BREEAM-NL In-Use 2016 Cartification based on English Version of manual not available

The BREEAM name and the BREEAM logo are trademarks owned by either BRE or BRE Global Limited. The BREEAM-NL name and BREEAM-NL logo are trademarks owned by DGBC. These trademarks may not be used without written permission respectively from BRE/BRE Global Limited and DGBC.

Catification based on English Version of manual not awaitable

About DGBC and BREEAM

Dutch Green Building Council

The Dutch Green Building Council (DGBC) is an independent organization that developed the BREEAM sustainability certification for the built environment in the Netherlands. It shall provide certificates to projects whose degree of sustainability is assessed according to predefined criteria laid down in an Assessment (BRL). The BREEAM family of labels is based on, and follows the international BREEAM developed by the BRE in the UK (see below under BREEAM).

DGBC is being supported by a large group of organisations with ambitions on sustainability and who subscribe the targets of DGBC. These participants are actively involved in the development and the continual improvement.

More information about the DGBC is available on www.dgbc.nl.

In this technical manual, named BREEAM-NL In-Use 2016 version 1.0, you can find all information about the Dutch version of the label for existing buildings.

BREEAM

BREEAM stands for Building Research Establishment Environmental Assessment Method "and is an instrument for assessing the sustainability of projects in the built environment. BREEAM was developed in 1991 by the Centre for Sustainable Construction, part of the UK Building Research Establishment Global (BRE Global).

Scheme management

BREEAM is developed and managed by DGBC, licensed by BRE Global. The Netherlands are formally recognized by BRE as National Scheme Operator (Scheme Administrator) and is therefore the only party in the Netherlands authorized to manage this certificate.

DGBC is as Scheme Administrator responsible for the content and the proper functioning of the BREEAM Assessment Guidelines. The internal organization is divided for this purpose into a projectbureau, a board and an independent Central Advisory Group ('College van Deskundigen', Cvd). The Central Advisory Group's primary task is to monitor the quality and performance of the BREEAM schemes. The Central Advisory Group is committed thereto independently with respect to both the projectbureau and the board. Both the Central Advisory Group and the board (unpaid) are compiled on the basis of the 'all parties concerned' principle and therefore representing all relevant stakeholders. In addition, the parties are consulted on schedule with specific consultative groups and theme-specific working groups.

The user guide for BREEAM-NL assessments describes the step-by-step progress on the certification of projects under the BREEAM-NL labels and how the independence of the review is guaranteed. The latest version of this guide can be found at www.breeam.nl on the processes and procedures page.

Colophon

DGBC is indebted to BRE Global for their continued commitment to international and relevant schemes, to our participants who make the development of BREEAM-NL financially possible and to all individuals who provided feedback and recommendations. Much of it has been incorporated into the issues. You can (continue to) provide input via helpdesk@dgbc.nl since this assessment is developed mainly through an Jersion of manual not available open source approach, using knowledge and expertise from the market. At the time of finalizing this version of the assessment, a large number of skilled and experienced people have been involved. Last but not least the Central Advisory Board and the In-Use advisory group, which ensure quality of the mark throughout the year and provide direction in the development process.

Board of experts

- Hans Wamelink, TU Delft (chairman)
- Bas Niese, Facilicom
- Daan Bruggink, ORGA Architect
- Hans Copier, Propertize
- Jan-Maarten Elias, Unica Ecopower
- Jeroen van Schooten, Team V Architectuur
- Marcel Smulders. Search B.V
- Paul van Bergen, DGMR
- Rene Groen. Gemeente Utrecht

Advisory group BREEAM In-Use

- Hans Copier, Propertize (chairman)
- Henk Vlug, Fortrus
- Henny van Woerkom, CBRE Global Investors
- Ilko van Genderen, VU Amsterdam
- Ilse van de Voort, Royal HaskoningDHV
- Jaap de Jonge, Rijksvastgoedbedrijf
- Jan Roersen, W4Y Adviseurs B.V.
- Klaas Voet, KV Beheer
- Marjon van Bree, Colliers International Corporate Solutions
- Rob Kuipers, ABN-AMRO Facility Management/ Real Estate
- Robert Bakker, Redevco Nederland B.V.
- Rogier Verbeek, Facilicom
- Victor Pastoor, Arcadis Nederland B.V.
- Thomas Metz, DGBG (secretary).

The content of this assessment has been reviewed and approved by the In-Use Advisory Group and the Central Advisory Group and BRE Global.

In addition there have been several parties that have supported during the translation and development or gave substantial input during the marketconsultation. In developing this version of the assessment, the following persons were involved:

- Alex Ivanović, Forta Nova
- Alfred van Kessel, Rijksdienst voor Ondernemend Nederland
- Annelies Visser, W4Y
- Bart Gerritsen. Tauw
- Bas Rutgers, Smits van Burgst Raadgevend Ingenieursbureau
- Cédrique Steenkamer, LBPISIGHT BV
- Dennis Zwepin. Saxion Hogeschool
- Edwin van Eeckhoven, C2N B.V.
- Ed Rooijakkers, Halmos

- Ellen van Midlum, Vrije Universiteit Amsterdam
- Femke Kamp, Universiteit Utrecht
- Frans Stuyt, SCCM
- Hannah van der Leij, Universiteit Utrecht
- Harry van de Vranden, Falck
- Irene van Veelen, ISSO
- Jan Willem de Vaal, VIVAT Verzekeringen
- Jacqueline Jones-Driessen, Deloitte
- Jeroen Hesen, Peutz
- Joost Bennekers, 123duurzaam
- Koos van Lindenberg, Liftinstituut
- Leon Burdorf, DWA
- Marieke Nijland-Huinen, DGMR
- Marije Vos. Arcadis
- Mark Spetter, Globalance
- Mark Steneker, Linthorst Techniek
- Martin Dunnik, Nieman Raadgevende ingenieurs
- Nicole van der Waart, Movares
- Niels Piscaer, Van der Valk Haarlem
- Patrick Teunissen, Omgevingsdienst Noordzeekanaalgebied
- Petra Paans, Peutz
- Robert-Jan van Baal, AXA Investment Managers
- Rudy van der Helm, SGS Search
- Sannie Verweij, Sannie Verweij Advies/ Gebouwinzicht
- Stef Bots
- Tim Habraken, CBRE
- Theun Lourens, PostNL
- Thijs Meulen, Technische Universiteit Eindhoven
- Tienke Springer, De Groene Ruimte BV
- Wouter Wienk, Rijksdienst voor Ondernemend Nederland
- Yvon van der Voort, SCCM
- Wilbert de Vries, PostNL
- Vincent van Marle, MVO Nederland

Dutch Green Building Council

- Annemarie van Doorn (Director)
- Martin Mooij (Head certification and maintenance)
- Thomas Metz, Senior Projectmanager (Existing buildings)
- Guido Slokkers, Projectmanager

naalgebied richt of manual not available richt of manual not available richt available richt of manual not available richt of

General information

There are increasing demands on the sustainability of buildings. In The Netherlands the requirements for sustainable buildings were not harmonized to the introduction of BREEAM-NL. By implementing the BREEAM-methodology a good assessment framework became available to determine the sustainability of buildings in an independent and uniform manner. BREEAM-NL In-Use is consistent with the international code developed by BRE Global for a Sustainable Built Environment (CSBE). CSBE also forms the basis for the other BREEAM labels, such as BREEAM-NOR (Norway), BREEAM-DE (Germany), BREEAM-ES (Spain), BREEAM-SE (Sweden) and of course the other labels within BREEAM-NL Netherlands.

The International Code for a Sustainable Built Environment (CSBE) is a framework for the assessment of sustainability. CSBE's strategic principles and requirements that define an integrated approach to the design, management, evaluation and certification of the environmental, social and economic impact on the built environment.

Intellectual property

This assessment method, the BREEAM-NL Manual and related material published on the DGBC websites is made available for downloading and may be used freely but remains the intellectual property of BRE Global. This material may not be used in a misleading context or for commercial purposes. If the material is made available to others, then the source is required.

Table of contents

- 2	، 2016	v1.0	
,	About	rt DGBC and BREEAM	
	Dutch	h Green Building Council	
		AM	
9	Schen	me management	
(Colop	ohon	
(Gener	ral information	
	Intelle	ectual property	
1.	Int	ectual property troduction to BREEAM and BREEAM-NL What is BREEAM? Aims and objectives of BREEAM BREEAM-NL	211
	1.1	What is BREFAM?	
	1.2	Aims and objectives of BRFFAM	
	1.3	BREEAM-NI.	
į	1.4	BRFFAM-NI In-Use	1
	1.5	BREEAM-NL In-Use How to use the BREEAM-NL In-Use scheme	1'
•	1.5	ope of BREEAM-NL In-Use	
2.	Sco	ope of BREEAM-NL In-Use	17
:	2.1	Asset types that can be assessed	17
:	2.2	Eligibility criteria	17
:	2.3	Additional criteria on building functions	18
;	2.4	Multi-tenanted assessments	19
	2.5	Eligibility criteria	2
3.	Sco	oring and rating	22
3	3.1	BREEAM-NL In-Use rating benchmarks	2
3	3.2	Environmental section weightings	2
3		Calculating an asset's BREEAM-NL In-Use rating	
3	3.4	Museum Credits	24
4.	Evi	idence requirements for BREEAM-NL In-Use	2!
		The BREEAM-NLM-Use assessor and expert role	
	4.2	Types of evidence	
	4.3	Applied principles of evidence	
	4.4	Robustness of evidence	2
	4.5	Opening meeting assessor	29
	4.6 👌	Site visit assessor	29
(4.70	Volume sampling	29
5.	Sel	If-assessment and certifying	30
		Self-assessment	
		Registering and certifying	
		Period of validity of certificates	
6.	та.	rminology	9 ,
		sessment criteria	
<i>i</i> .	ASS	sessment criteria	

7.1	Application of the assessment in the performance of an assessment	34
Part 1:	: Asset Performance	35
Manag	gement	36
Health	and wellbeing	37
	EA01 - Glazing	
	EA02 - Glare control	
HE	EA03 – Thermal control	41
	EA04 – Ventilation controls (by occupant)	_
υг	FACE Microbial contamination	1 0 11
HE	EA06 – Drinking water provisions	46
HE	EA06 – Drinking water provisions) 47
HE	EA08 – Interior and exterior illumance levels	49
HF	-AU9 - Lighting Control	5 1
HE	EA10 – Inclusive design EA11 – Location ventilation intake to pollution sources EA101 – High frequency lighting	53
HE	EA11 – Location ventilation intake to pollution sources	55
HE	EA101 – High frequency lighting	57
Гиона	y	Ε0.
Energy	VE01 – Energy performance of asset	59
EN	VEO1 – Energy performance of asset	60
EIN	NE04 – Air leakage and thermographic tests	62
EIN	VE30 – Onsite renewables	64
EIN	VETOT – Outdoor lighting and car park lighting.	66
	NE102 – Energy efficient elevators, escalators and travelators	
Transp	Port	71
TR	RA01 - Cyclist facilities	72
TR	RA02 - Proximity to public transport	74
TR	RA03 - Proximity to amenities	76
TR	RA04 - Pedestrian and cyclist safety related to deliveries	78
TR	RA101 - Limiting parking	79
TR	RA102 – Alternative means of transport	80
Water	·	81
W	AT01- Water meter	
W	AT02 - Water efficient equipment: WCs	84
	AT03—Water efficient equipment: urinals	
	AT04 – Water efficient equipment: hand washing basins	
	AT05 - Water efficient equipment: showers	
W	AT06 - Water efficient equipment: white goods	90
	AT07 - Leak prevention main water supply	
	AT08 – Self-closing water supply for sanitary	
	AT09 - Isolation valves	
	AT10 – Reducing mains water consumption	
	AT101 - Separate sewer system for rainwater	
Mater	rials	100

MAT01 – Condition survey	101
MAT02 – Security advice, implementation	103
MAT03 – Intruder alarm system	105
MAT04 – Alarm system monitoring	106
MAT05 – Natural hazards	108
MAT06 – Future adaption	
MAT07 – Designing for robustness	
MAT101 – Environmental impact building materials	
Waste	. (/1
waste	
WST01 – Storage of operational waste	115
Land Use and Ecology LE01 – Planted area	117
LE01 – Planted area	118
LE02 – Ecological features	120
POLO1 – Separators (light liquid and grease)	122
POLO1 — Sonarators (light liquid and grosso)	122
POLO2 - Flood risk assessment	125
POL02 - Flood risk assessment POL03 - Measures for reducing discharges to surface water	127
POLOS - Intensities for reducing discharges to surface water	128
POLOS - Look detection system	120
POL04 – Impact of refrigerants	122
POLOG - NO _x emissions	132
Part 2: Building Management	133
Management	134
MAN01 – Building user guide	135
MAN02 – Building user education	137
MAN03 - Building user information	139
MAN04 - Operation and maintenance manuals	140
MAN05 – Maintenance policy; scope	142
MAN06 – Maintenance policy; reactive or proactive	144
MAN07 – Environmental management system	146
MAN08 - Environmental policies and goals	148
MAN09 – Procedures for energy conservation	150
MAN10 - Leak testing	
MAN11 - Green lease	153
MAN12 – Building controls review	155
MAN13 – Building adaption	157
Health and Wellbeing	158
HEA12 – Fresh air rates	
HEA13 – Internal environment quality, operating temperature	
HEA14 - Internal environment: CO2 monitoring	
HEA15 - Internal environment: CO monitoring	
HEA16 - Internal environment: NOx monitoring	
HFA17 – Building user protection during building activities	

HEA18 - Volatile organic compounds	170
HEA19 – Control of chemicals	172
HEA20 - Acoustic conditions	173
HEA21 - Deep cleaning	175
HEA22 – Legionella management	176
HEA23 - Occupant satisfaction	178
HEA24 – Occupant satisfaction: feedback	180
Energy	
Operational Energy Calculator Guidance	183
ENE31 – Energy consumption start date	185
FNF32 - Fnergy consumption end date	186
FNF33 - Flectricity consumption	197
ENE34 – Natural gas consumption ENE35 – LPG consumption ENE36 – Gas oil consumption	188
ENE35 – LPG consumption	189
ENE36 – Gas oil consumption	190
FNEX / - Soun tossil tilei consumption	191
ENE38 – Biodiesel consumption	192
ENE39 – Biogas consumption	193
ENE40 – Wood/Waste consumption	194
ENE38 – Biodiesel consumption ENE39 – Biogas consumption ENE40 – Wood/Waste consumption ENE41 – District heating consumption	195
ENE42 – Carbon intensity district heating	196
ENE42 – Carbon intensity district heating	197
ENE44 – Carbon intensity district cooling	198
ENE45 – Electricity exported	199
ENE46 – Non-standard energy uses	200
ENE47, ENE50, ENE53, ENE56 and ENE59 – Non-standard energy use	201
ENE48, ENE51, ENE54, ENE57 and ENE60 – Non-standard energy consumption	203
ENE 49, ENE52, ENE55, ENE58 and ENE61 – Non-standard energy consumption floor area.	204
ENE62 – Energy consumption monitoring	205
ENE63 – Energy consumption data use	206
ENE64 – Sub-metering: main energy sources	208
ENE65 – Sub-metering: other energy sources	209
ENE66 – Sub-metering: tenanted areas	211
ENE103 - Energy conservation survey	212
ENE104 - Performance assurence installations	214
Transport	216
Water	
WAT11 – Annual consumption	
WAT12 – Water consumption: monitoring and reporting	
WAT14 – Water reduction during refurbishment	
WAT15 – Water strategy	
WAT16 – Water recycling	
WAT17 – Ground water extraction	

Materials	226
MAT08 – Condition survey	227
MAT09 – Sustainable procurement; policy	229
MAT10 – Sustainable procurement; scope	231
MAT11 – Fire safety, availability risk management	233
MAT12 – Fire Safety, periodic risk assessment	235
MAT13 – Emergency plan	237
MAT14 – Hazard management	239
Waste	241
Land Use and Ecology	242
LE03 – Ecological research and implementation	243
LE04 – Ecological policy	245
LE05 – External landscaping/maintenance	247
Pollution	249
POL07 - Night time light pollution.	250
POL08 – Chemical storage	252
POL09 – Regularly check of chemical storage	254
POL10 - Light liquid congrators	256
POL11 – Replacing refrigerants	257
POL11 – Replacing refrigerants	259
POL13 – Emergency preparedness and response	261
POL14 – Complaints procedure	263
Part 3: Occupier Management	265
MAN14 - Environmental management policy	
MAN15 - Environmental management issues	
MAN16 - Environmental management implementation	
MAN17 - Environmental objectives	
MAN18 - Organisational performance review	
MAN19 - Sustainability report	
MAN20 - Green Lease	
MAN101 Agreements with setting up and dismantling exposition (museum specific issue)	
MAN102 - Visitor education (Museum specific issue)	
MAN103 – Building interiors based on collections (Museum specific credit)	
Health and Wellbeing	
HEA25 - Occupier satisfaction	
HEA26 - Health and wellbeing management targets	
HEA27 - Health and wellbeing management objectives	
HEA28 - View out	
HEA29 – Communal rest areas	291
Energy	292
ENE67 - Energy policy	293

ENE68 - Energy management arrangements	295
ENE69 – Trends in energy performance data	298
ENE70 - Energy objectives	299
ENE71 - Energy savings	300
ENE105 – Managing climatic variations (Museum specific issue)	302
ENE106 – Illumination of the collection (Museum specific issue)	303
Transport	304
TRA05 - Transport requirements	
TRA06 - Transport management arrangements	307
TRA08 - Local amenities	310
TRA09 - Transport objectives	311
TRA10 – Transport impact of commuting	
TRA11 - Transport impact of business travel	314
TRA11 - Transport impact of business travel TRA12 - Transport impact of goods delivery	316
Water	318
WAT18 - Water use reduction	319
WAT19 - Water management arrangements	320
WAT20 - Water management targets	323
WAT21 - Water consumption	324
WATZI Water consumption	
WAT21 - Water consumption Materials MAT15 - Material procurement issues	325
MAT16 - Material procurement issues, implementation	
MAT17 - Supplier approval	
MAT18 – Supplier quality policy	
MAT19 – Supplier environmental management	
MAT23 - Material procurement targets	335
Waste	336
WST02 - Waste management activities	337
WST03 - Waste management, reclamation	
WST04 - Waste management arrangements	340
WST05 - Waste monitoring	343
WST06 - Waste performance	344
WSTOX Waste management objectives	345
W\$108 - Waste sent to landfill	
∼ ₩\$T09 - Waste diverted from landfill	348
WST10 - Waste sent for incineration	349
Land Use and Ecology	350
LE06 – Ecology/biodiversity enhancement	
Pollution	352
POL15 - Pollution management	
POI 16 - Pollution prevention arrangements	

Canification based on English Version of manual not available

1. Introduction to BREEAM and BREEAM-NL

1.1 What is BREEAM?

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's leading sustainability rating scheme for the built environment. BREEAM is now the international standard for best practices in sustainable design and it helps clients measure and reduce the environmental impacts of their buildings and in doing so create higher value, lower risk assets.

1.2 Aims and objectives of BREEAM

- BREEAM raises awareness amongst owners, occupants, designers and operators of the benefits and value of buildings with a reduced life cycle impact on the environment.
- BREEAM allows organisations to demonstrate progress towards corporate environmental objectives.
- BREEAM provides market recognition of buildings with a low environmental impact.
- BREEAM ensures best environmental practice is incorporated in the planning, design, construction and operation of buildings and the wider built environment
- BREEAM defines a robust, cost effective performance standard surpassing that required by regulations.
- BREEAM challenges the market to provide innovative, cost effective solutions that minimise the environmental impact of buildings.

1.3 BREEAM-NL

DGBC is formally recognized by the BRE as a National Scheme Operator (Scheme Administrator) BREEAM in the Netherlands and is therefore the only party in the Netherlands authorized to manage this label. We develop and manage multiple schedules, each designed to assess the sustainability performance of buildings and areas at different times in the life cycle.

Please visit <u>www.bream.nl</u> for information on BREEAM-NL labels. The score of a project can be determined based on the issued certificate or via the website <u>www.breeam.nl/projecten</u> where certified projects can be found including the validity of the certificate.

1.4 BREEAM-NL In-Use

BREEAM-NL In use is a performance assessment methodology and certification system for existing buildings, with the exception of housing and residential buildings.

The BREEAM-NL In-Use scheme sees sustainability in the broad sense (holistic approach). This means that buildings with BREEAM-NL In-Use are assessed on a wide range of topics such as management, health and wellness, energy, transport, water, materials, waste, land use and ecology and pollution.

The sustainability objectives rise above the legal minimum, as stipulated in the Building Act (Bouwbesluit) or other laws and regulations. BREEAM-NL certification is thus 'extralegal' and is therefore a voluntary choice of the client.

The BREEAM In-Use assessment process is broken down into three Parts:

- Part 1 Asset Performance: the performance of the asset's built form, construction, fixtures, fittings and installed services
- Part 2 Building Management: the management of the asset
- Part 3 Occupier Management: the management of building users and services

A building or building section can be evaluated and certified in either 1, 2 and 3 of the parts. Customers are encouraged to review all three parts in order to get to assess the overall quality of the building or building section.

The outcome of a BREEAM-NL In-Use rating is a certified BREEAM-NL In-Use score for the parts for which the assessment has been completed. This certified BREEAM In-Use score shows the performance of the asset on the different environmental categories, such as those shown in Table 1. This can either be compared to other assets and provides insight on which the performance can be optimized performance for total score and category scores.

As a BREEAM In-Use certificate must be renewed every year or once again be carried out an assessment (see Chapter 5 for details), BREEAM-NL In-Use stimulates continuous improvement of the asset.

Table 1: BREEAM-NL In-Use categories

Environmental category	Purpose
Management	To encourage the adoption of sustainable management practices related to operational activities to ensure that robust sustainability objectives are set, monitored and regularly updated.
Health & Wellbeing	To manage, monitor and increase the comfort and health and safety of asset occupants, visitors and other users within the asset.
Energy	To manage and monitor energy consumption and to encourage the use of equipment that supports the sustainable use and management of energy in the asset.
Transport	To recognise the implementation of policies that record the impacts related to transport, the proximity of local amenities and improve the ability of stakeholders to utilise alternative means of transportation.
Water	To manage and monitor water consumption in the operation of the asset and its site to encourage sustainable water consumption.
Materials	To manage and monitor the environmental impact of procurement as well as recognising the risks to the asset and its occupiers associated with security, fire and other naturally occurring events.
Waste	To encourage and recognise the implementation of policies and systems that reduce waste production and improve levels of segregation and recycling.
Land Use & Ecology	To manage and monitor the impact that activities undertaken on the asset's site have on the local environment and encourage sustainable land use, habitat protection and creation.
Pollution	To prevent, manage, monitor and control pollution associated with the assets location and operation.

1.5 How to use the BREEAM-NL In-Use scheme

This BREEAM-NL In-Use scheme document is a technical document, which has been created to:

- 1. Enable qualified and licensed BREEAM In-Use Assessors to complete BREEAM In-Use International assessments and determine a rating.
- 2. Enable DGBC to complete quality assurance reviews of a BREEAM In-Use licenced Assessor's assessment report, in accordance with the standards to which DGBC is accredited.

3. As a reference for clients whose proposed asset/management practices are assessed against BREEAM In-Use International.

The scheme document is split into seven sections:

- 1. Introduction to BREEAM and BREEAM-NL
- 2. Scope of the BREEAM-NL In-Use scheme
- 3. Scoring and rating
- 4. The BREEAM-NL In-Use evidence requirements
- 5. Certification
- 6. Glossary
- 7. Assessment criteria
 - a) Part 1: "Asset Performance"
 - b) Part 2: "Building Management"
 - c) Part 3 "Occupier Management"

The **Scope** (2) section describes the types of assets and stages of assessment that this version of the BREEAM-NL In-Use Scheme can be applied to. The Scope section can be used to check whether this is the correct BREEAM Scheme to use for their project.

The **Scoring and rating** (3) section illustrates how an asset's assessed performance is measured and rated. It outlines the BREEAM-NL In-Use rating level benchmarks and the BREEAM-NL In-Use environmental section weightings. Furthermore, this section includes a description of the BREEAM-NL In-Use assessment issues and 'credits' and how performance against these is calculated and expressed as a BREEAM-NL In-Use rating.

The **Evidence for BREEAM-NL In-Use** (4) section provides guidance on the various types and forms of evidence to demonstrate compliance with BREEAM-NL In- Use issues. This section also includes a description of why BREEAM-NL requires an auditable trail of evidence and a table of general types of evidence that are typically required and used as a form of compliance.

The **Certification** (5) section illustrates the requirements as part of the registration and certification process. It also includes a description of how it can be ensured that the certificate remains valid.

The **Glossary** (6) section provides an overview of the frequently used terms with explanations of their meaning.

The **Assessment criteria** (7) section includes the BREEAM In-Use assessment issues, categorised in 9 environmental sections divided over the 3 Parts.

2. Scope of BREEAM-NL In-Use

The BREEAM In-Use International scheme can be used to assess the environmental performance of existing (in-use) non-domestic assets. Is the result of the assessment positive and is the result independently checked? Than a BREEAM-NL In-Use certificate will be issued showing the asset with the relevant qualifications in the three sections: Asset Performance, Building Management and Occupier Management.

All BREEAM-NL In-Use assessments must be conducted with the Netherlands BREEAM-NL assessment This was agreed between the DGBC and BRE Global.

It is possible to carry out a self-assessment in the assessment tool. This allows you to calculate a non-independently tested score. The scores from this self-assessment may not be published or used for external purposes, as long as there has been no certification.

2.1 Asset types that can be assessed

The asset types that can be assessed under the BREEAM In-Use International scheme are outlined in Table 2.

Table 2: Asset types that can be assessed using BREEAM In-Use International

Part 1 "Asset Performance"	Part 2 "Building management"	Part 3 "Occupier management"
All non-domestic asset types	All non-domestic asset types	Offices
that meet eligibility criteria listed	that meet eligibility criteria listed	Retail
below	below	
	4,70	Museums

2.2 Eligibility criteria

For all asset types that can be assessed using BREEAM In-Use International, the eligibility criteria listed below must also be met.

For an assessment of any part:

- The asset must be a complete and finished structure.
- The asset is at least one year ago completed (in accordance to UAV 2012) after new construction or a major renovation. There are two exceptions:
 - If an asset had achieved certification against BREEAM-NL New Construction and Major Renovations, an assessment against Part 1 of BREEAM NL In-Use can be carried out directly after completion.
 - If an asset during the start of a (major) renovation has a valid BREEAM-NL In-Use certificate against Part 1, an assessment against Part 1 of BREEAM NL In-Use can be carried out directly after completion."
- The asset must contain occupied space(s) i.e. a room/rooms or space within the asset that is likely to be continuously occupied for 30 minutes or more per day by a building user. For a Part 1 assessment that has not yet been occupied, the asset must contain space that is designated to be occupied.

- An asset does not have to include the whole building; it could include just part of a building or a single floor. In such cases, the scope of the BREEAM In-Use assessment must include all relevant amenity and service areas. The scope must be equal to all the three parts.
- An asset cannot normally include more than one building. The only exception is where several buildings meet the following criteria:
 - Connected to and share common services to meet the comfort and sanitary demands of the occupants (for example: heating, ventilation, cooling and hot water).
 - The buildings have the same building function, similar performance, are of the same design and age.
 - o Building management and maintenance policies must be the same across the buildings.
 - The buildings share the same building envelope specification (the physical separator between the interior and exterior of a building).
- The asset must comply with all relevant legislation in its location.

For an assessment of Part 2 and/or Part 3

- The asset must have been occupied for at least one year prior to the start of the assessment.
- Consumption data related to the asset of at least one year prior to the start of the assessment must be available. This includes (but is not limited to): energy, water, transport and waste data. For energy consumption, this must include both electrical and non-electrical data.

2.3 Additional criteria on building functions

It is sometimes possible that a building function has a specific requirement within the BREEAM-NL In-Use. A building function according to the National Building Decree is a portion of a building structure with the same destination and use that form a functional unit. Examples include office, meeting, and industry.

Table 3 - Summary building functions

Building function	Description	Scope of the scheme	Customized
Houses/residential	Residential	Non-applicable to this BREEAM- NL label	
Meeting	Building function for the coming together of people for culture, communication, providing food or drinks for use at the same space, child care.	Café, canteen, restaurant, conference room, day-care, library, exhibition area	Terraces in sports buildings, cinema, theatre, casino, church, disco/club, bar/pub, trading floor.
Cell	Building type for coercion stay	Prisons, police cells, detention areas	Prison or police custody, temporary custody, cell on a train station
Healthcare	Building type for medical research, nursing, care or treatment.	Space for the treatment or care of patients in a hospital, nursing home, mental hospital, treatment room of a general practitioner, physiotherapist.	Operating room, intensive care, diagnostic treatment, delivery ward, emergency room.
Industrial	Building function for commercial	Workshop, laboratory, factory (light industry) cuisine restaurant,	Cold store, stable for storage of goods,

	processing or storage of materials and goods	warehouse, lab space ('wet').	datacentre, factory (heavy industrial).
Office	Building function for administration.	Administrative office, bank, office in a shop.	
Lodging	Building function for providing recreational residence or temporary shelter to people.	Hotel, motel, pension.	
Schools	Building function for teaching.	Auditorium / lecture hall, classroom, lab space ('dry').	oldsi.
Sporting	Building function for sports	Indoor football stadium (excl. Stand), changing rooms, squash court.	Swimming pool, horse riding school, tennis court, gym, squash court, sport court, indoor velodrome, fitness area, bowling, billiard room, shooting room, stadium (excl. terraces), changing rooms for sports.
Retail	Building function for the sale of materials, goods or services.	Shopping mall, department store, supermarket, showroom, pharmacy, library.	Sales at a gas station, railway sales office
Other	Building function for activities where the presence of people is not the primary activity	Not in itself certifiable. Parking garage certifiable as long as part of another use position, in which the garage of the surface is not more than 1/3 of the total GLA.	
Buildings not being buildings	Structure or part of a structure, which is not a building or part of a building.	Not in itself certifiable.	

If a building function is missing in the table or there's uncertainty about whether it can be assessed with this assessment, please contact the DGBC by helpdesk@dgbc.nl.

Other buildings/BREEAM-NL In-Use customized

With this version of the technical scheme, all building types, as defined under section 2.1, and building functions, as mentioned above in the table can be assessed. For different applications the DGBC will provide an overview of how to deal with some credits.

Mixed use

Buildings, in which several functions are combined, can also be assessed by BREEAM-NL In-Use. If there are multiple functions, all functions must meet the requirements before the credit can be approved. One may deviate from this, this is specifically named in the credit.

2.4 Multi-tenanted assessments

All the three parts of BREEAM-NL In-Use is aimed on a specific client type. The client type each part is

aimed at, and how these Parts can be assessed against within multi-tenanted assets is outlined in Table 4.

Table 4: Client type that each BREEAM In-Use part is aimed at

Part	Client type	Multi-tenanted assessment	
1: Asset performance	Building Owner	The rating can be based in 3 ways:	
		Common areas* that a facility/building manager is responsible for	
		Common areas AND (a part of) tenanted areas within the asset that are managed by the asset's facility/building manager.	
2: Building Management	Facility / building management	3) Tenanted areas, when in line with the eligibility criteria (section 2.2).	
		The assessor needs to collate the required data from each space type and the final score would be determined by the space with the lowest score.	
3: Occupier Management	Occupier	Multi-tenanted buildings can be assessed as a single combined asset under Part 3. The final score will be determined by the tenant with the lowest score.	

^{*}Common areas are facilities and/or access that is not owned or controlled by any one individual tenant, but used by all. These common areas are typically managed and maintained by the development's owner, i.e. landlord or their managing agent. Examples of common areas include: an atrium, stairwells, main entrance foyers/reception and external landscaped areas.

When the multi-tenanted building is being assessed as a single combined the asset, a minimum of 80% of the tenants must comply (measured by gross floor area). This demarcation must be determined in advance. Tenants within this demarcation must comply fully for the pursued issues, it is for example not allowed that a tenant is being assessed for lighting, but not for waste collection.

2.5 Building or building part, the demarcation

One can choose not to certify the whole building at once, but only a part of the building, subject to compliance with the minimum requirements of Section 2.2. This could be one floor of an office building or a retail unit in a mall. The delimitation of the building part shall be able to be clearly defined by a physical separation, such as, for example, walls or floors. All questions are applicable only to the physically demarcated part of the asset. If a question is asked about the organizational part (use), the question focuses on the organization of the physical part. If, for example, involves the management of the facilities, of manual not available then it focuses the question on the facilities necessary to provide that physical section of, for example fresh air or cold and heat.

Schematically, it can be represented as follows:

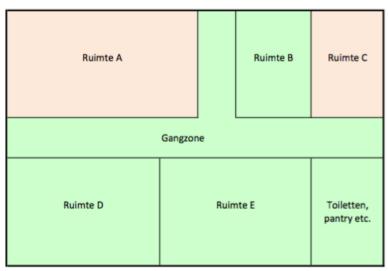


Figure 1: Multi-tenanted asset with common area and spaces B, D and E assessed (assessed are in green).

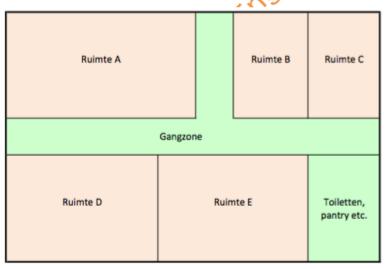


Figure 2: Multi-tenanted asset with common area assessed only (assessed area in green)

Note: If only communal functions section are being certified, thinking of the common area of a business complex or a large passage of a shopping centre, check in advance whether the minimum requirements (section 2.2) are met. Otherwise assessment BREEAM- NL In-Use is not possible.

3. Scoring and rating

There are a number of elements that determine the overall performance of an In-Use project assessed using BREEAM-NL In-Use. These are as follows:

- 1. BREEAM-NL In-Use rating level benchmarks
- 2. The environmental section weightings
- 3. BREEAM-NL In-Use assessment issues and credits

The way in which these elements combine to produce a BREEAM-NL In-Use rating is summarised below.

3.1 BREEAM-NL In-Use rating benchmarks

The BREEAM-NL In-Use rating benchmarks projects in the scores for Asset, Management and in-use. These scores are separated and can't be added or compared with each other. A maximum of five stars can be awarded in all parts. The BREEAM rating benchmarks for projects assessed using BREEAM-NL In-Use are outlined in Table 5.

Table 5: BREEAM-NL In-Use rating benchmarks

		1	
BREEAM-NL In- Use rating	% Score	Certificate	Star rating
Outstanding*	≥ 85%	Yes	****
Excellent	≥ 70%	Yes	***
Very Good	≥ 55%	Yes	***
Good	≥ 40%	Yes	**
Pass	≥ 25%	Yes	*
Acceptable	≥ 10%	Yes	-
Unclassified	510 %	No	-

The BREEAM-NL In-Use rating benchmarks enable a client and all other stakeholders to compare the performance of the asset with other existing assets, including those within a portfolio.

An unclassified BREEAM In-Use rating represents performance that is non-compliant with BREEAM In-Use, failing to meet either the BREEAM In-Use eligibility criteria (section 2.2) or the overall threshold score required for formal BREEAM In-Use certification. Both are mandatory to achieve a BREEAM-NL In-Use certificate.

3.2 Environmental section weightings

The weighings per category are a fundamental part of the assessment of the sustainability performance because they define the relative impact of different aspects of sustainability. BREEAM-NL In-Use uses the BREEAM In-Use International weighing system. This was developed based on consensus-based considerations and Rankings by an expert panel. The results are used to determine the relative value of the various categories and their share of the total score.

The weightings for each of the nine categories within the BREEAM- NL In-Use assessment are shown in Table 6.

Table 6: BREEAM In-Use International environmental section weightings

Environmental section	Weighting		
	Part 1	Part 2	Part 3
Management	-	15%	12%
Health & Wellbeing	17%	15%	15%
Energy	26,5%	31,5%	19,5%
Transport	11,5%	-	18,5%
Water	8%	5,5%	3,5%
Materials	8,5%	7,5%	4,5%
Waste	5%	- ~	11,5%
Land Use & Ecology	9,5%	12,5%	5%
Pollution	14%	13%	10,5%
Total	100%	100%	100%

3.3 Calculating an asset's BREEAM-NL In-Use rating

A BREEAM In-Use Assessor must determine the BREEAM-NL In-Use rating using the assessmenttool and in compliance with the requirements as set out in this technical manual and user manual, which is provided on www.breeam.nl.

The process of determining a BREEAM-NL In-Use rating for Part 1, Part 2 and Part 3 is outlined below. An example of a Part 1 assessment calculation is included in Table 7.

- 1. For each of BREEAM-NL In-Use environmental sections the number of 'credits' awarded is determined by the BREEAM In-Use Assessor in accordance with the criteria of each assessment issue (as detailed in the technical sections of this document).
- 2. The percentage of 'credits' achieved is then calculated for each section.
- 3. The percentage of 'credits' achieved in each section is then multiplied by the corresponding section weighting. This gives the overall environmental section score.
- 4. The section scores are then added together to give the overall BREEAM-NL In-Use score for the Part against which the asset has been assessed.
- The overall score is then compared by the assessor to the BREEAM-NL In-Use rating benchmark levels in order to view the relevant BREEAM rating that has been achieved.

	Credits achieved	Credits available	% of Credits achieved	Section weighting	Section score
Management	-	-	-	-	-
Health &	25	37	68%	17%	11,6%

	ating edits are specifically	122 20 46 36 4 6	66% 80% 22% 56% 100% 67% 82%	26,5% 11,5% 8% 8,5% 5% 9,5%	
Water Materials Waste Land Use & Ecology Pollution BREEAM-NL In-Use ra BREEAM-NL In-Use ra 3.4 Museum Cre The following credits at MAN101 – Agr MAN102 – Edu MAN103 – Buil	10 20 4 4 18 core ating	46 36 4 6 22	22% 56% 100% 67%	8% 8,5% 5% 9,5%	1, 4, 5,
Materials Waste Land Use & Ecology Pollution BREEAM-NL In-Use so BREEAM-NL In-Use ra 3.4 Museum Cre The following credits an MAN101 – Agr MAN102 – Edu MAN103 – Buil	20 4 4 18 core ating edits	36 4 6 22	56% 100% 67% 82%	8,5% 5% 9,5% 14%	4, 5,
Waste Land Use & Ecology Pollution BREEAM-NL In-Use so BREEAM-NL In-Use ra 3.4 Museum Cre The following credits an MAN101 – Agr MAN102 – Edu MAN103 – Buil	4 4 18 core ating edits	4 6 22	100% 67% 82%	5% 9,5% 14%	5,
Land Use & Ecology Pollution BREEAM-NL In-Use so BREEAM-NL In-Use ra 3.4 Museum Cre The following credits at MAN101 – Agr MAN102 – Edu MAN103 – Buil	4 18 core ating edits are specifically	22	67% 82%	9,5%	11
BREEAM-NL In-Use so BREEAM-NL In-Use ra 3.4 Museum Cre The following credits at MAN101 – Agr MAN102 – Edu MAN103 – Buil	18 core ating edits are specifically	22	82%	14% NO	11
BREEAM-NL In-Use so BREEAM-NL In-Use ra 3.4 Museum Cre The following credits an MAN101 – Agr MAN102 – Edu MAN103 – Buil	ating edits are specifically			anualno	VERY
3.4 Museum Cre The following credits ar MAN101 – Agr MAN102 – Edu MAN103 – Bui	ating edits are specifically		on of	manualti	VERY
3.4 Museum Cre The following credits at MAN101 – Agr MAN102 – Edu MAN103 – Bui	edits are specifically		on of	Manue	VERY
The following credits at MAN101 – Agr MAN102 – Edu MAN103 – Bui	are specifically		ON OF	Co	
• ENE106 – Ligh	ilding interior o	depending on the ate variability	e collection		
Certification	based				

- The following credits are specifically directed to museums

 MAN101 Agreements with construction and discrete MAN102 Education visitors

 MAN103 Building in the FNE101 MAN101 – Agreements with construction and dismantling of exhibitions

 - ENE105 Coping with climate variability

4. Evidence requirements for BREEAM-NL In-Use

BREEAM-NL is an independent-reviewed assessment and certification methodology that works in accordance with national and international guidelines. Work in accordance with international guidelines ensures that certification schemes such as BREEAM-NL work in a consistent and reliable manner. The Assessor's BREEAM-NL assessment report and quality assurance, the DGBC is fundamental to BREEAM-NL for guaranteeing the quality of, and confidence in the BREEAM-NL score assigned by the assessor.

To ensure the consistency and reliability, all ratings in the certification shall be based on verifiable, reliable information that is traceable and relevant and related to the asset being assessed. This is not only important to achieve compliance with international standards according to which BREEAM-NL works but also is challenged from the perspective of risk management towards customers and BREEAM-NL assessors in the event that the results of a certification.

4.1 The BREEAM-NL In-Use assessor and expert role

Where BREEAM In-Use International "auditors" and "assessors" know, BREAM-NL In Use distinguishes the roles of the 'experts' and' assessors.

The BREEAM-NL Users manual describes the roles below. In addition, the method, responsibilities and powers, method of submitting reports, version numbers, registration etc.

The BREEAM-NL Users manual will, at any inconsistencies in procedures, overrule the guidelines. The BREEAM-NL Users manual is available on the BREEAM-NL website.

The user of this assessment is deemed to be aware of the contents of the BREEAM-NL Users manual.

4.2 Types of evidence

Evidence need not necessarily have been prepared for a BREEAM- NL In-Use assessment. In many cases it can be demonstrated on the basis of available information and a visit to the asset, which are satisfied with the requirements of the credits. Therefore avoid too specific description of the necessary evidence in this assessment, although some credits will require specific documents.

Those involved will find that during a BREEAM-NL In-Use assessment some credits requires multiple types for of evidence. A piece of evidence may be used for multiple credits if the required evidence is the same. General proof at organizational level should arguably be related to the asset being assessed.

As support for customers, experts and assessors in the collection of information for each part to assess, below the various types of evidence that can be used will be described.

The types of evidence are divided into three overall categories:

- Generic evidence
- Specific evidence
 - Other evidence

Some credits will have to be submitted with a combination of these types of evidence.

Generic evidence may include evidence which is normally available for a building or an organization. Examples of evidence are included in Table 9. Generic evidence is not named under the heading "evidence" at the credits, but may be additionally required in order to show compliance. Not all the examples listed in Table 9 are applicable to all the credits, it is the responsibility of the BREEAM-NL In-Use assessor to determine if to the right evidence is delivered.

Specific evidence is information that in any case must be submitted to demonstrate that the chosen answer option is fulfilled within a credit. The specific evidence is defined and reported to the appropriate credit under the "evidence".

Other evidence is different from what is described in Table 9 or under "evidence" at the credits. In order to prevent this type of evidence to not be found in conformity therewith delaying certification, the credible, robust and traceability has to be at the same level or better than the specific or generic certificate. If in doubt, contact the DGBC prior to the delivery or acceptance of such evidence.

4.3 Applied principles of evidence

In determining the adequacy of the evidence for each credit, the principles as set out in Table 8, are considered by the assessor and, where applicable, the guidelines in section 4.4 robustness of evidence apply. Where the evidence meets this requirement, it is permissible for the purpose of the assessment.

are all e are al The following principles are not described in a hierarchical order and are all equally important in

Table 8: Evidence principles

	Summary	Principle	Objective	A question to ask to check
1	Evidence provided for all criteria for all credits sought	Evidence must demonstrate that ALL relevant criteria and subcriteria for each credit sought are achieved	Completeness.	Are all criteria and sub-criteria covered? Have all relevant definitions been addressed?
2	Unambiguous assessment	The assessment must demonstrate unambiguous compliance and the evidence must support this assessment. Evidence (and supporting notes) must clearly demonstrate to a 3rd party reviewer that the criteria have been met.	Independent review compatibility.	If a 3rd party (e.g. BRE Global Ltd) reviewed my report with the submitted evidence, would they be able to confirm compliance and award the same credits I have?
3	Robust	a. When selecting the Evidence type, always ensure it is robust and is relevant to the stage of assessment. The selected Evidence contains all the relevant basic information, with the necessary constituent parts to be deemed robust. b. See Robustness of Evidence section for further details on both of the above	Proof that evidence is robust and from a reliable source	Is this the most robust form of evidence available to demonstrate compliance with this criterion? Does the evidence contain all the relevant basic information? Is it fully auditable?
4	Use existing evidence	Use existing project information to demonstrate compliance. In most cases evidence shouldn't need to be 'created' for BREEAM-NL compliance purposes.	Minimises evidence and reduces time and cost of compliance.	Does robust evidence meeting the above principles already exist that I can use? If I need to ask for more evidence, is the project seeking credits where compliance is not adequately demonstrated?

4.4 Robustness of evidence

All evidence being used for a BREEAM-NL In-Use assessment must be robust with regard to the source and traceability. Below is an overview of data that is expected by the Assessor, when certain types of evidence are submitted:

• Communicative expressions: Among others newsletters, posters, interview reports, email conversations or other form of media being used as evidence must clearly indicate the name of the location, identity and role of the author, showing the date and the identity of the recipient.

- Formal letters or correspondence: Must be written on letterhead of the organization / company and signed (including electronic signature is acceptable). Ideally (digital) letters a secure document.
- **Minutes:** Include date, location and a list of attendees (name, organization and role), along with a report of the meeting and agreed actions.
- **Building plans/installations plans:** All these documents bear the name of the asset and / or the location of the drawing title, date, revision number and scale.
- Specifics/Building manual: In a specification / building manual it must be clear that it is related to the project being assessed and must include a date and revision number. Where parts of a specification are made available, the table of contents and the cover sheet should be available from which the name of the project, the revision number and date appears. Specifications must always be related to the actual situation built or used.

For other types of evidence to the following table (Table 9) are used as a guideline. The used evidence should always include at least basic information such as the project name, author, date and revision number (if applicable).

Table 9: Types of evidence

Def	Danis and a side and a form	De covinti en la che
Ref	Document/evidence type	Description/note
E1	Billing data	Evidence in the form of bills / invoicing that support the requested
		requirements in the criteria.
E2	BREEAM Assessor's site	The report is based on the BREEAM-NL In-Use assessor own-site
	visit report	visit to the asset to determine compliance with the BREEAM-NL In-
		Use criteria. The report serves as evidence separately and may
		contain pictures that are made by the assessor during the site visit.
E3	Building (Energy)	Evidence on the basis of meter readings in the consumption of,
	Management	among others, gas, electricity and water. These data appear from
	Systems(B(E)MS)/Metering	individual readings or data collected from the building management
	data	system (BMS), which is installed in the asset.
E4	Building information model	BIM (building information model) or BIM files that are used to contain
		the project and relevant information / evidence provided, are
		readable to the evaluative party.
E5	Calculations	Evidence on the basis of calculations that support the established
		goals / targets are achieved in the asset.
E6	Certificates of compliance	For example, ISO14001, FSC (Forest Stewardship Council), EPD
		(Environmental product declaration).
E7	Communication records	Formal pieces of communication to and from stakeholders and / or
	01	third parties from which an appointment, outcome or action shows.
	350	This may be in the form of a letter, minutes, e-mail correspondence,
		publication, or other form of media.
E8	Contractual information	Documents / contracts that demonstrate how maintenance /
		monitoring / testing or other services are performed by a (third)
		party.
E9	Other third party	For example, maps, schedules, product specifications, laws and
	information	regulations, product labels.
E10	Photographic evidence	Evidence provided by the expert in the form of pictures which
E 10	Thotographic evidence	supports the systems and building components or other relevant
- 9		
	Destancianal consists	systems or products that are available or installed to the asset.
E11	Professional services	Agreement for the provision of professional (consulting services,
L	contract	such as maintenance, testing whether legal or technical advice.
E12	Risk assessments	Risk ratings include various operational risks and other risks for a
		project and how each risk is managed and who is responsible for
		managing each risk. These reviews are usually carried out by a
		qualified person or organization with sufficient knowledge and
		experience.
E13	Specialist reports	Professional reports based on research, testing or studies by an
		expert, including (but not limited to):
		Environmental Management System
	ı	,

		Assessment flood
		Acoustic Research
		Indoor air quality
		Transport Analysis
		 Performance Assurance and maintenance reports and strategies
		Ecological Research
		Legionella management plan
		These studies / surveys / tests are usually performed by a qualified
		person or organization with sufficient knowledge and experience.
E14	Staff interviews	Interview reports with staff demonstrating that specified
		management aspects are implemented. They are an important part
		in determining that formal processes, procedures and documents
		are made available to employees and building occupants.

4.5 Opening meeting assessor

An audit starts with an opening meeting. There should be meeting notes present as part of the evidence for certification. De meeting notes should be uploaded in the assessmenttool under pocuments". The content of the meeting is not defined, as an opening meeting it has some implicit expectations, like the aim of the meeting, de scope of the assessment and the schedule.

4.6 Site visit assessor

The assessor will perform a visual inspection during the site visit (E2). Also at the site visit it is the premise that the expert prepared the visual inspection and the necessary inspection (photo) or provides material declarations. The assessor can take additional pictures during and after the tour for additional evidence questions. Photographic evidence should be included with additional information for explanation.

The assessor may choose to not control everything to which the credit applies to, but to carry out a representative sample. In this case, it is important that the assessor itself makes the selection for the sample, not the expert.

4.7 Volume sampling

When certifying multiple buildings the In-Use assessment tool provides the ability to copy the import of credits from a (representative) asset to other assets. For buildings with a certain degree of comparability, this prevents a significant administrative burden in completing and validating the credits. Note that the import credits are copied over existing entry.

In addition, there is an approach in development in order to further optimize the certification of larger groups of similar buildings. For more information on the actual situation, please contact the DGBC through helpdesk@dgbc.nl.

5. Self-assessment and certifying

5.1 Self-assessment

In BREEAM-NL In-Use one may choose for a non-independently tested score (self-assessment), or by an assessor tested score (certified). The results of a self-assessment are for internal use only.

The outcome of a BREEAM-NL In-Use self-assessment provides insight into opportunities for improvement in the building and the organization. It is thus a means to support the discussion about sustainability between actors in a building. Internally, in consultation with owners, users, operators and vendors (contractors), improvement targets are set and SMART arrangements are made according to the BREEAM-NL In-Use label for internal use.

5.2 Registering and certifying

A new BREEAM- NL In-Use project registration is required with the current version. A registration is valid for 1 year. If no certificate is obtained within one year of registration, it should be re-recorded at the then current version.

Once certified, projects may be certified again with the same version within a period of 3 years. For example, active policies can be implemented on a single version.

Recertification against a non-current version is only possible for the parts (Asset, Management and / or Use) with a valid BREEAM-NL In-Use certificate, in the case this certificate is not achieved from an earlier recertification against a non-current version. A project is always free to achieve a certificate according to the current version. Example: if a project is certified by BREEAM- NL In-Use BRL2014, this project until September 1, 2018 must be certified once more against the same version, if not already implemented a recertification earlier on September 1, 2015.

Upon the release of a new version of the assessment method, a new In-Use project can register with the previous version within three months after the release. This period of overlapping projects give the opportunity to see the consequences of a version update.

For example, if the operational version of 2016 is replaced with the release on July 1, 2018, it may be used for new projects until October 1, 2018.

5.3 Period of validity of certificates

The BREEAM In-Use certificate is valid for 1 year. As a result, regular reassessment is required for the certificate to retain its validity. On the BREEAM-NL project website (www.breeam.nl/projecten) and the Assessment Tool (www.assessmenttool.nl) the certificate is published until the certificate is no longer valid.

If there have not been any major or negative changes in the building (or building part), the certificate may be extended. This is the case when the current score on each of the building parts are certified separately (Asset, Management and / or use) and lose less than 5% in score.

The extension of the certificate may be up to two times for a period of one year. For the extension of a BREEAM-NL In-Use certificate the client must have determined and confirmed that there were no major negative changes. The consideration of whether or not occurrence of major changes should be done with the same assessment method version as to which it is certified.

If the score deviates more than 5% downward and within three years after the issuance of the certificate, the asset must be re-certified (recertification).

In the situation where there are no negative major changes, the certificate does extend as follows:

- Year 1: Initial certification
- Year 2: Extending certification
- Year 3: Extending certification
- Year 4: Recertification

If a certificate expires, for example if the certificate is not extended or no recertification takes place, the certificate will be declared invalid. At that time it is no longer allowed to use the BREEAM-NL logo.

coeff. ed. If mor sequires and requires and It is not required to certify all the sections ("Asset", "control" or "Area") at once, it are possible to certify only 1 or 2 parts. All three parts are listed on the certificate, even when not all parts are achieved. If more than one part is certified, they have to be co-certified. If a part is added at a later moment, this requires an initial

6. Terminology

The following definitions relate to the manner in which the terms are used in the present assessment method.

Assessment

The process by which a registered BREEAM In-Use Assessor will assess the sustainability performance of a project on the basis of the relevant documents for the BREEAM In-Use schemes. An assessment process starts formally at the time of registration of the project in the DGBC Assessment Tool and ends after agreement on the random check by the DGBC of the assessment report of the assessor.

Assessor

DGBC registered persons on the website are trained and qualified to perform assessments under the BREEAM-NL scheme. A registration is of limited duration and should be, according to the regulations, extended regularly. A registered assessor is always employed by a licensee organization. Only registered assessors may submit assessment reports. The assessor should always be independent from the evaluated project.

Asset (the reviewed (part of the) building)

The asset can be defined as the 'subject of review' and may consist of a whole building inclusive terrain, one floor of a building, a smaller portion of a building and the plot. The client defines the asset by giving a description of registration. The communication should be appointed at all times, as it is a part of the building.

Review

A review consists of three parts: Asset, Management and Use. The client is free to only review one, 2 or 3 parts. The certificate shall have appointed all three parts, to emphasize the interdependence.

Evidence

The evidence is effectively served disclosed information or documentation. This information relates to certifying the part.

Certificate

A certificate can be issued as an independent third party (by DGBC recognized BREEAM-NL In-Use assessor) has verified the data entered and the asset has been inspected according to the requirements stated in this assessment and the BREEAM-NL User Manual, who found on www.breeam.nl under "Processes and procedures.

Expert 3

The DGBC educated person who is qualified to assist customers, other stakeholders and assessors during the assessment process and to build a complete and correct BREEAM-NL project file. BREEAM Expert has no formal role that is required in the certification process. An expert may, and usually will, have a relationship with the client, such as a permanent or temporary employee, and the team will advise generally to optimize the credit score. An expert may register an assessment, provided that no assessment report on DGBC submit for verification.

Owner

The party that owns the building or part of the building (asset).

(Building) Users

All users of the building including employees, tenants, patients, students and visitors. If the question focuses only on for example employees or visitors, it is specified in the question.

Occupied area

Occupied areas or any part thereof for the accommodation of individuals for at least an average period of 30 minutes per day. An accommodation meets the minimum criteria in respect of size and height of the Building Act.

Occupied space

In an occupied space located space for the accommodation of persons, for at least an average period of 30 minutes per day.

Self-assessment

Submitting building data to the assessment tool does not lead to a certificate. The scores from these self-assessments may not be published or used for external purposes in conjunction with the brand BREEAM, BREEAM-NL Nieuwbouw, BREEAM In-Use or DGBC. This is because it is a score that is not assessed and determined by an independent third party and BREEAM In-Use assessor. Only after assessment it can be certified by BREEAM In-Use assessor.

7. Assessment criteria

A BREEAM In-Use assessment is performed by answering questions for Part 1 'Asset Performance', Part 2 'Building management' and / or Part 3 'Occupier management'. Each part is divided into the relevant categories that are applicable in the specific part, or which can be influenced by the client type of the related part.

The structure of the BREEAM-NL In-Use credits is as follows:

- 1. **Credit information:** This tops the credit and includes credit coding, name, number of items and to which part the credit belongs.
- 2. Question: This includes the question asked to assess the BREEAM-NL In-Use credit.
- 3. Aim: This gives the overarching goal of the credit and the effect that the measurement or limited.
- 4. **Available credits:** This shows the various answer options and the number of points that can be awarded per answer option. Sometimes multiple answer options can be selected, sometimes there is only one answer option,
- 5. **Criteria:** This section describes the requirements that must be met in order to award the points.
- 6. **Building function specific criteria:** Herein, the requirements are described which are specific to users functions.
- 7. Additional information on criteria: Here are requirements in addition to the criteria.
- 8. **Evidence:** This section describes the type of evidence and information which must be provided so that the assessor can validate whether the criteria are met. The evidence justifies the grant of the selected number of points within the BREEAM in-Use credit. In Chapter 4 provides more information on the types of evidence to be supplied to a BREEAM In-Use assessment.
- 9. **Definitions:** Definitions of terms used within the credit in the above parts.
- 10. **Additional information:** This section contains additional information that is relevant in the pursuit of the criteria.
- 11. **References:** Sources of information that may be used in obtaining the credit.

Not all credits above components are relevant or necessary, to those relating to credits these parts are therefore not included. Each credit contains at least the parts 'Credit Information', 'Question', 'Points', 'Criteria' and 'Evidence'.

7.1 Application of the assessment in the performance of an assessment

The customer answered the questions in a credit with the option that matches the situation in the asset at the time of review. The answer options and the available number of points described in any credit in this assessment under section points (4). To assist the customer in selecting the correct answer option, to the description of the target (3) and the criteria (5) are used. These components provide the requirements that must be met in order to allocate a certain number of points available. Under Building function specific criteria (6) specific building functions are described, general additions are shown under Additions to the criteria (7).

The item Evidence (8) describes which specific evidence related to the question can be delivered in addition to the generic evidence, as described in section 4 "Evidence for BREEAM In-Use". Additional information that may be applicable is described under Definitions (9) Comments (10) and References (11).

Part 1: Asset Performance

Certification based on English Version of manual not available

Management

The management category is not assessed within Part 1 of a BREEAM In-Use assessment.

Canification based on English Version of manual not available

Health and wellbeing

Category summary table

Issue reference	Title	Credits available		
HEA01	Glazing	2		
HEA02	Glare control	4		
HEA03	Thermal control	4 2		
HEA04	Ventilation control	2, 0		
HEA05	Micriobial contamination	2		
HEA06	Drinking water provisions	2		
HEA07	Indoor and/or outdoor space	4		
HEA08	Illuminance levels	4		
HEA09	Lighting control	4		
HEA10	Inclusive design	3		
HEA11	Location ventilation intake to pollution sources	2		
HEA101	High frequent lighting	4		
Total credits availab	ole (ii)	37		
Total credits available 37 Certification based on Endirection Certification Ce				

HEA01 - Glazing		
Part		Number of credits available
1		2

Aim

Available credits

Questi	on
What per	centage of the building envelope is glazed?
Aim To ensur	recentage of the building envelope is glazed? re building users have access to sufficient daylight. ple credits
Availab	ple credits
Credits	Answer option
0	Question not answered
0	Don't know
0	< 5%
1	≥ 5% en < 10%
2	≥ 10%

Assessment criteria

1. Glazed areas include roof lights that let daylight pass directly into the building.

Additions to the assessment criteria

The percentage of the building envelope that is glazed can be calculated or can be based on the calculation of the energy performance. Areas within the building where the exclusion of natural daylight is a functional requirement, tike for example in a media chamber, may be left out of consideration.

Evidence

- 1. Photographic evidence of all sides of building envelope OR facade and roof drawings on which the windows are shown.
- The calculation of the energy performance of the asset (Energy label or Energy performance coefficient), specifying percentage of the building envelope that is glazed.

Definitions

Building envelope: the physical separator between the interior of the building and the outdoor environment. It includes the walls, roof and foundation. For the purposes of this BREEAM-NL In-Use issue, only the walls and roof need to be taken into account.

HEA02 - Glare control		
Part		Number of credits available
1		4

Aim

Available credits

Questi	on	
What glare control features have been fitted to the building?		
Aim To reduc	What glare control features have been fitted to the building? Aim To reduce problems associated with glare for building users. Available credits	
Availal	ole credits	
Credits	Answer option	
0	Question not answered	
0	Don't know	
1	Glare control feature on all south facing windows	
2	Glare control feature on all south facing windows, with control by the occupant	
2	Glare control feature on all: south, east and west facing windows	
3	Glare control feature on all: south, east and west facing windows, with control by the occupant	
3	All windows have glare control features	
4	All windows have glare control features, with control by the occupant	
0	Other	

Assessment criteria

- 1. Glare control should be provided for relevant building areas where lighting and glare could be problematic for building users, e.g. workstations and projector screens.
- 2. The occupant in this credit should be the individual occupant of the asset. For this issue visitors are not considered as occupants in this credit (note: patients and hotel guests are not considered to be a visitor).
- d. Individual occupant controlled features provide a degree of controllability (from partly to full cover of the radiation surface) for the entry of natural light.
- 4. Automatically controlled solar/light shading is only compliant when controlled (overruled) by individual occupant.

Building function specific assessment criteria

Lodging: Curtains do meet the criteria for the glare control requirement despite the control/design doesn't allow a degree of flexibility to still allow sunlight in.

- 2. In fixed and integrated solar/light shading must be demonstrated that the glare control is

Jess may include (but are not limited to):
Lexternal solar shading
Lex eaves.
Bioclimatic design to provide shading from high-level summer and low-level winter suinternal blinds
Thredropaque windows.

Curtains do not meet the criteria for the glare control requirement, as the control/design needs to allow a degree of flexibility to still allow sunlight in.

Reference

Cartification Maked do Republic

HEA03 – Thermal control		
Part		Number of credits available
1		4

•	Do occupants of the asset have personal control over the temperature in their work area?		
	nise the provision of asset temperature controls that allow for independent adjustment of cooling systems.		
Availal	ple credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No		
1	Yes, can open windows		
2	Yes, can adjust temperature (using thermostat or thermostatic radiator valve (TRV))		
2	Yes, can adjust mechanical ventilation		
4	Yes, can adjust more than one of the above		
0	Other		

Assessment criteria

1. Local occupant control is available for temperature adjustment in separate zones and is easy in use.

Building function specific assessment criteria

- Meeting: separate zones have a maximum area of 60m2
 - Meeting rooms apply if they are adjustable in every separate room.
 - Rooms for larger groups in childcare apply if they are adjustable in every separate room. Specifically in exhibitions, all rooms are considered individual zones, thermal control doesn't need to be in the room itself, but should still be adjustable at the building management level.
- Healthcare: A bedding zone is considered an individual zone. Functions such as treatment and surgery rooms apply if they are adjustable in every separate room.
- Industrial: Every zone is considered as an individual area, controls don't need to be in the room itself, but may be adjustable at the building management level.
- Office: zoning consists of not more than 4 or 6 workplaces or for rooms with less than 4 workplaces the zoning should consist of every separate room.

- Lodging: Every zone is considered an individual lodging area, such as a hotel room.
- Schools: Every zone is considered an individual education area where thermal control can be adjusted by a teacher. Control in auditorium or lecture halls may not be in the room itself, but should be adjustable at the building management level.
- Retail: Every zone is an individual retail unit. In the case of shopping centres, common areas shall be controlled at the building management level.

Evidence

- 1. Building plans illustrating (representative) zoned areas.
- 2. Photographic evidence of controls.
- 3. (Sampling) inspection of the zoning and controls by the assessor on site

Definitions

- Bedding zone: A bedding zone is a particular form of an accommodation area with one or more bedding rooms
- Junte fo August Version of martial Centification based on English Version based on English Versi Bedding room: A bedding room is a special type of VERBLIJFSRUIMTE for one or more beds for

HEA04 – Ventilation controls (by occupant)		
Part		Number of credits available
1		2

Is there provision for personal control of ventilation for building occupants by enabling them to open windows or modify rates of air supply?

Aim

The stimulation and recognition for the possibility for the user to vent directly to the outside air, in addition to the ventilation present in the building.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. Every occupied space includes at least one open window.
- 2. In occupied areas more than 7 meters from the nearest drain facility, must also provide open windows or equivalent facilities, which ensures the distribution of ventilation air on both fronts.
- 3. The windows are easy nuse.

Building function specific assessment criteria

- Credit applies to offices, schools and lodging.
- Meeting: Credit applies to day-care, conference rooms and canteens.
- For other building functions than mentioned above, the credit is not applicable. When all the building functions are non-applicable for this credit, the maximum amount of points can be awarded.

Evidence

1. Photographic evidence of (a representative sample of the) windows, which shows the location and opening mechanisms.

HEA05 - Microbial contamination		
Part Number of credits availa		Number of credits available
1		2

Has a study been carried out to identify the most effective system to minimise the risk of Legionella contamination?

Aim

To ensure the most effective and properly designed control systems are installed and to avoid risk of Legionellosis.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. The study that will determine the most effective system to minimise the risk of Legionellosis must be carried out following ISSO Publication 55.1 or 55.2 (for collective water installations) and ISSO Publication 55.3 (for climate control installations)
- 2. Any collective water system or climate control installation that is at risk of Legionella contamination should have the appropriate Legionella control systems installed. Water systems that are at risk of such contamination include (but are not limited to):
 - a. Cooling towers
 - b. Evaporative condenser
 - c. Domestic hot and cold water systems
 - Other plant and systems containing water which is likely to exceed 20°C and which may release a spray or aerosol during operation or when being maintained. Examples include, but are not limited to:
 - i. Humidifiers and air washers
 - ii. Spa baths and pools
 - iii. Car/bus washing points
 - iv. Wet scrubbers
 - v. Indoor fountains and water features

Evidence

- 1. Copy of study that identifies the most effective method to avoid the risk of Legionellosis. The conclusion of this study must outline what system should be installed. Where no such systems are deemed necessary, this must be outlined in the study.
- 2. Where Legionella control systems have been installed, a copy of the operational manual/manufacturer specification indicating the type of Legionella control should be provided.

Definitions

Legionella: Legionella is the name of the bacteria that might cause Legionellose. Legionella infection can cause serious health problems and even death. Infection occurs when the bacteria is breathed in through water drops.

Collective water system: The water system consists of the piping and connected appliances, from watermeter up to the taps, including the hot water system

Climate control installations: Plants susceptible to Legionella concern cooling towers and evaporative humidifiers. Adiabatic humidifiers operate by atomizing air and to add to the incoming airliow, this in contrast to steam humidifiers to humidify the air by means of steam

Reference

ISSO-publications:

- Publication 55.1 Practice Manual Legionella prevention in tap water.
- Publication 55.2 Duty of Care Manual Legionella Corporate Water installations.
- Publication 55.3 Legionella in air conditioning systems.
- Joelle Joels Jers Certification based on English Certification based on English Publication 55.4 Alternative techniques for Legionella in collective tap water installations,
 - Publication 55.5 Management and maintenance of public water systems.

HEA06 – Drinking water provisions			
Part Number of credits available			
1		2	

Aim

Available credits

Questi			
ls drinkin	Is drinking water provided for occupants?		
	re the provision of fresh drinking water for building occupants. Die credits		
0 1''			
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No		
1	Yes, drinking water not connected to the drinking water network		
2	Yes, drinking water connected to the drinking water network		

Assessment criteria

- 1. Drinking water access points need to be:
 - a. Appropriate in number and placement to serve all building users; as determined by the assessor's best judgement;
 - b. In a hygienic location and condition.
- 2. Mains fed taps in totlet areas (note: taps in kitchen areas are compliant).
- 3. The provision of drinking water applies to building occupants that are members of staff. This means that visitors to the asset are not included.

Building function specific assessment criteria

- Healthcare: The provision of drinking water is available to clients and patients.
- CLodging: The provision of drinking water is available to guests, occupying the lodging room.
 - Schools: The provision of drinking water is available for students

Evidence

1. Visual inspection by the assessor with photographic evidence of water access points.

HEA07 - Indoor and/or outdoor space		
Part		Number of credits available
1		4

Are indoo	Are indoor rest and/or outdoor spaces provided for building occupants? Aim		
Aim	Aim		
To recog	To recognise the provision of space that is to be used for breaks from the working environment.		
	ole credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No		
2	Yes, lounge/Dining areas		
	Dedicated outdoor space with seating sheltered from wind and/or rain (located at least10		
2	metres away from roads, car parks or other sources of pollution)		
2	Yes, tea/coffee points with seating		
2	Yes, canteen facilities		
4	Combination of 2 or more of the above		
0	Other		

Assessment criteria

- 1. Resting places should:
 - Be of an adequate size, based on providing seating space for over 10% of building occupants.
 - b. Be accessible via safe pedestrian routes.
 - c. Provide building users with an area that is private and not susceptible to disturbance from sources of noise such as building services, car parks, delivery areas etc.
- 2. Resting space does not necessarily have to be provided within the asset, however: building users must have free and unrestricted access during working hours.
- 3. For buildings for buildings where most of the building users aren't personnel, such as shopping malls, hotels and museums, above requirements apply only to the staff. In addition to this the following applies:
 - a. Indoor and/or outdoor spaces refer to common areas shared with customers/visitors).
 - b. Food courts and restaurants count towards seating space provision.

Evidence

- 1. Building plans illustrating seating areas within asset.
- 2. Photographic evidence, demonstrating provisions available to building occupants.

Definitions

- Lounge/dining areas: areas that are accessible to all building users, including visitors and staff,
 where they can have a break from the working environment. These areas contain comfortable
 seating and tables and are designed for longer breaks. (Hot) food and drinks could be provided for.
- **Tea/coffee points:** areas that are accessible to all staff. These areas are designed for short breaks.(Hot) drinks, such as tea and coffee, are provided for. Provisions to prepare food could be provided for.
- Canteen facilities: areas that are accessible to all staff. These areas are designed for longer breaks and contain comfortable seating and table. (Hot) food and drinks or provisions to prepare these are provided for. Other building users, such as visitors to the asset, could have access to these areas.

Additional information

A space in which multiple facilities are combined, counts as one facility. For example, with just a canteen which can also be lunch and coffee and tea can be drunk, 2 points can be achieved.

HEA08 – Interior and exterior illumance levels		
Part		Number of credits available
1		4

Aim

Available credits

Questic	Question		
Do internal and external lighting levels meet national guidance best practice levels?			
Aim	Aim		
Aim To ensure optimum visual comfort for building occupants. Available credits			
Available credits			
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No		
4	Yes, illuminance levels meet national guidance best practice levels		

Assessment criteria

- 1. Lighting levels (lux) should be measured in relevant building areas by a suitably qualified person or organisation.
- 2. A suitably qualified person or organisation is a person/organisation that has experience in undertaking lighting measurements. They must use the appropriately tested and calibrated equipment (lux meter) to undertake the lighting assessment.
- 3. National best practice lighting guides: Where appropriate lighting guides do not exist for a country, the design team should demonstrate compliance with the European standards EN12464-1 and EN 12464-2.

Additions to the assessment criteria

When a Dialux calculation or equal is conducted which shows that the under assessment criteria 3 indicated directives are being met, this can be considered as equal to a measurement. In that case it should be proved that the assumptions of the calculation match the current situation of the asset.

Building function specific assessment criteria

- Meeting: For museums, the guidelines from lighting NSVV workgroup Museum Lighting and the Netherlands Institute applies; "Lighting in museums and exhibition spaces", 2008.
- Sports: NEN-EN 12193 applies to lighting in areas with sports facilities.

Evidence

- 1. Third party documentation or organisational documentation confirming the lighting levels in relevant building areas.
- 2. The properties of the measuring instrument and experience of the person or organization that conducted the survey

Definitions

Relevant building area: occupied space which is a room or space within the assessed building that is likely to be occupied for 30 minutes or more by a building user. The following internal areas are excluded from the requirements:

References

- Catification based on English Version of manual not available NEN-EN 12464-2: "Light and lighting – Working place lighting – Part 2: External working places"

HEA09 – Lighting control		
Part		Number of credits available
1		4

To what extent do occupants have control over the lighting in their work area?

Aim

To optimise the level of occupant control over lighting in relevant building areas.

Available credits

Credits	Answer option	
0	Question not answered	
0	Don't know	
0	None	
2	Automatic lighting controls per zone with manual override	
4	Automatic lighting controls per zone with manual override with provision of task lighting where requested	
0	Other	

Assessment criteria

- 1. Lighting controls are zoned in all areas with the following functions and are accessible for the users and easy to operate:
 - a. **Office:** zoning consists of not more than 4 or 6 workplaces or for rooms with less than 4 workplaces the zoning should consist of every separate room.
 - b. Schools Seminar and lecture rooms: zoned for presentation and audience areas
 - c. Library spaces: separate zoning of stacks, reading and counter areas
 - d. Conference rooms: the area around the whiteboard is zoned separately
 - e. Auditoria: presentation area, seating and paths are zoned separately.
 - Catering (restaurant, café, bar etc.): the serving area (bar, kitchen) and seating area are zoned separately.
 - g. Laboratories: Zones in laboratories and practical rooms have a maximum area of 52 m².
 - h. Lodging: Hallway, bathroom and bedroom are zoned per separate room.
- 2. If automatic controls are present, for example daylight regulation and presence detection, a manual override must be present to earn this credit.
- 3. The following internal areas are excluded from the lighting zone requirements:
 - a. Media and arts production spaces
 - b. Exhibition space
 - c. Sport facilities

Evidence

- 1. Building plans with zoning of representative parts.
- 2. Proof of lighting controls, for example:
 - a. Copy of building user guide outlining lighting controls.
 - b. Photographic evidence of lighting controls.
- 3. (Sampling) inspection of the zoning and controls by the assessor on site

Definitions

Additional information

. to will energy, order to my There are different type of lighting control systems, but this credit focuses on the extent to which users can operate the lights. Because this credit is focused on health and well-being and not on energy, it is important that the user has the possibility to manually take over the light control per zone in order to meet his or her

HEA10 – Inclusive design		
Part		Number of credits available
1		3

Does the asset contain features, beyond those specified by local legislation, which enables full use by less able-bodied persons?

Aim

To recognise and encourage assets that are functional and inclusive for all its users.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
3	Yes
0	Other

Assessment criteria

- 1. Features in the building that make access and possible for all building users.
- 2. Features are aimed at persons with:
 - a. Motor limitations
 - b. Visual impairment
 - c. Hearing impairment
- 3. Features that have been provided for should include (but are not limited to) the following as guidance:
 - a. The approach to all entrances should be level or gently sloping with a maximum sill height of 0,02m.
 - b. Entrances should be illuminated.
 - c. There should be space for turning a wheelchair in hallways and work areas, and adequate circulation space for wheelchairs elsewhere.
 - de Designated WC's should be sufficiently available, easily accessible and correctly signposted.
 - Where applicable, lifts should be provided to allow less able-bodied persons access to all levels
 - f. Evacuation procedures should take into account needs of less able-bodied individuals. For example: providing evacuation chairs, specific features for visual and hearing impaired people.

Additions to the assessment criteria

Buildings with an ITS certificate (Integrale Toegankelijkheidsstandaard) may be awarded with all points.

Additional information

Sufficient availability of designated WC's can for example be described as meeting the requirements of the Integrated Accessibility Standard (Integrale Toegankelijkheidstandaard) for designated toilets: Distance

between disabled toilets ≤ 100m, distance ≤ 75m from the furthest located room, measured through the obstacle-free route and at least one designated toilet per floor ≥ 1,000m2;

Evidence

- 1. Photographic evidence of listed features.
- aria.

 continuativata nota aratitable

 con 2. Where necessary, additional photographical evidence should be added, for example building plans outlining installed features and a list of features

HEA11 – Location ventilation intake to pollution sources		
Part		Number of credits available
1		2

Are the ventilation intake points sufficiently removed from sources of pollution and are the exhaust points sufficiently far from the intakes to prevent recirculation of used air?

Aim

To ensure that ventilation systems within the asset do not circulate air, which has the potential to be contaminated with exterior sources of pollution AND that re-circulation within the asset is minimise.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. With natural ventilation:
 - a. Openable windows/ventilators within the building are located at least 10m from roads, car parks and other potential sources of pollution.
 - b. All outlets are at least 10m from any opening to minimise recirculation within the building.
- 2. With mechanical ventilation:
 - a. The intake points are over 20m removed from roads, car parks and other potential sources of pollution.
 - b. The intake points and exhaust points are 10m apart to minimise recirculation.

Building function specific assessment criteria

Shopping malls

In retail, specifically in shopping malls, where every retailer has to reach its mechanical ventilation, it won't be physically possible to have ventilation exhaust points 10 meters from intake points. If there is proof of an installation that prevents conflicts between systems of users, the "Yes" option is selected. The minimum distance from sources of pollution, however, does apply in full.

Evidence

- 1. A list of present sources of pollution.
- 2. Photographic evidence or a copy of site plan which clearly indicates that the building location complies with the conditions specified, such as scaled drawings or on-site measurements.
- 3. With mechanical ventilation:
 - a. Photographic evidence or a copy of site plan which identifies the location of intake and exhaust points and clearly indicates that they comply with the conditions specified, such as scaled drawings or on-site measurements.

Additional information

The distance requirement for air intake points and extract points does not necessarily mean the plan distance, but the three dimensional distance around and over objects; e.g. on plan the air intakes may be less than 20m from a source of external pollution, but the intake may be on the roof of a 10 storey building

HEA101 – High frequency lighting		
Part		Number of credits available
1		4

What part of the lighting in occupied spaces in the asset is in normal and dimmed state of high frequency?

Aim

To increase visual comfort through the use of high frequency lighting in the occupied spaces in the asset

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	None of the lighting is high frequency lighting
1	At least 25% of the lighting is high frequency lighting
2	At least 50% of the lighting is high frequency lighting
3	At least 75% of the lighting is high frequency lighting
4	All of the lighting is high frequency lighting

Assessment criteria

- 1. The following lighting techniques are examples of high frequency lighting or equivalent:
 - Fluorescent and gas discharge lighting where the light sources are controlled by electronic high frequency
 - LED lighting without dimming
 - LED lighting with dimming wherein the dimming technology happens by controlling the current
 - Temperature heaters (for example halogen lamps).

Evidence

- Visual inspection by the assessor with photographic evidence that the lighting is installed in the occupied spaces in accordance with the requirements, this can be done through a selective inspection of the lighting.
- 2. In case of dimmable LED lighting there will be technical specifications provided with the lighting, showing that they meet the credit requirements.

Definitions

Additional information

This credit is aimed towards health and well-being and not towards energy, thereby there is a possibility to achieve points for this credit in the application of, for example, temperature emitters (such as halogen lamps), while this technique is energetically has a worse yield.

Cartification based on English Version of manual not available

Energy

Category summary table

Issue reference	Title	Credits available
ENE01	Energy performance of the asset	96
ENE04	Air leakage and thermographic tests	4
ENE30	Onsite renewables	10
ENE101	Outdoor lighting and car park lighting	4
ENE102	Energy efficient elevators, escalators and travelators	4
Total credits availal	ble	118
Certification	ble Energy efficient elevators, escalators and travelators ble A based on English Version of Phanilland Control of Phanilland Con	

ENE01 – Energy performance of asset		
Part		Number of credits available
1		96

What is the energy performance of the asset, in accordance with a current energy rating?

Aim

To stimulate and recognise understanding of the energy performance of the building and that measures are taken to minimize the building-related energy consumption.

Available credits

Energy rating on the basis of the basic calculation method (X = EI) or the detailed calculation method (X = Ep,tot/Ep,admin (NEN7120) or Qpres,tot/Qpres,toel (NEN2916):

Credits	Answer ontion
Credits	Answer option
0	Question not answered
0	Don't know
96	Basic method: X ≤ 0,36 OR Detailled method: X ≤ 0,65
94	Basic method: $0.36 < X \le 0.49$ OR Detailled method: $0.65 < X \le 1.00$
91	Basic method: $0,49 < X \le 0,62$ OR Detailled method: $1,00 < X \le 1,06$
88	Basic method: $0,62 < X \le 0,75$ OR Detailled method: $1,06 < X \le 1,15$
85	Basic method: $0.75 < X \le 0.81$ OR Detailled method: $1.15 < X \le 1.18$
82	Basic method: $0.81 < X \le 0.86$ OR Detailled method: $1.18 < X \le 1.20$
77	Basic method: $0.86 < X \le 0.96$ OR Detailled method: $1.20 < X \le 1.25$
71	Basic method: $0.96 < X \le 1.00$ OR Detailled method: $1.25 < X \le 1.30$
66	Basic method: $1,00 < X \le 1,04$ OR Detailled method: $1,30 < X \le 1,35$
61	Basic method: 1,04 < X ≤ 1,09 OR Detailled method: 1,35 < X
54	Basic method: 1,09 < X ≤ 1,15
34	Basic method: 1,15 < X ≤ 1,30
16	Basic method: 1,30 < X ≤ 1,45
5	Basic method: 1,45 < X ≤ 1,60
5	Basic method: 1,60 < X ≤ 1,75
5	Basic method: 1,75 < X

Assessment criteria

- 1. The energy label of the asset is calculated with an energy label not older than 10 years.
- 2. The energy label is issued by the NL-EPBD label certified company.
- 3. Calculation of Energy for the Basic method according to BRL 9500-00 and BRL9500-03 or for the Detailed Method according BRL9500-00 and BRL9500-06.

Additions to the assessment criteria

If the asset is a building section, wherefore no energy label can be delivered, the energy label of the entire building can be used as evidence. Another option is to calculate a non-registered energy label of the

specific part of the building. In this case, as additional evidence, a valid diploma EPA-U EPN of the issuer of the energy label should be added as evidence.

Building function specific assessment criteria

Mixed use: For a building with more than one function, an energy label for the complete building will suffice when the building has a communal heating system. Beside that an energy label of another representative part of the building can be used as evidence.

Retail: Shopping malls can be rated with the energy rating of the complete shopping mall. If an individual shop wants to be rated, an energy rating of the respective shop must be calculated.

Industry: Currently there is no method for determining the energy rating of industry functions. For industrial functions that cover more than 10% of the total surface area of the building, the "International BILL Asset Energy Calculator" is to be used. Please contact the DGBC. Industry functions which cover less than 10% of the surface area of the entire building may be excluded from the calculation.

Evidence

1. Copy of energy label, including the registration number.

Definitions

Energy label using the basic calculation method: The energy label is determined by calculating the energy index, according to BRL9500-00 'Algemeen deel' and BRL9500-03 'Energie, bestaande utiliteitsgebouwen.

Energy label using the detailed calculation method: Especially for low energy utility buildings, a more detailed method is available to achieve an energy label, according to BRL9500-00 'Algemeen deel' and BRL9500-03 'Energie, bestaande utiliteitsgebouwen, detailmethode. This is a method to assess efficient buildings, but also in order to demonstrate that performance with evidence. The energy is determined based on the coefficient of Ep;to / Ep,admin according NEN7120 or Qpres; to / Qpres; and according NEN2916 (with building plans for 2012).

Additional information

• Buildings with an energy label certificate are located on www.ep-online.nl. All buildings with an energy label and energy index are located here.

References

- Rijksdienst voor ondernemend Nederland (<u>www.rvo.nl</u>) Answering questions about energy label for buildings
- Kwaliteit voor Installaties Nederland (<u>www.kvinl.nl</u>) List of companies certified to issue energy label certificates for buildings.
- Inspectie Leefomgeving en Transport (<u>www.ilent.nl</u>) Control since January 1, 2015 if the definitive energy label was issued at sale.
 - Decisions energy performance of buildings (http://wetten.overheid.nl/BWBR0023734/)
- Regulations on energy performance of buildings (http://wetten.overheid.nl/BWBR0020921/)
- BRL9500-00, BRL9500-03 en BRL9500-06
- NEN2916 Energy performance from utility buildings Calculation method
- NEN7120 Energy performance from buildings Calculation method

ENE04 – Air leakage and thermographic tests			
Deel	Verplichte credit	Number of credits available	
1	Nee	4	

What are the results of duct and air handling leakage and thermographic tests?

Aim

Understanding the airtightness of the asset and the manner in which the thermal insulation is installed and encouraging improvements to reduce heat loss and save energy.

Available credits

Credits	Answer ention		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No leakage and thermographic tests have been conducted in the last 5 years		
0			
	A leakage test has been conducted with the following result: > 15 m ³ /h.m ² building envelope		
0	@50 Pascal		
	A leakage test has been conducted with the following result: > 10 tot ≤ 15 m3/h per m2 of the		
	building envelope @50 Pascal OR Thermographic tests have been conducted and any defects		
1	are corrected		
	are corrected		
	A leakage test has been conducted with the following result: > 5 tot ≤ 10 m³/h per m² of the		
2	building envelope @50 Pascal		
4	building envelope @50 Pascai		
	A leakage test has been conducted with the following result: > 2.5 tet < 5 m ³ /h per m ² of the		
	A leakage test has been conducted with the following result: > 2,5 tot ≤ 5 m³/h per m² of the		
3	building envelope @50 Pascal		
	A leakage test has been conducted with the following result: ≤ 2,5 m³/h per m² of the building		
4	envelope @50 Pascal		

Assessment criteria

- The leakage and thermographic tests have been conducted in the last 5 years and in any case after completion of the building and after any changes made in the construction or building envelope.
- 2. A leakage or thermographic test has been made by a person or organisation with relevant knowledge and experience.
- 3. The thermographic test has been conducted according to NEN-EN 13187.
- 4. The leakage test has been conducted according to NEN-EN 13829 or NEN-EN-ISO 9972 with a differential pressure of 50 Pascal.

5. The defects that should be corrected are described by the person or organisation that conducted the themorgraphic test.

Building function specific assessment criteria

Industry: This credit is part of the "BIU International – Asset Energy Calculator", that is to be used to get points awarded on credit ENE01. If the industry function is used in the Asset Energy Calculator, the interpretation of ENE04 is derived from In-Use International, the Dutch interpretation does not apply to awarding points.

Evidence

- 1. Report with results of the leakage and thermographic tests.
- 2. Proof of the knowledge and experience of the person who performed the measurement or investigation.
- 3. Photographic evidence, reporting and / or new measurement showing that the defects based on thermographic inspection are corrected (if applicable).

Additional information

The unit m³ / h.m² (pressure per hour per square meter of the shell) is connected to the international standard BREEAM In-Use. In the Netherlands, the unit dm³ / s.m² is used. The conversion of dm³ / s.m² to m³ / h.m² is 3,6.

References

- NEN-EN 13187 'Thermal performance of buildings Qualitative detection of thermal irregularities in building envelopes Infrared method'
- NEN-EN 13829 'Thermal performance of buildings Determination of air permeability of buildings Fan pressurization method' (replaces NEN-EN 2686)
- NEN-EN-ISO 9972:2015 Thermal performance of buildings Determination of air permeability of buildings Fan pressurization method' (replaces NEN-EN 13829)

 Authority of buildings Fan pressurization method' (replaces NEN-EN 13829)



ENE30 – Onsite renewables			
Part		Number of credits available	
1		10	

What percentage of the total energy consumption is offset by onsite renewables and community renewable schemes?

Aim

To understand if renewable energy technologies are being used on site and how much these offset energy requirements for the site.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	There is no onsite or community renewable energy generation
2	> 0% < 5%
4	≥ 5% to < 10%
6	≥ 10% to < 15%
8	≥ 15% to < 20%
10	≥ 20%

Assessment criteria

1. Calculating energy offset should be done by the following formula (all figures for energy should be converted to kWh prior to calculation):

Eher $\times 100\% = share \ of \ onsite \ renewables$

- Etot = Total energy used onsite per year
- Eher = Total renewable energy generated onsite per
- 2. All renewable energy generation should be sub-metered. This metered data would then be used to calculate the proportion of renewable energy generated (in kWh).
- 3. Renewable energy produced on site needs to be used directly, fed into the grid and/or stored for later use.
- 4. For the purposes of BREEAM In-Use International, technologies eligible to contribute to achieving the requirements of this issue must produce energy from renewable sources as defined by Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the

promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (www.eur-lex.europa.eu). All other ancillary requirements set out in the EU Directive also apply.

- a. The share of onsite renewable energy should be calculated following 'Protocol monitoring hernieuwbare energie (revision 2015)' from Agentschap NL.
- b. When energy is supplied from district heating or cooling, the amount of energy should be supported by the energy supplier as well as the percentage renewable energy within the supplied energy.
- c. Air source heat pumps can only be considered as a renewable technology when used in heating mode.
- 5. Signing up to a green tariff is not considered to be an acceptable means of demonstrating compliance with the criteria.

Evidence

- 1. Photographic evidence of onsite renewable energy sources or community renewable energy schemes
- 2. Yearly metering data or yearly energy bills with the share of renewable energy specified or data sources based on energy bills or measured energy data.
- 3. Calculation with the share of renewable energy following criteria 1.

Additional information

Renewable Energy Directive (2009/28/EC): Directive of the European Parliament and Council on the promotion of the use of energy from renewable sources. Article contains several definitions, including the definition of "renewable energy", "energy from renewable non-fossil sources, namely wind, solar, aero thermal, geothermal, hydrothermal energy and energy from the ocean, hydropower, biomass, landfill, gas, sewage treatment plant gas and biogases. '

The directive can be seen through

newa Encerification based on E https://ec.europa.eu/energy/en/topics/renewable-energy/renewable-energy-directive.

ENE101 – Outdoor lighting and car park lighting		
Part		Number of credits available
1		4

What is the type of exterior lighting and parking garage lighting?

Aim

Understanding energy efficient exterior lighting and energy efficient lighting in the parking garage at the asset and encouraging improvements that lead to energy savings, without prejudice to the (social) security.

Available credits

A maximum of 4 points can be awarded for this credit. Please choose of the following options, additional options are possible.

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
0	Lighting is conventional and not energy efficient	
1	Exterior lighting is available and energy efficient OR is provided with an energy saving control	
1	Parking garage lighting is available and energy efficient OR is provided with an energy saving control	
2	Exterior lighting is available and energy efficient AND is provided with an energy saving control	
2	Parking garage lighting is available and energy efficient AND is provided with an energy saving control	
2	There is no exterior lighting present and is not necessary in view of (social) security.	
2	There is no parking garage lighting present and is not necessary in view of (social) security.	

Assessment criteria

1. Exterior lighting and parking garage lighting is rated energy efficient when from the type: LED, TL5, Natrium or equivalent in terms of efficiency (lumen/watt).

- 2. An exterior lighting control is classified as energy-efficient as it is equipped with automatic on and off, in which switching is done through twilight switch and switching off by a timer. If the lights are being reduced to a level of illumination that's required and standardized this can be approved.
- 3. A parking garage lighting control is classified as energy-efficient as it is equipped with a timer, motion sensor or if applicable dimming.

Evidence

- 1. A list of the type of luminaires, the control scheme by the building manager (for example based on the long-term maintenance, operating and maintenance manual or instructions for use of the asset).
- 2. Random control by the assessor of type and control system.

Definitions

Outdoor lighting: Building lighting and advertising lighting, lighting from the entrance, canopy lighting, lighting of paths, roads, parking lots, garages and other outdoor areas that belong to the plot of the building.

Additional information

Energy savings in exterior lighting is realized significantly by adapting the switching pattern in daylight. The turning on and off of lights through a switch prevents accidental lighting stays on. Installing a dimmer switch delivers an average of 180 hours of savings relative to a timer.

Consumption can be further reduced by placing a motion sensor. By applying a twilight switch with motion sensor lighting during night hours and shut off times will be approximately 90% of the time.

Car park lights on open terrain count as exterior lighting

ENE102 – Energy efficient elevators, escalators and travelators			
Part		Number of credits available	
1		4	

Are the elevators, escalators and travelators efficient and adapted to usage?

Understanding the energy efficiency of applied elevators, escalators and paths and encouraging improvements that lead to energy savings.

Available credits

A maximum of 4 points can be awarded for this credit. Please choose of the following options, additional options are possible.

Punten	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
2	All elevators are energy efficient	
2	There are no elevators present	
2	All escalators and travelators are energy efficient	
2	There are no escalators and travelators present	

Assessment criteria

A lifts is energy efficient when:

- a. The measured power use results in energy label C, the metering is executed following VDI 4707-1 or ISO 25745-2.
- b. The metering is performed by an independent organisation within the last 5 years.
- 2. An escalator/travellator is energy efficient when:
 - a. The measured power use results in energy label C, the metering is executed following ISO 25745-3.
 - b. The metering is performed by an independent organisation within the last 5 years.
 - c. The escalators and travelators are provided with a stand-by system so they shut down automatically when they aren't used for a certain time span. NB in some cases the energy

efficiency is higher when the escalators or travelators run at a lower speed, see additional information for the extra criteria.

Additional information

- Automatic shutdown from the escalators/travelators is strongly dependent on the operating
 conditions and function, it is only efficient when the escalator or travellator isn't used for a longer
 period. Frequent use has a reversed effect on energy consumption, in this situation, it's more
 efficient to run the escalators/travelators at a slower speed. If this is the case, a report with the
 support of the use of the escalators/travelators should be provided by the advisor or supplier.
- If several elevators or escalators of the same type and year of manufacture are provided only a representative number needs to be measured. The approach should be accepted by the assessor, but at least the elevator with the shortest floordistance should be included in the measurement.
- With lifts of less than 5 years old, an calculation by the original supplier of the expected energy label can be considered as equivalent to measurement.

Evidence

- 1. Building plans with locations of the lifts, escalators and travelators.
- 2. Documentation from the type of lifts, escalator and/or travellator used
- 3. The measured power consumption from the lifts is calculated following VDI 4707-1 of ISO 25745 (if applicable).
- 4. The measured power consumption from the escalators/travelators is calculated following ISO 25745 (if applicable).
- 5. Documentation from the supplier of the escalators/travelators which the presence of a stand-by system shows. (when this is not apparent from inspection).
- 6. Visual inspection from the assessor with photographic evidence.

Definitions

Elevator: A conveyor system that, by means of a cage which moves along fixed, relative to the horizontal plane more than 15 degrees inclined leaders, and which is intended for transport of:

- 1. People;
- 2. People and goods;
- 3. Goods only if the cage is reachable, that is to say that a person may enter it without difficulty and fitted with controls that are located in the car or within the reach of the person contained;
- 4. Lifts following a fixed course and with a lifting speed greater than 0.15 m / s, if they do not move along guides which are rigid, fall within the scope of this Directive (for example, scissor lifts).

This credit does not apply for:

- Cable installations, including funicular railways, for the public or private transportation of persons.
- lifts specially designed for military purpose or maintain order.
- Mining lifts
- Stage lifting devices
- Elevators used in transportation
 - Elevators that are connected to a machine, solely as entrance to a working space.
- Cogwheel tracks
- Construction site lifts
- · Wheelchair lifts
- Stair lifts

Escalator: A diagonal conveyor system, a diagonal transport system, consisting of a stairs with moving steps

Travelator: A conveyor system with a horizontal moving surface where people can stand or walk on.

References

-

Certification based on English Version of manual not available

Transport

Category summary table

Issue reference	Title	Credits available
TRA01	Cyclist facilities	4
TRA02	Proximity to public transport	8
TRA03	Proximity to amenities	4
TRA04	Pedestrian and cyclist safety related to deliveries	3
TRA101	Limiting parking	2
TRA102	Alternative means of transport	2
Total credits available		22
Total credits available Alternative means of transport 2 22 Certification based on Endish Certification based on Endish		

TRA01 - Cyclist facilities			
Part		Number of credits available	
1		4	

What facilities are available to cyclists?

Aim

To encourage building users to cycle by ensuring adequate provision of cyclist facilities.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
1	There are sufficient, well-lit and secure cycle racks
2	There are sufficient, well-lit and secure cycle racks and gender specific changing facilities or individual cubicles (including lockers) in place
3	There are sufficient, well-lit and secure cycle racks, gender specific changing facilities or individual cubicles, and shower facilities (including lockers) in place
4	There are sufficient, well-lit secure cycle racks, gender specific changing facilities or individual cubicles, and shower facilities (including lockers), and a ventilated drying area to hang wet clothes in a sheltered space
0	Other

Assessment criteria

- 1. Compliant cycle storage facilities must be provided for a percentage of staff in accordance with the following figures:
 - a) 10% of staff numbers for organisations with up to 500 staff PLUS
 - b) 7% of staff numbers for organisations with 501 1000 staff PLUS
 - c) 5% of staff numbers for organisations with over 1000 staff

For assets where the majority of building users are not staff, e.g. retail centres, hotels, museums, and schools, the above requirements apply to full-time staff only.

In addition the following must be provided for visitors:

i. 5% of the total number of customer car parking spaces (excluding disabled spaces and mother-and-baby spaces where provided). This is subject to providing a minimum of 10 cycle racks. Any asset that provides at least 50 customer cycle storage spaces will comply regardless of the number of parking spaces. The staff spaces must be provided in addition to customer spaces and whilst they do not need to be separate from customer spaces, this is encouraged.

In addition the following must be provided in schools with regard to the number of pupils/students:

- i. Day-care: at least 10 cycle storage places per 100 children.
- ii. Elementary school: at least 40 cycle storage places per 100 pupils.
- iii. Secondary schools: at least 60 cycle storage spaces per 100 pupils.
- iv. Higher education: at least 60 cycle storage spaces per 100 students.
- 2. Regarding cycle storage spaces, the following applies:

- a) If the cycle storage places are not in a secure room, it must be possible to secure the wheel and frame to a secured object with a lock.
- b) The majority of racks are within 100m of the building entrance.
- c) Lighting is present.
- 3. The number of lockers is at least equal to 20% of cycle spaces provided, and these should be accessible by both male and female users. For assets where the majority of building users are not staff, e.g. retail centres, this requirement applies to staff only.
- 4. Showers: 5% of the cycle storage racks, with a minimum of 1 shower (with a lock, so men and women can use the shower in succession). An asset with 4 showers or more is always in compliant, regardless of the amount of cycle storage spaces. This requirement applies to staff only.
- 5. Should be a specially designed and designated space (a plant room does not comply) and heating/ventilation should be adequate. For assets where the majority of building users are staff, e.g. retails centres, this requirement applies to staff only.

Additions to the assessment criteria

Cycle storage space

A cycle storage space could be a cycle rack or a clearly designated space for storing cycles using the stand.

Public cycle storage space

For assets where the majority of building users are not staff, public cycle storage spaces account for 50% of the mandatory spaces for visitors.

Sufficient cycle storage spaces

Offering sufficient parking places means that there is always enough place. If during a site visit of the assessor the number of parking places are shown to be insufficient, despite the numbers are in accordance to the criteria the credits cannot be awarded.

At a lower number of available parking places than required, only credits can be awarded if equivalence is proven based on a current investigation by an independent party, and photos of decisive moments in the year.

Evidence

- 1. Building plan with the location of the cycle facilities.
- 2. Calculation that shows the sufficient amount of cycle storage spaces, lockers, dressing rooms and showers.
- 3. Visual inspection by the assessor with photographic evidence from the applied facilities.

Additional information

If the number of cycling facilities that should be supplied is not a whole number, it must be rounded up to the nearest whole number. For example, where the number of cycling facilities that should be provided is calculated to be 10.2, the actual number of facilities that must be provided is 11.

TRA02 - Proximity to public transport		
Part Number of credits available		
1	8	

Question Is the asset within walking distance of public transport networks which operate a frequent service?		
set within walking distance of public transport networks which operate a frequent service? The appropriate public transport provision is available to building occupants. The credits		
Answer option		
Question not answered		
Don't know		
Public transport network over 1km away, with a maximum of 3km, from the building, with a 30-minute service frequency at peak times. Distance is measured as the walking distance via a safe route.		
Public transport network over 1km away, with a maximum of 3km, from the building via a safe pedestrian route, with a 15-minute service frequency at peak times. Distance is measured as the walking distance via a safe route.		
Public transport network less than 1km away from the building, with a 30-minute service frequency at peak times. Distance is measured as the walking distance via a safe route.		
Public transport network less than 1km away from the building, with a 15-minute service frequency at peak times. Distance is measured as the walking distance via a safe route.		
At the beginning and the end of the day a shuttle service to a public transport node or a town centre is present.		
Public transport network less than 500m away from the building, with a 30-minute service frequency at peak times. Distance is measured as the walking distance via a safe route.		
Public transport network less than 500m away from the building, with a 15-minute service frequency at peak times. Distance is measured as the walking distance via a safe route.		

Assessment criteria

- 1. The distance to a public transport network is set and complies with the requirements, as noted in the answer options. Distance in measured from the main entrance of the building.
- 2. The destination of the shuttle service must be a transport node or city centre.

Additions to the assessment criteria

Unless the asset has different peak times specified, the peak times are from 7:30 - 9:30 and from 17:00 -19:00.

Evidence

- 1. Annotated map demonstrating a safe route and distances to public transport connections.
- 2. Copies of public transport at network timetables.
- 3. Proof about the presence of the shuttle service, with the timetable and route (if applicable).
- 4. Inspection by the assessor of the public transport provision

Definitions

er traffic) and the state of th Safe pedestrian route: A safe route runs through pavements (separate from other traffic) and safe

TRA03 - Proximity to amenities			
Part Number of credits availabl			
1		4	

Aim

Available credits

Question Is the asset within walking distance of amenities?		
Aim To ensure appropriate amenities are available to building occupants. Available credits		
Credits	Answer option	
0	Question not answered	
0	Don't know	
0	No amenities are present within walking distance	
1	A lunchroom/cafeteria/supermarket is present within 1km of the building via a safe pedestrian route	
2	A lunchroom/cafeteria/supermarket is present within 500m of the building via a safe pedestrian route	
2	A lunchroom/cafeteria/supermarket and 2 other amenities are present within 1km of the building via a safe pedestrian route	
4	A lunchroom/cafeteria/supermarket and 2 other amenities are present within 500m of the building via a safe pedestrian route	
0	Other	

Assessment criteria

- 1. The distance is measured from the main entrance via safe pedestrian routes.
- 2. The amenities are opened during working hours of the building users.
- 3. Amenities are for example:
 - a) ATM
 - b) Mailbox
 - c) Sporting facilities
 - d) Day-care or nursery
 - e) Book store
 - f) Kiosk
 - g) Pharmacy
 - h) Drugstore
 - i) Barber

- j) Bicycle shop
- k) Dry cleaner's
- I) Weekly market
- m) Flower shop

Building function specific assessment criteria

Industry: If there is a significant amount of international deliveries (5% on the total amount of deliveries) The following can be provided in addition to the requirements from the credit:

- o 1 point: If there are facilities present like a toilet, shower, toilet and a dressing room specifically for drivers.
- 2 points: If there is a parking space for trucks to rest during the night within a 5km radius The maximum amount of credits that can be awarded stays at 4 points.

Evidence

- 1. Annotated map demonstrating a safe pedestrian route and distance to amenities (applicable if the amenities are outside the asset).
- 2. Asset floor plans with location of amenities indicated (applicable if there are amenities inside).
- 3. Evidence that shows amenities are opened during working hours.
- 4. Inspection by the assessor of the present amenities

Definitions

Safe pedestrian route: A safe route runs through pavements (separate from other traffic) and safe crossing points or, where provided, dedicated pedestrian crossing points.

Additional information

Certification based on Endis Amenities on the plot of the asset also count towards amenities inside of the building.

TRA04 - Pedestrian and cyclist safety related to deliveries		
Part Number of credits availab		Number of credits available
1		2

Are service delivery access points, routes, and manoeuvring areas onsite independent from parking areas pedestrian, and cyclist access points and routes?

Aim

To recognise and encourage the provision of safe and secure pedestrian and cycle access routes.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

1. The location is considered safe when independent foot- and bike paths are available from the entrance to the premises to the (main) entrance of the asset.

Additions to the assessment criteria

If the building has no outside area and the entrances open directly to public area, the building meets the requirements by definition.

Evidence

- 1. Copy of site map indicating location of service delivery areas in relation to other areas to indicate that these are separated from foot- and bike paths.
- 2. Photographic evidence of the service delivery areas and safe pedestrian route(s). If the situation looks safe from the photographic evidence, evidence point 1 is not required. At the discretion of the assessor.

TRA101 - Limiting parking		
Part Number of credits availab		Number of credits available
1		2

Aim

Available credits

Question Is the parking policy at the location aimed at reducing car use and / or there is paid parking has been introduced? Aim Discouraging car use. Available credits			
Aim			
Discoura	ging car use.		
Availab	ole credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No measures have been implemented		
2	The amount of parking spaces doesn't exceed more then 20% of the municipal parking ratio for the location		
2	Paid parking is implemented		
0	Other		

Assessment criteria

1. The credit applies to all of the parking spaces related to the asset, this includes nearby rented parking spaces.

Evidence

- 1. An overview of the amount of parking spots, including nearby rented parking spaces and the current municipal parking ratio. (if applicable)
- 2. Official documents stating that paid parking is implemented. Paid parking can also be verified through visual inspection (if applicable).

Additional information

Nearby rented parking spaces refers to nearby rented parking spaces where a fixed number of parking spaces in a nearby garage or in a nearby parking lot are available for the user of the asset.

TRA102 – Alternative means of transport		
Part	Number of credits available	
1	2	

Are there charging stations for electrical cars or facilities for carpooling or car sharing present?

Aim

To stimulate the reduction of car related emissions by using electric cars or carpooling and car sharing.

Available credits

Credits	Answer option	
0	Question not answered	
0	Don't know	
0	No measures have been implemented	
1	There are charging stations present for electric cars	
1	Facilities for carpooling or car sharing are present	
0	Other	

Assessment criteria

- 1. The charging stations for electric cars are suitable for all standard connections for a minimum of 3% of the total of parking places with a minimum of one charging station for visitors and a charging station for personnel.
- 2. Designated priority parking locations near the (main) entrance of the building are present for carpoolers.
- 3. The amount of carpool parking locations is at least 5% of the total amount of parking places, with a minimum of one.

Evidence

- 1. An overview of the number of parking spaces and the calculation of the amount of charging stations / carpool sites.
- 2. Visual inspection by the assessor with photographic evidence from the amount of charging stations, carpool parking places and facilities for commercial car sharing.

Additional information

This credit focuses on car usage.

Water

Category summary table

Issue reference	Title	Credits available	
WAT01	Water meter	6	
WAT02	Water efficient equipment: WCs	4	
WAT03	Water efficient equipment: urinals	4 2	
WAT04	Water efficient equipment: hand washing basins	4 0	
WAT05	Water efficient equipment: showers	Q .	
WAT06	Water efficient equipment: white goods	4	
WAT07	Leak prevention main water supply	4	
WAT08	Self-closing water supply for sanitary	4	
WAT 09	Percentage sanitary and equipment with Isolation valves	4	
WAT 10	Reducing mains water consumption	4	
WAT 101	Separate sewer system for rainwater	4	
Total credits availab	ple	46	
Total credits available 46 Certification based on English Certification based on English			
Certifi,			

WAT01- Water meter		
Part		Number of credits available
1		6

To what level is water consumption metered?

Aim

To ensure water consumption can be monitored and therefore enable building users to target reductions in water consumption.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Not metered
2	Site – Where water consumption is metered for the whole site
4	Building – Where water consumption is metered at the whole building level
6	All water-consuming plant or building areas that consume 10% or more of the building's total water demand are either fitted with sub meters or have water monitoring equipment integral to the plant or area AND Where the building is multi tenanted: water consumption is metered per tenanted area
0	Other

Assessment criteria

- 1. Awater meter on the mains supply to the site or building (whichever is applicable) including where water is supplied via a borehole or other private source.
 - Evidence provided demonstrates that a water meter is installed on relevant water supplies to the specific response given in the credit criteria.
- 3. Where water is metered and monitored at site level, the water meters must measure all water that is utilised on site, including, but not limited to:
 - a. Main supply
 - b. Bore hole supply
 - c. Rainwater harvesting
 - d. Grey water harvesting
- 4. If there is no water supply to the building, the assessor must validate this.

Evidence

- 1. Copies of site/building/asset plans, indicating where water meters are located.
- 2. Photographic evidence of installed water meters.
- 3. The most recent measurements so it confirms that all the water meters actually work.

Catification based on English Version of manual not awaitable

WAT02 - Water efficient equipment: WCs		
Part		Number of credits available
1		4

What percentage of WCs has been fitted with low flush technologies?

Aim

To reduce water consumption by encouraging the specification of water efficient WCs.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	0%
1	All WCs ≤ 6 litres per flush
2	≥ 75% of all WCs ≤ 4,5 litres per flush (all remaining WC's ≤ 6 litres per flush)
3	All WCs ≤ 4,5 litres per flush
4	≥ 50% of all WCs ≤ 3 litres per flush (all remaining WC's ≤ 4,5 litres per flush)

Assessment criteria

- 1. The WCs within the asset all have a flushing volume and/or a double flush button or a flush interrupter corresponding to the answer options.
- 2. The flush volume regards to the 'effective flush volume' and this will need to be calculated, an explanation and worked example is available in the additional information section.

Additions to the assessment criteria

The effective flush volume (EFV) is the volume of water needed to clear the WC and transport any contents far enough to avoid blocking the drain. The effective flush volume of a single flush WC is the volume of water used for one flush.

The effective flush volume of a dual flush WC is the ratio of full flush to reduced flush. This is taken to be one full flush for every three reduced flushes for non-domestic buildings.

The effective flush volume would therefore be calculated as follows, using a 6/4 litre dual flush volume WC as an example:

$$\frac{(6L\times1) + (4L\times3)}{4} = 4.5L EFV$$

A flush interrupter can be considered to have an effective flush volume of 75% of the full flush.

Evidence

- 1. Copies of asset floor plans indicating the location and quantity of WCs or a similar method.
- 2. Photographic evidence showing the dual flush and flush interrupter buttons.
- 3. Photographic evidence of information on cistern to identify flow rate, copy of liaisons with manufacturer confirming WC is low flush.

Cartification based on English Version of manual not available

WAT03 – Water efficient equipment: urinals		
Part		Number of credits available
1		4

Aim

Available credits

•	Question Does the asset contain low water use or waterless urinals? Aim To reduce water consumption by stimulating water efficient urinals. Available credits		
Aim	Jaile		
To reduc	e water consumption by stimulating water efficient urinals.		
Availab	ole credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No		
1	All urinals with less than or equal to 3 litres per flush		
2	All urinals with a maximum of 1,2 litres per flush		
4	Waterless urinals		
0	There are no urinals present in the asset		

Assessment criteria

1. Where multiple fittings are specified with various flow rates, the flow rates for each type of fitting will need to be calculated and the average flow rate determined by the assessor.

Evidence

- 1. Copies of asset floor plans indicating the location and quantity of urinals or a similar method.
- 2. Manufacturer/supplier literature of installed urinals. For verifying waterless urinals, no product information is needed, the assessor can verify this.

WAT04 – Water efficient equipment: hand washing basins		
Part		Number of credits available
1		4

What percentage of the hand washing basin taps is designed for low water use?

Aim

To reduce water consumption by encouraging specification of water efficient equipment.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	0%
1	≥ 1% tot < 25%
2	≥ 25% tot < 50%
3	≥ 50% tot < 75%
4	≥ 75%

Assessment criteria

1. Hand washing basin taps must have a maximum flow rate that is less than 6.0 litres/min or an automatic control (e.d bush button with an auto shutoff or Active Infrared Taps).

Additions to the assessment criteria

Only taps that are specifically used in hand washing basins are applicable. This requirement does not apply to:

- 'Scrub' facilities in clinical areas of healthcare buildings
- Taps provided to cleaners
- Kitchen and external taps
- Taps in technical installations or sinks in technical rooms
 - Other instances where such fittings would be inappropriate for medical/health-related reasons (such instances must be justified by the design the building management)

Evidence

- 1. Copies asset floor plans identifying the location and quantity of hand wash basins or a similar method.
- 2. Photographic evidence of installed hand washing basins. This should involve a representative sample.

3. Manufacturer/supplier literature or metering that shows that the taps have of water efficient specifications.

Canification based on English Version of manual not available

WAT05 - Water efficient equipment: showers		
Part		Number of credits available
1		4

What percentage of the showers is low water use?

Aim

To reduce water consumption associated with the use of showers by stimulating the use of low water using showers.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	0%
1	≥ 1% tot < 25%
2	≥ 25% tot < 50%
3	≥ 50% tot < 75%
4	≥ 75%
4	No showers in place

Assessment criteria

1. In order to be awarded the relevant credits showers must have a maximum flow rate less than 6 litres per minute.

Additions to the assessment criteria

The criteria requirement does not apply to medical or health-related reasons, such as an emergency shower

Evidence

- 1. Copies of asset floor plans demonstrating location of changing facilities.
- 2. Photographic evidence of installed showers. This should involve a representative sample.
- 3. Manufacturer documentation should be provided for the showers which have been installed and observed within the building in order to confirm that they are low water use.

WAT06 - Water efficient equipment: white goods		
Part		Number of credits available
1		4

Aim

Available credits

Question What percentage of the water consuming white goods are low water use (dishwashers, washing machines)? Aim To reduce water consumption associated with the use of white goods. Available credits		
Aim		
To reduc	To reduce water consumption associated with the use of white goods.	
Availab	Available credits	
Credits	Answer option	
0	Question not answered	
0	Don't know	
1	≥ 1% tot < 25%	
2	≥ 25% tot < 50%	
3	≥ 50% tot < 75%	
4	≥ 75%	
4	No water consuming white goods in place	

Assessment criteria

- 1. Low water consumption for white goods means less than or equal to:
 - a. Professional dishwasher:. 7 liters per rack
 - Domestic dishwasher: 12 litres per cycle
 - c. Professional/Industrial washing machine: 12 litres per kg
 - d. Domestic sized wasmachine: 45 litres per load

Only water consuming white goods that are under the operational control of the building owner and/or are fitted by the building owner must be assessed.

Evidence

- 1. Photographic evidence of listed white goods.
- 2. Manufacturer specifications of white goods installed in the asset.
- 3. Copies of asset floor plans with marked location of white goods installed.

Definitions

This credit refers to white goods in household appliances that only consume water namely, dishwashers and washing machines.

Additional information

Through the model number of the white goods appliances, many specifications are to be found on the internet.

Cartification based on English Version of manual not available

WAT07 - Leak prevention main water supply	
Part	Number of credits available
1	4

Aim

Available credits

	Question Does the asset have an automated leak detection system? Aim To reduce the impact of water leaks that may otherwise go undetected. Available credits		
Aim	Jaille Land Committee of the Committee o		
To reduc	To reduce the impact of water leaks that may otherwise go undetected.		
Availat	ole credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No		
4	Yes		

Assessment criteria

- 1. A leak detection system on the main water supply that detects higher than normal flow rates at meters and/or sub-meters. It does not necessarily require a system that directly detects water leakage along part or the whole length of the water supply system. The system can be flow based or sensor based.
- 2. The leak detection system should be:
 - a. Able to easily identify any detected leaks
 - b. Activated when a continuous flow of water passes through the water meter at a flow rate above a pre-set minimum for a pre-set period of time
- 3. The system does not need to cut off the water supply when the alarm is triggered.

Additions to the assessment criteria

If there are multiple buildings or major water connections, they should all be visibly equipped with leak detection.

Evidence

- 1. Photographic evidence of leak detection system.
- 2. Manufacturer specifications of system.

Additional information

This credit does not specify what the minimum and maximum leakage currents may be; however, the system must be able to distinguish between different flow volumes, which belong to (set in) the consumption patterns of different building user / users or owners.

WAT08 – Self-closing water supply for sanitary		
Part		Number of credits available
1		4

Are toilet areas fitted with controls that isolate water supply when they are unoccupied?

Aim

To reduce the impact of water leaks in areas that are not occupied that may otherwise go undetected.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- 1. Shut off systems may control combined toilet areas (for example the male and female toilets within a core) provided that the source of the leak within that area can be isolated once the building is occupied (i.e. the facilities management team are able to pin point the position of the leak whether it is in the male or female toilets).
- 2. Proximity detection shut off is not required for each individual toilet, but the requirement is for the cold water supply to be isolated for each toilet block on a floor.
- 3. When the requirements apply to facilities to a single WC (potentially within smaller or low occupancy buildings), the shut-off can be provided via the same switch that controls lighting (whether proximity detection or a manual switch).
- 4. Programmable timed controllers linked to the shut-off device are an acceptable means of compliance for facilities in this type of space, where constant use is to be expected during operating hours.

Building function specific assessment criteria

Lodging: The credit does not apply on WCs and showers in hotel rooms, but it does apply on communal blocks

Evidence

- 1. Photographic evidence of water shut off controls (when reachable).
- 2. Manufacturer specifications of shut off controls (if available).
- 3. Systematic diagram showing the areas of isolation.

WAT09 - Isolation valves		
Part		Number of credits available
1		4

To minimise unnecessary water consumption due to defects and to minimise disruption during maintenance.

Available credits aud not

Credits	Answer option
0	Question not answered
0	Don't know
0	0% tot < 1%
1	≥ 1% tot < 25%
2	≥ 25% tot < 50%
3	≥ 50% tot < 75%
4	≥ 75%

Assessment criteria

- 1. Evidence illustrates that isolation valves are installed for relevant equipment within the asset. Relevant equipment includes (but is not limited to):
 - a. Washing basin (isolation valves)
 - b Shower (isolation valves)
 - WC (isolation valves)
 - d. Urinal (isolation valves)
 - e. Washing machine (isolation valves or waterlock)
 - Dishwasher (isolation valves or waterlock)
- 2. All isolation valves are fitted to areas in which water using appliances are installed, such as shower blocks and WC areas, the aim of the credit would be met. These areas can be included in the overall percentage.
- 3. Isolation valves are classified as any valve in the pipe, which prevents the flow of water to a specific appliance; for example WCs.
- 4. Isolation valves must be easily accessible.

Additions to the assessment criteria

This involves only water-consuming devices that are connected to a water supply. Washing machines and dishwashers can be a water seal, which closes the water supply as soon as leakage, therefore they are considered equivalent to an isolation valve.

Evidence

- 1. Photographic evidence of water isolation controls. This should involve a representative sample.
- 2. Product information from the manufacturer if the isolation valve or water seal is not visual (for example, if the water trap is integrated).

Additional information

In the Netherlands, isolation valves are almost standard used in devices such as coffee machine (connected to water supply), dishwashers, washing machines and water heaters. This will make it that aing ne that shu e that shu har a th maximum points can be achieved in many buildings. In dishwashers and washing machines a water seal is often present, also known as water stop or aqua stop. This is a safety valve that shuts off the water supply

WAT10 – Reducing mains water consumption		
Part		Number of credits available
1		4

Does the asset use non-mains water supply for any use?

Aim

To reduce the demand for mains water within the asset.

Available credits

0 114	
Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Legislative requirements prevent use of non-mains water supply within the asset
2	Rain water is used in the asset
2	Grey water is used in the asset
4	Rain and grey water is used in the asset

Assessment criteria

- 1. Usage of rain and grey water is for example (but not limited to):
 - a. Irrigation for landscaping
 - b. Toilet flushing
 - c. Carwashing
 - d. Washing clothes
 - e. Business process/production

Evidence

Photographic evidence of the present water storage used for rain and grey water

2. Where legislative requirements prevent the use of non-mains water supply, copy of relevant legislation.

Definitions

- **Grey water:** slightly contaminated wastewater, which originates from domestic operations, which is cleaned and reused.
- Rainwater: rainwater or melt water from ice, snow and hail, which is captured and reused.

Additional information

In the following cases it might not be possible to apply the usage of rain and grey water by law:

Buildings with a medical office or a building housing a vulnerable group of people.

Sources for grey water might include:

- Showers
- Sinks

Catification based on English Version of manual not awaitable

WAT101 - Separate sewer system for rainwater		
Part		Number of credits available
1		4

ls a sepa	Is a separate sewer system for rainwater and black water present?	
Aim	ilable	
Reducing	the pressure on the sewers and sewage facilities during heavy rainfall and preventing	
	desiccation on location.	
Availab	Available credits	
Credits	Answer option	
0	Question not answered	
0	Don't know	
0	No	
2	Rainwater is buffered and gradually / slowly drained to the sewer system	
4	Yes	

Assessment criteria

- 1. Rainwater is buffered and gradually / slowly drained to the sewer system (but not limited to)
 - a. Vegetation roofs
 - b. Ponds
 - c. Partial infiltration of the rainwater
- 2. The asset must drain the rainwater (rainwater) via a separate sewer connection for rainwater (4 credits).

Additions to the assessment criteria

Question can also be answered with yes, if the rainwater drainage is disconnected from the sewers on the condition that there is sufficient room for infiltration or it is discharged immediately on surface water and there is no inconvenience during heavy rainfall.

Evidence

- 1. Plans of the site showing the connections for the separate sewer system.
- 2. Photographic evidence showing the means of buffering such as a water storage, pond, vegetation roof and/or garden.
- 3. Inspection by the assessor to make sure there are no connections between the sewer system for rainwater and the public sewer, supplemented with photos.

Additional information

Not all municipalities have been calculated on a separate sewer system, but they are used in more and more places. If the municipality does not separate rainwater, only rainwater buffering (2 credits) can be selected in this credit.

Catification based on English Version of manual not awaitable

Materials

Category summary table

Issue reference	Title	Credits available
MAT01	Condition survey	4
MAT02	Security advice, implementation	4
MAT03	Intruder alarm system	4
MAT04	Alarm system monitoring	4
MAT05	Natural hazards	4
MAT06	Future adaption	4
MAT07	Designing for robustness	2
MAT101	Environmental impact building materials	10
Total credits availa	ble	36
Certification	ble Dased on Fridgish Dased on Fridgish	

MAT01 – Condition survey		
Part		Number of credits available
1		4

If a condition survey has been completed within the last 5 years, has work been conducted to rectify any defects identified?

Aim

To encourage asset/property owners to understand the physical condition of their property, and manage any deficiencies to structural and systems.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Asset is over 5 years old and a condition survey has not been carried out within the last 5 years
0	A condition survey has been carried out, however no works have been carried out to rectify defects identified
1	A condition survey has been carried out and an action plan is in place which establishes when defects will be rectified
2	A condition survey has been carried out and all major defects have been rectified
3	A condition survey has been carried out and all major issues/defects have been rectified and an action plan confirms when the remaining defects will be rectified
4	A condition survey has been carried out and all identified issues/defects have been rectified
4	The asset is less than 5 years old and no condition survey has been undertaken
0	Other

Assessment criteria

- 1. A condition survey should be conducted by a person with relevant education and experience.
- 2. The conduction survey has been conducted following NEN2767, ISSO publication 104 and/or ISSO publication 106.
- 3. The conduction survey is less than 5 years old.
- 4. Criteria for repairing or renewing defective elements should be established to ensure work prioritisation.

Additions to the assessment criteria

- An example of a condition survey is a survey conducted following the RgdBOEI method. Because RgdBOEI-surveys are more comprehensive than a the surveys following NEN2767, the inspector using this method must meet the educational requirements for Integral Real Estate Inspector (Integraal Inspecteur Vastgoed (IVV)), which the state real estate agency suggests.
- If a report has been prepared in accordance with ISSO Publication 104 and/or 106, it must be demonstrated that the measurement is related to both the construction and the installation technical part.
- The age of the asset can be calculated from the time of delivery after construction or after a major renovation.

Evidence

- 1. Records of previous condition surveys.
- 2. Copy of action plan (if applicable).
- 3. Photographic evidence and/or documentation to demonstrate the address of defects (if applicable).
- 4. Assets that are less than 5 years old will require appropriate public records of property registration to demonstrate the building's age (if applicable).

Definitions

- Condition survey: A condition survey is a survey of the current state from the structural and the installation systems and can be conducted following NEN2767. NEN2767 consists out of several parts. Part 1 (NEN2767-1) is the method described to objectively determine the state of de structural and installation parts. Part 2 (NEN2767-2) is a standard list for defects from structural and installation parts. Part 1 and 2 must be used together
- Major issues are issues that need to be addressed in order for the building to operate and function correctly.
- **Minor issues** are issues that can be addressed at a later stage, as these do not directly adversely affect the operation of the building
- Large-scale renovation: Renovation by altering the building envelope (walls, floor, roof, windows, doors) and equipment (lighting, heating, cooling, ventilation) with the aim of extending the lifetime of the building.

References

- NEN2767-1 Condition survey Method
- NEN2767-2 Condition survey of structural and installation parts List of defects
- ISSO-publicatie 104 Roadmap to Sustainable Management and Maintenance
- ISSQ-publicatie 106 Functional inspection method Sustainable Management and Maintenance

MAT02 – Security advice, implementation		
Part		Number of credits available
1		4

How were security measures for the building and its content decided upon?

Aim

To ensure all property related security issues are identified by a suitable safety advisor and addressed in order to reduce risks from frequent crime (destruction, burglary, theft).

Available credits

111 41141111111111111111111111111111111	
Credits	Answer option
0	Question not answered
0	Don't know
0	No security advice has been drafted
0	A qualified safety advisor has drafted a security advice but no measures have been implemented.
1	A qualified safety advisor has drafted a security advice and minor measures have been taken.
2	A qualified safety advisor has drafted a security advice and major measures have been taken.
4	A qualified safety advisor has drafted a security advice and all measures have been taken.
0	Other

Assessment criteria

- 1. A consultation involving a competent third party organisation has been carried out to identify potential weaknesses of property perimeters and building interiors, including the parking lot and the vicinity of the building.
- 2. A qualified safety advisor has the following qualifications:
 - a. Diploma Crime Prevention Through Environmental Design (CPTED).
 - b. Post HBO-diploma Security Management from DHM Security Institute (Former university of the Hague
 - c. CPO diploma (Certified Protection Officer)
 - d. Qualified employee of a BORG- or NBR certified security firm.
- 3. Recommendations are in accordance with the security advice and are followed and implemented.

Additions to the assessment criteria

• If there are no additional safety measures stated in the security advice, the maximum amount of points may be awarded.

Measures may only be considered as taken, when a conducted solution was assessed by an
independent authoritative organization, this may be the adviser who made the security advisory.

Evidence

- 1. Copy of the report and actions raised from the survey by a suitably qualified third party organisation.
- 2. Proof of the qualifications of the advisor
- 3. Photographic evidence and/or documentation to demonstrate the rectification of issues/defects.

Definitions

Security advice: an advice wherein the asset is rated on risks of burglary and social security and defects found in these areas and advice on how to remedy this. A security advice may also additionally contain a large number of other topics, including the safe use of social media, offender profile, workplace security, secure IT management etc.

Additional information

Minor and major measures

If a measure is considered as minor or major depends on the effort, (time, costs) which is needed to implement the measure compared to the other measurements. Preferably the adviser describes if a recommendation should be seen as "small" or "large" in the project.

Were advised don't be advised describes if a recommendation should be seen as "small" or "large" in the project.

Certification because of the cost of the cost

MAT03 – Intruder alarm system		
Part		Number of credits available
1		4

Has the asset been fitted with an intruder alarm system that is certified to National or International standard or is the asset manned by a security guard 24 hours a day?

Aim

To ensure the asset is equipped with appropriate security systems to prevent any damage to the asset.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- The intruder alarm system is BORG certified.
 OR
- 2. 24-hour guard security should be undertaken by trained staff either employed by the organisation or contracted to look after the site.

Additions to the assessment criteria

- Other certificates than BORG 2005 version 2 will also suffice, if it is shown to be at least equivalent.
- 24-hour camera surveillance will also suffice if it is equivalent to 24 hour manned guarding.

Evidence

- 1. Requirements for an asset with an intruder alarm system:
 - a. Documentation that shows the intruder alarm system is certified following the national assessment following BORG 2005 version 2 or equivalent.
- 2. Requirements for an asset with 24 hour manned guarding:
 - a. Company data and contracts for the organisation performing the security.

References

_

MAT04 – Alarm system monitoring		
Part		Number of credits available
1		4

Are the alarm systems (fire, intruder) connected to a monitored facility that is operational 24 hours a day

Aim

To ensure an asset has appropriate response to a fire and break in when the building is unoccupied.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- 1. Fire and/or intruder alarm systems are BORG certified.
- 2. Present fire alarm system is certified following the certification scheme Fire alarm systems 2011 from CCV (Brandmeldinstallaties 2011) or inspected in accordance with the CCV Fire Inspection Scheme, NEN 2535.
- 3. Alarm receiving centres should be staffed at all times.
- 4. There are, for example procedures have been agreed with the emergency services, and other parties, which the alarm centre remain operational during the investigation of the cause of the alarm.

Additions to the assessment criteria

- In addition to BORG 2005 version 2 certificate, the credit can also be achieved by other certificates, if it can be shown to be at least equivalent. Regarded as equivalent are in any case: a BORG proof of completion, a VEB proof of completion or a VEB certificate.
- An alarm receiving centre may be a private alarm receiving centre (PARC). In this case, this PARC is based on the WPBR to obtain a permit from the Minister of Justice.
- If the asset is guarded for 24 hours per day following the requirements of MAT03, the maximum amount of points may be awarded for this credit.

Evidence

- 1. Documentation that shows the fire and intruder alarm system is certified or inspected.
- 2. Documentation that shows the alarm system is connected to an alarm receiving centre.
- 3. Relevant (contract) documents relating to the crew of the emergency and procedural arrangements.

References

• NEN2535: Fire safety of buildings - Fire detection installations - System and quality requirements and guidelines for detector siting

Catification based on English Version of manual not available

MAT05 – Natural hazards		
Part		Number of credits available
1		4

Have emergency plans been developed to deal with threats from all relevant natural hazards?

Aim

To ensure the asset is protected against the potential impacts of natural hazards.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes
4	No, asset is in an area where no risks exist

Assessment criteria

- 1. The emergency plan includes an integral and coherent emergency strategy aimed at protecting the asset for all **relevant** natural hazards for the time period specified.
- 2. Relevant natural hazard risks/plans should have been identified by competent individuals/relevant organisations.
- 3. Natural hazards are natural processes or phenomena occurring in the biosphere or crust that may constitute a damaging event. The following hazards can occur in The Netherlands:
 - a. Flooding's 6
 - b. Earthquakes
 - c. Wildfires
- 4. Emergency plans have been delegated to relevant individuals within the organisation.
- 5. The emergency plan contains an evacuation plan
- 6. If there is no perceived threat from natural hazards this should be outlined in appropriate documentation from a relevant authority or expert.

Additions to the assessment criteria

The government has information that easily traces hazards via: http://nederland.risicokaart.nl/. If a correct application can be shown and the results are such that it can be stated with certainty that the asset is located in an area with no or negligible risks stated in criteria 3, there is no need to involve a person with sufficient knowledge and experience relevant to natural hazards.

Evidence

- 1. Emergency plan for one or more natural hazards.
- 2. Documentation stating the persons and the function of the person involved within the organisation with emergency plans.

- 3. For assets that list no natural hazard risk exists:
 - a. Documented confirmation from relevant agency/experts that the asset is located in an area of no risk on the basis of nederland.risicokaart.nl or equivalent sources.

References

http://nederland.risicokaart.nl/

Catification based on English Version of manual not awaitable

MAT06 – Future adaption		
Part		Number of credits available
1		4

Does the design of the asset allow future adaptation to meet changing demands such as variations in use and functionality?

Aim

To recognise and encourage buildings which have been built to allow a degree of flexibility for future usage.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- 1. The building should have been designed with a degree of flexibility to ensure that future changes in use are possible. This flexibility could consist of (but is not limited to):
 - a. Partition walls which can be easily re-positioned, separating load-bearing structure and facade, through breakable floors.
 - b. Circuitry/plumbing which can be easily removed/adapted when areas are unoccupied or when there is increased usage required; for example lighting removal or addition.
 - c. Other design features deemed suitable by the assessor.

Evidence

1. Photographic evidence of (internal) design features that allow for flexibility.

Plans, studies, reports or other documentation that reflect that functional adaptability was taken into consideration during the design process.

MAT07 – Designing for robustness		
Part Number of credits availab		Number of credits available
1		2

Does the asset contain features that protect exposed elements of the building and landscaping from damage from pedestrian traffic, internal vehicular/trolley movement, and external vehicular collision?

Aim

To minimise the frequency of building part replacement, maximising materials optimisation

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. Examples of features that protect exposed elements of the building include, for example:
 - a. Asset walls separated from vehicular traffic by a path or other barrier.
 - b. Wall/corner guards
 - c. Bollards
- 2. Examples of features that protect exposed elements of landscaping include, but are not limited to:
 - a. Pathways which are easily accessible and dissuade building users to walk across landscaped areas.
 - b. Landscaped zones are fenced off.

Evidence

1. Photographic evidence of vulnerable areas and taken measures to protect these areas

MAT101 – Environmental impact building materials		
Part		Number of credits available
1		10

What is the environmental impact of materials used in the building?

To identify and encourage the use of materials with a low environmental impact during the lifecycle of a building.

Available are different to the control of the lifecycle of a building.

Available credits

Question	Answer option
0	Question not answered
0	Don't know
1	Average age: ≥ 10 and < 20 year OR the environmental impact that exceeds the reference score
2	Average age: ≥ 20 and < 30 year
3	Average age: ≥ 30 and < 40 year OR the environmental impact is between >0% and <10% under the reference score
4	Average age: ≥ 40 and < 50 year OR the environmental impact is 10% under the reference score
5	Average age: ≥ 50 year OR the environmental impact is 20% under the reference score
6	The environmental impact is 30% under the reference score
7	The environmental impact is 40% under the reference score
8	The environmental impact is 50% under the reference score
9	The environmental impact is 60% under the reference score
10	The environmental impact is 70% under the reference score

Assessment criteria

- 1. With the use of the DGBC calculation tool for the average age of the building, a maximum of 5 points can be awarded.
- 2. Calculation of the environmental impact from the shadow costs per m2 GIA (Gross Internal Area) relative to the reference score

- a. The rating of the shadow costs must be in accordance with the most recent version of "Bepalingsmethode Milieuprestatie Gebouwen en GWW-werken" including the National Environmental Database (Nationale Milieudatabase).
- b. The calculation is conducted by a knowledgeable and experienced person relevant to shadow costs, this person can also inform knowledge and experience, This person may appoint points of interest in the calculation and justify solutions.

Additions to the assessment criteria

The shadow costs can be calculated with different tools, not all tools meet the BREEAM-NL requirements. In addition, both the tools and the National Environmental Database are subject to change. A current list of available tools and instructions is available via www.breeam.nl/hulp. Also the reference score for each function and database version that must be maintained as a reference, is shown here.

Evidence

- 1. From an asset in which the average age of the building is used for awarding points, the age of the building must be shown by means of formal documentation (it does not need for individual components).
- 2. From an asset which was carried out with shadow costs calculation:
 - a. Calculation of the total gross internal area
 - b. Shadow costs calculation with the shadow costs per m2 GIA following the described BREEAM-NL method.
 - c. Proof of the qualifications of the advisor calculating the shadow costs

Additional information

Buildings that already have been realized, the main part of materials is already fixed. This issue gives an insight into the choices made at that time including any amendments since than and it's environmental impact. It encourages long use of materials as well as choosing materials with a low environmental impact in the event of alterations, renovations and expansions.

Waste

Category summary table

Issue reference	Title	Credits available
WST01	Storage of operational waste	4
Total credits availa	ble	4
Certification	Storage of operational waste ble hased on English Version of manual for the storage of operational waste	not avaire

WST01 – Storage of operational waste		
Part		Number of credits available
1		4

Is waste collected and separated and are there facilities for recycling at a central location?

Aim

To ensure assets have adequate space for waste stream separation on site, allowing for recycling to take place and thus reduce waste being sent to landfill or for incineration.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
1	Yes, there is space for 1 type of waste stream separation on site
2	Yes, there is space for 2 types of waste stream separation on site
3	Yes, there is space for 3 types of waste stream separation on site
4	Yes, there is space for 4 types of waste stream separation on site
0	Other

Assessment criteria

- 1. Separate bins should be provided for different waste streams (if this is necessary), examples of these include (but are not limited to):
 - a. Glass
 - b. Paper and cardboard
 - Metal waste
 - d. Plastics (foils)
 - e. Food and cooking oil
 - f. Other forms of recycling, specifically to the asset.
- 2. Residual waste does not count as a separate waste stream.
- 3. Dangerous waste streams do not count as separate waste streams because the separation and disposal is required by law.
- 4. Recycling of different colours of glass is classed as 1 (combined) waste stream.
- 5. Recycling of different types of metal is classed as 1 (combined) waste stream.
- 6. Recycling of paper and cardboard is classed as 1 (combined) waste stream.
- 7. Recycling of food and cooking oil is classed as 1 (combined) waste stream.
- 8. Bins located in this central area should:

- a. Be grouped together
- b. Be easily identifiable in terms of the waste streams they hold.
- 9. Bins should be in an appropriate location, easily accessible to those responsible for disposing of waste.
- 10. There is enough space to separate and store the waste, including residual waste and dangerous waste, at the central deposit site.

Additions to the assessment criteria

Whether there is sufficient space is determined by the amount of waste and how it is collected. Relatively, smaller spaces can still be shown to be sufficient if, for example, use is made of a press container, or a higher pick-up rate. If the room is neat and tidy and no abundance is present on means of collection, it may be assumed that there is sufficient space.

When in doubt about whether there is enough space, the following can be used:

- 2 m² per 1.000 m² of gross internal area (GIA) for assets or 10 m2 GIA for assets 5.000 m² (total of all flows)
- Additional 2 m² per 1.000 m² NFA in assets or additionally at least 10 m² GIA in assets> 5.000 m² where catering is provided.

Evidence

- 1. Photographic evidence of the central storage space.
- 2. If waste is commingled, records from waste collector that commingled waste are separated in the storage Vers

 Certification based on English

 Certification based waste streams as identified.
 - 3. Calculation of the required area of the central storage space.

Land Use and Ecology

Category summary table

Issue reference	Title	Cred	its available
LE01	Planted area	4	0
LE02	Ecological features	2	1801
Total credits available		6	12/10

Centification based on English Version of manual not a

LE01 – Planted area		
Part		Number of credits available
1		4

What percentage of the asset's footprint has been planted?

Aim

To measure and encourage planted areas within the asset's footprint that enhance the asset's site ecology.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	0%
1	≤10%
2	>10% tot ≤40%
3	>40% tot ≤70%
4	>70%
0	Other

Assessment criteria

- 1. Planted area can contain or be a mix of horizontal and vertical planning.
- 2. Horizontal planting can be a green roof.
- 3. Vertical habitats or green walls can be:
 - a. Free standing or part of the building, as long as there are located within the asset's footprint.
 - Partially or completely covered with vegetation and, in some cases, soil or an inorganic growing medium.

Evidence

- 1. Photographic evidence of installed ecological structures.
- 2. Floor plan and/or views of the area which shows the landscaping (including the calculation of the percentage of external landscaping)

Definitions

Green roof: A green roof is a roof that is partially or completely covered with vegetation and soil or another growing medium, situated on top of a waterproof membrane. These systems can be either intensive or extensive:

- a) Extensive green roof systems: This contains contain: sedum, moss, grass and herb roofs. The thickness of the green roof build-up in this case is up to 15 cm and the height of the vegetation up to 50 cm. This vegetation usually requires a minimum of maintenance, need to be irrigated and imposes less stringent requirements on the supporting structure.
- b) Intensive green roof systems: Green roof build-up Roof garden thick with a height of over 15 cm. The vegetation optionally is characterized by the presence of bushes and trees in combination with lawn and / or ground covers. This vegetation makes intensive maintenance is required and depending on the used plants also a form of irrigation. Also proposes heavier demands on the supporting structure.

Vertical planting / green facade: Vertical planting or green facades are facades that are partially or completely covered with vegetation. The vegetation can be placed in the ground and grows, optionally with the aid of structures, against the wall or can be laid out in such a way that there are provided breeding ground against the facade, in which vegetation can grow. The vertical shade / green facade has a connection to the facade.

Additional information

Ecological value

The ecological value of landscaping depends on the type of landscaping and its location relative to the green structures in the area. In general, the flora (plants, shrubs and trees) has an intrinsic value, but that the ecological value of the landscaping is greater if it prevents the species from naturally occurring in the Netherlands (native species) and is appropriate to the environment (dune species adapt example at the coast). And as landscaping fills (multiple) functions (different) animals; the flora example, offers food for many animals and a place to rest or hide.

Calculate %

The area of landscaping, both of the green roof and the vertical vegetation, is a snapshot. Only the present, grown plants can be counted and not the potential plants that can grow in the landscape. In the calculation, the surface of the vertical planting is added to the surface of the horizontal planting. This is divided by the area of the footprint of the asset. The rate may thus exceed 100%.

LE02 – Ecological features		
Part Number of credit		
1	2	

What ecological features have been planted/installed in the planted area(s) of the asset's footprint?

Aim

To measure and recognise ecological features that have been installed in the planted areas of the asset's footprint in order to improve the ecological value of the site.

Available credits

For this issue a maximum of 2 credits can be awarded.

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know or not applicable	
0	No	
1	Traditional planted areas, such as planting in car parks and planting around the asset	
1	Other planted areas, such as green roofs, facades, flowers and trees	
1	Features to assist local fauna	
0	Other	

Assessment criteria

- 1. Native floral species or those with a known attraction or benefit to local wildlife can be considered for the purpose of enhancing the ecological value.
- Features to assist local fauna include (but are not limited to):
 - a. Bird boxes.
 - b. Bat boxes.
 - c. Insect boxes.
 - d. Integrated features for animals.
- 3. Planted areas must be of a viable size to support the flora and fauna within them.

Additions to the assessment criteria

- 1. With multiple assets on a plot, one assessment may be taken for the whole plot in the, provided that the environmental provisions be equally distributed on the plot.
- 2. To determine the ecological value, a licensed ecologist is needed for the assessment of the size and features on the plot. A previously conducted ecological study or advice with justification that the recommended measures are implemented properly, may also qualify. This is only possible if there were no major changes to the asset, the grounds and the surrounding area since that study.

Evidence

- 1. Photographic evidence of installed ecological structures.
- 2. Evidence (statement, opinion or report from a recognized ecologist) showing that the ecological not availa features are correctly installed and maintained in sufficient size.

Definitions

Licensed ecologist

A licensed ecologist is a person that: (definition according to www.RVO.nl):

- 1. has a bachelor or master level trained with an emphasis on (Dutch) ecology, and / or
- 2. is active as ecologist for an ecological bureau that is connected to the Dutch 'Netwerk Groene Bureaus' and/or
- 3. is actively involved in the protection of species and belongs to the Netherlands instead in existing organizations.

Additional information

- Placing features will be awarded with points. The expert must demonstrate that the ecological features are correctly installed and maintained. For example, bird or bat boxes, this means a report on the height and orientation of the box. This calls for an ecologist. In many cases, a single field research is sufficient. And if a Part 2 "Management" is certified with the LE-credits, the deployed recognized ecologist can immediately take all the credits at one time.
- Certification based on The definition of 'ecological value' is given in credit LE01



Pollution

Category summary table

Issue reference	Title	Credits available
POL01	Separators (light liquid and grease)	4
POL02	Flood risk assessment	4
POL03	Measures for reducing discharges to surface water	2
POL04	Impact of refrigerants	₹
POL05	Leak detection system	4
POL06	NO _x emissions	4
Total credits availab	ple	22
Certification	ole Nox emissions ole Aparendien Version Aparendien Aparendi	

POL01 – Separators (light liquid and grease)		
Part Number of ci		Number of credits available
1		4

Are there light liquid separators fitted within the drainage system to vehicular areas and/or grease separators/filters for kitchen facilities, where required?

Aim

To reduce the risk of polluting natural watercourses through contaminated surface run-off and/or grease from kitchen facilities entering drainage systems

Available credits

	I K
Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes, light liquid interceptors are installed within the drainage system to vehicular areas OR grease separators/filters are installed within kitchen facilities
4	Yes, light liquid interceptors are installed within the drainage system to vehicular areas AND grease separators/filters are installed within kitchen facilities
4	Asset does not require light liquid separators or grease separators

Assessment criteria

- 1. Light liquid separators must be installed for all vehicular areas, and/or grease separators/filters must be installed within kitchen facilities, where required. Where either of these areas is not present, e.g. there are vehicular areas but no kitchen facilities; the criterion only applies to the vehicular areas. For example, if there's only a parking garage available and no kitchen facilities, only the requirements for parking count, if such requirements are achieved the full 4 points may be awarded.
- 2. Where it can be demonstrated that drainage or wash down facilities do not lead water from inside an underground or covered area to natural watercourses, such areas comply with the requirements by default.
- An asset will not require light liquid separators or grease separators/filters if there are no parking and/or kitchen facilities on site.
- 4. The following site areas (where present) require oil separators in surface water drainage systems:
 - a. Car parks larger than $800m_2$ or with 50 or more parking spaces.
 - b. Smaller car parks discharging to a sensitive environment.
 - c. Areas where goods vehicles are parked or manoeuvred.
 - d. Vehicle maintenance areas.
 - e. Roads.
 - f. Industrial sites where oil is stored or used
 - g. Gas stations.

Evidence

- 1. Photographic evidence of interceptor equipment on site (fat and/or oil).
- 2. Site plans detailing location of interceptors (fat and/or oil).

Canification based on English Version of manual not available

POL02 - Flood risk assessment		
Part Number of credits ava		Number of credits available
1		4

Is the bu	Is the building located in a low or zero flood risk area?		
Aim To encou	Aim To encourage the identification of flood risk and implement mitigation measures, where required.		
Availab	Available credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
2	No, flood mitigation measures required and implemented		
4	Yes		

Assessment criteria

- 1. When it is determined that the asset is in an area with low risk, no additional steps are required to be taken to reduce and control pollution related to flooding.
- 2. If the asset is in an area with a medium or high risk, there should be an appropriate organisation or authority of competent and experienced individual recommendations are made to reduce pollution caused by floods.
- 3. It must be demonstrated that the recommendations have been implemented.

Additions to the assessment criteria

Flooding from the following sources must be taken into account:

- a. Rivers.
- b. Tidal.
 - Surface water: sheet run-off from adjacent land (urban or rural)
- Groundwater: most common in low-lying areas underlain by permeable rock (aguifers)
- e. Sewers: combined, foul or surface water sewers.
- Reservoirs and canals

The government has information that easily traces hazards via: http://nederland.risicokaart.nl/. If a correct application can be shown and the results are such that it can be stated with certainty that the asset is located in an area with no or negligible risk of flooding, there is no need to involve a person with sufficient knowledge and experience relevant to natural hazards. A low risk on http://nederland.risicokaart.nl/ is displayed as "low risk (very unlikely to occur within a lifetime)."

Evidence

- 1. Basis of how the risks have been identified by flooding.
- 2. Report with recommendations to reduce pollution caused by floods (if applicable).
- 3. Photographic evidence with the implementation of the recommendations (if applicable).

Cartification based on English Version of manual not available

POL03 - Measures for reducing discharges to surface water		
Part	Number of credits available	
1	2	

Are there measures in place to minimise the rate of surface water runoff from the site?

Aim

To reduce the risk of watercourse pollution and other environmental damage.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. Appropriate measures to minimise surface water runoff include (but are not limited to):
 - a. Sustainable Urban Drainage Systems, SUDS
 - b. Permeable surfaces
 - c. Infiltration trenches
 - d. (Roof) planting
 - e. Rainwater tankş C
- 2. Where applicable, measures should take account of the need to restrict discharge from chemical cleaning, which could include (but is not limited to):
 - a. Bunding around drainage systems
 - b. Double skinned containers
 - c. Light liquid separators
 - d. Shut-off valves fitted to the site drainage system to prevent the escape of chemicals to natural watercourses (in the event of a spillage or bunding failure).

Evidence

Annotated photographic evidence of onsite measures, supplemented with photos of possible installations.

POL04 – Impact of refrigerants		
Part Number of credits availab		Number of credits available
1		4

What refrigerants are used in the asset refrigeration equipment?

Aim

To encourage the use of refrigerants with a low global warming potential (GWP) in refrigerant equipment.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	All refrigerants have a GWP-100 of >10 (e.g. majority HFCs, HCFC, CFCs)
2	All refrigerants have a GWP-100 of ≤10 (e.g. Propane, Butane)
4	All refrigerants have a GWP-100 of ≤1 (e.g. Ammonia, Water, Carbon dioxide)
4	No refrigerants used
0	Other

Assessment criteria

- 1. The scope of this question will exclude domestic-scale refrigeration equipment and small plug-in chillers with integral refrigeration plant. Such systems on average have a charge less than 5kg, therefore in most circumstances individually installed or small multiple installations will not fall within scope of this credit. However, the assessor should ask the client organisation to confirm that the total charge is ≤5kg.
- 2. The issueapplies to all equipment and areas using refrigerants including, but not limited to:
 - a Cold circuits, walls, floors, ceilings or cold storage enclosures
 - Cold store services including, but not limited to; chilled water pipe work, refrigerant pipe work and ductwork
 - a. Comfort cooling (heat pump systems, closed heat / cold storage, compression chillers)
- 3. A list of typical refrigerants with a low GWP can be found in Table 13 in the additional information section of this issue.
- 4. This issue applies to refrigerants used in equipment that is installed on-site only.

Evidence

1. Copy of manufacturer's information confirming the global warming potential of refrigerants used on site OR photographic evidence of refrigerant packaging/systems that shows the used refrigerants (usually the R-number), which the GWP is determined from the table below.

2. Statement from building manager indicating that the asset does not contain any systems that contain refrigerants (if applicable).

Definitions

- GWP-100: GWP stands for Global Warming Potential. This is the contribution to the greenhouse effect expressed in CO2 equivalents (methodology using a 100-year Integrated Time Horizon.
- **ODP:** ODP stands for Ozone Depletion Potential. This is a measure of the depletion of the ozone layer, expressed CFK-11 in equivalents. The ODP compares the effects of the refrigerant with the al not availabl 30s refrigerant R11 (CFC-11), which is set at 1.0.

Additional information

Table 14 contains a list of common refrigerant types with a low GWP.

Table 10: Common refrigerant types with a low GWP

R-number	Chemical name	GWP (100-yr)
R-30	Dichloormethane	9
R-170	Ethane	3
R-290	Propane	3
R-600	Butane	3
R-600a	Isobutane	3
R-702	Hydrogen	5,8
R0717	Ammonia (NH ₃)	0
R-718	Water (H ₂ O)	<1
R-729	Air (nitrogen (N ₂), oxygen (O ₂), argon (Ar))	0
R-744	Carbon dioxide (CO ₂)	1
R-1150	Ethylene	3
R-1234yf	2,3,3,3-Tetrafluorpropene	<1
R-1270	Propylene	3

Source: BREEAM In-Use International SD221 – 1.0:2015 – Version: 0 – Version Date: March 2015 Certification basec

POL05 - Leak detection system		
Part Number of credits availa		Number of credits available
1		4

Is there an automated refrigerant leak detection system in place for all equipment that use refrigerants?

Aim

To reduce the level of greenhouse gas emissions related to the leakage of refrigerants.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No leak detection system in place
3	Yes, warning alarm/lighting only
4	No refrigerants used OR used refrigerants have a GWP-100 of ≤ 1 CO ₂ -equivalent.
4	Yes, automatic shutdown and pump down of refrigerants and warning alarm/lighting
0	Other

Assessment criteria

- 1. A leak detection system should be in place for systems that are installed in the building for the following uses:
 - a. Comfort cooling
 - b. Cold storage, including commercial food/drink display cabinets but excluding domestic white goods e.g. fridges and freezers
 - c. Process based cooling loads e.g. servers/I.T equipment.
- 2. A leak detection system that detects refrigerants is not required.
- 3. Maximum points may be awarded if:
 - Only small multiple hermetic systems are installed; where the refrigerant charge in each unit is less than 5kg.
 - b. Refrigerants used have a GWP-100 ≤ 1 CO₂-equivalent.
 - c. Systems use solid refrigerants, where very little refrigerant will escape to the atmosphere in the event of system failure and leakage. This must be confirmed by the refrigeration system manufacturer.

Evidence

- 1. Photographic evidence of installed leak detection systems or proof on the basis of documentation, maintenance contract and/or manuals that show the presence and use of leak detection systems.
- 2. In the case of solid refrigerants, manufacturer confirmation of minimal leak risk.
- 3. Statement from building manager indicating that the asset does not contain any systems that contain refrigerants with a GWP-100 of \leq 1 CO₂-equivalent (if applicable).

Certification based on English Version of manual not available

POL06 - NO _x emissions		
Part		Number of credits available
1		4

Does the building generate nitrogen oxide (NO_x) emissions as a result of any on-site combustion of fuel to meet space heating or hot water demand?

Aim

To encourage and recognise the use of heating that minimises NO_x emissions.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Yes
4	No

Assessment criteria

- 1. For this question NO_x is mainly emitted from high temperature combustion where trace elements of nitrogen exist in the fuel, such as: coal, oil and gas.
- 2. If a 'No' answer is selected, assessors must confirm that relevant equipment on site or within the asset does not utilise the fuel types which have been specified.

Evidence

1. Copy of manufacturer's details for equipment installed and their dry NOx emissions rate in mg/kWh.

Definitions

NO_x-emissions: NO_x emissions are pollutant gases produced by the combustion of fuels. NO_x reacts with heat and sunlight to produce ozone that can cause serious respiratory problems. It also reacts with water to produce acid rain which has a detrimental effect on ecosystems.

Additional information

Because of the presence of a gas distribution network in the Netherlands, most buildings are heated with a gas powered heating plant on their own site. In those cases, no points are awarded for this credit. Electricity taken from the grid, has indirectly NOx emissions resulting from the production of electricity in power plants for instance. This, however, is not part of this demand. It concerns only the NOx emissions at their own location can thereby be awarded maximum points for a full electric heat generation.

Part 2: Building Management

Canification based on English Version of manual not available

Management

Category summary table

Issue reference	Title	Credits available	
MAN01	Building use guide	2	
MAN02	Building user education	2	
MAN03	Building user information	2	
MAN04	Operation and maintenance manuals	2, 0	
MAN05	Maintance policy; scope	6	
MAN06	Maintenance policy; reactive or proactive	4	
MAN07	Environmental management system	4	
MAN08	Environmental policies (and goals)	4	
MAN09	Procedures for energy conservation	4	
MAN10	Leak testing	4	
MAN11	Green lease	4	
MAN12	Building controls review	4	
MAN13 Building adaption 4		4	
Total credits availab	ole ()	46	
Total credits available 46 Certification based of Certification bas			

MAN01 – Building user guide		
Part		Number of credits available
2		2

Is there a building user guide, and has relevant information from this document been made accessible to all building users

Aim

To recognise and stimulate the provision of relevant information to building users, which enables them to understand the building facilities and installations and use them efficiently.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. Dedicated building/site specific guidance fort he non-technical building user. The purpose of the guide is to help building users access, understand and operate the building efficiently and in a manner keeping with the original design intent.
- 2. A Building User Guide will provide easily accessible and understandable information relevant to the following stakeholders
 - a. The building's staff (or where relevant residents)
 - b. The non-technical facilities management team/building manager
 - c. Other building users, e.g. visitors/community users
- 3. The content of the guide will be specific to the building type and end users, but broadly should include information on the following: General building information, in particular the sustainability aspects
 - a. General building information, more specific the sustainability issues
 - b. Environmental strategy, e.g. energy, water, waste efficiency policy/strategy and how users should engage with/deliver the policy/strategy.
 - c. Building services overview and access to controls, e.g. where to find them, what they control, how to operate them effectively and efficiently etc.
 - d. Information for visitors; e.g. access and security procedures/provisions and facilities.
 - e. Provision of, and access to, shared facilities.
 - f. Information about emergency information/instructions, actions during calamities, evacuation plans, the type and location of the emergency measures, fire fighting equipment and first aid equipment.
 - g. Separation procedure for waste collection.

- h. Building related operational procedures specific to building type/operation, e.g. laboratories.
- i. Building related incident reporting/feedback arrangements.
- j. Planned building related training information/links
- k. Provision of, and access to transport facilities, e.g. public transport, cyclist facilities, pedestrian routes, etc.
- I. Provision of, and access to local amenities, e.g. supermarket and pharmacy.
- m. Re-fit, refurbishment and maintenance arrangements/considerations.
- n. Links, references and relevant contact details.
- 4. There is no requirement on the format the Building User Guide should take.

Building function specific assessment criteria Lodging:

For lodging accommodations there must be a concise user manual which explains the use of the room (including a map of the building with all facilities and emergency procedures) which is made available to guests and placed in all rooms.

Evidence

- 1. Copy of the Building User Guide, the front page and index of the Building User Guide can be sufficient.
- 2. Support from the assessor as to the completeness and correctness of the manual.
- 3. Details how the relevant information has been made accessible to building users, examples include:
 - a. Digital accessibility of the user manual
 - b. Training schedules
 - c. Copies of emails to (new) building users
 - d. Information pack handed to new building users
 - e. Manner in which relevant information has been made accessible to visitors.

Additional information

The Guide does not necessarily need to be available in the entirety for all users, it's about making the relevant information accessible for the relevant users. For example visitors don't need to get information about refurbishment considerations.

The user manual can be included in a building and maintenance manual. Examples of building facilities are e.g. windows and sunscreens. Examples of installations are e.g. heating, cooling, lights and elevators.

References 💉

- BREEAM-NL New buildings and Renovations, issue MAN4
- NEN5509:1998 nl User manuals
- CIBSE Building logbook toolkit.

MAN02 – Building user education		
Part		Number of credits available
2		2

Are regular meetings or formal communications scheduled with occupants to discuss asset related issues (including environmental matters), and are such issues reported to the management?

Aim

To facilitate structured feedback and awareness which enables management staff and building occupants to understand how to better operate the building.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. Meetings should be scheduled at appropriate intervals and locations, or other formal forms of communication are used regularly, at least when new procedures are adopted or system/controls installed
- 2. Communication consists of at least the following subjects:
 - a. Operation and efficient use of new installations or building facilities
 - b. New procedures on environmental areas, calamities or emergencies
 - c. Changes in the building and the environmental consequences thereof.
 - d. Changes in the environmental rules.
 - e. Other subjects that connect to elements mentioned in the Building User Manual according to credit MAN01.
- 3. Outcomes of meetings and other forms of communications are provided to the management as feedback.

Additions to the assessment criteria

Meetings can coincide with regular consultation with the users, e.g. a periodical tenants' agreement, as long as it is clearly recorded that the outcomes are presented and communicated to the relevant management.

Evidence

- 1. Confirmation that the relevant participants (identified e.g. based on the notes) have attended the meetings regularly or have copies of other formal forms of communication from the organisation, such as notes from meetings or formal announcements from at least the last year.
- 2. Proof of feedback of the outcome of the meetings to the management.

Cartification based on English Version of manual not available

MAN03 - Building user information			
Part Number of credits available			
2		2	

Is a notice board or display area present within the asset to provide staff and visitors with information relating to the environmental policies and/or performance of the asset?

Aim

To recognise and encourage building management that informs occupants about asset performance.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. The building user information can consist of one or more notice boards, beamers or digital screens.
- 2. The provision of information is used to communicate actual information related to the building and the organisation, e.g.:
 - a. Safety, health and environmental policies
 - b. Asset/organisational environmental performance
 - c. Public transport (see additions to criteria).
 - d. Environmental best practice topics
- 3. The information facility is places on a central location in the asset, and is available and accessible to building users.

Additions to the assessment criteria

An information facility with public transport information only satisfies if it is a dynamic travel information system (DRIS) and the facility is located at the main entrance, so information on public transport is quickly and easily available to all building users when leaving the asset.

Evidence

- 1. Photographic evidence of notice board/display area and the displayed information.
- 2. Map with location of the building user information unit.

MAN04 - Operation and maintenance manuals		
Part		Number of credits available
2		2

Is a full set of operation and maintenance (O&M) manuals available and accessible by building management/facilities management staff?

Aim

To ensure adequate technical information is available to managers and contractors carrying out necessary management, maintenance and refurbishment duties.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. Building O&M manuals should cover all current and relevant building services and building elements which may include (but are not limited to):
 - a. Heating and cooling systems
 - b. Water distribution systems
 - c. Ventilation systems
 - d. Lighting systems
 - e. External shading systems
 - f. Construction/specification details for building fabric
 - g. Other installations and facilities, which are available and accessible in the asset.
 - h. Renewable and low carbon technologies (where present)
 - Ecological features
- 2. Content of the maintenance and user manual corresponds to the building elements/ facilities/ installations present in the asset, and is current.
- 3. The management and user manual is available and accessible to all building managers and facility managers.

Evidence

- 1. Overview of all current and relevant building services and elements included in the O&M manuals.
- 2. Photocopy/photographic evidence of the front cover and table of contents of the O&M manuals.
- 3. Support for the way and to whom the O&M manual has been made available.

Clarification

The assessor is not required to assess the content of the O&M manuals, but must ensure that all relevant documents are available and accessible.

Where a building is managed by a building management contractor the manuals may be kept off site, but it is important that the information is in a form that makes it easy for contractors to obtain copies and make use of them on site.

References

Cartification based on English Version of manual not available

MAN05 – Maintenance policy; scope				
Part	Number of credits available			
2	6			

For which of the following building elements/services a maintenance policy/procedure is in place?

Aim

Het recognise and encourage the setting of periodic schedules, best practice maintenance of building elements/services and proactive and appropriate building equipment to ensure that the building elements/services are working efficiently.

Available credits

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
2	Building fabric	
2	Heating, Ventilation and Cooling (HVAC) systems, as applicable, and hot water	
2	Lighting	

Assessment criteria

- In order to award the credits for HVAC systems, procedures should be in place to cover all HVAC systems, as applicable.
- 2. The maintenance policy includes both maintenance and inspections.
- 3. Maintenance reports should state as a minimum:
 - **a.** Person or organisation carrying out the maintenance
 - b. Date the maintenance has been carried out
 - c. Description of building service/element that has been maintained
 - d. Outcomes of maintenance procedure
 - e. Actions following the maintenance procedure
 - f. Date indicating next maintenance interval

Evidence

- 1. Formal organisational documentation illustrating maintenance schedules, for example a long-term maintenance planning or maintenance contract.
- 2. Sample check by the assessor of the maintenance procedure for the systems specified with photographic evidence. This could be a cover page and table of contents and must clearly state:

- a. Person or organisation carrying out the maintenance
- b. Date the maintenance has been carried out
- c. Description of building service/element that has been maintained.

Catification based on English Version of manual not available

MAN06 – Ma	MAN06 – Maintenance policy; reactive or proactive				
Part	Number of credits available				
2	4				

Is/are the maintenance policy/policies proactive or reactive?

Aim

To recognise and encourage proactive maintenance policies that enable the efficient operation of the building.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
1	Reactive policy only. Policy reviewed more than 1 year ago
2	Reactive policy only. Policy reviewed within the last year
3	Proactive maintenance policy. Policy reviewed more than 1 year ago
4	Proactive maintenance policy. Policy reviewed within the last year
0	Other

Assessment criteria

- 1. The age of the policy can be determined through the date when the final document was drawn up or the date of the review
- 2. Information within the policy outlines
 - a. The scope and aims of the policy
 - b. Who has endorsed and has responsibility for that policy
 - How it will be implemented and policy objectives achieved
 - d. Schedule specifying what maintenance has been and will be undertaken at set intervals.
- A proactive maintenance policy is a policy where maintenance is planned with regular intervals with the aim to prevent faults or breakdowns from occurring.
- 4. Proactive maintenance policies should be regularly reviewed, at least when there are significant changes are made to the building or equipment is replaced.

Evidence

- 1. A copy of the maintenance policy.
- 2. Documentation which indicates the age of the policy and when a review has been conducted

Definition

- Reactive maintenance policy: policy where maintenance is done after problems are reported
- **Proactive maintenance policy**: policy where maintenance is done at set intervals with the goal to prevent faults or breakdowns

Cartification based on English Version of manual not available

MAN07 – Environmental management system		
Part		Number of credits available
2		4

Has an environmental management system been developed by the building management organisation?

Aim

To recognise and encourage that an environmental management system is in place.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
1	An environmental management system has been developed, implemented and approved.
2	An environmental management system has been developed, implemented and approved, which includes scope, objectives and targets.
3	In addition to the answer option for 2 credits, the environmental management has been distributed throughout the building management organisation and responsibilities have been set.
4	In addition to the answer option for 3 credits, the environmental management policy or plan has been accredited to ISO 14001 or equivalent standards with a valid certificate.
0	Other

Assessment criteria

- 1. The environmental management system must be approved by the board of directors or higher management.
- 2. The environmental management system must be in use and ensure constant improvement of environmental achievements.
- 37 The environmental management system is connected to the management tasks that are completed in the assessed asset.

Evidence

- 1. Signed copy of environmental policy document.
- 2. Evidence of communication of plan to staff.
- 3. Evidence in what way the environmental management policy includes scope, objectives and targets.
- 4. List of responsibilities and persons identified as champions to help implement these responsibilities.

- 5. Where the environmental Management System is third party certified: a copy of a valid Environmental Management System certificate must be provided
- 6. When the environmental management policy or plan is ISO14001 certified, the assessor Doesn't need to check its content or structure.

Definitions

Environmental management policy: An environmental management policy, is preferably a part of system atal manage and are tradien version of manual not available.

Continuation hased on English version of manual not available. the general management system and specifically focuses on in controlling and improving achievements in the field of environmental issues. By an environmental management system structural attention is paid to the environment in management, and the environmental management

MAN08 - Environmental policies and goals		
Part		Number of credits available
2		4

Does the owner of the asset or (on behalf of the owner) the building manager have an environmental management policy in place that requires improvement targets to be met?

Aim

To recognise and encourage policies that aim to reduce the assets environmental impacts through defined improvement targets.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
1	Yes, improvement targets have been set for energy consumption
2	Yes, improvement targets have been set for energy and water consumption
2	Yes, improvement targets have been set for energy and waste/recycling
3	Yes, improvement targets have been set for energy, water and waste/recycling
4	Yes, improvement targets have been set for all of the above, and additional resource performance and sustainability indicators
0	Other

Assessment criteria

- 1. An energy management system certified through ISO50001 or equivalent can be awarded with 1 oredit.
- 2 Additional resource performance criteria could include biodiversity, pollution, procurement, improvement, etc.
- 3. The policy should have senior management approval.
- 4. The asset owner demonstrates (i.e. through examples) how the policy is implemented and affected at the local level, either through general organizational operation, or project related initiatives and management strategies.
- 5. An environmental management system certified through ISO14001 or equivalent meets the criteria, if improvement goals have been set for the chosen themes.

Evidence

- 1. A copy of the environmental policy document highlighting areas in which improvement targets have been set.
- 2. Specific examples that demonstrate environmental impacts are being measured and put into a format which is easy to interpret, such as past annual figures being used as benchmarks within a spreadsheet.
- 3. A valid energy management system certificate, such as ISO50001 (if applicable).
- which which we saw that the control of the control

MAN09 – Procedures for energy conservation		
Part	Num	ber of credits available
2		4

Are operating procedures in place to help reduce energy consumption?

Aim

To recognise and encourage procedures that ensure energy consumption within the building is controlled and reduced where practicable.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No plans/procedures for minimising energy consumption are in place
2	Yes - Energy reduction plans/procedures are in place
4	Yes - Energy reduction plans/procedures that include annual budgets for energy efficiency and reduction measures are in place
0	Other

Assessment criteria

- 1. The operating procedures should be formally documented and available to all relevant building users
- 2. The operating procedures should be updated regularly to help ensure alignment with overall energy management plans (or other related documents). These updates should at least occur when:
 - a. New energy consuming technologies/products or serviced are introduced in the asset
 - b. The energy management plan (or other related document) is reviewed
- 3. Operating procedures to help reduce energy consumption should include (but are not limited to) the following:
 - Allocation of adequate resources (financial and human) to energy management.
 - b. There is a reliable and effective system for monitoring and reporting energy performance.
 - c. Targeting all relevant areas and building users, active engagement of the workforce around energy issues.

Additions to the assessment criteria

If a certified energy management system (ISO50001 or equivalent) is present, the maximum amount of credits can be awarded. The assessor is then not required to check the content or structure.

Evidence

- 1. Copies of relevant documentation outlining the procedures that are in place to reduce energy consumption.
- 2. Actualisation of procedures

- 3. Description of how procedures are communicated with relevant building users.
- 4. When the energy management system is certified through a third party: a valid energy management system certificate (like ISO50001).

Catification based on English Version of manual not awaitable

MAN10 - Leak testing		
Part		Number of credits available
2		4

Aim

Available credits

Question Are duct and air handling unit leakage tests undertaken regularly, and are leaks rectified if identified?		
Aim To ensur	Aim To ensure ventilation systems operate at optimum efficiency. Available credits	
Availab	Available credits	
Credits	Answer option	
0	Question not answered	
0	Don't know	
0	Not tested	
4	Yes, tested regularly and leaks have been rectified	
4	Not applicable	

Assessment criteria

- 1. Testing should be undertaken on a yearly basis, either by competent members of the facilities team or third party professionals...
- 2. Air duct and handling systems should be tested in accordance with regional/nationals standards or best practice guidance (ISSO Publicatie 17, NEN-EN 1751 or equivalent).
- 3. Answering option? not applicable" referes to a situation with natural ventilation without air treatment.

Evidence

- 1. Evidence of relevant building monitoring/testing procedures, this could be within relevant sections taken from Building Management MAN 04 – Operation and maintenance manuals
- 2. Copy of inspection log and proof of repair.

References

- ISSO-Publicatie 17 Quality criteria for airduct systems for residential and commercial buildings.
- NEN-EN1751:2014 Ventilation for buildings Air terminal devices Aerodynamic testing of damper and valves

MAN11 - Green lease		
Part		Number of credits available
2		4

Are green lease agreements/contracts with tenants in place?

Aim

To encourage the implementation of lease agreements that contain incentives to actively engage tenants to consider energy, water, and waste efficient practices.

Available credits

Credits	Answer option
0	Question not answered
0	Question not answered
0	No
2	Yes, with qualitative targets
4	Yes, with qualitative and quantitative targets on at least energy, water and waste

Assessment criteria

- 1. Green leases can include at least the qualitative targets in which is included how improvements are encouraged. The agreement can also include (but is not limited to):
 - a. Energy efficiency targets
 - b. Environmental policy/energy management plan
 - c. Improvements/schedule of dilapidations
 - d. Financial incentives
 - e. Separate energy, water, and/or gas metering
 - f. Dispute resolution procedures
- 2. Where the asset is multi tenanted, a green lease agreement/contract must be in place for at least 75% of the tenants.

Additions to the assessment criteria

In the situation that the owner is also the user, they must show how the organization in the asset is encouraged to be more efficient with energy, water and waste.

Evidence

1. A copy of the tenant contract with the green lease section and scope highlighted or identified OR another agreement between owner and tenant in which these arrangements are written down.

2. In case the owner is also the user, documentation in which the required targets are written down. If the organization uses a certified ISO 14001 environmental management system, a valid ISO 14001 certificate is adequate.

Catification based on English Version of manual not awaitable

MAN12 – Building controls review	
Part	Number of credits available
2	4

al not availab Are building management systems regularly reviewed to ensure they are fully functional and operating as intended?

Aim

To ensure building management systems are running efficiently and effectively.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes – monitored by the building manager
4	Yes – monitored and/or certified by accredited third party auditor
0	Not applicable – no building management system within asset

Assessment criteria

- 1. The building manager or an advisor on behalf of the building manager, must be trained to operate the building management system to high efficiency standards
- 2. Building management systems must be reviewed at least every 6 months, for example on the basis of ISSO publication 94.
- 3. Accredited third party professionals should be experts in how to operate the specific system which is being assessed. An example of such persons would be:
 - a. Members of relevant organisations such as the European Building Automation and Controls Association.
- De actual technical description is in accordance to the settings and working of the building management system.

Additions to the assessment criteria

This issue is addressing full building management systems. Individual automated controls, such as PIRs controlling lighting, are not considered to be a building management system.

Efficient and effective function can be related tot he energy use, effort, resources, costs, etc.

Evidence

- 1. Copy of inspection report
- 2. Confirmation that the person who manages the building management system is trained sufficiently.

3. Confirmation that het person responsible for the periodical check up of the building management system is accredited.

Additional information

- A Building management system (central computer) manages, registers, guards and controls several systems and installations in the building such as air flow management, heating, cooling, lighting, security.
- A technical description is a document in which the aimed operation of the installations is described.
- More information on the eu.bac system can be found on system.eubac.org.

References

- NEN-EN 15232:2012: Energy performance of buildings Impact of Building Automation, Controls water pre . water and Building Management.
 - ISSO publicatie 94: Control technology for HVAC systems and hot water preparation.

MAN13 – Building adaption		
Part		Number of credits available
2		4

Is an asset strategy in place that outlines possible adaptation strategies/procedures to meet future demands, including those relating to climate change and changes in functionality?

Aim

To encourage the asset management team to have appropriate strategies/procedures in place that outline possible adaptation to the asset to meet to future demands.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- 1. The scope of the strategy should cover (but is not limited to):
 - a. The potential for major refurbishment, including replacing the façade.
 - b. Design aspects that facilitate the replacement of all major plant within the life of the building e.g. panels in the floors/walls that can be removed without affecting the structure, providing lifting beams and hoists
 - c. The degree of adaptability in the internal physical space and external shell to accommodate change in use.
 - d. The extent of accessibility to local services, such as local power, data and communication infrastructure, etc.

Evidence

 Copy of strategies/procedures for adaptation of the asset to meet changing future demands.

Health and Wellbeing

Category summary table

Issue reference	Title	Credits available		
HEA12	Fresh air rates	4		
HEA13	Internal environment quality, operating temperature	4		
HEA14	Internal environment: CO ₂ monitoring	2		
HEA15	Internal environment: CO monitoring	2 2		
HEA16	Internal environment: NOx monitoring	3		
HEA17	Building user protection during building activities	2		
HEA18	Volatile organic compounds	2		
HEA19	Internal environment: Control of chemicals	4		
HEA20	Acoustic conditions	4		
HEA21	Deep cleaning	4		
HEA22	Microbial contamination	2		
HEA23	Occupant satisfaction	3		
HEA24	Occupant satisfaction: feedback	4		
Total credits availab	ole	39		
Certification based on Continuous				

HEA12 – Fresh air rates		
Part		Number of credits available
2		4

If the asset uses mechanical ventilation, have "fresh" air rates been measured?

Aim

To recognise and encourage a healthy internal environment through the supply of sufficient fresh air.

Available credits

Credits	Answer option
Ciedita	
0	Question not answered
١٠	
	Don't know
0	
	No
0	
	Yes
2	
	AA a a a a d Caraba a' a a da a a a a ' a Para a' (b tha a a a a d a a Carabba ' la Para a a da l' a a a (ALEALA 007)
3	Measured fresh air rates are in line with the current national building regulations (NEN1087)
	Measured fresh air rates are in line with published local best practice (Class IDA 3 from EN
4	13779, table A.11)
	Not applicable, the asset is not mechanically ventilated
2	Two applicable, the asset is not inconamount ventilated

Assessment criteria _

- 1. Measurements are to be undertaken by competent persons.
- 2. Fresh air measurements must have been taken within 12 months of the assessment date and when major changes to the building or its occupancy have been made.
- 3. Fresh air rates need to be measured in all relevant areas of the building in order to comply.

Additions to the assessment criteria

• Class IDA 3 for Retail and offices equals 6-10 l/s fresh air per person

In case of a ventilation system with good control settings (variable and reacting to the demand) it is sufficient to measure the output of the boxes every five years and check the adjustment of the controls in this way. This does not have to be continual measurement.

Evidence

- 1. Copy of report confirming
 - a. The date on which the measurement was taken
 - b. Measured input of fresh air
 - c. That measurements have been taken in all user areas

- d. That the measurements has taken place in line NEN1087 or EN13779 (if applicable)
- e. That fresh air supply meets or exceeds standards against which it was assessed (if applicable).
- 2. Confirmation of competency of person/organisation undertaking air quality testing, for example through a resume.

Cartification based on English Version of manual not available

HEA13 – Internal environment quality, operating temperature		
Part		Number of credits available
2		4

Aim

Available credits

Questi			
Which le	Which levels of thermal comfort does the internal environment climate satisfy in relevant user areas?		
Aim			
Stimulating a good thermic comfort level in the asset.			
Availat	ple credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
2	A good thermal comfort level		
4	An excellent thermal comfort level		

Assessment criteria

- 1. A calculation has to be made in accordance with NEN7730 or ISSO074 to determine the comfort
- 2. The simulation calculations has been carried out conform NEN5060:2008, with the reference year RA2008T1.
- 3. Points are granted if at minimum the demands for the concerned building types are fulfilled, as set down in 'Building function' specific assessment criteria'.

Building function specific assessment criteria

Offices

- Good comfort level: NEN-ISO 7730:2005 category B (-0,5 < PMV < + 0,5) with a maximum of 150 exceeded hours OR ISSO 74:2014 (ATG) Class B with a maximum of 150 exceeded hours.
- Excellent comfort level: NEN-ISO 7730:2005 category A (-0.2 < PMV < +0,2) with a maximum of 100 exceeded hours OR ISSO 74:2014 (ATG) Class A with a maximum of 125 exceeded hours.

Schools

- Good comfort level: Program requirements 'Frisse Scholen' (2015), Class B, part temperature, OR ISSO 74:2014 (ATG) Class B with a maximum of 150 exceeded hours.
- Excellent comfortlevel: Program requirements 'Frisse Scholen' (2015), Class A, part temperature, or ISSO 74:2014 (ATG) Class A with a maximum of 125 exceeded hours.

Meeting, industrial, retail and lodging

- Good comfort level: NEN-ISO 7730:2005 category B (-0,5 < PMV < +0,5) with a maximum of 300 exceeded hours OR ISSO 74:2014 (ATG) Class B with a maximum of 300 exceeded hours.
- Excellent comfort level: NEN-ISO 7730:2005 category A (-0.2 < PMV < +0.2) with a maximum of 250 exceeded hours OR ISSO 74:2014 (ATG) Class A with a maximum of 250 exceeded hours

Evidence

- 1. Copy of report confirming:
 - a. A calculation has been made according to the demands of this credit.
 - b. Name and description of the type of software that has been used.
 - c. Results and starting points of the calculation and those these satisfy the demands for the specified number of points.
- 2. Inspection from the assessor on location that shows the starting points coincide with actual practice

References

- NEN5060:2008: Hygrothermal performance of buildings Climatic reference data
- NEN-EN-ISO 7730:2005: Ergonomics of the thermal environment Analytical determination and interpretation of thermal comfort using calculation of the PMV and PPD indices and local thermal certification based on English Version of comfort criteria
 - ISSO 74:2014: Thermal comfort Criteria for the internal temperature in buildings.

HEA14 - Internal environment: CO₂monitoring		
Part		Number of credits available
2		2

Are internal levels of Carbon Dioxide (CO2) monitored and controlled?

Aim

To encourage the monitoring of internal conditions to ensure a healthy indoor environment is provided.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes
0	Other

Assessment criteria

- 1. CO2 levels should be measured in all relevant areas within the asset as follows:
 - a. Areas of the building subject to large and unpredictable or variable occupancy patterns have CO₂ sensors specified, AND:
 - i. In mechanically ventilated spaces:

The sensor(s) are linked to the mechanical ventilation system and provide demand controlled ventilation to the space.

ii. In naturally ventilated spaces:

The sensors either have the ability to alert the building owner/manager when levels exceed the recommended set point, or are linked to controls with the ability to adjust the quantity of fresh air, i.e. automatic opening windows/roof vents

- b. For all other building areas regular and planned measurements of CO₂ should be logged for a period of one week's typical occupancy for the building, in all occupied spaces, under normal operating conditions, at least 4 times a year.
- The placed meters near spaces with high, unpredictable or variable occupancy settings must be connected to a monitoring system or a building management system.

Evidence

- Photographic evidence of measuring equipment.
 Specifications of the measuring equipment installed and in-use, including a brief outline of the
- 2. Scope of operation.
- 3. Copy of procedures and/or monitoring log.

Additional information

Examples of spaces with a large, variable or unpredictable occupancy setting: meeting rooms, assembly halls, classrooms, waiting spaces, auditorium

Catification based on English Version of manual not available

HEA15 - Internal environment: CO monitoring		
Part		Number of credits available
2		2

Are internal levels of Carbon Monoxide (CO) monitored and controlled where sources of CO have been identified inside the asset and in proximity to external air intakes?

Aim

To encourage the monitoring of internal conditions to ensure a healthy indoor environment is provided

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes
2	There are no internal sources of CO and no external air intakes present/external air intakes are not in proximity to sources of CO
0	Other

Assessment criteria

- 1. CO levels should be continuously monitored and controlled in the following areas:
 - a. Where sources of CO are installed internally.
 - b. In external air intakes that are within 20 metres of possible sources of CO.
- 2. CO-sources contain every appliance that uses fuel, e.g.:
 - a. CO-emissions related to heating, cooling, or generating electricity.
 - b. Traffic from nearby roads
 - c. Traffic on loading locations and parking spots
 - d. Emergency generators
- 3. An alarm should be activated when CO levels rise above a pre-set maximum for a pre-set period of time.
- 4. The placed meters should be connected to a monitoring system or building management system.

Evidence

- 1. Photographic evidence of measuring equipment.
- 2. Specifications of the measuring equipment installed and in-use, including a brief outline of the scope of operation.
- 3. Copy of procedures and/or monitoring log.
- 4. Diagrams, photos or plans indicating internal sources of CO and/or sources of CO in proximity to external air intakes.
- 5. Where no sources of CO are installed in the building or where there are no sources of CO near external air intake:

Confirmation of building management team that no sources of CO have been installed

Definition

Carbon monoxide (chemical formula CO): an invisible, colourless and odourless gas. It's created for example by incomplete combustion in appliances that operate on organic substances, such as oil, gas, fuel, coals and wood (not electrical appliances). By exposure to high concentrations of CO, carbon monoxide poisoning can occur and this can cause brain damage and death.

Catification based on English Version of manual not available

HEA16 - Internal environment: NO _x monitoring		
Part		Number of credits available
2		2

Are internal levels of Nitrogen Oxides (NO_x) monitored and controlled where sources of NO_x have been identified inside the asset and in proximity to external air intakes?

Aim

To encourage the monitoring of internal conditions to ensure a healthy indoor environment is provided.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes
2	This is not necessary for the asset
0	Other

Assessment criteria

- 1. NOx levels should be continuously monitored and controlled in the following areas:
 - a. Where possible sources of NOx are installed internally
 - b. In external air intakes that are within 20 metres of possible sources of NOx
- 2. An alarm should be activated when NOx levels rise above a pre-set maximum for a pre-set period of time.
- 3. Sources of NOx emissions include all fuel burning devices, including (but not limited to):
 - a. NOx emissions related to cooling, heating or providing electricity to the asset
 - Traffic from nearby roads
 - Traffic at loading docks and parkin spaces
 - d. Back-up generators

The placed meters should be connected to a monitoring system or building management system.

Evidence

- 1. Photographic evidence of measuring equipment.
- 2. Specifications of the measuring equipment installed and in-use, including a brief outline of the scope of operation.
- 3. Copy of procedures and/or monitoring log.
- 4. Diagrams, photos or plans indicating internal sources of NO_x and/or sources of NO_x in proximity to external air intakes.
- 5. Where no sources of NO_x are installed in the building or where there are no sources of NO_x near external air intake:
 - a. Confirmation of building management team that no sources of NOx have been installed.

Definitions

sil fuel s. It also re set on the first version of manual not and the set on the first version of manual not and the set of the set NO_x emissions: NO_x emissions are pollutant gases produced by the combustion of fossil fuels. NO_x reacts with heat and sunlight to produce ozone that can cause serious respiratory problems. It also reacts with

HEA17 – Buildin	HEA17 – Building user protection during building activities		
Part		Number of credits available	
2		2	

al not available Are policies/procedures in place to minimise the exposure of building occupants to chemicals and dusts released by refurbishment/renovation/redecoration works?

Aim

To reduce the risk to health associated with chemical and/or dust exposure.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- Policies/formal procedures to minimise risk to building occupants from building refurbishment/ renovation/redecoration must be in place. These can be:
 - a. Included within risk assessments that are conducted/undertaken prior to any work taking
 - Included in an internal organisational policy, where these policies/procedures can be easily identified.

Evidence

- 1. Copy of official documents which highlight the methods and relevant clauses which set conditions to minimise exposure to chemicals and dust during refurbishment/renovation/redecoration works.
- 2. Evidence of precautions taken for previous works, including relevant risk assessments which assess the conditions and risks identified (if relevant).

Additional information

Examples of precautionary measures during renovations are:

- 1. Increasing the capacity
- 2. Placing dust partitioning.
- 3. Closing the space/floor (and the ventilation system) for users
- 4. Temporary moving of the building users
- 5. Only using dust-free and emission-free products
- 6. Changed (renovation) working hours

HEA18 - Volatile organic compounds		
Part		Number of credits available
2		2

Is there a strategy/policy in place for minimising the use of harmful volatile organic compound (VOC) emitting materials/substances?

Aim

To recognise and encourage a healthy internal environment through the use of internal finishes, fittings and cleaning products with reduced/no emissions of VOCs.

Available credits

Credits	Answer option	
0	Question not answered	
0	Don't know	
0	No	
2	Yes	
2	Yes, part of a maintenance policy	

Assessment criteria

- 1. Strategies/policies to reduce the use of harmful VOC emitting materials/substances can either be stand-alone documents or part of a wider environmental policy/strategy.
- 2. Strategies can be based on (a combination of):
 - a. Procurement
 - b. Process
 - c. Risk aversion
 - d. Maintenance
- 3. Typical materials/substances that should be covered by the policy/procedure:
 - a. Paints, adhesives, and cleaning materials
 - b. Electrical appliances such as printers
 - c. Carpet and other flooring materials
 - d. Ceiling tiles
 - e. Glued wooden parts and laminated parts
 - f. Office furniture
- 4. Policy and procedures are carried out

Evidence

1. Copy of relevant policy/procedure.

Definitions

Volatile organic compounds (VOCs) are emitted by a wide array of products numbering in the thousands. Examples include: paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishings, glues and adhesives, Urea-formaldehyde foam insulation (UFFI), pressed wood products (hardwood plywood wall panelling, particleboard, fibreboard) and furniture made with these au a st d in the Eurganic companies were and the Aramanual not avail and the Aramanual pressed wood products. It has been proven of these products that certain concentrations can cause irritation by breathing in, and above certain concentrations it can cause health problems such as the 'sick' building syndrome. In the definition of this credit VOC are meant to be the products named in the EU 1999/13/CE Directive Solvents. Under VOC the sVOC are also included, semi volatile organic compounds.

HEA19 – Control of chemicals		
Part	Number of credits available	
2	4	

al not available Is adequate ventilation provided to relevant building areas to keep the concentration of pollutants from printers and specialist equipment at acceptable levels?

Aim

To maintain acceptable levels of internal air quality.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- 1. Relevant building areas are areas within the building where any of the equipment mentioned in the question are installed/placed. <
- 2. Adequate ventilation for specialist equipment must be provided where this is stated within the manufacturer guidance.

Additions to the assessment criteria

A local ventilation provision is a way to create sufficient ventilation.

A local ventilation provision is not required if the following criteria are met:

- There are no appliances that influence the air quality negatively
- Copying machines with a production of less than 50.000 pages of A4 per month are not placed near working spaces, they share placed in a corridor or in an open space.

There should be local exhaust ventilation when the next two criteria are met:

- Printers on a floor near working spaces
 - Printers or copying machines with a production of over 50.000 pages A4 per month.

Evidence

- 1. Floor plan indicating where equipment is placed and where ventilation is in place.
- 2. Evidence that no ventilation is necessary, or which shows that there are sufficient measures for ventilation.
- 3. Check by the assessor of (a representative part) the present facilities with photographic evidence.

HEA20 - Acoustic conditions		
Part	Number of credits available	
2	4	

Have internal acoustic conditions been monitored by a suitably qualified third party acoustician?			
Aim To ensur	Aim To ensure the acoustic performance of the building meets the appropriate best practice standards.		
Availat	Available credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No		
2	Yes		
4	Yes, and all recommendations have been implemented		

Assessment criteria

- 1. Monitoring of acoustic comfort should be carried out and reviewed when changes are made to the building fabric or building services that would influence acoustic conditions in the relevant spaces within the building.
- 2. A named third party acoustician is responsible for optimising acoustic comfort and ensuring compliance with the appropriate best practice standards (NEN-EN-ISO 16283 or NEN 5077 (including NPR 5092 and NPR 5097) or equivalent.
- 3. Acoustic conditions need to be measured in all representative spaces in the building in order to comply with the issue.
- 4. Acoustic conditions should be in line with national standards or best practice guidelines.

Additions to the assessment criteria

In case there are no recommendations, because in the eyes of the acoustician a high level of acoustic comfort has already been reached in the asset, the maximum number of points can be awarded. The acoustician should determine what the 'best practices' are in case of a specific asset. The acoustic performances described in the Handbook building quality from a building physics point of view, version 2.2 (16 may 2016) of the NVBV should be used as a guideline.

Evidence

- 1. Report of the acoustic inspection, and details of the individual responsible for the acoustic maintenance and monitoring; including qualification.
- 2. Records of monitoring demonstrating compliance with appropriate best practice standards.

3. Overview with executed measures, or the planning with the commission of the assignment for this execution (if applicable)

Definitions

Relevant building area: occupied space which is a room or space within the assessed building that is likely to be occupied for 30 minutes or more by a building user. This includes public areas, such as dayrooms, exercise areas and communal areas, in shopping centres.

References

- NEN-EN-ISO 16283 Acoustics Field measurement of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation
- Jes c Jund insurant protestion of manual rot. Register version of manual rot. Certification based on English Version base NEN 5077: Noise control in buildings - Determination methods for performances concerning airborne sound insulation of facades, airborne sound insulation, impact sound insulation, sound

HEA21 - Deep cleaning		
Part		Number of credits available
2		4

Is there a strategy in place to carry out deep cleaning, at an appropriate frequency?

Aim

To recognise and encourage a policy of regular cleaning to reduce the risk to health associated with poor building cleanliness.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
1	Yes, deep cleaning of soft furnishings and/or carpets carried out once every three years
2	Yes, deep cleaning of soft furnishings and/or carpets carried out more than once every three years
4	Yes, deep cleaning of soft furnishings and/or carpets carried out annually
4	There are no soft furnishings and/or carpets within the asset

Assessment criteria

- 1. Deep cleaning would typically require the use of specialist/steam cleaning apparatus.
- 2. Regular daily cleaning of soft furnishings and/or carpets is not considered 'deep cleaning'.
- 3. The use of hamitul chemicals should be minimised to reduce the effects of deep cleaning on the indoor environment.

Evidence

- 1. Accopy of the maintenance/cleaning policy highlighting the relevant cleaning clauses.
- 2. Records of deep cleaning carried out or a copy of the contract with the cleaning company.
- 32 In the case deep cleaning isn't necessary, this should be proven through a visual inspection with photographic evidence, to establish there are no soft furnishings or carpets.

Additional information

Carpeting means at least (but is not limited to) curtains, upholstery and pillows

HEA22 – Legionella management		
Part		Number of credits available
2		2

Are all systems that are installed to reduce the risk of Legionella contamination adequately maintained?

Aim

To ensure Legionella contamination systems are maintained to avoid the risk of Legionella contamination.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Regular inspection and maintenance of all systems, by a competent third party contractor, in accordance with national regulations
0	Other

Assessment criteria

- 1. The control of the risk of Legionella contamination is detailed in a management plan. This plan includes (but is not limited to)
 - a. Overview of locations where Legionella bacteria can start growing in the water or ventilation installations.
 - b. Management procedures for the tap water installation or ventilation installation where (at the least) the intervals for the following are noted:
 - i. Inspection (no more than 1 year)
 - (i) Maintenance and control
 - iii. Overhaul
 - iv. Cleaning and disinfection
- 2. The maintenance plan is drawn up for collective drinking water systems in accordance to ISSO publication 55.3 (climate installations) or ISSO publication 55.5 (tap water installations).

Additions to the assessment criteria

In the case that there are no installations that have a risk of infection people with Legionella, the maximum amount of credits can be awarded. At the minimum the inventarisation of the process of ISSO 55.2 has to be included.

Evidence

1. Management plan and copy of list of systems that are installed to reduce the risk of Legionella contamination.

- 2. Copy of legionella inspection log and results.
- 3. If "No systems have been installed for the control of legionella" is selected, this must become apparent from an earlier risk analysis conform ISSO publication 55.1 (tap water installations) or ISSO publication 55.3 (climate installations). For this see credit HEA05

Definitions

Legionella: is the name of bacteria, which can cause Legionnaire's disease. People infected with Legionella bacteria can get a serious lung infection (veteran's disease). Contamination takes place through breathing in tiny drops of water infected with the bacteria (aerosols) that end up in the air through atomization.

Tap water installation: the tap water installation contains pipes and the connected appliances, from the water meter until the taps, including warm water tap installation.

Climate installation: installations that are receptacle for legionella including cooling towers of adiabatic air humidifiers. Adiabatic humidifiers atomize the air and add it to the incoming air stream, in opposition to steam humidifiers which humidify air through steam.

Additional information

The subject of legionella has been included in the Dutch Law. So called priority institutions have to satisfy with the credit's demands according to law. For non-priority institutions these credit demands are outside the law.

References

- Legionella sheet, 'your care' from The Human Environment and Transport Inspectorate (ILT) with the legislative requirements for prioritary institutions, see via www.ilent.nl.
- ISSO-publications:
 - Publication 55.1: Practice manual or evention of Legionella in drinking water systems
 - Publication 55.2: Manual duty of care prevention of Legionella collective drinking water systems.
 - Publication 55.3: Prevention of Legionella in systems for climate control
 - Publication 55.4: Alternative techniques for the prevention of Legionella in collective drinking water systems.
 - Publication 55.5. Operation and maintenance of collective drinking water systems.

HEA23 - Occupant satisfaction				
Part		Number of credits available		
2		3		

Are procedures in place for the collection and recording of occupant satisfaction in regards to the asset's internal environment?

Aim

To ensure that building occupant satisfaction with the building is regularly monitored and reviewed so improvements can be made.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes
3	Yes, third party system used as a basis for the survey
0	Other

Assessment criteria

- 1. Regular collection and recording of building occupant satisfaction (using an established procedure) should be undertaken at least once every three years and additionally when major changes in facility planning, building services etc. have been undertaken.
- 2. The survey process should be designed to cover, as a minimum:
 - a. Internal environmental conditions
 - b. Internal environmental controls
 - c. Onternal fit-out and contents
 - d. Communal facilities in the building
- 3. The occupant satisfaction feedback survey can be carried by an in-house team provided they can demonstrate that they have the necessary research skills and expertise in social research.
- 4. Qualitative methods, such as the use of structured interviews and/or focus groups may also comply, provided they involve a cross section of building occupants and cover the range of issues set out above.
- 5. To avoid de-motivation of respondents it is important in that the results and subsequent actions are communicated to the participants either in a report or a presentation. Where occupant satisfaction surveys have taken place, the assessor should check that contents of the survey and the results have been disseminated to respondents.

Additions to the assessment criteria

- The occupant satisfaction feedback survey relates to the employees of the asset, not to other users, unless this is specifically stated under 'Buildings functions specific assessment criteria'.
- · A complaints' register is not satisfactory fort his credit

Building function specific assessment criteria

- Healthcare: The occupant satisfaction feedback survey also relates to the clients and patients.
- Lodging: The occupant satisfaction feedback survey also relates to the guests.
- Schools: The occupant satisfaction feedback survey also relates to the pupils/students.

Evidence

- 1. A copy of the report of the building occupant's satisfaction feedback survey.
- 2. Copy of procedure and survey process.
- 3. Proof that the results are communicated back to the participants and relevant other building users

Additional information

- In order to maintain confidentiality with the given answers, an independent advisor might be more acceptable to the survey participants
- In the ISSO-publication 103 Monitoring sustainable management and maintenance (Monitoring van duurzaam beheer en onderhoud) a method has been included to measure the comfort experience of inhabitants.

 A partification based on Erndish Variable

 A partification based on Erndish

 A partification based on Ern

HEA24 – Occupant satisfaction: feedback				
Part		Number of credits available		
2		4		

Are procedures in place to address feedback and issues as highlighted in the occupant satisfaction survey process?

Aim

To recognise and encourage procedures which act on information gathered through occupant satisfaction surveys so that the building performance can be optimised.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes
4	Yes, targets are set and signed off at senior manager or director level
0	Other

Assessment criteria

- 1. Processing the feedback results in regular procedures and measures should occur as often as the occupant satisfaction survey takes place, with the minimum frequency the same as the one demanded by credit HEA23.
- 2. Targets should be set for all topics for which building occupants have highlighted issues.
- 3. All targets and procedures that are in place as a result of the occupant satisfaction survey should be accessible to all building occupants.
- 4. Process on targets and procedures should be reviewed annually.

Evidence

- 1. Copy of reviews/targets that have been set based on occupant survey outcomes.
 - 2. Records of how information on target setting and procedure development has been communicated with building occupants. This could either be through hard copy or soft copy.

Energy

Category summary table

Issue reference	Title	Credits available
ENE31	Energy consumption start date	ot available
ENE32	Energy consumption end date	12010
ENE33	Electricity consumption	Valle
ENE34	Natural gas consumption	X O
ENE35	LPG consumption	O
ENE36	Gas oil consumption	
ENE37	Solid fossil fuel consumption	
ENE38	Biodiesel consumption	
ENE39	Biogas consumption	Up to 40 credits are available.
ENE40	Wood/Waste wood consumption	Credits are
ENE41	District heating consumption	calculated within the energy model.
ENE42	Carbon intensity district heating	
ENE43	District cooling consumption	
ENE44	Carbon intensity district cooling	
ENE45	Electricity exported	
ENE46	Non-standard energy uses	
ENE47, 50, 53, 56 and 59	Non-standard energy use	
ENE48, 51, 54, 57 and 60	Non-standard energy consumption	
ENE49, 52, 55, 58 and 61	Non-standard energy consumption floor area	
ENE62	Energy consumption monitoring	4
ENE63	Energy consumption data use	4
ENE64	Sub-metering: main energy sources	4
ENE65	Sub-metering: other energy sources	4
ENE66	Sub-metering: tenanted areas	4
ENE103	Energy research	8
ENE104	Performance assurence installations	8

Certification based on English Version of manual not available

Operational Energy Calculator Guidance

Introduction

To calculated the amount of points awarded for issue ENE31 till ENE61 the Operational Energy Calculator is used, which is integrated in the assessmenttool This section has been produced to give BREEAM In-Use further guidance on the workings of the operational energy calculator so it is clear how any reductions in operational energy consumption will be reflected in the calculation of the operational energy rating.

Overview

In order to calculate the operational energy rating, the carbon dioxide (CO₂) emissions resulting from actual building energy consumption are compared to the equivalent CO₂ emissions for a reference building. There are three main parts to the methodology:

- Establishing the reference benchmark,
- Establishing the actual building CO₂ emissions
- Comparing the reference benchmark with the actual CO₂ emissions to generate a rating.

Establishing reference benchmark

The reference benchmark is set according to the main activity type in the building being assessed. To reflect that there may be more than one activity carried out in any given building e.g. an office block with a restaurant area, it is possible to select up to five different asset types for a single assessment. Where more than one asset type is selected, the reference benchmark is calculated on an area weighted basis. This reference benchmark is adjusted to take account of local climate using the same degree-day calculation methodology used for the asset model. In order to recognise the lower energy consumption of naturally ventilated properties, the reference benchmarks are based on a mix of both air-conditioned and naturally ventilated premises.

The reference building energy consumption is converted to CO₂ by multiplying the electrical and non-electrical energy benchmarks by appropriate carbon emission factors. The carbon emissions factor for all non-electrical energy consumption is based on a natural gas / fuel oil mix and is fixed, irrespective of the country of assessment (reference benchmark compiled by BRE). The carbon emissions factor for electrical energy consumption varies according to the country of assessment.

Establishing actual energy consumption

The metered energy consumption is used as the starting point for establishing the applicable energy consumption for the actual building. It is possible to make four 'corrections' to the metered energy consumption data:

- Energy consumption associated with non-standard energy uses that would not be considered
 typical for the type of building being assessed can be subtracted where separately metered. In the
 issue text, examples are given.
- Any electricity exported from the site can be subtracted where there is a separate export meter.
- A correction is then made to account for consumption data based on any reporting period that is not 365 days.
- A final correction can be made to account for the area that has been unoccupied during the reporting period, for more information, see paragraph 'Unoccupied area' on the next page.

Users are able to enter metered energy consumption for a number of different fuel types including: grid supplied electricity, natural gas, LPG, gas oil, solid fossil fuels, biodiesel, biogas, wood, district heating and district cooling.

Once the energy consumption for each fuel type has been entered, the tool calculates the associated CO₂ emissions for the actual building by multiplying the consumption data by the relevant carbon emission factors for each fuel type. As for the reference baseline, the carbon emission factor for electricity varies according to the country of assessment, but the emission factors for non-electrical consumption are fixed.

The only exception to this is for district heating and cooling systems where it is possible to enter the actual emissions factor for the system where known.

Establishing final score

The operational energy rating is then calculated by comparing the actual CO₂ emissions to the reference CO₂ emissions using a sliding scale with maximum credits being awarded for a zero carbon building, and zero credits awarded where the actual emissions are more than twice the reference emissions.

Unoccupied area

To ensure that the reference remains representative in case of unoccupied areas, parts of the asset which are not occupied or not used in accordance with the asset function should be deducted from the gross floor area entered in the calculation model. The following conditions apply:

- If the total unoccupied GFA exceeds more than 10% of the total GFA of the asset, this surface must be
- If there is an unoccupied GFA over a period of more than 6 months, this surface must be deducted.
- The surface of common areas that are not in use because of unoccupied areas must be deducted.
- The surface of common areas that are in use, but with lower intensity because of unoccupied areas, wouldn't be deducted.
- In case of multiple building functions within the asset, the unoccupied GFA must be deducted from the building function where it relates too. See Example 3.

The deduction of the GFA should be calculated as follows:

$$A_{input} = A_{total} - \left(A_{unuccupied} \times \frac{T_{unuccupied}}{T_{reporting\ period}}\right)$$

GFA to be entered in the energy calculator

Total GFA of the asset A_{total}:

Total onuccupied GFA during (substantial part of) the reporting period

Part of the reporting period where the area was onuccuipied The reporting area as entered in issues ENE31 and ENE32.

Example 1: If the asset has a GFA of 10,000 m2 and a total of 900 m2 is unoccupied, the unoccupied GFA does not has to be deducted (because less than 10%).

Example 2: If the asset has a GFA of 10.000 m² and during a period of nine months within a reporting period of 12 months, 2.000 m² GFA was unoccupied, the GFA to be entered should be calculated as follows:

$$10000 - \left(2000 \times \frac{9}{12}\right) = 8500$$

The GFA that has to be entered in the energy calculator will be 8.500 m².

Example 3: If the asset consists of educational functions (8.000 m²) and office functions (2.000 m²) and during 9 months within a reporting period of 12 months there's 2.000 m2 GFA unoccupied within the educational functions. The GFA to be entered for educational functions should be calculated as follows: $8000 - \left(2000 \times \frac{9}{12}\right) = 6500$ The GFA that has to be entered for the educations functions will be 6.500 m², for the office functions 2000

$$8000 - \left(2000 \times \frac{9}{12}\right) = 6500$$

Note: The energy use to be entered remains the energy use of the asset in total, this means that also the energy use of the unoccupied area has to be taken into account.

ENE31 – Energy consumption start date		
Part		Number of credits available
2		Credits are calculated within the Energy Model

Please enter the start date of the annual reporting period for consumption data applicable to questions. anual not availa Building Management ENE 33 – Electricity consumption to Building Management ENE 45 – Electricity exported.

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: DD/MM/JJJJ
N/A	

Assessment criteria

Assessors must ensure that the reporting period is between 11 – 13 months.

Evidence

1. Copies of energy bills or verified meter readings for the beginning and end of the reporting period.

Additional information

The intention is that the user enters energy consumption data based on a 365 day period; however it is possible to enter data for any reporting period between 11 and 13 months. Any reporting period outside of the 11 to 13 month range would be invalid and result in zero credits being scored.

ENE32 – Energy consumption end date		
Part		Number of credits available
2		Credits are calculated within the Energy Model

Please enter the end date of the annual reporting period for consumption data applicable to questions Building Management ENE 33 – Electricity consumption to Building Management ENE 45 – Electricity exported.

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: DD/MM/JJJJ
N/A	

Assessment criteria

1. Assessors must ensure that the reporting period is between 11 – 13 months.

Evidence

1. Copies of energy bills or verified meter readings for the beginning and end of the reporting period.

Additional information

The intention is that the user enters energy consumption data based on a 365 day period; however it is possible to enter data for any reporting period between 11 and 13 months. Any reporting period outside of the 11 to 13 month range would be invalid and result in zero credits being scored.

ENE33 – Electricity consumption	
Part	Number of credits available
2	Credits are calculated within the Energy Model

availal not availal Annually, how much mains supplied electricity is consumed by the asset in kWh/annum (as metered in the reporting period)?

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIA.
- 2. Assessors must confirm that the reporting period is aligned with the start and end date of the utility bills.

Evidence

1. Copies of energy bills or verified meter readings for the beginning and end of the reporting period. Certification based

ENE34 – Natural gas consumption	
Part	Number of credits available
2	Credits are calculated within the Energy Model

Annually, how much natural gas is consumed by the asset in kWh/annum (as metered in the reporting period)?

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under: Asset Dimensions. This also includes further guidance on the definition of GIA.
- Assessors must confirm that the reporting period is aligned with the start and end date of the utility bills.

Evidence

1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 – Natural gas consumption through to Building Management ENE 43 – District cooling consumption If the asset uses a fuel type that is not listed, please contact DGBC for guidance on how to account for this.

ENE35 – LPG consumption		
Part		Number of credits available
2		Credits are calculated within the Energy Model

Annually, how much LPG is consumed by the asset in kWh (as metered in the reporting period)?

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIA.
- 2. Assessors must confirm that the reporting period is aligned with the start and end date of the utility bills.
- 3. Calculating LPG usage can be achieved via:
 - a. Metering
 - b. Calculations based on inventory data (the number of canisters used on site) during the reporting period (where their specifications are known)

Evidence

- 1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 – Natural gas consumption through to Building Management ENE 43 – District cooling consumption If the asset uses a fuel type that is not listed, please contact DGBC for guidance on how to account for this.

ENE36 – Gas oil consumption	
Part	Number of credits available
2	Credits are calculated within the Energy Model

Annually, how much gas oil (light fuel oil/diesel) is consumed by the asset in kWh (as metered in the reporting period)?

Aim
This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIR
- 2. This figure regards fuel which has been used directly within the asset NOT for vehicles or other appliances which operate on site, unless this is specified within the scope.
- 3. Assessors must confirm that the reporting period is aligned with the start and end date of the utility
- 4. Recording fuel usage can be achieved through:
 - a. Metering of equipment
 - b. Estimates of system efficiency and running times
 - c. Calculations based on inventory data

Evidence

- 1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.
- 3. Photographic evidence of sub meters (if relevant).

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 – Natural gas consumption through to Building Management ENE 43 - District cooling consumption If the asset uses a fueltype that is not listed, please contact DGBC for guidance on how to account for this.

ENE37 – Solid fossil fuel consumption		
Part		Number of credits available
2		Credits are calculated within the Energy Model

al not availa Annually, how much solid fossil fuel is consumed by the asset supplied in kWh (as metered in the reporting

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIR
- 2. Solid fossil fuel refers to the burning of solid material for the purposes of creating heat, such as Smokeless fuel. Coal and Anthracite
- 3. Assessors must confirm that the reporting period is aligned with the start and end date of the utility
- 4. Calculating the amount of solid fuel usage can be achieved through:
 - a. Sub-metering of equipment which uses solid fuel
 - b. Invoices for materials purchased during the reporting period and calculations based on the calorific content of the material.

Evidence

- 1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.
- 3. Photographic evidence of sub-meters (if relevant)

Additionalinformation

Please note: all fuel consumption must be entered for Building Management ENE 34 – Natural gas consumption through to Building Management ENE 43 - District cooling consumption If the asset uses a fuel type that is not listed, please contact DGBC for guidance on how to account for this.

ENE38 – Biodiesel consumption		
Part		Number of credits available
3		Credits are calculated within the Energy Model

Annually, how much biodiesel is consumed by the asset in kWh/annum (as metered in the reporting period)?

Aim
This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIRI
- 2. Cooking oil can only be used when it has been appropriately refined to a standard which is suitable for fuel usage.
- 3. Assessors must confirm that the reporting period is aligned with the start and end date of the utility
- 4. Calculating biodiesel usage can be achieved through:
 - a. Sub-metering of equipment which uses this fuel
 - b. Invoices for biodiese materials purchased during the reporting period and calculations based on the calorific content of the material.

Evidence

- 1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.
- Photographic evidence of sub-meters (if relevant)

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 – Natural gas consumption through to Building Management ENE 43 - District cooling consumption If the asset uses a fuel type that is not listed, please contact DGBC for guidance on how to account for this.

ENE39 – Biogas consumption		
Part	Number of credits available	е
2	Credits are calculated within the Energy Model	Э

Annually, how much biogas is consumed by the asset in kWh/annum (as metered in the reporting period)?

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIA.
- includes further guidance on the definition of GIA.
 2. Biogas can be used from offsite suppliers or as a result of onsite generation, following a process such as anaerobic digestion etc.
- 3. Assessors must confirm that the reporting period is aligned with the start and end date of the utility bills.
- 4. Calculating biogas usage can be achieved through:
 - a. Sub-metering of equipment which uses this fuel
 - b. Invoices for gas imported during the reporting period

Evidence

- 1. Copies of utility bills of verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.
- 3. Photographic evidence of sub-meters (if relevant).

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 – Natural gas consumption through to Building Management ENE 43 – District cooling consumption If the asset uses a fuel type that is not listed, please contact DGBC for guidance on how to account for this.

ENE40 – Wood/Waste consumption		
Part	Number of credits available	
2	Credits are calculated within the Energy Model	

Annually, how much wood/waste wood is consumed by the asset in kWh (as metered in the reporting period)?

Aim
This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIR
- 2. Calculating the amount of solid fuel usage can be achieved through invoices for materials purchased during the reporting period and calculations based on the calorific content of the material.
- 3. Assessors must confirm that the reporting period is aligned with the start and end date of the utility bills.

Evidence

- 1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 - Natural gas consumption through to Building Management ENE 43 - District cooling consumption If the asset uses a fuel type that is not listed, please contact DGBC for guidance on how to account for this.

ENE41 – District heating consumption		
Part	Number of credits available	
2	Credits are calculated within the Energy Model	

Annually, how much district heating energy is consumed by the asset in kWh (as metered in the reporting Anot availa

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIR
- 2. Assessors must confirm that the reporting period is aligned with the start and end date of the utility bills.
- 3. Evidence provided will illustrate that an accurate calculation of district heating energy usage has been provided. This could include, but is not limited to:
 - a. Relevant metering of equipment
 - b. Building energy management systems
 - c. Calculation via energy bills for fuel types if these fuel types are only used for district heating, etc.

Evidence

- 1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.
- 3. Photographic evidence of sub-meters (if relevant).

Definitions

District heating refers to heating which is delivered via a central source to different parts of the building; a system that runs from central boilers for example.

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 - Natural gas consumption through to Building Management ENE 43 - District cooling consumption If the asset uses a fuel type that is not listed, please contact DGBC for guidance on how to account for this.

ENE42 – Carbon intensity district heating		
Part		Number of credits available
2		Credits are calculated within the Energy Model

If known, what is the carbon intensity (CO₂-emission factor) of the district heating system in kgCO₂/kWho

Aim

This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

sessment criteria

1. The carbon intensity of the district heating system would be sourced from the supplier of this system.

Evidence

Certification based on English 2. Relevant literature/records/data or other information from the district heating supplier stating the

ENE43 – District cooling consumption		
Part	Number of credits available	
2	Credits are calculated within the Energy Model	

What is the district cooling energy consumption in kWh/annum (as metered in the reporting period)?

Aim
This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. Please ensure that all consumption data relates specifically to the area of the asset that is being assessed. This is the area that has been filled in as GIA under Asset Dimensions. This also includes further guidance on the definition of GIA
- 2. Assessors must confirm that the reporting period is aligned with the start and end date of the utility
- 3. Accurate calculation of district cooling energy usage could come from:
 - Relevant metering of equipment
 - b. Building energy management systems

Evidence

- 1. Copies of utility bills or verified meter readings for the beginning and end of the reporting period.
- 2. Calculations based on inventory data.
- 3. Photographic evidence of sub-meters (if relevant).

Definitions

Collective district cooling: refers too cooling which is delivered from a central source to several buildings.

Additional information

Please note: all fuel consumption must be entered for Building Management ENE 34 – Natural gas consumption through to Building Management ENE 43 - District cooling consumption If the asset uses a fuel two that is not listed, please contact DGBC for guidance on how to account for this.

ENE44 – Carbon intensity district cooling		
Part		Number of credits available
2		Credits are calculated within the Energy Model

Aim

Available credits

Quest If known,	ion what is the carbon intensity of the district cooling system in kgCO ₂ /kWh?
Aim This data	is required to generate the operational energy rating.
Available credits	
Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

1. The carbon intensity of the district cooling system would be sourced from the supplier of this system.

Evidence

other in the incommendation based on Empire Certification based on 1. Relevant literature/records/data or other information from the district-cooling supplier stating the

ENE45 – Electricity exported		
Part		Number of credits available
2		Credits are calculated within the Energy Model

What is the quantity of electricity exported off site in kWh/annum (as metered in the reporting period)?

Aim
This data is required to generate the operational energy rating.

Available credits

Credits	Provide date as: kWh/annum
N/A	

Assessment criteria

- 1. The quantity of electricity exported off site would only need to be considered where there are separate meters for the import and export of electricity. Where these meters are combined, the contribution of electricity generated on site and exported off site will already be factored in to the main electricity consumption figure.
- 2. Where a separate meter for import and export of electricity are installed on-site, only the electricity that is exported via the export meter should be taken into account.
- 3. Assessors must confirm that the reporting period is aligned with the start and end date of the utility

Evidence

- 1. Photographic evidence of relevant export meter
- 2. Data from the building management system (if relevant) (BEMS)
- 3. Copies of verified data for the 12-month period specified.

ENE46 – Non-standard energy uses		
Part	Number of credits available	
2	Credits are calculated within the Energy Model	

Aim

Available credits

Question Input the number of non-standard energy uses that are sub-metered within the asset (0-5 types).			
Aim This data	Input the number of non-standard energy uses that are sub-metered within the asset (0-5 types). Aim This data is required to generate the operational energy rating. Available credits		
Availa	Available credits		
Credits	Answer options		
N/A	Question not answered		
N/A	0		
N/A	1		
N/A	2		
N/A	3		
N/A	4		
N/A	5		

Assessment criteria

- 1. Non-standard energy uses, in this instance, are defined as (but not confined to):
 - a. Regional server room
 - b. Trading floor
 - c. Bakery oven
 - d. Sports flood lighting
 - E. Furnace or forming process
 - f. Blast chilling or freezing
- Non-standard energy uses applies to (a collection of) appliances, which are not typical for the assessed building type.

Evidence

- 1. Photographic evidence of sub-meters; a sample is sufficient.
- 2. Building plans illustrating the location of sub-meters.

ENE47, ENE50, ENE53, ENE56 and ENE59 – Non-standard energy use		
Part	Number of credits available	
2	Credits are calculated within the Energy Model	

Aim

Available credits

•	Question Select the non-standard sub-metered energy use.	
Aim This data	e non-standard sub-metered energy use. a is required to generate the operational energy rating. able credits	
Available credits		
Credits	Answer options	
N/A	Question not answered	
N/A	Regional server room	
N/A	Trading floor	
N/A	Bakery oven	
N/A	Sports floodlighting	
N/A	Furnace or forming process	
N/A	Blast chilling or freezing	
N/A	Other	

Assessment criteria

- 1. Non-standard energy uses are defined as:
 - a. Regional server room: Energy used in a server room that services multiple satellite offices/servers
 - borrading floor: Energy used in a room where traders are gathered to operate on financial markets
 - Bakery oven: Energy used in a commercial sized oven used to bake foods.
 - Sports floodlighting: Energy used by broad-beamed, high intensity artificial lights (often used outside)
 - e. Furnace or forming process:
 - i. Energy used in a furnace: an industrial devise used for many things, such as extracting metals or as heat source in chemical plants.
 - Energy used in forming process: a manufacturing process which makes uses of suitable stresses to cause deformation of materials to produce required shapes.
 - f. Blast chilling or freezing: Energy used for cooling materials (often food) quickly to low temperatures.
 - g. Other: energy use of (a collection of) appliances which are not typical for the assessed building type.

Evidence

- 1. Photographic evidence of non-standard energy use.
- 2. Written explanation what non-standard energy use is.

Canification based on English Version of manual not available

ENE48, ENE51, ENE54, ENE57 and ENE60 – Non-standard energy consumption		
Part	Number of credits available	
2	Credits are calculated within the Energy Model	

Available credits

	۷		Energy Model		
	Question What is the energy usage of the non-standard sub-metered energy use?				
Aim This data is required to generate the operational energy rating.			Of Who		
Available credits			Wal no		
Credits	Provide date as: kWh/	annum			
N/A					

Assessment criteria

1. Non-standard energy uses should be sub-metered to confirm the energy use associated with the non-standard energy use and area.

Evidence

- 1. Copies of verified meter data for the 12 month period specified.
- 2. Photographic evidence of the installation of sub-meters for the non-standard energy use Certification based on

ENE 49, ENE52, ENE55, ENE58 and ENE61 – Non-standard energy		
consumption floor area		
Part Number of credits available		

Part	Number of credits available
2	Credits are calculated within the Energy Model

Available credits

			Energy Model
Question What is the floor area associated with the non-standard energy use (m ₂)?			
Aim This data	Aim This data is required to generate the operational energy rating.		
Availa	Available credits		
Credits	Provide date as: m ²		
N/A			

Assessment criteria

- 1. The floor area that is associated with the non-standard energy use should be measured. The floor are is calculated as follows for the non-standard energy uses:
 - a. Regional server room: The area/room that comprises the regional server.
 - b. Trading floor: The area/floor that comprises the trading.
 - c. Bakery oven: The area comprising the bakery oven and the associated process.
 - d. Sports floodlighting: The area/grounds that are lit by the floodlights.
 - e. Furnace or forming process:
 - i. The area comprising the furnace and the associated process.
 - ii. The area comprising the forming process.
 - f. Blast chilling or freezing: The area comprising the blast chiller/freezer and associated process.
- 2. In general non-standard energy uses must calculate the floor surface that is covered by the appliances and the corresponding process

Evidence

Building plans illustrating floor area related to the non-standard energy use.

ENE62 – Energy consumption monitoring		
Part		Number of credits available
2		4

Is energy	consumption monitored and is this data accessible?
Aim To encourage the monitoring of energy consumption that in turn will allow building managers to set improvement targets.	
Availa	ible credits
Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- Consumption data can be acquired from:
 - a. Meters (manually or automatically read)
 - b. Delivery and stock-level figures
- 2. In order to illustrate that this data is accessible, the building management team (or whoever is responsible for energy measurement) must present data held in a single location, where this is presented in an orderly way and is accessible to employees.

Evidence

1. Records of energy consumption data as part of a spread sheet; calculated from metering data or energy bills.

Additional information

The assessor is not required to assess the content of the energy data, but they must confirm that the relevant information is presented in an orderly and accessible way.

ENE63 – Energy consumption data use		
Part		Number of credits available
2		4

How is collected energy consumption data used?

Aim

To facilitate the structured and systematic provision of reporting on energy consumption to encourage building users to understand and set efficiency improvement targets.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
1	Filed away
2	Energy monitoring and control
3	Energy monitoring and control and reported on internally
4	All of the above and in addition published in a public annual report.
0	Other

Assessment criteria 🤗

- 1. Building energy consumption should be monitored, targeted and reported to at least the higher management in the building occupant's organizational structure. Responsible for the building management of the asset.
- 2. There are dedicated energy management/reduction targets endorsed at senior level. The targets must address/declare that:
 - a. The organisation is dedicated to reducing energy consumed as a result of its operation/s.
 - b. The organisation will work with occupiers/suppliers to address impacts of consumed energy and strategies to reduce consumption (if relevant).

Additions to the assessment criteria

For participants of the MJA-3 the first three credits can be automatically awarded when the relevant obligations for this issue from MJA-3 have been made specifically for the asset.

Evidence

1. Evidence of company utilising data in ways identified, such as:

- a. Energy Management Reports, Corporate Social Responsibility report or Annual Sustainability report detailing how data is targeted and improved, plus an analysis of the energy monitoring.
- b. Proof this report is communicated tot he management of the building user (if applicable)
- c. Proof this report is published publically (if applicable)

Definitions

e this, and and ind protect of manual not available of

ENE64 – Sub-metering: main energy sources		
Part		Number of credits available
2		4

How many of the following main energy uses are covered by separate sub-meters:

- Heating
- Cooling
- Interior Lighting
- Ventilation

Aim

available To facilitate the structured and systematic provision of reporting on energy consumption to ensure building users understand and set targets to operate the building more efficiently.

Available credits

Credits	Answer option
Credits	
0	Question not answered
0	Don't know
0	No sub-meters provided
1	1 of the main energy uses
2	2 of the main energy uses
3	3 of the main energy uses
4	4 of the main energy uses
0	Other

Assessment criteria

- 1. Only main energy uses are covered in this issue. Other energy uses are covered in Building Management ENE 65 – Sub-metering: other energy sources.
- Assessors should verify that the sub-meters were operational during the reporting period.

Evidence

- 1. Copies of verified meter data for the first and last date of the 12-month reporting period. If the meters are proven to be installed just recently, wherefore a 12-month reporting is not yet possible, it's sufficient to demonstrate that the meters are in use.
- 2. Building map or line diagram indicating sub-meters and the related energy uses.

ENE65 – Sub-metering: other energy sources		
Part		Number of credits available
2		4

Which of the following energy uses are covered by separate sub-meters:

- Exterior lighting
- All means of vertical transportation (e.g. lifts and escalators)
- · Display and aesthetical effects lighting
- Data rooms in the building
- Central kitchen
- Ventilation, and air-conditioning in transitional spaces (e.g. air curtains and revolving doors)
- · Small power

Aim

To encourage separate metering of appliances within the asset in order to attain a better granularity of data which can be used to target improvements.

Available credits

0 !!/	
Credits	Answer option
0	Question not answered
0	Don't know
0	None of the listed energy uses
1	1 of the listed energy uses
2	2 of the listed energy uses
3	3 of the listed energy uses
4	4 or more of the listed energy uses
0	Other

Assessment criteria

- 1. Sub-metering for main energy uses is covered by Building Management ENE 64 Sub-metering: main energy sources.
- 2. Display and aesthetical lighting and small power can be hard to monitor separately in a cost effective way. That's why lighting and small power can be measured per floor.
- 3. Assessors should verify that the sub-meters were operational during the reporting period.

Additions to assessment criteria

Other significant energy uses can be included, as long as they are sub-metered, and the energy use of the particular user group is more than 5% of the total energy use in the asset, and it is not included anywhere in ENE64 or ENE66. The total maximum amount of credit remains 4.

Evidence

- Certification based on English Version of manual not available. 1. Copies or verified meter data for the first and last date of the 12-month period specified. If the meters are proven to be installed just recently, wherefore a 12 month reporting is not yet possible,

ENE66 – Sub-metering: tenanted areas		
Part		Number of credits available
2		4

Are sub-meters provided for tenanted areas?

Aim

To facilitate the structured and systematic provision of reporting on energy consumption to ensure building users understand and set targets to operate the asset more efficiently.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	The asset is occupied only by a single tenant
4	Yes the asset is fully sub-metered per floor or other logical partition.
0	Other

Assessment criteria

- 1. There is a sub-meter for all the supplied energy, e.g. electricity and gas.
- 2. An asset with only tenant can only get the maximum number of credits if there is a sub-meter available per floor or other logical partition.
- 3. To very small assets (< 250 m2, even with more than one tenant), 2 credits can be allotted.

Evidence

- Copies of bills or verified data for the 12-month period specified. If the meters are proven to be installed just recently, wherefore a 12-month reporting is not yet possible, it's sufficient to demonstrate that the meters are in use.
- 20 Building map or line diagram indicating sub-meters and the related energy uses.

Additional information

If there is only one tenant, they will automatically have their own sub-meter. If the asset only has one tenant, no sub-metering is required. The assessment is less, because the absence of sub-meters makes the asset less flexible in the future, if the single tenant leaves, and the asset is then rented out to multiple tenants. An asset where every floor is sub-metered, will be more flexible in future changes in the building lease. The assessment of logical partitions can differ, and is up to the judgment of the assessor.

ENE103 – Energy conservation survey		
Part		Number of credits available
2		8

Aim

Available credits

Questi	
Has an e	energy conservation survey been carried out for the asset?
Aim	ailal
To clarify	the possibilities of energy conservation
Availat	the possibilities of energy conservation ble credits
Credits	Answer option
0	Question not answered
0	Don't know
0	No energy conservation survey has been carried out.
4	Yes, there is an energy conservation survey.
6	Yes, there is an energy conservation survey, and at least all measures with a payback time of 5 years or less have been carried out.
8	Yes, there is an energy conservation survey, and at least all measures with a payback time of 10 years or smaller have been carried out.

Assessment criteria

- 1. An EPA-U customized advice or equivalent will suffice for the energy conservation survey.
- 2. The energy conservation survey is not older than four years.
- 3. The energy conservation survey and measures were made specifically for the assessed asset.

Additions to assessment criteria

- An EPA-U customized advice must be carried out conform ISSO 75.2 and according to BRL9500-04.
- 2. An energy-audit in accordance with the EED or an energy-efficiency plan (EEP) in accordance to the MJA3 agreement or the MEE agreement will suffice for the energy conservation survey.
- 3. If the asset concerns an establishment covered by the Environmental Activities decree and it concerns an industry for which 'erkende maatregelen' (recognized measures) are compiled, these 'erkende maatregelen' should be conducted as a minimum before awarding 6 of 8 credits.

Evidence

- 1. EPA customized report or advice report or an equivalent energy conservation study (if relevant)
- 2. Documentation of the carried out energy audit conform EED or equivalent (if relevant)
- 3. Proof of participation to MJA3 or MEE (if relevant)

4. Photographic proof of the carried out measures or documentation which shows which measures have been carried out.

Definitions

Audit commitment conform EED: On the basis of quideline energy-efficiencies 2012/27/EU (Energy efficiency 2012/27/EU) large corporations must carry out an energy audit and repeat this at least every four years. See the Rijksdienst for Ondernemend Nederland (Stage service for the Enterprising Netherlands) for more information about which corporations fall under this obligation.

Recognized measures ('erkende maatregelen'): In the Environmental Activities Decree is an overview of recognized measures for different sectors provided. Approved measures are measures that have a payback period of less than or equal to 5 years. See www.rvo.nl for more information.

EPA-U Customized advice: In the customized advice all relevant energy-conserving measures are mentioned, and the energy conservation and payback time are calculated. The customized advice is adapted to the asset and the specific use. In the customized advice the carrying out of the energy conserving measures and the maintenance planning of the asset are coupled.

MJA3: Multiple years' agreement energy efficiency 2001-2020. MEE: Multiple years' agreement energy efficient ETS enterprises

References

- Jn s Jmmerch Version Dased on English Version Certification Dased on English Version Dased on English Da ISSO 75.2 – Technical manual for energy conservation surveys for commercial buildings
 - BRL9500-04 "EPA-maatwerk" report, existing commercial buildings

ENE104 - Performance assurence installations		
Part		Number of credits available
2		8

Is the performance of the installations assured related to energy-efficiency and related to indoor climate,

Aim

To ensure an efficient operation of the installations by means of a performance assurance installations.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
4	A contractual agreement organizes that based on analyses and/or monitoring at least every three-year a functional inspection is being conducted, to assure that the installations are being brought back to the intended performance.
8	A contractual agreement organizes that based on continual performance monitoring the proper functioning of the installations is guarded and that assures that the installations are yearly being brought back to the intended performance.

Assessment criteria

- 1. The following installation parts are (if applicable) part of the performance assurance:
 - a. Heating
 - b. Cooling
 - c. Hot water
 - d. Ventilation/air handling
 - e. Lighting
- 2. The performance assurance is conducted in accordance to the Installation Performance Scan (IPS) or ISSO Publication 106 and ISSO Publication 104. Continual performance monitoring is conducted in accordance to ISSO Publication 31, appendix B.
- The performance assurance is conducted by an organisation or person with a relevant education and experience.
- 4. The correct functional operation of the installations is known and documented, optimisations and changes are being registered. For the example establishing and maintaining a core document with accompanying attachments.

Additions to the assessment criteria

Another method to conduct a (retro) commissioning process than according to IPS or ISSO and continual monitoring according to ISSO Publication 31 can be awarded if equivalence can be proven. This should be validated by the assessor.

Evidence

- 1. Documentation which shows:
 - a. A contractual agreement is committed for the functional inspection and/or performance monitoring and bringing back the installations on the performance as stated in the assessment criteria.
 - b. De correct functional operation of the installations is known and actualized.

Additional information

Performance assurance of installations helps to make the actual performance of facilities clear gives opportunities to optimise. Because in many buildings the installations aren't well tuned/set and/or adapted to the current operating mode of the building, the energy saving potential is high and the properfunctioning of the systems contributes to a healthier indoor environment and a reduction in absenteeism

By means of a functional inspection and adjustment following thereon of the tuning/setting, the building is brought to the intended performance. That's the focus of this credit. The next step is keeping the performance on the intended level, this is awarded in other credits.

References

- ISSO Publication 104 "Roadmap to Sustainable Management and Maintenance"
- ISSO Publication 106 "Functional inspection sustainable Management and Maintenance"
- ISSO Publication 31 "Measurement points and measurement methods for climate control systems"
- ISSO Publication 105 "Core document building technics"
- w.rvc certification based on English Installation Performance Scan, see www.rvo.nl

Transport

The transport category is not assessed within Part 2 of a BREEAM In-Use assessment.

Canification based on English Version of manual not available

Water

Category summary table

Issue reference	Title	Credits available
WAT11	Annual consumption	4
WAT12	Water consumption: monitoring and reporting	8 210
WAT14	Water reduction during refurbishment	2
WAT15	Water strategy	4
WAT16	Water recycling	4
WAT17	Ground water extraction	2
Total credits availa	able	24

Certification based on English Version of Certification based on English Version base

WAT11 – Annual consumption		
Part Number of credits a		Number of credits available
2		4

What is the annual water consumption? Enter volume in m₃.

Aim

To ensure management are aware of annual consumption from potable and non-potable water sources.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
4	Annual water consumption m ³

Assessment criteria

- 1. Annual water consumption should include the sum of all water drawn into the boundaries of the reporting organisation. This includes water consumption from potable and non-potable water sources (including groundwater, rainwater and municipal water supply), for any use over the course of the reporting period.
- 2. The water consumption relates to the most recent 12 month period

Additions to the assessment criteria

Water consumption is generally calculated by the supplier over a broken year, e.g. march to February. Such an overview is sufficient as long as it shows the consumption over 12 consecutive calendar months

Evidence

- 1. Measurements over the period of a year, e.g. the invoice of the drinking water company.
- 2. Over view of the total water use on the basis of meter readings or invoices.

Additional information

With multiple tenants in the asset, an excel overview can bring insight into the subdivision of the use.

WAT12 – Water consumption: monitoring and reporting		
Part		Number of credits available
2		8

To use information gained from monitoring to help inform the water strategy and reduce overall consumption.

Available credits Is there a strategy in place to use water-monitoring data to minimise water consumption that includes

allal not

Credits	Answer option	
0	Question not answered	
0	Don't know	
0	No	
1	Strategy is in place, no other actions are taken	
2	Strategy is in place and water targets are filed away, no other actions are taken	
4	Strategy is in place that compares water consumption against asset targets	
6	Strategy is in place that compares water consumption against asset targets and report on these internally	
8	Strategy is in place that compares water consumption against asset targets and report on these internally and published in an annual public report	

Assessment criteria

- 1. The strategy should outline how monitoring data will be used to help minimise water consumption. This could for example be through:
 - a \bigcirc Tasks and responsibilities in the field of registering the consumption, monitoring, and the actions to take.
 - Identifying areas of unexpectedly high water consumption that could indicate system leaks.
 - Identifying the areas and periods with high water consumption that should be targeted for installing water efficiency measures.
 - d. Making monitoring data available to asset users with a view to modifying user behaviour.

Evidence

- 1. A copy of the strategy/policy, in which the water consumption related sections are highlighted, e.g. the maintenance or environmental policy.
- 2. Records of water consumption analysis; e.g. spreadsheet, summary report.
- 3. Copies of how water consumption and analysis have been reported internally such as:
 - a. Internal memos

- b. Newsletters
- c. Posters
- d. Emails
- 4. The paragraph of the annual report in which the water consumption is published, e.g. the sustainability report or others (MVO-report) (if applicable).

Catification based on English Version of manual not available

WAT14 – Water reduction during refurbishment		
Part		Number of credits available
2		2

Is there a policy in place to replace water appliances and fittings with low water use equivalents during refurbishments?

Aim

Promoting the reduction of water consumption through installation of water-efficient fixtures and fittings, at a natural replacement moment or renovations.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. As a minimum, the policy should include:
 - a. A replacement programme, e.g. description in the long-term maintenance plan that water-efficient fixtures will be implemented on natural replacement moments.
 - b. In the renovation plan a description that the old water fixtures will be replaced with water-efficient ones if applicable).
 - c. A schedule of approved replacement appliances or selection criteria which determines whether replacement alternatives are sufficiently water saving.
- 2. If all water appliances and fittings have already been replaced with low water use equivalents, a policy should still be in place to ensure a continuation of good practice.

Evidence(

1. Copy of the policy document, which includes the replacement program and the overview of approved alternatives and if relevant, the renovation plan.

WAT15 – Water strategy		
Part		Number of credits available
2		4

Does the organisation have a strategy for maintaining water systems?

Aim

To ensure that reliable water supplies are maintained and any wastage through leaks are minimised.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
2	Yes
4	Yes, there is a proactive maintenance policy

Assessment criteria

- 1. A proactive maintenance policy is present and in progress to ensure that the reliability of the installed fittings and water systems is increased. These maintenance policies typically consist of two parts:
 - a. Preventive maintenance: maintenance, measurements, tests, parts replacement, etc. to prevent faults from occurring.
 - b. Predictive maintenance: maintenance techniques that are designed to help determine the condition of installed equipment in order to predict when maintenance should occur.

Evidence

- 1. Copy of relevant section of maintenance strategy, long term maintenance plan or maintenance contract.
- 2 Copy of maintenance logs, which proves that the preventive and proactive maintenance is actually carried out (if applicable)

Additional information

Very often there is no specific policy for water systems, but is this included in the long term maintenance policy and a preventive maintenance contract.

WAT16 – Water recycling		
Part		Number of credits available
2		4

What percentage of total water consumption is from alternative supplies (grey water/rainwater)?

Aim

To encourage the use of alternative water supplies in order to reduce the demand for mains supplied fresh water.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	0%
1	≥ 1% tot < 25%
2	≥ 25% tot < 50%
3	≥ 50% tot < 75%
4	≥ 75%

Assessment criteria

- 1. Alternative water supplies include water that is treated prior to reuse and water that is not treated prior to reuse.
- 2. Both rainwater and grey water can be considered as alternative water supplies
- 3. Other water sources can be used to meet the aim of the credit as long as the alternative water supply is used to reduce demand of mains fed fresh water supply for unregulated water uses.

Evidence

- 1. Meter readings for both mains and alternative supplies
- Calculations (based on metered data for both mains an alternative supplies) to demonstrate the percentage of water consumption obtained from alternative supplies.

Additional information

Untreated, re-used water includes e.g. the collection of rainwater in a tub or basin which is used to irrigate green elements on the location.

WAT17 – Ground water extraction		
Part		Number of credits available
2		2

Is non-mains water extraction metered and monitored to avoid over-extraction?

Aim

To avoid over extraction of the water table.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	No water is extracted
2	Yes

Assessment criteria

- 1. The net amounts of extracted groundwater are measured reliably and registered. The net amount is the difference between the amount of extracted and the amount of water that is discharged back into the ground. Both streams have been measured and registered, on which basis the net amount is determined
- 2. These measurements and registrations take place:
 - a. During groundwater extraction for use as drinking or process water (private water source)
 - b. During ground sanitation
 - c. During geothermal heating/cooling systems.
- 3. On the basis of the previously named information the following is determined:
 - a. Catchments are accurately balanced against overall requirements, to maintain a healthy water environment
 - Spare resources are allocated to new/future abstractions
 - c. Assurance that licence conditions are being adhered to

Evidence

- 1. Evidence of monitoring data, e.g. the mandatory reports to the authorities.
- 2. If possible, copy of policy which stipulates monitoring is to take place

Additional information

In this credit, the situation where no water extraction takes place is awarded 2 points. Normally drinking water through the water supply companies is mostly extracted form the groundwater and supplied via the public network. A private water source has several environmental and water system cons: the extraction is

concentrated in one location, and is very unregulated compared to the water system of an area. Besides that, private extraction costs relatively more energy and environmental load for filtration and pre-treatment in comparison to the larger scale of the collective water sources.

Cartification based on English Version of manual not available

Materials

Category summary table

Issue reference	Title	Credits available
MAT08	Condition survey	4
MAT09	Sustainable procurement; policy	2
MAT10	Sustainable procurement; scope	4
MAT11	Fire safety, availability risk management	2,0
MAT12	Fire safety, periodic risk management	2
MAT13	Emergency plan	2
MAT14	Hazard management	2
Total credits availab	ole & C	18

Certification based on English Version Certification based on English

MAT08 – Condition survey		
Part		Number of credits available
2		4

Aim

Available credits

Question Where a condition survey has been carried out, who was the responsible party for completing it?		
Where a condition survey has been carried out, who was the responsible party for completing it? Aim To ensure that a competent party carries out a condition survey. Available credits		
Credits	Allswer option	
0	Question not answered	
0	Don't know	
0	No condition survey has been carried out	
1	Carried out by the building management personnel	
2	Carried out by building management following third party approved procedures	
3	Carried out by an independent third party	
4	Carried out by an independent chartered building surveyor	
4	The asset is less than 5 years old (and no condition survey has been carried out)	
0	Other	

Assessment criteria

- 1. The responsible party/person that carries out the condition surveys must be suitably trained and experienced. Competent persons include:
 - a Facilities management/building management staff
 - civil engineers or other relevant engineering disciplines
 - c. Architects
 - d. Chartered surveyors

2. A licensed inspector is included in the register of:

- a. NVDO (Dutch organisation for Efficient Maintenance) as a certified inspector ("Gediplomeerde Inspecteur Conditiemeting"), or
- b. Sertum as an Integral Inspector Real Estate IIV ("Integraal Inspecteur Vastgoed IIV"), or
- c. Equivalent.

Additions to the assessment criteria

In the case of an RgdBOEI inspection, the inspector that works with this inspection method, must have followed a training for Integral Inspector Real Estate (IVV) and have a Hobéon person certificate in order to be awarded 4 credits.

Evidence

- 1. Copy of the section/page of the condition survey stating the name and organisation (including third party certification where available) of the party that carried out the condition survey.
- 2. Information regarding relevant qualifications and experience of the person who has undertaken the
- ..taken
 ..ty registrati
 ..ty r 3. Assets that are less than 5 years old will require appropriate public records of property registration

MAT09 – Sustainable procurement; policy		
Part		Number of credits available
2		2

Does the organization responsible for the building management have an environmental/sustainable procurement policy that covers materials, products, and services?

Aim

To recognise and encourage the implementation of an environmental procurement policy that encourages the purchases of sustainable materials, products and services.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. The environmental/sustainable purchasing policy is oriented on daily maintenance, internal rehousing's, renovations and reorganisations. The policy should be endorsed at senior management level.
- 2. The section timber products should be included in the procurement policy. All timber products that are purchased should be produced in a (sustainable) responsible manner and originate from a legal source.
- 3. The asset owner demonstrates (i.e. through examples) how the policy is implemented, either through general organisational operation, or project related initiatives and management strategies.
- 4. The sustainable procurement policy is executed.

Additions to the assessment criteria

If the management organisation is purchasing 100% sustainable in accordance to the criteria for sustainable procurement/responsible procurement (MVI), as published on www.pianoo.nl, the maximum number of credits can be awarded.

Evidence

- 1. A copy of the environmental/sustainable purchasing policy.
- 2. Proof that shows the procurement policy is actually executed, e.g. an overview of recent asset bound purchases that shows the purchase was done in accordance with the procurement policy.

Definitions

Responsibly and legally produced wood: Certified with a quality label that has been accepted by the Timber Procurement Assessment Committee (TPAC). For an actual overview: http://www.tpac.smk.nl.

Canification based on English Version of manual not available

MAT10 – Sustainable procurement; scope		
Part		Number of credits available
2		4

What initiatives are included in the scope of the environmental/sustainable procurement policy?

Aim

To recognise and encourage measures which ensure that environmental impacts associated with the management of the building are minimised by setting environmental standards for procurement of goods and services.

Available credits

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
0	No policy in place	
1	The asset owner works with the supply chain to help reduce environmental impact of procurements	
1	Environmental impacts of materials, products and services are taken into account with targets to reduce negative impacts	
1	CO ₂ emissions arising from transport of materials, products and services are taken into account and targets set to reduce CO ₂ emissions	
1	The asset owner has actively set targets to reduce the consumption of hazardous materials	
0	Other	

Assessment criteria

- 1. The policy should be endorsed at senior management level.
- 2. The policy is actually carried out

Additions to the assessment criteria

This credit concerns asset- and management related purchases, such as items for maintenance, repairs, materials and e.g. cleaning. Purchase of user goods (printer paper, toilet paper) are not included in this credit.

Evidence

- 1. A copy of the policy highlighting the relevant clauses.
- 2. Confirmation of the name/position of the top level manager with ownership and responsibility for implementation.
- 3. Proof that shows the procurement policy is actually being executed, and is in accordance with the policy objectives. E.g. an overview of recent asset-bound purchases which show the purchases is in accordance with the procurement policy.

Catification based on English Version of manual not available

MAT11 – Fire safety, availability risk management		
Part	Number of credits available	
2	2	

Has an integral fire risk assessment been carried out?

Aim

To recognise and encourage the execution of a fire risk assessment that goes beyond statutory requirements and identifies fire risks to property and the environment and sets out procedures to keep these impacts to a minimum as far as practicable.

Available credits

Credit	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. A risk assessment (fire safety survey) is carried out which goes beyond statutory requirements and which covers the asset, the potential environmental risks, the consequences for the direct surrounding and those who live near the asset. The risk assessment must name the consequences of the fire within the asset, analyse and provide mitigating measures.
- 2. A fire risk assessment must be carried out by a competent person. A competent person is 'a person with enough training and experience or knowledge and other qualities to enable the properly to assist in undertaking the preventative and protective measures'. For more complex assessments, the necessary competency may not reside with a single individual, but will instead be provided by a team, including those with relevant local knowledge.
- 3. A fire risk assessment should be carried out and reported by an expert in accordance to e.g.:

 a. BRL-K21016 "Brandveilig Gebruik Bouwwerken" (BGB) (Fireproof Use Buildings)
 - NPR6059 (Practice Guideline Fire Safety) or NEN6059 (Assessment of fire safety of buildings)
 - c. Inspection carried out in accordance to the RgdBOEI methodology from the Dutch Central Government Real Estate Agency.

Additions to the assessment criteria

In the risk assessment, if relevant, the following must be included: the storage of dangerous substances, asbestos, storage tanks with emergency current aggregates/generators and bottles of gas.

The risk assessment is at least reviewed after relevant adjustments to the asset.

An audit by the fire department can be seen as equivalent to an audit of an third party, but only when it complies with the assessment criteria.

Evidence

- 1. Copy of most recent fire risk assessments carried out.
- 2. Documentation (such as a certificate) to prove competence of the person undertaking the fire risk assessment.

Catification based on English Version of manual not awaitable

MAT12 – Fire Safety, periodic risk assessment		
Part		Number of credits available
2		2

Is the risk assessment concerning fire safety executed on a regular schedule?

Aim

To recognise and encourage proactive fire risk assessment practices which help ensure the risk of fire within the asset is kept to a minimum as far as practicable.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment Criteria

- 1. Fire risks identified through an appropriate fire risk assessment (fire safety survey) should be reviewed regularly, monitored and managed by an external party.
- 2. For the content requirements and the method of execution of the risk assessment, see credit MAT11.
- 3. Procedures as identified in the fire risk assessment should at least be reviewed annually AND when changes are made to the building.

Additions to the criteria

With NEN6059-2, the RgdBOEI inspection methodology or equivalent, a risk assessment is carried out once every 5 years. This 5-year cycle is considered to be 'regular'. Inspection by firemen can be considered a check up by an external party, as long as it contains all the requirements set down in the second criteria.

Evidence

- 1. Evidence provided for MAT11 Fire safety, availability risk management
- 2. Documents which show when the risk assessment was reviewed or supplemented and proof that it is executed regularly. An inspection report by firefighters is satisfactory as long as there is evidence this is done periodically, and it contains the requirements set down in the second criteria.

References

• Information about the RgdBOEI inspections: http://www.rijksvastgoedbedrijf.nl/expertise-en-diensten/r/rgd-boei-inspecties.

Catification based on English Version of manual not available

MAT13 – Emergency plan		
Part Number of credits available		Number of credits available
2		2

Is there a company emergency plan in place that includes strategies for the protection of property and/or the environment?

Aim

To encourage fire risk/emergency plans that go beyond statutory requirements and aim to protect property and the environment in addition to people.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
1	Yes, protection of property
2	Yes, protection of property and environmental impacts

Assessment Criteria

- 1. For the purposes of this issue, the company emergency plan should address property and/or the Environment and connects tot integral risk assessment.
- 2. In simple premises, the company emergency plan may be no more than an evacuation plan.
- 3. In multi-occupied and more complex premises, the company emergency plan will need to be more detailed and compiled only after consultation with other responsible people, e.g. owners or other employees, who have control (or some control) over the building.
- 4. A complex building will usually require trained staff to assist other occupants who are not necessarily familiar with the building or its safety systems, and who can function as the contacts to the fire fighters. This should be documented in the company emergency plan.
- 5. The following should at least be included or taken into consideration when developing an Company emergency plan:
 - a. Providing an accessible means of escape solution should be an integral part of the fire safety management process.
 - Fire safety management should take into account the full range of people who might use the premises, paying particular attention to the needs of people with physical or mental impairments or visitors
 - c. When providing means of escape for a building, intervention and assistance by the fire and rescue services should not be assumed or relied upon.
 - d. In addition to life safety considerations, the company emergency plan should also include:
 - i. Mitigation of potential environmental impacts during fire.
 - ii. Risk management, business continuity, contingency planning, restart planning.
 - iii. Contingency plans for salvage and damage control.

Additions to the criteria

• Where there is a collection or cultural heritage, besides the emergency/hazard plan there should be a collection aid (Collectiehulpverlening CHV) plan, as set down in the State Services for the Cultural Heritage (Rijksdienst voor het Cultural Erfgoed).

Evidence

1. A copy of the company emergency plan with sections which relate to the protection of building and contents identified

Additional information

The company emergency plan is preferebly in line with the integral risk assessment of issue MAT11.

ences

Website Rijksdienst voor het Cultureal Fater.

References

Centification based on English Version of manual Website Rijksdienst voor het Cultureel Erfgoed over collectiehulpverlening (CHV): veilig erfgoed.nl/onderwerpen/preventie/collectiehulpverlening

MAT14 – Hazard management		
Part Number of credits availa		Number of credits available
2		2

Is a policy to enhance the protection of the asset from risks arising from natural hazards in place?

Aim

To recognise and encourage policies that are in place to reduce risk of damage from natural hazards.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Criteria

- 1. A policy to enhance the protection of the asset from risks arising from **relevant** natural hazards should be in place.
- 2. Relevant natural hazard risks should have been identified and a policy written by competent individuals/relevant organisations.
- 3. The relevance of natural disasters is dependant on the geography, geology, hydrology and climate factors. In the Netherlands the following natural hazards can occur:
 - a. Floods (part of credit POL2)
 - b. Earthquakes 🗸
 - c. Forest fires

Additions to the criteria

- Policy can be included in a hazard management plan, emergency plan or calamity plan.
- Through the government, via http://nederland.risicokaart.nl/ information is provided that traces risks in a straightforward manner. If correct application of this can be proven, and the results show with certainty that the asset lies in an area with no or negligible natural risks of the natural hazards named in the third criteria, no expert needs to be involved. No or negligible natural risks, in accordance to the 'risicokaart' relates to:
 - Floods: An area with a 'small chance' for flooding.
 - Earthquakes: Area that isn't in the Mercalli zone.
 - Forest fires: Area that isn't within the areas with a risk of forest fires.
- If the asset is in an area with no, or negligible risk for natural hazards, no policy needs to be in place and the maximum amount of credits can be awarded.

Evidence

- 1. A copy of the natural hazard risk policy/strategy for containing natural hazards.
- 2. Substantiation of the qualification of the person who wrote the hazard management plan or the corresponding section of the emergency/calamity plan.
- 3. For an asset where there are no risks for natural disasters: Documentation on the basis of the <u>nederland.risicokaart.nl</u>, which shows the asset is in a location with negligible risk

Definitions

Competent individual: an individual (or individuals) with relevant technical and professional experience suitable to:

- 1. Determine the potential for natural hazards in the region of the development
- 2. Determine the likely impacts on the site, building and locality
- 3. Subsequently identify appropriate mitigation measures

Additional information

On the website http://nederland.risicokaart.nl/ locations are viewable where wildfires and earthquakes can take place. Floods are divided in three categories

- large chance (on average once every 10 years)
- average chance (on average once every 100 years)
- small chance (on average once every 1000 years)

If the asset is within an area with a small chance, this can be considered as a location with no or a negligible risk for floods. Dependant on the location corresponding to wildfires and earthquakes, 2 credits can be awarded.

Waste

The waste category is not assessed within Part 2 of a BREEAM In-Use assessment.

Canification based on English Version of manual not available

Land Use and Ecology

Category summary table

Issue reference	Title	Credits available
LE03	Ecological research and implementation	4
LE04	Ecological policy	4 310
LE05	External landscaping/maintance	2
Total credits availal	ole	10
Certification	ble External landscaping/maintance ole Apased on English Version of manual state of the state	

LE03 – Ecological research and implementation		
Part Number of credits availa		mber of credits available
2		4

Has an ecological research been conducted and are the suggested improvements carried out?

Aim

Encouraging organisations to establish the ecological value of their asset/site and improve the ecological value based on recommendations that have been made by a suitably qualified ecologist.

Available credits

Credits	Answer option
0	Question not answered
0	Unknown
0	No
1	An ecological research has been conducted, but the suggested improvements are not carried out
2	An ecological research has been conducted, and a major part of the suggested improvement are carried out
4	An ecological research has been conducted, and all of the suggested improvement are carried out
0	Other

Assessment criteria

- 1. The ecological research has been conducted by an independent, suitable qualified ecologist and the research is at least revised, after changes have occurred in the asset, the immediate vicinity or in legislation which may affect the results of the ecological research.
- 2 The ecology survey can be written by an non qualified ecologist provided that is has been reviewed by a suitable qualified ecologist which must have found it to be:
 - a) Representing sound industry practice
 - b) Written objectively (avoiding invalid biased and exaggerated statements)
 - c) Appropriate given the local site conditions and scope of works proposed

Evidence

- 1. The ecological survey including the suggested improvements.
- 2. Evidence that the ecology survey was carried out by a qualified ecologist.
- 3. Photographic evidence of the improvements which have been carried out.

Relevant definitions

Suitable qualified ecologist

A suitable qualified ecologist is a person is a person that (definition from Netherlands Enterprise Agency):

- . etwerk
 . sting
 . sti 1. Holds a degree on the level of University of applied sciences or University in ecology or in a related subject comprising a significant ecology component and or.

LE04 – Ecological policy		
Part Number of credits avai		Number of credits available
2		4

Is an ecological policy / action plan in place for the greenery and ecological features of the site?

Aim

To encourage organisations to develop an ecological action plan for the greenery and ecological features for the asset and the open space to preserve and improve the ecological value of the site.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes
4	Not applicable, the ecology survey determined that there was no ecological value on site or possible improvement to be made.

Assessment criteria

- 1. The action plan should set measures and targets that are:
 - a. Specific to the greenery and ecological features of the asset/site
 - b. Measurable and achievable
 - c. Realistic and time bound
- 2. The action plan is written (or content approved) by a suitable qualified ecologist.
- 3. The action plan has a duration of at least 6 year.
- 4. The action plan is at least riveted, after major changes to the asset or the site.
- 5. The action plan is when possible aligned with and it meets the municipal green structure plan.

 Taking into account the greenery and the ecological value en the effects on local flora and fauna

Evidence

- 1. Copy of Ecological action plan.
- 2. Evidence that the plan/strategy was developed (or approved) by a suitable qualified individual.
- 3. Evidence that it meets the municipal green structure plan

Relevant definitions

Suitable qualified ecologist

A suitable qualified ecologist is a person is a person that (definition from Netherlands Enterprise Agency):

- 1. Holds a degree on the level of University of applied sciences or University in ecology or in a related subject comprising a significant ecology component and or.
- 2. Is working as an ecologist for an ecological consultancy firm that is a participant of the 'Netwerk Groene Bureaus and/or.
- 3. Is actively involved in the protection of species and participates in the therefore existing organisations in the Netherlands.

Catification based on English Version of manual not available

LE05 – External landscaping/maintenance		
Part		Number of credits available
2		2

Is there a policy/plan in place to maintain and improve the ecological value of the asset and its immediate site?

Aim

To encourage organisations to develop a policy/plan that maintains and improves the ecological value of the asset and its immediate site.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. The organisation, responsible for maintaining the ecological features, should:
 - a. Have their own policies that stipulate that the work they undertake will maintain or enhance the ecological value on site.

OR

- b. Have contractual agreements with building management/building owner that stipulate that the work they undertake will maintain or enhance the ecological value on site.
- 2. The policy/plan is approved by a suitable qualified ecologist and should consist of (but not limited to):
 - a. Ecological vision (based on the policy on ecology).
 - Landscaping.
 - Cleaning of façade, landscaping and hardscaping.
 - d. Planting/installation of features to enhance flora and fauna on site
 - The policy/plan has duration of 6 year.

Evidence

- 1. Copy of the relevant policy/plan
- 2. Evidence of the implementation in the organisation or contractual agreements with the relevant sections marked.
- 3. Evidence that the policy/plan is conducted or approved by a suitable qualified ecologist.

Relevant definition

Suitable qualified ecologist

A suitable qualified ecologist is a person is a person that (definition from Netherlands Enterprise Agency):

- 1. Holds a degree on the level of University of applied sciences or University in ecology or in a related subject comprising a significant ecology component and or.
- 2. Is working as an ecologist for an ecological consultancy firm that is a participant of the 'Netwerk Groene Bureaus and/or.
- 3. Is actively involved in the protection of species and participates in the therefore existing

Certification based on English Version of manual not available

Pollution

Category summary table

Issue reference	Title	Credits available
POL07	Night time light pollution	4
POL08	Chemical storage	4
POL09	Regularly check of chemical storage	2
POL10	Light-liquid separators	3
POL11	Replacing refrigerants	2
POL12	Land containment mitigation	4
POL13	Emergency preparedness and response	2
POL14	Complaints procedure	4
Total credits availal	ole	24
, tification	ole On Endish Version	

POL07 - Night time light pollution		
Part		Number of credits available
2		4

Are steps taken to minimise nighttime light pollution arising from internal and external lighting?

Aim

To ensure that internal and external lighting is concentrated in the appropriate areas and that woward and sideward lighting is minimised, reducing unnecessary light pollution, and nuisance to neighbouring properties

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
2	Yes, routine checks and monitoring is performed (registration and control)
4	Yes, a light pollution survey has been conducted by a third party and all recommendations have been fully implemented.

Assessment criteria

- 1. A light pollution survey should (at least) be undertaken
 - a. Once every 4 years.
 - b. When significant changes are made to the building and/or the site.
- 2. Internal and external ighting should be designed to reduce light pollution. Design measures could include for example:
 - a. Selecting fittings that focus light onto desired areas only
 - b. Using light sources with the minimum intensity required to achieve desired luminosity levels
 - c. Internal and external lighting can be automatically switched off between 23:00hrs and 06:00hrs. Options to achieve this are, but are not limited to:
 - i. Providing a timer for all internal and external lighting set to the appropriate hours.
 - ii. By formal requirements in contracts for staff that is last to leave occupied spaces within the asset.
- 3. If there is no external lighting on or around the assessed development, the requirements only apply to internal lighting.
- 4. Where light fittings are specified to comply with specific security standards and these conflict with these BREEAM In-Use criteria they can be excluded from the assessment of this issue. In these circumstances the assessor must obtain evidence confirming that the specific security standards are applicable to the assessed development.
- 5. Where a different curfew time applies for other reasons (e.g. noise control), consideration should

- be given to the co-ordination of the curfews, e.g. allowing sufficient time of operation for the lighting after the conclusion of the activity to facilitate crowd dispersal, particularly where large numbers of spectators are involved.
- 6. Where non security lighting is considered to be essential between 23:00hrs and 06:00hrs, i.e. for buildings which open/operate between these times, the lighting system is able to automatically switch to lower levels of lighting in accordance to the directives of NSVV and NEN-EN 12464-2.
- 7. Flush stud lights used for safety purposes in vehicle manoeuvring areas may be excluded from the assessment.

Evidence

- 1. Photographic evidence confirming that external luminaires are designed to restrict upward light and light spill.
- 2. Confirmation that lighting is switched off after a set time.
- 3. File with registered improvements and complaints and steps taken to minimize light pollution.
- 4. Copies of sections of light pollution survey of a third party specifying results and recommendations (if applicable).

Relevant definition

External lighting: Lighting of paths, roads, entrance/exit, parking lots, blovele storage and other external areas belonging to the plot of the building, advertising lighting, façade lighting and road lighting.

POL08 – Chemical storage		
Part		Number of credits available
2		4

Are all hazardous chemicals stored in areas with adequate containment to deal with ≥110% of the chemicals stored?

Aim

To reduce the impact of a chemical leak/spill by ensuring that these areas remain effective in the event of a leak/spill

Available points

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Not applicable, there are no hazardous chemical stored in the asset
4	Yes

Assessment criteria

- 1. The chemical storage for hazardous chemicals meets the criteria of PGS 15 or equivalent.
- 2. In case of storage of liquids it's necessary to take measures to contain the liquids in case of spillage. Measures can include, (but are not limited to):
 - a. Double skinned tanks
 - b. Drip trays
 - c. Non-permeable membranes in the room where tanks are located
 - d. Bunding

Additional assessment criteria

De asked storage capacity is only applicable to liquids. Empty, uncleaned packaging are not taken into account.

Evidence

- 1. Photographic evidence of chemical storage.
- 2. Confirmation that facilities are appropriate to the directives from PGS 15.

Additional information

In the PGS 15 chapter 3.9.1 and 4.7 subscribe criteria for the storage of products. The starting point for the storage capacity for hazardous liquids is that no liquid can flow from the storage facility. The capacity of the hazardous liquids must be at least 110% of the volume of the largest packaging within the storage facility. If 110% of the largest packaging is less than 10% of the total volume of packaging than 10% of the total volume of packaging taken as a minimum.

Reference

Jestance destroyers on the second of the sec • PGS 15: 'Publicatie Gevaarlijke Stoffen' 15:2011 version 1.1 (December 2012) - PGS 15 provides guidance on the method of storage and temporary storage of packaged dangerous substances with regard to fire safety, occupational and environmental safety. In June 2015, a draft version for

POL09 – Regularly check of chemical storage			
Part	Part Number of credits available		
2		2	

Are the chemical storage areas checked regularly to ensure that they remain effective?

Aim

To ensure that the chemical storage areas are well maintained and remain fully effective.

Available points

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Not applicable, there is no storage of hazardous chemicals in the asset or on the site
2	Yes

Assessment criteria

- 1. Where chemical storage areas are present, internal checks are conducted at planned intervals to determine whether the bunded areas are being maintained to operate at optimum efficiency.
- 2. A competent person or relevant organisation is conducting the checks.

Additional assessment criteria

There's compliance with the criteria of PGS 15 related to periodic checks, when the directives are relevant for the concerning chemical storage.

Evidence

1. Accepy of the logbook of the periodic checks or a regular used contact form, which shows the checks of the chemical storage areas.

Relevant definitions

Competent person: A person that conducts check is competent when he or she has enough knowledge of hazardous chemicals and the PGS15 directive. This can be specific to the present chemicals in the asset. Persons with a VCA certificate 'Safety for operational supervisors (VOL-VCA) or with an ADR Basis certificate or equivalent do comply.

Reference

- PGS 15: 'Publicatie Gevaarlijke "Opslag van verpakte gevaarlijke stoffen". PGS 15 provides guidance on the method of storage and temporary storage of packaged dangerous substances with regard to fire safety, occupational and environmental safety. In June 2015, a draft version for an update of the PGS has been published.
- VCA certificate" 'Veiligheid voor Operationeel Leidinggevenden' (VOL-VCA) Safety for operational managers.
- ADR (Accord européen relatif au transport international de marchandises Dangereuses par Route)

Catification based on English Version of manual not available.

POL10 - Light-liquid separators		
Part Number of credits available		available
2	2	

Aim

Available credits

Questi	
Does the	scope of the maintenance policy cover light-liquid separators?
Aim	
To ensur	e light-liquid separators are maintained to operate as intended.
Availak	e light-liquid separators are maintained to operate as intended. Die credits
Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	No light-liquid separators on site
2	Yes

Assessment criteria

- 1. With light-liquid separators on site, maintenance in accordance to NEN-EN 858-2 is obligatory. The detailed criteria for inspection and maintenance should be stated in the maintenance policy.
- 2. Maintenance to the system should be conducted as often as necessary, but at least once every 6 months. A competent person should conduct the maintenance.

Evidence

- 1. A copy of the maintenance policy with the relevant parts marked.
- 2. Documentation with the frequency of the maintenance and the competency of the person(s) that conducted the maintenance.

Additional information

The NEN-EN 858-2 gives the criteria for the maintenance of the light-liquid separator. In the legislative document 'activiteitenbesluit' this directive is referenced to

Reference

- NEN-EN 858-1:2002 (en NEN-EN 858-1:2002/A1:2004): Separator systems for light liquids (e.g. oil and petrol) - Part 1: Principles of product design, performance and testing - Marking and quality control
- NEN-EN 858-2:2003: Separator systems for light liquids (e.g. oil and petrol) Part 2: Selection of nominal size, installation, operation and maintenance.

POL11 – Replacing refrigerants		
Part Number of credits availab		Number of credits available
2		2

Jal not available Is a policy and timetable in place to replace refrigerants with low environmental impact alternatives and is it executed?

Aim

To reduce the impact of refrigerants on the environment.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	No, all refrigerants have been replaced with low environmental impact alternatives/were never used.
2	Yes

Assessment criteria

- 1. There's a policy in place for the replacement of refrigerants with low environmental impact alternatives and this policy needs to cover:
 - a. Equipment containing refrigerants which is to be replaced.
 - b. What low environmental impact refrigerant the existing refrigerant is to be replaced with.
 - c. The timescale over which this is to be delivered.
- 2. The strategy should cover air conditioning and refrigeration systems equipment within the building for the following uses, including:
 - Comfort cooling.
 - b. Cold storage.
 - c. Including commercial food/drink display cabinets but excluding domestic white goods e.g. fridges and freezers.
 - d. Process based cooling loads e.g. servers/I.T equipment.
- 3. Small multiple hermetic systems are exempt; where the refrigerant charge in each unit is less than
- 4. If replacement has already taken place then full credits can be awarded.
- 5. The policy is implemented.

Evidence

1. Copy of the policy/timetable relating to replacing refrigerants.

Additional information

Table underneath outlines examples of refrigerants with low Global Warming Potential (GWP).

Table 11: Examples of refrigerants with a low GWP potential

R-number R-30	Chemical name	GWP (100-yr)	
11-00	Dichloromethane	9	
R-170	Ethane	3	
R-290	Propane	3	
R-600	Butane	3	.0
R-600a	Isobutane	3	0)
R-702	Hydrogen	3 3 3 5,8 0 <1 0 1 3 <1	
R0717	Ammonia (NH ₃)	0	
R-718	Water (H ₂ O)	<1	
R-729	Air (Nitrogen (N ₂), oxygen (O ₂), argon (Ar))	0	
R-744	Carbon dioxide (CO ₂)	1	
R-1216	Ethylene	3	
R-1234yf	0.0.0.0 Tetrefluererere	<1	
R-1270	Propylene	3	
	ċ	O	
	Propylene EAM In-Use International SD221 – 1.0:2015 – Version		

POL12 – Land contamination mitigation		
Part		Number of credits available
2		4

Has an assessment of the site been performed to check for potential land contamination issues?

Aim

Through insight in the actual contamination and possible solutions prevent/reduce risk of the site having a negative impact on the surrounding environment.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes
4	Yes, and all contamination issues have been addressed
4	Yes, no contamination issues have been found

Assessment criteria

- 1. For 2 credits: A specialist's site investigation for potential land contamination is available, that identifies (for example in accordance to NEN5727 or NEN5740):
 - a. Any areas of contamination and the degree of contamination
 - b. The contaminant sources/type
 - c. The options for remediating sources of pollution which present unacceptable risk to the site and surrounding environment
- 2. The specialist, who conducts the site investigation or the remediation, is certified and approved.
- 3. When an investigation in accordance to NTA5755 is in place, there should be a decision from the local authorities present.
 - When the investigation shows no contamination issues, the maximum amount of credits can be awarded.

For 4 credits, in addition to the above, the following must apply: Any areas of contamination identified in the contaminated land site investigation have been remediated in accordance with the remediation strategy and its implementation plan.

Additional assessment criteria

- The site investigation is at least actualised after activities on or around the site that have a potential for land contamination.
- When the asset is located in an area where there's no reason to suspect land contamination en no
 research is needed, the maximum amount of point can be awarded. This should be confirmed by a
 specialist on the basis of a 'preliminary investigation' in accordance to NEN5725, an 'exploratory
 survey' in accordance to NEN5740, a 'further investigation' in accordance to NTA5755 or equal.

Evidence

- 1. Copy of the land specialist's contamination report.
- 2. A copy of the professional report (or relevant sections of the report) conforming that the contamination issues are complied with and here relevant contaminations are cleaned up (when applicable).
- 3. Decisions of the local authority (when applicable).

References

- NEN 5740:2009 Soil quality Strategy for exploratory survey Investigation of the environmental quality of soil and soil lots.
- NEN 5725:2009 Soil quality Strategy for preliminary investigation prior to exploratory and main survey
- NTA 5755:2010 Soil quality Strategy for further investigation Investigation of the type, concentration and extend of pollution of soil and soil lots.

 NTA 5755:2010 Soil quality Strategy for further investigation Investigation of the type, concentration and extend of pollution of soil and soil lots.

 NTA 5755:2010 Soil quality Strategy for further investigation Investigation of the type, concentration and extend of pollution of soil and soil lots.

 NTA 5755:2010 Soil quality Strategy for further investigation Investigation of the type, concentration and extend of pollution of soil and soil lots.

 NTA 5755:2010 Soil quality Strategy for further investigation Investigation of the type, concentration and extend of pollution of soil and soil lots.

 NTA 5755:2010 Soil quality Strategy for further investigation Investigation of the type, concentration and extend of pollution of soil and soil lots.

POL13 – Emergency preparedness and response		
Part Number of credits available		Number of credits available
2		2

Jal not availab Is a response plan in place to deal with pollution incidents in line with national standards or best practice quidelines?

Aim

To reduce the impact of any pollution incidents on the surrounding environment.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	No pollution risks identified for asset
2	Yes
2	Not applicable as no sources of pollution are located on the site

Assessment criteria

- 1. A response plan or equal outlining emergency response procedures for dealing with potential pollution incidents should be in place. Sources of potential pollution include (but are not limited to):
 - a) Fuel storage (e.g. diesel for emergency back-up generators) or other hazardous chemicals.
 - b) Cleaning products that are stored on site
 - c) Refrigerants that are stored on site
- 2. The response plan should be periodically reviewed, especially after the occurrence of any accidents or emergency situations.
- 3. The response plan should be 'up-to-date' and where practical, the response procedures should be tested periodically.

Additional assessment criteria

It is sufficient if there is a response plan for incidents.

Evidence

- 1. Copy of the response plan with a description of the response to contamination en incidents (when applicable)
- 2. Documentation of periodically conducted reviews and conducted checks of the response plan.

3. A declaration of the building owner or building manager that there are no sources of contamination on the site (of applicable).

Catification based on English Version of manual not available

POL14 – Complaints procedure		
Part Number of credits availabl		Number of credits available
2		4

Is there a complaints procedure in place that deals with noise, odour and light issues relating to the asset and associated operations?

Aim

To ensure any issues affecting building users or occupiers in the surrounding areas can be raised through a formal route and dealt with effectively.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Criteria

1. A complaints procedure is available en active that details how to deal with any complaints quickly and impartially. This can be a regular complaints procedure, but in that case there should be specific attention to complaints about light, noise and odour.

Evidence

- 1. Copy of the documented complaints procedure.
- 2. Copy of a record of complaints from the past including the way they are monitored and handled and communicated to the petitioner.

Other information

The assessor should validate if the complaints procedure deals correctly with the complaints related to light, noise and odour.

Part 3: Occupier Management

Certification based on English Version of manual not available

Management

Category summary table

MAN14 Environmental management policy MAN15 Environmental management issues 11 MAN16 Environmental management implementation MAN17 Environmental objectives and results MAN18 Organisational performance review MAN19 Sustainability report MAN20 Green Lease MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) MAN102 Visitor education (Museum specific issue) MAN103 Interior of the building based on collections (Museum specific issue) Total credits available (available for museums) 32 (46)	Issue reference	Title	Credits available
MAN16 Environmental management implementation 4 MAN17 Environmental objectives and results 4 MAN18 Organisational performance review 2 MAN19 Sustainability report 3 MAN20 Green Lease 4 MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) 6 MAN102 Visitor education (Museum specific issue) 6 MAN103 Interior of the building based on collections (Museum specific issue) 32 (46)	MAN14	Environmental management policy	4
MAN17 Environmental objectives and results MAN18 Organisational performance review MAN19 Sustainability report MAN20 Green Lease MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) MAN102 Visitor education (Museum specific issue) MAN103 Interior of the building based on collections (Museum specific issue) Total credits available (available for museums) 32 (46)	MAN15	Environmental management issues	11
MAN18 Organisational performance review MAN19 Sustainability report MAN20 Green Lease MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) MAN102 Visitor education (Museum specific issue) MAN103 Interior of the building based on collections (Museum specific issue) Total credits available (available for museums) 32 (46)	MAN16	Environmental management implementation	4
MAN19 Sustainability report MAN20 Green Lease MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) MAN102 Visitor education (Museum specific issue) MAN103 Interior of the building based on collections (Museum specific issue) Total credits available (available for museums) 3 4 MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) 4 Total credits available (available for museums) 32 (46)	MAN17	Environmental objectives and results	4 0
MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) MAN102 Visitor education (Museum specific issue) MAN103 Interior of the building based on collections (Museum specific issue) Total credits available (available for museums) 32 (46)	MAN18	Organisational performance review	2
MAN101 Agreements regarding setting up and dismantling exposition (Museum specific issue) MAN102 Visitor education (Museum specific issue) MAN103 Interior of the building based on collections (Museum specific issue) Total credits available (available for museums) 32 (46)	MAN19	Sustainability report	3
MAN102 Visitor education (Museum specific issue) 6 MAN103 Interior of the building based on collections (Museum specific issue) 4 Total credits available (available for museums) 32 (46)	MAN20	Green Lease	4
MAN103 Interior of the building based on collections (Museum specific issue) Total credits available (available for museums) 32 (46)	MAN101		4
Total credits available (available for museums) 32 (46)	MAN102	Visitor education (Museum specific issue)	6
tion based on English.	MAN103		4
ation based on English	Total credits availab	ble (available for museums)	32 (46)
Certificati			

MAN14 - Environmental management policy		
Part		Number of credits available
3		4

Is there an environmental management policy and/or procedure in place?

Aim

To recognise and encourage the implementation of a formal environmental management policy in which the intent and objectives to manage environmental activities are outlined and responsibilities allocated.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No, there is no environmental policy and/or procedure
1	Yes, an environmental policy and/or procedure is under development
2	Yes, an environmental policy and/or procedure is under development with a ≤ 1 year endorsement plan
3	Yes, an environmental policy and/or procedure is in place and has been endorsed by the board of directors/senior management
4	An environmental policy and/or procedure has been developed with stakeholders' consultation in compliance with the guidance given in ISO 14001, or equivalent and stakeholders' comments have been integrated
0	Other

Assessment criteria

- 1. The environmental management policy should:
 - Be appropriate to the nature, scale and environmental impacts of an organisations activities, products and services
 - b. Include a commitment to continual improvement and prevention of pollution
 - c. Include a commitment to comply with applicable legal requirements and with other requirements which relate to an organisations specific environmental aspects
 - d. Install a framework for setting and reviewing environmental objectives and targets
 - e. Be documented, implemented and maintained
 - f. Is communicated to all persons working for or on behalf of the organisation
- 2. For 4 credits: An environmental management system audited and approved by an independent third party auditor, such as ISO14001 or equivalent

Evidence

1. Copy of the confirmation that the environmental management policy and/or procedure is being developed with the proposed timing and amount currently (if applicable).

- 2. Copy of the letter from management confirming that an environmental strategy will be approved within 1 year (if applicable).
- 3. A copy of the environmental management policy and / or relevant procedures signed by top management (if applicable).
- 4. Copy of a Environmental Management System certificate, such as ISO14001 or equivalent third party certification document and the evidence of stakeholders' consultation and integration of stakeholders' comments.

Additional information

I not available Subjects according to the BREEAM-NL categories that may be opted in the environmental management policy, are:

- Health and Wellbeing
- Energy
- Transport
- Water
- Materials (procurement)
- Land Use and Ecology (biodiversity, landscaping and ecology)
- Pollution (air, noise and hazardous chemicals)

The principle of materiality guides the choice of subject. The organisation will need to demonstrate that it is certification based on English Version Cased on English actively practising the relevant initiatives to inform stakeholders (accounting for policy and regulation). For example, an oil company might not be able to infer that mobility of employees is more important than

MAN15 - Environmental management issues		
Part		Number of credits available
3		11

Aim

Credits

Question Which of the following issues do the environmental management arrangements specifically measure/manage? Aim To encourage the management of a broad range of environmental issues. Credits Answer option		
Aim To encou	rage the management of a broad range of environmental issues.	O
Credits		
Credits	Answer option	
0	Question not answered	
0	Don't know	
0	There is no environmental policy and/or procedure	
1	Decision processes which address environmental and sustainability issues alongside cost, time and quality in case of purchasing practices	
1	Decision processes which address environmental and sustainability issues alongside cost, time and quality when planning capital expenditure	
1	Decision processes which address environmental and sustainability issues alongside cost, time and quality when planning accommodation requirements	
1	There'se a policy for the reduction of energy consumption, energy efficiency and supply	
1	Measurement and compensation of the ${\rm CO}_2$ emissions of staff commuting, according to Gold standards or equivalent	
1	Measurement and compensation of the $\rm CO_2$ emissions of business travel, according to Gold standards or equivalent	
1	Measurement of company carbon footprint (i.e. energy, waste, processes, transport)	
1	Compensation of company carbon footprint (i.e. energy, waste, processes, transport), according to Gold standards or equivalent, due to company's policy	
1	Reduction of water consumption, efficiency and wastage	
1	Waste reduction and management	

1	Pollution reduction and control	
---	---------------------------------	--

Assessment criteria

- 1. An organisation should identify the environmental aspects within the scope of its business operations, taking into account the inputs and outputs associated (intended and unintended) with its activities.
- 2. This scope entails the current situation, but also planned or new developments.
- 3. An organisation should establish, implement and maintain procedures(s) that are documented and kept up to date, ensuring that significant environmental aspects are taken into account in establishing, implementing and maintaining appropriate environmental management.
- 4. An organisation should consider aspects that it can influence, such as those related to goods and services used by the organisation and those related to products and services that it provides.

Evidence

- 1. Documentation of environmental management. The relevant sections are highlighted.
- ental mai ental mai de la cental mai de 2. Verification by assessor during investigation whether environmental management has been

MAN16 - Environmental management implementation		
Part		Number of credits available
3		4

To what degree have the environmental management arrangements been implemented? Aim To encourage the implementation of environmental management arrangements throughout the		
Aim To encou	urage the implementation of environmental management arrangements throughout the tion.	alo.
Credits	tion.	
Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
0	There is no environmental policy and/or procedure	
1	All environmental aspects and all prevention policies have been identified and defined	
1	All environmental issues that may arise from within the asset have been regularly reviewed.	
1	Targets are set and monitored to ensure that actions are completed	
1	Management arrangements include procedures to incorporate feedback from staff, clients and other stakeholders	
1	Individual staff are identified who are accountable for implementation of the environmental policies, objectives and targets	
1	Formal, regular training is provided for key environmental management staff	
When	an EMS is in place or under development:	
1	Where no EMS is in place, an EMS is under development	
2	An EMS has been developed and includes procedures to review position against an appropriate peer group through published guidance, benchmarking	
4	An Environmental management system (EMS) has been in place for at least 3 years covering activities which are related to the building/site under assessment in accordance with the principles of ISO 14001 or equal	

Assessment criteria

- 1. Management should ensure the availability or resources essential to establish, implement, maintain and improve the environmental management policy.
- 2. Appropriate roles, responsibilities and authorities should be defined, documented and communicated with the approval of the top management.
- 3. There should be regular reporting to top management on the performance of the environmental management system for review, including recommendations for improvement.
- 4. The organisation should identify the awareness, knowledge, understanding and skills needed by any person with responsibility and authority to perform tasks relating to environmental management on its behalf if necessary. Competence should be measured on the basis of appropriate education, training and experience, and associated records shall be retained.
- 5. Employees are aware of the organisation's environmental policy and environmental management system as well as the environmental aspects of the organisation's activities, products and services that could be affected by their work.

Evidence

- 1. Copy of documentation that proves the implementation.
- 2. Evidence of Management review (s); minutes, action plans (if applicable)?
- 3. Copy of published guidelines used to determine a peer group and benchmark date used (if applicable).
- 4. Copy of EMS surveillance audit report(s) conducted by appropriate third party organisation (if applicable) or copy of external certificate. When formal documentation is lacking, the third party organisation can verify the relevant clauses of ISO14001 (if applicable).

Additional information

EMS (Environmental Management System): An environmental Management System. This can entail a tailored or a certified Environmental Management Systems, such as NEN-EN-ISO 14001 or equivalent.

MAN17 - Environmental objectives		
Part		Number of credits available
3		4

In the last calendar year, what percentage of environmental objectives were achieved?

To encourage and recognise the attainment of environmental objectives and with that the continual improvement of environmental performance.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No environmental objectives were made or achieved
0	< 25%
1	≥ 25% tot < 50%
2	≥ 50% tot < 75%
3	≥ 75% tot < 100%
4	100%

Assessment criteria

- 1. Environmental objectives relate to the subjects discussed in MAN15 (however, are not limited to these subjects).
- 2. Environmental objectives should be specific and measurable wherever practicable, and consistent with the environmental policy.
- 3. Organisations should be able to demonstrate that the credit criteria has been met by providing up to date records of environmental impacts on site which have been targeted and met.
- ₹ The in this credit assessed environmental objectives should address major relevant environmental impacts for which the organisation is responsible, such as those identified in Environmental Management Policy.
- 5. Organisations should be able to demonstrate how they have achieved reductions.

Evidence

1. Copy of documentation that shows the environmental objectives with their relevance and significance.

- 2. Copy of the Key Performance Indicators (KPI) including evidence/source and/or Service Level Agreements (SLA).
- 3. Organisational Corporate Sustainability Report, documenting performance against objectives.

Catification based on English Version of manual not available

MAN18 - Organisational performance review		
Part	Number of credits available	
3	2	

How often is a review of the organisational performance against the environmental objectives carried out by the board of directors/senior management?

To encourage the development and review of environmental objectives to continually improve organisational performance.

Credits

Credits	Answer option	
0	Question not answered	
0	Don't know	
0	Never	
0	Infrequently (every year)	
1	At least annually	
2	At least twice a year	

Assessment criteria

- 1. Reviews should include:
 - a. Results of evaluations of compliance with legal requirements.
 - b. Communication(s) from external interested parties, including complaints.
 - c. Performance against objectives and targets.
 - d. Follow-up actions from previous reviews.
 - e Changing circumstances, including developments in legal and other requirements related to the organisations environmental impacts.
 - Recommendations for improvement.
 - A management review should cover the scope of the environmental management system, although not all elements of the environmental system need to be reviewed at once and the review process may take place over a period of time.

Evidence

- 1. Copy of documentation that shows the frequency of evaluation by board of directors/senior management (i.e. minutes and/or items on the agenda).
- 2. Copy of documentations indicating that the crucial points have been included in the assessment.

MAN19 - Sustainability report		
Part		Number of credits available
3		3

Did the organisation produce a sustainability/Corporate Social Responsibility (CSR) report in the past year?

Aim

To ensure transparent communication of social, economic and environmental performance.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
1	Yes. Internal report which is not independently verified
2	Yes. Report is independently verified by a third party assurance/verification body and is accessible to all internal and external stakeholders
3	Yes. Report conforms to the Global Reporting Initiative (GRI) guidelines, Integrated Reporting (IR) or equivalent and it is independently verified by a third party assurance/verification body and is accessible to all internal and external stakeholders

Assessment criteria

- 1. The sustainability/CSR report should provide a balanced and reasonable representation of the sustainability and ecological performance of the reporting organisation covering both positive and negative issues.
- 2. The report should have been written based on accurate, verifiable data, collected by the organisation over the period of one year. A report, which covers a period of more than 1 year, is compliant when it includes data for each yearly interval.

Evidence

- . Copy of Sustainability/Corporate Social Responsibility Report.
- 2. Copy of documentation that gives proof of verification by independent third parties (if applicable).
- 3. Verification of the accessibility of the report by the assessor (if applicable).

Additional information

Global Reporting Initiative (GRI): The standardised content for International Sustainability/Corporate Social Responsibility Reports is documented by the Global Reporting Initiative (GRI). The GRI express that organisations aiming to report on sustainability performance must report on their Social, Economic and Environmental performance indicators

Integrated Reporting (IR): A model developed by the International Integrated Reporting Council (IIRC) to substantially integrate the financial annual report and the sustainability report (integrated annual report).

Catification based on English Version of manual not available

MAN20 - Green Lease		
Part		Number of credits available
3		4

Are tenants engaged and actively involved in a green lease with their landlord?

Aim

To ensure the collaboration between building owners and occupiers, in order to improve the environmental performance of the asset.

Credits

	. 1/1
Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes (with qualitative targets)
4	Yes (with qualitative and quantitative targets on at least lighting and energy)
4	Not applicable, the building is owner-occupied

Assessment criteria

- 1. See compliance requirement from Building Management MAN 11 Green lease (Part 2 'Building Management').
- 2. The tenant has an understanding of the advantages of the 'green lease' contract for his own use and clarity regarding what to expect from his landlord, for example:
 - a. There are clear agreements about measures to be taken by the landlord and what should be expected of the tenant.
 - by the added value of the 'green lease' tenant contract to the level of sustainability of the asset has been made apparent.
 - c. The advantages, i.e. cost savings, comfort and quality of the internal environment has been made transparent.

Addition to assessment criteria

When the collaboration between building owners and occupiers has been ensured, i.e. in case of owner-occupation, regular credits can be granted.

Evidence

- 1. A copy of the tenant contract with the green lease section and scope (qualitative and quantitative targets) highlighted.
- 2. A copy of the tenant contract that shows the advantages of 'green lease' for own account.

MAN101 - Agreements with setting up and dismantling exposition (museum specific issue) Part Number of credits available 4

Question

Are there any agreements regarding the sustainability of the different parties involved in the construction and demolishment of events?

Aim

To stimulate agreements regarding sustainability and with that increase the reuse of materials and reduce the energy and water consumption.

Credits

Please choose from the following options, more options are possible

Credits	Answer option	
0	Question not answered	
0	Don't know	
0	No, no agreements were made	
1	Agreements were made, but the scope has not been identified	
2	Agreements are made regarding reuse of materials and reduction of energy consumption	
4	Agreements are made regarding reuse of materials and reduction of energy consumption. Parties involved are selected based on these agreements.	

Assessment criteria

The agreements involve the reuse of materials at the very least and the reduction of energy and water consumption.

Additions to the criteria

This question is only applicable to museums. It will not work on different functions and therefore, will not be included in the calculations.

Evidence

1. Copy of the documented agreements.

MAN102 – Visitor education (Museum specific issue)		
Part	Number of credits available	
3	6	

How is the visitor informed/educated about the level of sustainability?			
museum Credits	Aim To increase the understanding among the visitors about the sustainability measures applied in the museum. Credits Please choose from the following options, more options are possible:		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No, no measures were identified for visitor education		
1	Active energy monitoring through information terminals/digital information boards		
1	Energy label made visual to visitors and employees		
1	Disclosure about supporting good causes		
1	Disclosure about realised compensated CO ₂ emissions		
2	Restaurant or store operating according to the fair trade principle, specifically in case of local suppliers		
2	The museum offers programmes about sustainability		

Assessment criteria

- 1. The information used to educate visitors is located centrally.
- 2. Restaurants and/or stores clearly show that they operate according to the fair trade principle in case of local suppliers.

Additions to criteria

This question is only applicable to museums. It will not work on different functions and therefore, will not be included in the calculations.

Evidence

1. Visual inspection by the assessor supported with photographic evidence.

Catification based on English Version of manual not available

MAN103 – Building interiors based on collections (Museum specific credit)

Part	Number of credits available
3	4

Question

Were the climate requirements of the collections considered, when installing the collection?

Aim

To encourage consideration in advance of the location of pieces of the collection, to prevent additional climate requirement.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- 1. In advance considerations about the climate requirements and the collection can be derived from (but is not limited to):
 - a) By the instalment of the less climate sensitive art near the facades.
 - b) By a division in North and South.
 - c) By the compartmentalisation of the collection.

Additions to criteria

This question is only applicable to museums. It will not work on different functions and therefore, will not be included in the calculations.

Evidence

. Documentation that prove in advance considerations of the climate requirements of the collection.

Health and Wellbeing

Category summary table

Issue reference	Title	Credits available
HEA25	Occupier satisfaction	10
HEA26	Health and wellbeing management targets	56
HEA27	Health and wellbeing management objectives	4 2
HEA28	View out	2 0
HEA29	Communal rest areas	2
Total credits availal	ble	74
Certification	ole No assed on Endish Version of manual rest areas No assed on Endish Version of manual rest areas	

HEA25 - Occupier satisfaction		
Part	Number of credits available	
3	10	

Are the following key issues measured, monitored and managed?		Ne	
Aim To ensur	Aim To ensure that staff capabilities, prospects and wellbeing are enhanced by the organisation. Credits Antwoordoptie (meerdere antwoorden mogelijk) Question not answered		
Credits			
Credits	Antwoordoptie (meerdere antwoorden mogelijk)		
0	Question not answered		
0	Don't know		
1	Skills and capabilities of staff		
1	Social interaction/team building		
1	Workplace comfort		
1	Productivity		
2	Staff satisfaction		
2	Continual professional development		
2	Management effectiveness		

Assessment criteria

- include, but is not limited to:
 - a. Regular meetings/reviews
 - b. Questionnaires
 - c. Auditina
- 2. Results of questionnaires and audits are applied, unless irrelevance of results or inapplicability of solutions are proved.
- 3. Continual professional development of all employees in the asset can be sustained, i.e. by performance- and development reviews (i.e. PCB) and a personal development plan.
- 4. Management is involved in mutual agreements and arranges sufficient budget.

Evidence

- 1. Description of the formal process to manage the subjects, i.e. dossiers of assessment cycles. The assessor checks the updated dossiers (i.e. updates are necessary in case of resignation or hiring of employees) by taking random samples.
- 2. Copy of the building occupants satisfaction feedback forms, procedure and/or survey.
- 3. Description of the implementation of the points of improvement following from the different procedures.
- 4. Policies, business rules regarding employee education, i.e. personal training plans (for example a Personal Development Plan (PCB) and how this needs to be incooperated.

Definitions

PCB: A Dutch performance and appraisal system. PCB stands for Planning, Coaching and Assessment (B stands for the Dutch translation of assessment: "Beoordelen").

Certification based on Endieth Versican Landing Coaching and Assessment (B stands for the Dutch translation of assessment: "Beoordelen").

HEA26 - Health and wellbeing management targets		
Part		Number of credits available
3		56

Are management arrangements present that set health and wellbeing targets and monitor implementation?

To recognise and encourage management arrangements that monitor and set relevant health and wellbeing targets aimed at improving health and wellbeing for all staff.

Credits

Answer option (multiple answers possible)

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
1	Scope and objectives are defined	
1	Health and wellbeing issues/concerns of staff are evaluated and recorded	
1	Targets are set and monitored to ensure that actions are completed	
1	Occupant satisfaction surveys are carried out at least annually	
1	Mechanisms are included to incorporate feedback into procedures or strategy	
1	Individual staff are identified who are accountable for implementation of the health, wellbeing and safety policies, objectives and targets	
1	Signs, notices and posters are displayed in appropriate locations to highlight areas of risk to health and safety	
2	Absenteeism and productivity are assessed and monitored in relation to the quality of the internal environment	

Initiatives applicable on the field of health and wellbeing

2	Rooms with installations or hazardous materials are properly marked	
_		

2	Working areas are equipped with comfortable and remotely operated lighting	
4	Monitoring working area noise levels to acceptable levels. This means that the levels should not exceed the targets of the NPR 3428 "Ergonomics - Noise at the workplace - Determination of the amount of disturbance of communication and concentration."	
4	Monitoring of indoor air quality and when necessary, action is taken	
4	Avoiding the use of equipment, such as printers and photocopiers, within main office areas without adequate local ventilation	
4	A complaint/feedback system is in place to measure the level of comfort in the building	
4	Provision or subsidisation of the use of sports facilities	
4	Social activities are encouraged, i.e. team building activities, organisation of social events etc.	
2	Provision of refreshment facilities, i.e. canteen/restaurant, hot and cold drink provision, vending machines	
4	Provision of internal rest areas	
2	Provision of plants in working areas.	
4	Provision of a health plan for staff, e.g. employee discount with health, contribution to medical or health expenses.	
1	Awareness seminars/training sessions are carried out for all staff regarding health and wellbeing and safety.	
1	Formal, regular training is provided for staff responsible for health, safety and wellbeing management.	
1	Improvement targets are set in line with best practice guidance available (including workplace comfort and human resource management).	
1	Certification achieved against a people management standard tailored to help achieve business objectives.	
1	Performance regarding health and wellbeing are benchmarked and compared.	
1	Regular communication is carried out with staff covering health, safety and wellbeing issues (i.e. through newssheets, meetings, posters, published statistics etc.).	
1	A staff mentoring/support system is in place which is independent of staff performance.	

Assessment criteria

- 1. Initiatives and policies are made for the selected topics and implementation is guided.
- 2. Policies are documented and applied (if applicable).
- 3. Policies can be recorded in a separate document or implemented as part of general policy.

Evidence

- 1. Copy of documentation where the selected topics of initiatives and policies are recorded (with specific targets) and supported by photographic evidence of the physical services, i.e. employee specific targets) and supported by photographic evidence of the physical services, i.e. employ interviews.

 2. Research results, registration and monitoring (if applicable).

 3. Visual inspection by the assessor supported by photographic evidence of the physical services.
 - 2. Research results, registration and monitoring (if applicable).

HEA27 - Health and wellbeing management objectives		
Part		Number of credits available
3		4

In the last calendar year, what percentage of the health and wellbeing management objectives was achieved?

Aim

To promote improvement in the field of health and wellbeing and to ensure that health and wellbeing objectives are being met.

Credits

1	
Credits	Answer option
0	Question not answered
0	Don't know
0	Objectives are not determined or achieved
0	< 25%
1	≥ 25% tot < 50%
2	≥ 50% tot < 75%
3	≥ 75% tot < 100%
4	100%

Assessment criteria

- 1. The objectives relate to (but are not limited to) the subjects mentioned in Occupier Management HEA 26.
- 2. The objectives mentioned in this credit show a significant impact on the field of health and wellbeing.

Evidence

- 1. Copy of reports or policies set for the calendar year with the Health and Wellbeing objectives and targets.
- 2. List of objectives indicating which ones have been achieved
- 3. Documented support of the relevance and significance of the objectives.

HEA28 - View out		
Part		Number of credits available
3		2

Is there a policy or practice in place to ensure that all workstations or desks for building users have an adequate external view out of a window?

Aim

To enhance wellbeing within the workspace by allowing building occupants to refocus their eyes from close work activities to reduce the risk of eyestrain or dry eyes.

Credits

Credits	Answer option	
0	Question not answered	
0	Don't know	
0	No	
1	Yes, and 75% of the workstations have an adequate external view	
2	Yes, and 95% of the workstations have an adequate external view	

Assessment criteria

- 1. The view out should be through an external window providing a view of a landscape or buildings (rather than just sky) at seated eye level (1.2 1.3m) in the relevant building areas.
- 2. A view in to an internal courtyard or atrium will comply provided the distance from the opening to the back wall of the courtyard/atrium is at least 10 meter.
- 3. The distance between the external window and object that blocks the view (for example buildings, walls and screens is at least 10 meter.
- 4. The view cannot be an internal view across the room, as this is likely to become obstructed by partitions, filing cabinets etc.
- 5. Roof lights and high level windows that do not provide an adequate view out do not meet the requirements.
- 6. Relevant building areas should be within 7m distance of a window or permanent opening providing a view.

Building function specific criteria

Retail: Workstations at shop unit level are adequate when an open façade of at least 50% gives
access to an external view.

Evidence

1. Visual inspection by the assessor supported by photographic evidence.

- 2. A copy of building floor plans illustrating the maximum distance to a view out of a window from the furthest workstations.
- 3. Site plan which illustrates the minimum distance between the window and view blocking objects.

Definitions

Workstations situated in relevant building areas: A workstation in a building area is relevant when it satisfies the following conditions: people being continuously present for at least 30 minutes and employees performing tasks at i.e. a desk, table or counter. This includes concentration cubicles and meeting rooms. All rooms with i.e. blinds on windows in order to minimise daylight available (e.g. media room), can be excluded.

Additional information

Cetification based on English Version of manual not of Cetification based on English Version bas When it is not possible to prove the presence of workstations in building areas, all building areas within the asset need to satisfy the assessment criteria.

HEA29 – Communal rest areas		
Part		Number of credits available
3		2

Are courses of action undertaken to ensure that indoor and outdoor rest spaces are not used for any other purpose?

Aim

To recognise and encourage the provision of rest areas for building users, which are not subsequently utilised for meetings at times of high demand or other purposes.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
2	Yes

Assessment criteria

- 1. If an internal space is used as a communal rest area, the space is prohibited to be used as a meeting room.
- 2. Rest areas comply with Asset Performance HEA 07 Indoor and/or outdoor space (Part 1 'Asset Performance').

- 1. Photographic evidence of communal rest area(s), indicating signs/guidelines for area usage.
- 2. Copies of policies that are available to staff on how communal rest areas are used.

Energy

Category summary table

Issue reference	Title	Credits available		
ENE67	Energy policy	3		
ENE68	Energy management arrangements	48		
ENE69	Trends in energy performance data	2		
ENE70	Energy objectives, results	4		
ENE71	Energy savings	4		
ENE105	Managing climatic variations (Museum specific issue)	20		
ENE106	Illumination of the collection (Museum specific issue)	10		
Total credits availab	ole (available for museums)	61 (91)		
Total credits available (available for museums) 61 (91) Certification based on English Cert				

ENE67 - Energy policy		
Part		Number of credits available
3		3

Which of the following issues are considered within the energy policy?

Aim

To ensure that there are a range of different energy management procedures/policies included in the energy policy that conform the trias energetica model, used to reduce the energy consumption.

Credits

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
1	Reduction in energy demand (prevention of waste)	
1	Renewable energy sources (plot or local)	
1	Efficient generation	

Assessment criteria

- 1. Reduction in energy demand (building and user dependent). This can be done by, for example:
 - a. Improving the building fabric
 - b. Application of motion or presence sensors to regulate the lighting
 - c. Educating the user about efficient energy consumption, i.e. to keep the windows closed when the AC is switched on in summer. Informing the user about efficient use, i.e. by keeping the windows closed in summer.
- 2. Renewable energy sources (conforming ENE30) are installed on plot. Generated energy is used in the asset.
- 3. Efficient use of fossil fuels to satisfy energy consumption, i.e. by:
 - a. Installation with a high efficiency
 - b. Low temperature heating and high temperature cooling
 - c. Application of energy-efficient lighting
- 4. The energy policy should be signed off at senior level and be actively implemented by dedicated staff members within the organisation.

Additions to the assessment criteria

- The chosen options need to be of relevance and significance when the total energy consumption of the asset is taken into account.
- Conducting energy measures with a short payback period (< 5 years) should be part of the policy. If the asset concerns an establishment covered by the Environmental Activities decree and for the

industry in question 'recognized measures' (for energy saving) apply, the 'recognised measures' are conducted or an action plan is in place to ensure that these measures are conducted within 3

Evidence

- 1. Copy of relevant energy policy/strategy (reference and issue numbers) with relevant clauses.
- 2. Copy of the action plan for conduction the recognized measures (if applicable)

Definitions

catification hased on English Version of manual not available. Recognized measures ('erkende maatregelen'): In the Environmental Activities Decree is an overview of

ENE68 - Energy management arrangements		
Part		Number of credits available
3		48

To what extent do management arrangements set energy targets, and monitor implementation?

Aim

To recognise and encourage management arrangements aimed at improving energy performance and usage awareness.

Credits

Credits	Answer option	
0	Question not answered	
0	Don't know	
1	Targets are set based on a reference year and monitored to ensure that actions are completed	
1	Targets are based on 'best practices'	
1	Long term objectives are translated in annual plans of action with specific goals to increase the chance of realisation	
1	Information is made available to all staff regarding energy management and energy efficiency	
1	Formal, regular training is provided for staff responsible for energy management	
1	Includes mechanisms to incorporate feedback into procedures or strategy	
1	Organisation conducts regular meetings with stakeholders within the government or NGO's regarding CO ₂ targets and policies	
4	Third party certification under an energy management standard such as ISO 50001:2011 which is either independently audited or certified	

Energy saving initiatives:

4	'Best practices' are used regarding computers and displays to save energy	

2	"Best practices' are used regarding van white goods to save energy	
2	Energy efficient printers and photocopiers are used that include a standby option	
2	There are no separate heaters, coolers or ventilators used or present	
2	Timers or motion detectors are installed on relevant equipment	
2	Outside regular working hours, indoor lighting is reduced	
4	Energy efficient thin clients or laptops with server for application and data are used	
4	'Best practices' are used regarding servers to increase energy efficiency and/or virtualisation of servers is used (to share and optimise the use of server capacity when less servers are necessary)	
2	Policy in place to minimise printing	
1	Energy saving tips and signs on ICT equipment	
2	(Online) awareness sessions are carried out about the relation between daylight and curtains	
2	(Online) information is provided about the use of heating and cooling.	
2	Promotions/campaigns are organized to increase awareness around energy consumption, i.e. warm sweater day, participation during Earth hour etc.	
2	It is preferred to switch off equipment rather than using the standby mode	
4	Transformer of the building has the ability to adjust the voltage at 230V / 400V (TAP).	

Assessment criteria

1. Objectives and initiatives are documented and implementation is monitored.

2. Management arrangements should be documented and available to view where applicable.

Additions to criteria

Only equipment (ICT, white goods etc.) that are monitored and/or installed by the user should be assessed.

- 1. Copy of the Energy Management Strategy (reference and issue numbers) with relevant clauses.
- 2. Visual inspection by the assessor supported by photographic evidence.

- 3. Description of energy monitoring process (if applicable).
- 4. Evidence of improvement targets, reference year and records of on-going monitoring (if applicable).

Catification based on English Version of manual not available

ENE69 – Trends in energy performance data		
Part		Number of credits available
3		2

How often are the asset's energy performance data trends reviewed and compared with historical data and performance targets?

Aim

Identifying short and long-term energy performance trends; highlighting opportunities for energy savings and any identifying changes in trends due to the implementation of energy management procedures.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Never
0	Infrequently
1	At least annually
2	At least twice a year

Criteria

1. All energy consumption on site should be measured and compared with historical data and performance targets.

- 1. Relevant spread sheets or energy benchmarking data identifying energy performance trends.
- 2. Relevant documentation indicating what energy management procedures have been implemented and what affect these had on the energy performance trends.

ENE70 - Energy objectives			
Part		Number of credits available	
3		4	

In the last calendar year, what percentage of the energy objectives/targets was achieved?

Aim

To ensure that energy objectives and targets are met; thereby encouraging and recognising the continual improvement of energy performance.

Credits

	V
Credits	Answer option
0	Question not answered
0	Don't know
0	No objectives are in place or are met
0	< 25%
1	≥ 25% tot < 50%
2	≥ 50% tot < 75%
3	≥ 75% tot < 100%
4	100%

Criteria

- 1. The energy objectives must relate to (but are not limited to) the subjects discussed in "ENE67 Energy policy".
- 2. The energy objectives must have a significant and relevant impact on total energy consumption.
- 3. Assessment is done based on the previous year.

- 1. Documentation that gives evidence of the energy objectives.
- 2. Report or document that gives evidence of the achievement of the objectives.
- 3. Copy of Energy Management Strategy (relating to set objectives/targets).

ENE71 - Energy savings			
Part		Number of credits available	
3		4	

What were the asset's energy savings for the previous year?

Aim

To encourage and recognise energy savings of the asset for various energy sources and systems; thereby reducing energy consumption of the asset.

Credits

Credits	Answer option (multiple answers possible)
0	Question not answered
0	Don't know
1	Electricity savings of the asset kWh/annum/m²
1	Natural gas savings by the asset kWh/annum/m²
1	Oil savings by the asset kWh/annum/m ²
1	Solid fuel savings by the asset kWh/annum/m²
1	Increase of renewable energy generated onsite kWh/annum/m ²
1	District heating energy savings by the asset kWh/annum/m ²
1	District cooling energy savings by the asset kWh/annum/m ²
2	Savings on total energy consumption by the asset kWh/annum/m²

Assessment criteria

- 1. The energy consumption is calculated for the previous year, based on a benchmark of energy used 2 years ago.
- A maximum of 4 credits can be rewarded.
- 3. Saving should be corrected for climate change.
- 4. Credits can be rewarded in case of energy saving, regardless the level of saving (i.e. 2% or 50%).

- 1. Energy bills of the past years, measurements and analysis of the energy savings and climatic factors.
- 2. Installation of renewable energy technology (if applicable).

Additional information

Savings are supplied in kWh/annum/m². This method is used to compare different energy sources. The energy bills of the energy suppliers often show energy use in kWh. Visit BREEAM.nl/hulp for conversion factors. If the building generates the same amount of renewable energy onsite in a year (ENE30-Onsite renewables), compared to the amount it uses, maximum amount of credits will be rewarded.

Catification based on English Version of manual not available

ENE105 – Managing climatic variations (Museum specific issue)			
Part		Number of credits available	
3		20	

Has the p	possibility for managing climatic variations (i.e. increase bandwidth) been researched?		
Aim			
	To encourage an understanding of managing climatic variations by increasing the bandwidth of temperature and relative humidity and with decrease energy consumption.		
Credits	Credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	No, no research of the different possibilities has been conducted		
5	Yes, in the past 3 years, the issue has been discussed with the building and collection manager of the museum		
10	Yes, in the past 3 years, the issue has been discussed with the building and collection manager of the museum and different possibilities were research		
20	Yes, a possibility to manage climatic variations has been implemented		

Assessment criteria 🥏

- 1. During exhibitions continuous temperature and relative humidity should be maintained onsite.
- 2. The research conducted and the different implementations serve to increase the bandwidth for relative humidity and the temperature in the museum.

Additions to criteria

This question is only applicable to museums. It will not work on different functions and therefore, will not be included in the calculations.

Evidence

1. Documentations that support the requirements, i.e. GBS data and a research report and/or minutes of the conversation with the building and collection manager.

ENE106 – Illumination of the collection (Museum specific issue)			
Part	Number of credits available		
3	10		

What is the type of lighting used to illuminate the collection?

Aim

To encourage the use of energy efficient lighting to reduce energy consumption and with that reduce the related environmental impact.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Illumination is conventional and not energy efficient
2	10 - 25% of the illumination is energy efficient
4	25 - 50% of the illumination is energy efficient
6	50 - 75% of the illumination is energy efficient
8	75 - 100% of the illumination is energy efficient
10	All illumination used is energy efficient or no illumination has been used

Assessment criteria

1. Energy efficient lighting: lighting with energy label A, a specific output of at least 50 lumen/Watt and at least 25.000 hours as told by the manufacturer.

Additions to criteria

This guestion is only applicable to museums. It will not work on different functions and therefore, will not be included in the calculations.

Evidence

1. Documentation of energy label, specific output and hours (by manufacturer). The amount and type of lamps is inspected at random by the Assessor.

Transport

Category summary table

Issue reference	Title	Credits available
TRA05	Transport reduction/registration environmental impact	12
TRA06	Transport management arrangements	43
TRA08	Local amenities	4
TRA09	Transport objectives	4
TRA10	Transport impact of commuting	4
TRA11	Transport impact of business travel	4
TRA12	Transport impact of goods delivery	4
Total credits availab	ole	75
Certification	Transport impact of goods delivery Net Control of Cont	

TRA05 - Transport requirements			
Part	Number of credits available		
3	12		

Are the environmental impacts associated with the following transport requirements reduced/managed?

Aim

To ensure that the environmental impacts of all travel to and from the asset are reduced/managed.

Available credits

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
2	Visitor/customer travel	
2	Supplier deliveries	
4	Staff commuting	
4	Business travel	

Assessment criteria

- 1. Environmental impacts associated with the mentioned transport requirements should be established and reduced/managed. Environmental impacts can include, but are not limited to:
 - a. Fossil fuel use
 - b. Emissions related to transport
 - c. Pollution related to transport
 - d. Noise
- 2. The management of the environmental impacts associated with the travel requirements can be combined in a separate document (travel plan) or part of a wider management policy.

Evidence

- 1. Copy of the organisation specific management arrangements related to the environmental impacts of the travel requirements.
- 2. Copy of the site-specific transport survey/assessment.
- 3. Copy of travel policies/procedures.
- 4. Photographic evidence confirming installation of measures that support the management arrangements.

Definitions

A travel plan is a strategy for managing all travel and transport within an organisation, principally to

increase choice and reduce reliance on the car by seeking to improve access to site or development by sustainable modes of transport. A travel plan should focus on the follow points:

- Prevent travel (i.e. encourage conference calls).
- Prevent reliance on the car (i.e. encourage use of cycle, public transport or other alternatives)
- Improve transportation (i.e. cruise control, fuel efficient cars).
- Improve use of transportation (i.e. improving driving style, carpooling, optimal load factor).

A travel plan includes at least, but is not limited to:

- Cost-saving potential

Certification based on English Version of manual not available

TRA06 - Transport management arrangements		
Part		Number of credits available
3		43

To what extent are transport management arrangements in place that allow monitoring against set targets?

Aim

To recognise and encourage management aimed at reducing the effects of transport to the environment and increasing awareness of travel impacts.

Credits

Credits	Answer option (multiple answers possible)	
0	Question not answered	
0	Don't know	
1	Scope and objectives are defined	
1	Targets are set and monitored to ensure that actions are completed	

Transport initiatives to decrease environmental impact:

2	Pedestrian and cycle routes in and around the building are properly illuminated	
4	Responsible commuting is stimulated by financial incentives (mobility budget)	
2	Parking services are in place depending on functional needs (type of car)	
2	Paid parking has been implemented	
4	Video-conferencing facilities	
2	Home working policy	
4	Staff/visitor shuttle bus for travel to and from key transport links	

2	Staff car pool	
2	For business travel staff car pool or public transportation is encouraged	
2	All car pool cars have energy label B or better	
2	All rental and lease cars have energy label B or better.	
1	Policy to offer staff and visitors carbon offsetting travel (i.e. electric taxis, borrowed bikes)	
2	Staff are encouraged to minimise carbon impacts of business travel	
2	Staff are encouraged to minimise carbon impacts of freight	
2	Staff are encouraged to minimise carbon impacts of commuting	
1	Awareness seminars / training sessions are carried out for all staff regarding minimisation and management of transport impacts	
1	Individual staff are identified who are accountable for implementation of the transport policies, objectives and targets	
1	Formal, regular training is provided for staff responsible for transport management	
1	Improvement targets are set in line with best practice guidance available	
1	An environmental management system (EMS) that includes procedures to review position against an appropriate peer group through published guidance, benchmarking etc. with regards to transport	
1	Deliveries are scheduled to minimise impacts on staff and surrounding environment	

Assessment criteria

- 1. Management arrangements should be documented and available to view where applicable.
- 2. The transport management arrangements can be combined in a separate document (a travel plan) or part of a wider management policy.
- 3. Employees are informed about the possibility and use of a car share scheme (if applicable).

Evidence

- 1. A copy of the organisation specific management arrangements/Travel Plan, highlighting relevant clauses:
 - a. A copy of the site-specific transport survey/assessment
 - b. A copy of travel policies/procedures
 - c. Records demonstrating regular reviews of transport policy
 - d. Means of motivating staff, including evidence of incentives
 - e. Training material/dates and certificates for training completion

- f. Interviews with staff
- g. Information on deliveries to site
- h. Photographic evidence
- i. Visual inspection notes

Canification based on English Version of manual not available

TRA08 - Local amenities		
Part		Number of credits available
3		4

Is there information available for users on local facilities?

Aim

To encourage the use of local facilities and with that decrease the necessity of extra travel.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No
4	Yes

Assessment criteria

- 1. Local facilities include, but are not limited to:
 - a. Supermarket
 - b. ATM
 - c. Childcare facilities
- 2. Information should be freely available to all building users. This can be done through hardcopies or softcopies (i.e. through intranet, notice boards, leaflets or email) or a combination of the two.
- 3. Information should include distance or time necessary to travel to the facilities.

Evidence

1. Copy of documentations with necessary information that is freely available to all users OR inspection by the assessor with photographic evidence.

TRA09 - Transport objectives		
Part		Number of credits available
3		4

Questi			
In the last calendar year, what percentage of the transport objectives and targets were achieved? Aim			
Aim			
To ensur introduct	e that targets related to transport are met within an appropriate timeframe, enabling the ion of new targets; thus ensuring the continual improvement of transport.		
Credits	Credits		
Credits	Answer option		
0	Question not answered		
0	Don't know		
0	Objectives are not in place or met		
0	< 25%		
1	≥ 25% tot < 50%		
2	≥ 50% tot < 75%		
3	≥ 75% tot < 100%		
4	100%		
	(/)		

Assessment criteria

- 1. Transport objectives conform (but are not limited to credit "TRA06 Transport".
- 2. Assessment is based on the previous year.
- 3. Objectives assessed in this credit show a relevant and significant impact on the environmental impact of transport.

Evidence

Documentation/reports on targets and when these were achieved in the previous year.

TRA10 – Transport impact of commuting		
Part		Number of credits available
3		4

What is the total work commute in kilometres per annum for staff in the asset?

Aim

To recognise and encourage the measurement of annual distance travelled for staff commute of CO₂ emissions; improving knowledge of management, and enabling quantitative targets to be implemented.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Fuel, distance or CO ₂ emissions are not registered
1	1 relevant transport type is measured
2	2 relevant transport type are measured
4	All relevant transport type are measured

Assessment criteria

- 1. Staff commute relates to the total distance that people that work in the asset travel to and from work. This does not include additional business related trips, such as external meetings.
- 2. Relevant transport types are (but not limited to):
 - a. Car
 - b. Train
 - c. Light rail/tram/subway
 - d. Bus
 - Motorbike
 - . Bicycle
- →3⊘Inventory of transport data based on reliable sources or research from past year.
- The inventory must be conducted in fuel, mileage or CO₂, but it is required that for all the inventoried transport types the same unit is used.
- 5. When measurements are applied in CO₂ emissions, application must be performed by a person with relevant knowledge and experience.

Evidence

1. Documentation that show outcomes and sources of identification and transport data, for example reporting about the CO₂-emission inventory, as described in the CO₂ Performance Ladder.

2. Written statement including the explanation of identification, calculation method and total km, fuel or CO₂ emissions.

Canification based on English Version of manual not available

TRA11 - Transport impact of business travel		
Part		Number of credits available
3		4

What is the total of businesses travel per transport mode (in fuel, distance (km) or CO₂ emission) for the previous year?

Aim

To encourage the registration of annual distance travelled or CO₂ emissions of business travel and enabling quantitative targets to be implemented.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Fuel, distance or CO ₂ emissions are not registered
1	1 relevant transport type is measured
2	2 relevant transport type are measured
4	All relevant transport type are measured

Assessment criteria

- 1. Business relates to the total distance that people that work in the asset travel to and from work. This does not include commuting, but specifically business travel, i.e. additional business related trips, such as external meetings etc.
- 2. Relevant transport types are (but not limited to):
 - a. Long haul flights, over 7 hours in length often involving intercontinental travel
 - b. Short haul flights, 3200 km/4.5 hours in length
 - Domestic flights, 800 km/1.5 hours in length
 - d. Car
 - e. Train
 - f. Light rail/tram/subway
 - g. Bus
 - h. Motorbike
 - i. Bicycle
- 3. Inventory of transport data based on reliable sources or research from past year.
- 4. The inventory must be conducted in fuel, mileage or CO₂, but it is required that for all the inventoried transport types the same unit is used.
- 5. When measurements are applied in CO₂ emissions, application must be performed by a person with relevant knowledge and experience.

Evidence

- 1. Documentation that show outcomes and sources of identification and transport data, for example reporting about the CO₂-emission inventory, as described in the CO₂ Performance Ladder.
- 2. Written statement including the explanation of identification, calculation method and total km, fuel or CO₂ emissions.

Cartification based on English Version of manual not available

TRA12 - Transport impact of goods delivery			
Part Number of credits available			
3		4	

What is the total of goods delivery per transport mode (in fuel, distance (km) or CO₂ emission) for the previous year?

Aim

To encourage the measurement of annual distance travelled or CO₂ emissions for goods delivery; thereby enabling quantitative targets to be implemented.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Fuel, distance or CO ₂ emissions are not registered
1	1 relevant transport type is measured
2	2 relevant transport type are measured
4	All relevant transport type are measured

Assessment criteria

- 1. Goods delivery from operations includes goods delivered to AND from the asset.
- 2. Relevant transport types are (but not limited to):
 - a. Heavy goods vehicle
 - b. Large goods vehicle
 - c. Van
 - d. Rail freight
 - e. Marin freight
 - f. Air freight
 - Inventory of transport data based on reliable sources or research from past year.
- In the inventory must be conducted in fuel, mileage or CO₂, but it is required that for all the inventoried transport types the same unit is used.
- 5. When measurements are applied in CO₂ emissions, application must be performed by a person with relevant knowledge and experience.

Evidence

1. Documentation that show outcomes and sources of identification and transport data, for example reporting about the CO₂-emission inventory, as described in the CO₂ Performance Ladder.

2. Written statement including the explanation of identification, calculation method and total (ton)km, fuel or CO_2 emissions.

Canification based on English Version of manual not available

Water

Category summary table

Issue reference	Title	Credits available
WAT18	Water use reduction	3
WAT19	Water management arrangements	47
WAT20	Water management targets	4
WAT21	Water consumption	2
Total credits available		56

- Transish Version of manus Certification based on English Version based on English Certification based on English Certif

WAT18 - Water use reduction		
Part Number of credits availab		Number of credits available
3		3

How are activities managed to avoid unnecessary water consumption?

Aim

To ensure the reduction of water consumption and the demands placed on water supplies.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Activities are not managed
1	Green/staff champions identified to encourage reduction of water wastage
1	Awareness training for staff
1	Staff feedback mechanisms in place to raise issues, such as leakages, that result in implementation of improvements in procedures or strategy

Assessment criteria

- 1. Staff champions should promote reductions in water consumption through frequent engagement with staff.
- 2. Awareness raising should be through seminars, team meetings or general updates.
- 3. Feedback mechanisms should be simple to access.

- 1. Interviews with relevant staff and an overview of relevant staff.
- 2. Copy of awareness raising material.
- 3. Copy of relevant feedback procedures.

WAT19 - Water management arrangements		
Part		Number of credits available
3		47

To what extent are water management arrangements in place that allow monitoring against set targets?

Aim

To recognise and encourage management arrangements aimed at reducing the consumption of water and increasing awareness of water consumption.

Credits

Credits	Answer option	
0	Question not answered	
0	Don't know	
1	Scope and objectives defined	
1	Water consumption is recorded	
1	Targets are set and monitored to ensure that actions are completed	
1	A water management system is in place	
1	Water consumption is monitored	

Initiatives regarding water management:

2	Water saving tips/signage (i.e. on flushing handles or attention boards)	
5	(Sanitary) equipment aims toward saving water and measures are taken to reduce water consumption, i.e. by reducing quantity or flow.	
3	Rainwater is harvested and reused	
3	Grey water is harvested and reused	

3	Water consumption is reduced by harvesting and containing rainwater with (roof)planting (compost, straw, hay, leaves, grass, wood chips or gravel).	
3	Use of local plants that require less water	
7	Water pressure reduction for onsite water consumption	
3	Limitations of the length of the water pipes	
3	Water using appliances (i.e. washing machines and dishwashers) are only operated with full loads	
2	No water softeners are in place or water softeners are demand initiated (i.e. based on water consumption rather than a pre-programmed timer)	
3	No appliances are connected to water softeners or only appliances requiring soft water are connected	
1	Separate water meter on hot water cold feed to provide indication of hot water Consumption	
1	Purchase and use of appliances or sanitary equipment that aim towards saving water	
1	User's maintenance policy of the water supply system	
1	Targets are set on available information about 'best practices'	
1	Environmental management system (EMS) includes procedures to review position against an appropriate peer group through published guidance, benchmarking etc. with regards to water	

Assessment criteria?

- 1. A water management policy should declare that:
 - a. The organisation will comply with environmental legislation relating to water management.
 - b. The organisation is dedicated to reducing consumption of water as a result of its operation and related activities.

As part of the strategy there must be:

- i. A water consumption minimisation champion, who has the support of senior management, with responsibility for the necessary communications, resources, action program and training to make the strategy work
- ii. Some form of training of employees in their role(s) and responsibilities for water consumption minimisation

- 1. Copy of documentations that hold the different options (i.e. policy, objectives, target, equipment specifications or maintenance done by user.
- 2. Visual inspection by the assessor with photographic evidence.

Additional information

All Dutch water companies use the following classification on the hardness of water:

 Very soft water: to 4 °D Soft water: 4 to 8 °D Medium water: 8 to 12 °D Hard water: 12 to 18 °D

Very hard water: 18 to 30 °D

Catification based on English Version of manual not awaitable

WAT20 - Water management targets		
Part Number of credits availal		Number of credits available
3		4

In the last calendar year, what percentage of annual water management objectives/targets was achieved?

Aim

To ensure that water management objectives are met within an appropriate timeframe, enabling the introduction of new targets; thus ensuring the continual improvement of water performance.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Objectives are not in place or met
0	< 25%
1	≥ 25% to < 50%
2	≥ 50% to < 75%
3	≥ 75% to < 100%
4	100%

Assessment criteria

- 1. Objectives apply to (but are not limited to) the subjects mentioned in "WAT19 Water)".
- 2. The objectives assessed in this credit have a relevant and significant impact on improving the water management.

- Meter readings from previous year.
- 2. Documentation of water policy including the highlighting of relevant objectives and targets.
- 3. Documentation or reports that show the achievement of targets.
- 4. Support of the relevant objectives.

WAT21 - Water consumption		
Part		Number of credits available
3		2

What was the total quantity of water consumed (in cubic metres) during the last calendar year?

Aim

To ensure that users of the asset are aware of the consumption of water for the last year.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
2	Water consumed during the last calendar year: m ³

Assessment criteria

1. Water consumption is determined with measurement results

Evidence

- 1. Meter readings from previous year
- 2. Utility bills

Additional information

According to the Environment Barometer in the Netherlands, 10.4 m³ water/ fte/ annum was consumed during the past years on average.

References

Key figures on use i.e. water consumption can be found on: http://www.milieubarometer.nl/kantoor.

Materials

Category summary table

Issue reference	Title	Credits available
MAT15	Material procurement issues	7
MAT16	Material procurement issues, implementation	51
MAT17	Supplier approval	3
MAT18	Supplier quality policy	8, 0
MAT19	Suplier environmental management	8
MAT23	Material procurement targets	4
Total credits availab	ole	81
Certification	Material procurement targets ole Noseed on English Noseed on Englis	

MAT15 - Material procurement issues		
Part		Number of credits available
3		7

To what extent is sustainability considered when procuring materials?		Ne
	Aim To encourage sustainability considerations when procuring materials for occupant activities. Credits	
Credits	Answer option (Multiple answers possible)	
0	Question not answered	
0	Don't know or not applicable	
0	No procedures are in place to encourage sustainable procuring of materials	
1	Minimising the emission from deliveries	
2	Procedures are in place to reduce procurement of consumables where practicable	
2	When procuring materials, sustainability considerations are part of the selection procedure	
2	Sustainable procuring of materials conforms criteria for Responsible Sourcing (MVI).	

Assessment criteria

- 1. Materials that are covered in the procurement policy relate to materials that are needed to perform the tasks that are relevant to the type of asset. These materials can include, but are not limited to:
 - Office supplies
 - Procuring facilities
 - Cleaning products
 - Furniture and design
- 2. The selection process of sustainable procuring of materials, takes the following into account: environmental factors, i.e. recyclability, energy efficiency, reuse and environmental impact (life cycle) and social aspects, i.e. working conditions, safety standards and human rights.
- 3. Where contracting with a supplier, companies should make it known that they expect business partners to comply with all national laws and regulations,

Evidence

1. Copy of sustainable procurement policy.

- 2. Evidence of participation to programs on sustainable materials (i.e. FSC or PECF or for government, evidence of sustainable procuring). A C2C certificate of procured material can also be used as evidence.
- 3. Documented confirmation from suppliers.

Definitions

Responsible sourcing ('Maatschappelijk verantwoord inkopen': MVI): MVI concerns the sustainability criteria and documents developed by the government. These can be found on the website of PIANOo, the centre of expertise on this field. MVI assess products and services on their effects, i.e. on environment, welfare and health. Criteria such as, sustainable use of raw materials, green house gas emissions and social conditions, are part of the procurement policy. Procurement can vary from office supplies to construction materials. The government has developed sustainability criteria and documents that can be used.

Additional information

definit should be should be the should be th A supplier who has an PEFC- or FSC certification, is not delivering by definition PEFC-/FSC certified timber. If timber has been harvested in accordance to PEFC-/FSC should be proven by the delivery

MAT16 - Material procurement issues, implementation	
Part	Number of credits available
3	51

Are management arrangements for the procurement of materials that allow monitoring against set targets. in place?

Aim

To increase awareness and continuously limit the environmental impact of materials procured for occupant activities.

Credits

Credits	Answer option (Multiple answers possible)	
0	Question not answered	
0	Don't know	
0	No procurement policy is in place	
1	Scope and objectives are defined and appropriate requirements specified	
1	Targets are set and monitored to ensure that actions are completed	
1	A management system is in place to promote the efficient use of materials	
1	Management arrangements include procedures to incorporate feedback from staff, clients and other stakeholders	
1	Materials purchasing is monitored to include need, quantities, and sustainability issues	
1	Targets are set based on available data on best practices	
1	To encourage awareness, information and results on materials procurement are shared with all staff, i.e. through seminars, training sessions or formal communication	
1	Individual staff are identified who are accountable for implementation of the materials policy, objectives and targets regarding materials procurement	
1	Formal, regular training is provided for staff responsible for materials procurement	
1	A list of acceptable suppliers is maintained for all materials.	

1	An environmental management system (EMS) is in place (ISO14001 or equal) that includes procedures to review position against an appropriate peer group through	
	published guidance, benchmarking etc. with regards to materials procurement	

Initiatives on materials procurement

2	Monitor and double check meeting arrangements to reduce over ordering refreshments, room size, facilities	
2	Use of detergents which are fully degradable	
2	Recyclability/Reusability - for example print cartridges	
4	Work with suppliers to minimise packaging	
6	Policy and procurement to ensure that printers with low impact such as ammonia free, non-carcinogenic toners	
8	Policy to review all consumed products at least once every two years to identify alternatives which have less of an environmental impact	
10	Working with suppliers to reduce impact of supply chain	

Base decision process on whole life cost of equipment and consumables, considering the following:

2	Durability - extended life of products	
2	Maintainability – choosing products with an ease of cleaning, self-cleaning	
2	Upgradeability – choosing computer equipment that can be upgraded, modular equipment	

Assessment criteria

- 1. Selected objectives and initiatives are established within the organisation. The objectives and initiatives are deemed measurable and consistent with policy and implementation is monitored.
- 2 The organisation must aurier to see a valid reason that this is not the case... The organisation must adhere to each requirement in all instances within the asset unless there is
- 3. Objectives and initiatives are documented and made available, when applicable.
- 4. Objectives and initiatives can be a separate document or a part of wider policy.

Evidence

- 1. Copy of the procurement arrangements/procurement policy, similarities with suppliers or statements that give evidence of chosen options. This may be a signed statement from the organisation in which the options are named specifically.
- 2. Relevant labels or certificates demonstrating compliance with the chosen options.

MAT17 - Supplier approval		
Part		Number of credits available
3		3

Which of the following initiatives are used to assess the policy of suppliers on ethics and sustainability?

Aim

To encourage the assessment of suppliers on the ethical and sustainable sourcing of materials in supplier selection.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	Suppliers are not assessed on ethical and sustainable sourcing
2	A Supplier Questionnaire/Survey is in use
3	Membership of an industry/supply chain initiative that support ethical and sustainable sourcing

Assessment criteria

- 1. The acceptability of suppliers should be reviewed annually or when suppliers change to ensure the applicability of the requirements.
- 1. The assessment includes at least the ethical and sustainable sourcing policy of the supplier.

Evidence

- 1. Copy of supplier questionnaire/survey.
- 2. Copy of letter(s) sent to suppliers.
- 3. Copy of membership certificate.

Additional information

Organisations can ask their suppliers to provide comprehensive information about their policy on ethics and sustainability. Onsite visits can be organised to monitor suppliers' progress, or lack of progress, in meeting objectives. Evaluating this information can become part of a company's regular assessments of business requirements.

MAT18 – Supplier quality policy		
Part		Number of credits available
3		8

What percentage of suppliers is required to have a (certified) quality policy?

Aim

To ensure that suppliers document objectives for (certified) quality and the commitment of to ensure quality.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	< 25%
1	≥ 25% not certified
2	≥ 50% not certified and/or ≥ 25% certified
4	≥ 75% not certified and/or ≥ 50% certified
6	≥ 90% not certified and/or ≥ 75% certified
8	≥ 90% certified

Assessment criteria

- 1. Suppliers documented, implemented (evidence is provided) and monitored their quality policy (processes are in place to systematically monitor policy).
- 2. Suppliers have a certified quality system, i.e. ISO9001 or equal.
- 3. The organisation should review that the environmental management system of suppliers is in place annually or when suppliers change to ensure the applicability of the requirements.

Additions to criteria

This credit concerns suppliers of goods and services, that supply at least 80% of the total supplied goods and services, measured in volume or money, depending on the organisation's preferences and always including all regular suppliers. Pizza deliveries are excluded, but annual accounting services and lease company services are included.

Evidence

1. Copy of the letters distributed to suppliers/contractors asking for the quality policy.

- 2. Recent overview of all suppliers (not older than one year) indicating which of the suppliers have a quality policy / certified quality system and showing that selected percentage is achieved.
- 3. Reference to the certified quality system of the supplier. If the quality policy has not been reviewed by a third party, a copy of the policy should be given as evidence.

Definitions

NEN-EN-ISO 9001: specifies the requirements for a quality management system of an organisation.

Certification based on English Version of manual not available

MAT19 – Supplier environmental management		
Part		Number of credits available
3		8

What per	rcentage of suppliers is required to have an (certified) environmental management system?
Aim To ensur environm Credits	re that suppliers manage their activities and processes to prevent or mitigate harmful nental impacts.
Credits	Answer option
0	Question not answered
0	Don't know
0	< 25%
1	≥ 25% no certified environmental management system
2	≥ 50% no certified environmental management system AND/OR ≥ 25% certified environmental management system
4	≥ 75% no certified environmental management system AND/OR ≥ 50% certified environmental management system
6	≥ 90% no certified environmental management system AND/OR ≥ 75% certified environmental management system
8	≥ 90% certified environmental management system

Assessment criteria

- Suppliers have a certified environmental management system, i.e. ISO14001 or equal.
- Suppliers have an environmental management system, but not certified:
 - a. Suppliers have formulated, implemented (evidence is provided) and monitored (processes are in place to systematically monitor policy) an environmental management system.
 - b. A certified CSR (MVO in Dutch) performance level, if the environmental policy applies.
 - c. An ISO26000 self-declaration does not suffice, unless criterion a) is a part of the declaration.
- 3. The supplier's environmental management system identifies significant environmental aspects which apply to the organisation and which can be influences directly or indirectly.
- The asset owner should review that the environmental management system of suppliers is in place annually or when suppliers change to ensure the applicability of the requirements.

Additions to the assessment criteria

This credit concerns suppliers of goods and services, that supply at least 80% of the total supplied goods and services, measured in volume or money, depending on the organisation's preferences and always including all regular suppliers. Pizza deliveries are excluded, but annual accounting services and lease company services are included.

Evidence

- 1. Copy of the letters distributed to suppliers/contractors asking for the quality policy.
- 2. Recent overview of all suppliers (not older than one year) indicating which of the suppliers have a quality policy / certified quality system and showing that selected percentage is achieved.
- centification hased on English Version of manual not available. 3. Reference to the certified quality system of the supplier. If the quality policy has not been reviewed

MAT23 - Material procurement targets		
Part		Number of credits available
3		4

In the last calendar year, what percentage of materials procurement objectives and targets were achieved?

Aim

To ensure that material procurement targets are met and thus ensuring the continual improvement of material procurement.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No objectives are in place or met
0	< 25%
1	≥ 25% to < 50%
2	≥ 50% to < 75%
3	≥ 75% to < 100%
4	100%

Assessment criteria?

- 1. Procurement objectives in addition to, but limited to 'MAT16 Materials'.
- 2. Assessment is based on the past year.
- 3. The objectives assessed in this credit have a relevant and significant impact on the sustainability of the procurement of materials.

Evidence

- Copy of documented material procurement objectives and targets.
- Copy of documentation that shows what percentage of the material procurement objectives has been achieved.
- 3. Support of the relevance of objectives.

Waste

Category summary table

Issue reference	Title	Credits available
WST02	Waste management activities	8
WST03	Waste management, reclamation	4
WST04	Waste management arrangements	39
WST05	Waste monitoring	4.0
WST06	Waste performance	2
WST07	Waste management objectives	4
WST08	Waste sent to landfill	2
WST09	Waste diverted from landfill	2
WST10	Waste sent for incineration	2
Total credits availa	able	67
Certification of the control of the	able Waste sent for incineration waste sent for incineration were likely able to the control of	

WST02 - Waste management activities		
Part		Number of credits available
3		8

To what extent were activities organised to prevent unnecessary waste flows, in line with the waste hierarchy and manage waste flows to reduce environmental impacts?

Aim

To identify and encourage waste management in line with the waste hierarchy to reduce waste flows and thus reduce negative environmental impact.

Credits

Credits Answer option (Multiple answers possible) 0 Question not answered □ 0 Don't know □ 0 No waste management activities are in place □ 2 Waste management policy incorporates the reduction of waste produced □ 2 Waste management policy incorporates the reuse of waste materials □ 2 Waste management policy incorporates recycling of waste □ 2 Waste management policy incorporates recovery of energy from waste □	• "		
Don't know No waste management activities are in place Waste management policy incorporates the reduction of waste produced Waste management policy incorporates the reuse of waste materials Waste management policy incorporates recycling of waste Waste management policy incorporates recovery of energy from waste	Credits	Answer option (Multiple answers possible)	
No waste management activities are in place Waste management policy incorporates the reduction of waste produced Waste management policy incorporates the reuse of waste materials Waste management policy incorporates recycling of waste	0	Question not answered	
Waste management policy incorporates the reduction of waste produced Waste management policy incorporates the reuse of waste materials Waste management policy incorporates recycling of waste	0	Don't know	
Waste management policy incorporates the reuse of waste materials Waste management policy incorporates recycling of waste	0	No waste management activities are in place	
2 Waste management policy incorporates recovery of energy from waste	2	Waste management policy incorporates the reduction of waste produced	
Waste management policy incorporates recovery of energy from waste	2	Waste management policy incorporates the reuse of waste materials	
Waste management policy incorporates recovery of energy from waste	2	Waste management policy incorporates recycling of waste	
	2	Waste management policy incorporates recovery of energy from waste	

Assessment criteria

- 1. The organisations waste management policy should state how the alignment with the waste hierarchy criteria specified is achieved.
- 2. The waste management policy can refer to waste from products consumed and/or produced by the organisation.

Evidence

1. Copy of contract or report of waste manager to prove policy and results.

Additional information

The EU Waste Framework Directive (2008/98EC) sets out the waste hierarchy that should be applied as a priority order in waste prevention and management legislation and policy:

- a. Prevention;
- b. Preparing for re-use;

- c. Recycling;
- d. Other recovery, e.g. energy recovery; and
- e. Disposal.

The water hierarchy imposes an order of priorities based on the question "what is the option that delivers the best overall environmental outcome". The list above shows a) as most eco-friendly and e) as least ecofriendly option. In the Netherlands the "Ladder of Lansink" is used as standard for waste management. This is based on the same principle.

at Th at The season of manual not available the season of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English Version of manual not available catification based on English version of manual not available catification based on English version of manual not available catification based on English version of manual not available catification based on English version of manual not available catification before the catification of the catificatio

WST03 - Waste management, reclamation		
Part		Number of credits available
3		4

Aim

Credits

Question How are	
Aim To encou	waste streams separated and reclaimed? urage recycling and reclamation when waste creation is unavoidable.
Credits	a not
Credits	Answer option
0	Question not answered
0	Don't know
0	All residual waste is put into a bin
1	2 waste streams are reclaimed separately.
2	3 waste streams are reclaimed separately.
4	4 or waste streams are reclaimed separately.

Assessment criteria

- 1. Common waste streams are
 - a. Paper and cardboard
 - b. Glass
 - c. Organic waste/swill d. Wood

 - e. Plastic (foil)
 - f. Small hazardous waste (batteries, paint, energy saving lamps, fluorescent tubes)
- 2. Residual waste does not separate waste flows, but can be seen as a collection.

Evidence

- .10 Copy of waste annual audit report or annual review of the bill.
- 2. Visual inspection by assessor and verification through photographic evidence.

WST04 - Waste management arrangements		
Part		Number of credits available
3		39

Question	
What waste management arrangements are in place to reduce waste?	
	31
nise and encourage management arrangements almed at improving waste production 🗸	
ole credits	
Answer option (Multiple answers possible	
Question not answered	
Don't know	
Scope and objectives are defined and monitored	
Targets are set according to the waste hierarchy (see additional information at WST02)	
Waste management system is in place and operational (registration, monitoring, prevention, segregation, and communication)	
Waste generation and sources are monitored	
In addition to common waste, the following waste flows are reclaimed separately (when applicable): can (soda), (PET) bottles, organic waste/swill.	
Use clearly differentiated recycling bins (such as labelled and colour coordinated) to promote sorting at source	
Double sided printing	
Avoidance of printing emails etc.	
(Electronic) measures to encourage paperless work and meetings	
Use of 80 gram paper or lower for general use	
	Inise and encourage management arrangements aimed at improving waste production ince, segregation and awareness. Answer option (Multiple answers possible) Question not answered Don't know Scope and objectives are defined and monitored Targets are set according to the waste hierarchy (see additional information at WST02) Waste management system is in place and operational (registration, monitoring, prevention, segregation, and communication) Waste generation and sources are monitored In addition to common waste, the following waste flows are reclaimed separately (when applicable): can (soda), (PET) bottles, organic waste/swill. Use clearly differentiated recycling bins (such as labelled and colour coordinated) to promote sorting at source Double sided printing Avoidance of printing emails etc. (Electronic) measures to encourage paperless work and meetings

1	Use of recycled paper	
2	Office food waste streams sent for recovery by composting or bio-gas	
2	Policy and procedure to reuse office supplies such as folders, document wallets, paper clips etc. (i.e. through adding these to office stock)	
2	Policy and contract to reuse unwanted IT equipment through local schools, charities, and community organisations. This is demonstrated by a contract with institute or different document (press release, report)	
2	Policy and contract to reuse furniture within the organisation or through local schools, charities and community organisations This is demonstrated by bills of relocation, contract with institute or different document (press release, report)	
2	Policy or contract to work with suppliers to minimise and/or reuse packaging / take back surplus products	
2	Encourage the use of reusable catering containers such as plates, cups etc.	
2	Conduct office surveys and occupant surveys to identify ways of minimising, recycling and managing waste	
4	Use a certified/registered waste carrier to collect materials, such as; waste contractors, scrap metal merchants, recycling businesses, local authorities, and skip hire businesses	
1	Incentives for staff to reduce waste	
1	Staff awareness trainings of possibilities to reduce or separate waste OR regular communication schemes to create internal awareness	
1	Formal, regular training including legislation and compliance awareness, is provided for staff responsible for waste management	
1	Staff responsible for waste management work closely with an authorised waste management firm to ensure waste practices are managed efficiently (regular meetings)	
1	Individual staff are identified who are accountable for implementation of the waste management policies, objectives and targets	
1	Includes mechanisms to incorporate feedback into procedures or strategy	
1	Environmental management system (EMS) includes procedures to review position against an appropriate peer group through published guidance, benchmarking etc. with regards to waste	

Assessment criteria

- 1. Objectives are documented within the organisation. Objectives are deemed measurable and consistent with the policy and implementation is monitored.
- 2. Objectives are documented and available, if applicable.
- 3. Objectives can be combined in a separate document or part of a wider management policy.

Evidence

- 1. Evidence provided for the relevant criteria can include:
 - a. Audits
 - b. Procedures
 - c. Strategies
 - d. Interviews
 - e. Any other evidence found acceptable by the assessor

Catification based on English Version of manual not available

WST05 - Waste monitoring		
Part		Number of credits available
3		4

For how many types of waste, the quantity (volume and/or weight) is recorded and monitored?

Aim

To promote the registration and monitoring of waste streams within the asset, so the organisation can understand what it produces and thus target improvements with well-designed policy.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No recording or monitoring of waste streams
1	At least 2 waste streams
2	At least 3 waste streams
4	At least 4 waste streams

Assessment criteria

- 1. The waste streams discussed in this credit should resemble the waste streams discussed in WST03.
- 2. The organisation should be able to demonstrate that it is recording/monitoring waste arisings within the asset by providing up to date figures for waste types produced within the asset on (at least) a monthly basis.
- 3. Recording/monitoring of waste arisings should be performed in a way which allows easy interpretation of data and be more detailed than annual figures received from waste carriers. Providing complex information; bills from waste carriers for example, does not count as active monitoring/recording.

Evidence

- 1. Copy of recording/monitoring on at least a monthly basis and monitored amounts of waste streams.
- 2. A copy of annual waste audit report or an overview of the annual invoice of the contractor showing resemblance with the registered waste amounts.

WST06 - Waste performance		
Part		Number of credits available
3		2

Aim

Available credits

Questi		
How ofte	n is the organisation's waste performance reviewed?	
Aim	ilab	
To encou	To encourage the continual improvement of waste performance.	
Availab	Aim To encourage the continual improvement of waste performance. Available credits	
Credits	Answer option	
0	Question not answered	
0	Don't know	
0	Infrequently	
1	At least annually	
2	At least twice a year	

Assessment criteria

- 1. Where waste audits are regularly carried out, the following should be considered:
 - a. The quantities of waste of each type generated
 - b. The way in which wastes are being handled and stored
 - c. The costs of disposal for different types of waste
 - d. Cost savings as a result of waste minimisation strategies (where historical data for comparison is available)
 - e. An audit has been carried out prior to the assessment and within the past twelve months. The audit has been used to inform and update the waste strategy

Evidence(

- 1. Copy of last meeting indicating frequency in minutes or other relevant documentation.
- Documentation of assessment procedure.
 - Data of previous two audits.

WST07 - Waste management objectives		
Part		Number of credits available
3		4

In the last calendar year, what percentage of annual waste management objectives and targets were achieved?

Aim

To encourage and recognise the meeting of waste management objectives and introducing new targets, thereby improving continuous waste performance.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No objectives are in place or met
0	< 25%
1	≥25% to <50%
2	≥50% to <75%
3	≥75% to <100%
4	100%

Assessment criteria

- 1. The targets and objectives conform, but are not limited to credit WST04 Waste management arrangements.
- 2. The assessment is based on the past year.
- 3. The objectives discussed in this credit have a relevant and significant impact on the improvement of waste management.

Evidence

1. Documentation of the targets, objectives combined with the results and conclusion of the past calendar year.

WST08 - Waste sent to landfill	
Part	Number of credits available
3	2

Aim

Available credits

Questi	on	
What is t	he total quantity of waste sent to landfill in metric tonnes in the last calendar year?	
Aim		
To identi	Aim To identify the share of the amount of produced waste that is sent to landfill. Available credits	
Availal	ole credits	
Credits	Answer option	
0	Question not answered	
0	Don't know	
2	Amount of waste sent to landfill: tons weight	

Assessment criteria

- 1. The occupant of the asset must make clear how this information was collected.
- 2. In the Netherlands, a landfill disposal banks posed for many waste streams. When no waste is sent to landfill, "0 tons weight" need to be entered.
- 3. Data provided must be for the same time period as the data provided for the other waste questions (WST09 and WST10).
- 4. When no amount in weight is available, the amount can be specified in consultation with the waste processing company based on quantity or volume of containers used.

Additions to the assessment criteria

Exceptions to the landfill disposal ban are cargo for which an exemption have been obtained, because they have been declared not useable for processing or a statement by deputy states has been given that the processing capacities in the Netherlands for this waste streams limited and waste sent to landfill is therefore allowed. When companies are officially allowed to sent waste to landfill, that comes from the location that needs to be certified, these amounts can be entered.

Evidence

- 10 Report with total amount of waste sent to landfill or sum of all invoices.
- Declaration when no waste is sent to landfill, i.e. by the waste processing company or in the relevant section of the waste report. It is allowed to use a general report (section of an annual report) when the waste processing company does not send waste to landfill, or specifically for organisation/location.
- 3. When an EMS is in place by third party organisation(s), an internal and external audit should be related to waste management.

Additional information

The amount entered in case of waste processing companies that do not use weighing units on their trucks, is calculated by the amount of containers, the average degree of filling and the specific weight used. In most cases, the amount of waste (in weight) is delivered by the waste processing company.

Cartification based on English Version of manual not available

WST09 - Waste diverted from landfill	
Part	Number of credits available
3	2

What is the total quantity of waste (in tons weight) diverted from landfill and thus sent for reuse or recycling, in metric tonnes for the last calendar year?

Aim

To encourage and promote the recycling of resources, avoiding the associated impacts of sending waste to landfill.

Available credits

Credits	Answer option
0	Question not answered
0	Don't know
2	Amount of waste diverted from landfill: tons weight

Assessment criteria

- 1. The occupant of the asset must make clear how this information was collected.
- 2. Data provided must be for the same time period as the data provided in Occupier Management WST 08 Waste sent to landfill and Occupier Management WST 10 Waste sent for incineration.
- 3. When no amount in weight is available, the amount of containers or volume can be converted into the amount in weight in consultation with the waste processing company.

Evidence

1. Report with total amount of waste for the last calendar year or sum of all invoices.

Additional information

The amount entered in case of waste processing companies that do not use weighing units on their trucks, is calculated by the amount of containers, the average degree of filling and the specific weight used. In most cases, the amount of waste (in weight) is delivered by the waste processing company.

WST10 - Waste sent for incineration		
Part		Number of credits available
3		2

What is the total quantity of waste (in tons weight) sent for incineration in metric tonnes for the last calendar year?

Aim

To encourage and promote the recycling of resources, avoiding the associated impacts of sending waste to landfill.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
2	Enter answer in: tons weight

Assessment criteria

- 1. The occupant of the asset must make clear how this information was collected.
- 2. Data provided must be for the same time period as the data provided in Occupier Management WST 08 Waste sent to landfill and Occupier Management WST 09 Waste diverted from landfill.
- 3. When no amount in weight is available, the amount of containers or volume can be converted into the amount in weight in consultation with the waste processing company.

Evidence

- 1. Copy of an annual waste management report or copy of reports of the sum of combined invoices of the plot by the participating organisation.
- 2. When there is a contractual agreement that waste should not be incinerated, this agreement qualifies as evidence.

Additional information

The amount entered in case of waste processing companies that do not use weighing units on their trucks, is calculated by the amount of containers, the average degree of filling and the specific weight used. In most cases, the amount of waste (in weight) is delivered by the waste processing company.

Land Use and Ecology

Category summary table

Issue reference	Title	Credits available
LE06	Ecology/biodiversity enhancement	3
Total credits availal	ble	3 2110
Certification	ble Ecology/biodiversity enhancement ble Abased on English Version of manual of the property of the propert	lot all

LE06 – Ecology/biodiversity enhancement		
Part		Number of credits available
3		3

Aim

Available credits

Questice Does the support?	
Aim To encou	urage organisations to support local ecology and biodiversity. Die credits Answer options
Availat	ole credits
Credits	Answer options
0	Question not answered
0	Don't know
0	No
1	Partnerships/sponsorship or active support arrangements are in place with international wildlife protection/enhancement organisations
2	Partnerships/sponsorship or active support arrangements are in place with regional/national wildlife protection/enhancement organisations
3	Partnerships/sponsorship or active support arrangements are in place with local wildlife protection/enhancement organisations

Assessment criteria

- 1. Partnerships/sponsorship can come through direct donations of capital and/or staff time.
- 2. Active support can come through participation in the wildlife protection/enhancement organisations by employees of the organisation.
- Partnerships/sponsorship and active support are most valuable when applied at a local level. Therefore, international partnerships are recognised but not awarded the maximum number of credits.
- ♥ Partnerships/sponsorship and active support can be given to organizations working specifically for ecology or biodiversity. Examples are environmental associations, bird associations, beekeepers. Locally is for example within the metropolitan area or a specific nature area.

Evidence

- 1. Evidence of the involvement.
- 2. Copy of relevant partnership/sponsorship documents

Additional information

An employee who participates actively for a local organisation gives active support in this way.

Pollution

Category summary table

Issue reference	Title	Credits available
POL15	Pollution management	11
POL16	Pollution prevention arrangements	33
POL17	Pollution prevention targets	4
Total credits availab	ple	48
Certification	Pollution prevention targets ple Apased on English Version of Phase of the Pase of the P	

POL15 - Pollution management		
Part	Number of credits available	
3	11	

How are pollution and nuisances managed and monitored?

Aim

To prevent or reduce pollution and nuisances caused by asset use.

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No measures are in place
2	Use of effective incident response guidance/procedures in accordance to local, national, or international guidance/procedures
2	Reduce and effectively control environmental pollution impacts (these should include the following, as a minimum, where relevant: lighting, noise generating plant/equipment, traffic nuisance)
1	Pollution management systems are used for CO ₂ emissions
1	Pollution management systems are used for CO emissions
1	Pollution management systems are used for NO _x emissions
4	Use of non-polluting/non-hazardous alternatives wherever possible (these should include the following, as a minimum and where relevant: cleaning products, refrigerants, lubricants, oils, hydraulic fluids, paints, adhesives, batteries)

Assessment criteria

- 1. Analysis of risks from dangerous substances, prevention and management can be demonstrated by but not limited to:
 - a. Risk assessment
 - b. Procurement strategies
 - c. Emergency procedures
- 2. Management practices should be reviewed annually or when changes to any system/building element are made.

Evidence

- 1. Relevant documentation outlining procedures and measures.
- 2. Visual inspection by assessor and verification through photographic evidence.

POL16 - Pollution prevention arrangements		
Part Number of credits av		
3	33	

Which of the following arrangements/initiatives are taken to prevent pollution and nuisances?

Aim

To recognise and encourage management arrangements aimed at reducing the pollution and nuisances and increasing awareness of pollutants.

Credits

Answer ontion (Multiple approximate)

Credits	Answer option (Multiple answers possible)	
0	Question not answered	
0	Don't know	
0	No arrangements are in place	
1	Targets and scope are set	
1	Risk levels and incidents of pollution and nuisance are registered	
1	Risk levels and incidents of pollution and nuisance are monitored	
1	Specific targets are set and monitored to ensure that actions are completed	
1	Routine inspection and maintenance of machinery/equipment to reduce pollution and nuisances	
1	Awareness seminars/training sessions are carried out for all staff regarding pollution and nuisances avoidance and control	
1	Individual staff are identified who are accountable for implementation of the pollution management policies, objectives and targets	
1	Formal, regular training is provided for staff responsible for pollution prevention and management	
1	Mechanisms are in place to incorporate feedback into procedures or strategy	

1	Improvement targets are set in line with best practice guidance available	
1	Environmental management system (EMS) includes procedures to review position against an appropriate peer group through published guidance, benchmarking etc. with regards to pollution	

Pollution prevention initiatives:

4	Procedures and trainings to cope with incidents.	
6	Water with detergent should be drained through a waste water drainage point (and not be mixed with rainwater or ground water)	
6	Oil filters are in place and are maintained in areas as parking lots, garages, kitchens and pomp stations	
6	It has been verified that the drainage plan of the asset is accessible to users	

Assessment criteria

- 1. Quality objectives and requirements for pollution management. Objectives and initiatives are measurable and consistent with policy and implementation is monitored.
- 2. Pollution arrangements and initiatives are documented and available, when required.
- 3. Management arrangements or initiatives can be combined in a separate document or part of a wider management policy.
- 4. In the drainage plan of the asset, all drains are indicated.

Evidence

- 1. Documentation and/or photographic evidence that show the selected options.
- 2. Visual inspection by assessor and verification through photographic evidence.

POL17 - Pollution prevention targets		
Part		Number of credits available
3		4

In the last calendar year, were the pollution prevention objectives, targets and improvements met?

Aim

To ensure that targets are met, new targets are introduced and continual action to prevent pollution

Credits

Credits	Answer option
0	Question not answered
0	Don't know
0	No objectives are determined or met
0	<25%
1	≥25% to <50%
2	≥50% to <75%
3	≥75% to <100%
4	100%

Assessment criteria

- 1. Objectives relate to (but not limited to) the subjects discussed in POL16.
- 2. The objectives assessed in this credit have a relevant and significant impact in reducing pollution.

Evidence

- 1. Documentation of objectives and targets.
- 2. Documentation showing the percentage of goals that have been achieved.
- 30 Discussion of the relevance of the objectives.