epd-norway
Global Program Operator

Environmental Product Declaration

I henhold til ISO14025:2006 og EN15804:2012+A2:2019

Bedsted Lø Grusværker

Deklarationens ejer:
Bedsted Lø Grusværker ApS

Deklareret produkt(er):
Grusgravsprodukter

Deklareret enhed:
1 ton

Produktkategori /PCR:
EN15804+A2:2019 som kerne PCR
NPCR PART A Construction products and services, Version: 2.0
NPCR 018 PART B for natural stone products, aggregates and fillers

Programoperatør og udgiver:
The Norwegian EPD foundation

Deklarationsnummer:
NEPD-11110-11058

Registreringsnummer:
NEPD-11110-11058

Udstedt: 20.05.2025

Gyldig til: 20.05.2030

BEDSTED LØ GRUSVÆRKER
A CRH COMPANY

The Norwegian
EPD Foundation

General information

Produkt:
Grusgravsprodukt

Programoperatør:
The Norwegian EPD Foundation
Post Box 5250 Majorstuen, 0303 Oslo, Norway
Tlf: +47 23 08 80 00
e-mail: post@epd-norge.no

Deklarationsnummer:
NEPD-11110-11058

Denne deklaration er baseret på Product Category Rules:
EN15804+A2:2019 som kerne PCR
NPCR PART A Construction products and services, Version: 2.0
NPCR 018 PART B for natural stone products, aggregates and fillers

Erklæring om ansvar:
Ejeren af deklarationen er ansvarlig for den underliggende information og dokumentation. EPD Norge er ikke ansvarlig for producentinformationer, data om livscyklusvurdering og dokumentation.

Deklarerede enhed:
1 ton grusgravsprodukt

Deklarerede enhed med option:
A1, A2, A3, A4, C1, C2, C3, C4, D

Funktionel enhed:
-

Verifikation:
Uafhængig verifikation af deklaration og data i henhold til ISO 14025:2010.

internal ☐ External ☒

Guangli Du, Aalborg University, Denmark
Independent verifier approved by EPD Norway

Deklarationens ejer:
Bedsted Lø Grusværker ApS
Kontaktperson: Bjarne Overgaard
Telefon: 7466 2214
e-mail: grus@grus.dk

Producent:
Bedsted Lø Grusværker ApS
Stenagervej 9, 6230 Rødekro, Danmark
Telefon: 7466 2214
e-mail: grus@grus.dk

Produktionssted:
Mjøls: Stenagervej 9, 6230 Rødekro, Danmark
Lovtrup: Friisvej 101, 6392 Bolderslev, Danmark
Uge Mark: Oksevejen 9, 6360 Tinglev, Danmark

Ledelsessystem:
Kvalitets- og miljøledelsessystem i henhold til virksomhedens retningslinjer.

Organisationsnummer:
[123456789MVA fill in]

Udstedelsesdato:
20.05.2025

Gyldig til:
20.05.2030

Årstal for produktion:
2023

Sammenligenlighed:
EPD'er for byggematerialer kan muligvis ikke sammenlignes, hvis de ikke overholder EN 15804 og ses i en bygningskontekst

Denne EPD er udført af:
Nana Lin Rasmussen, Sweco Danmark A/S

Godkendt:

Manager of EPD Norway

Produkt

Produktbeskrivelse:

EPD'en for Bedsted Lø Grusværker ApS for 1 ton grusgravsprodukt, er en gennemsnits EPD for 11 produktgrupper beregnet på specifikke data.

Det er danske grusgravsprodukter, som er inddelt i 3 materialetyper; Betonproduktion, Diverse og Vejmaterialer.

Produkter i "Betonproduktion" kan bl.a. benyttes til inputmaterialer i støbemixblandinger, men de kan også bruges i deres rene form til bl.a. pyntesten.

Produkter i "Diverse" kan bl.a. blive brugt til haver, som pyntesten i deres rene form.

Produkter i "Vejmaterialer" kan bl.a. benyttes til inputmaterialer i asfaltblandinger, men de kan også benyttes i deres rene form.

Produktspecifikation:

Råmaterialet er opgravet grusgravsprodukter i 4 forskellige grusgrave, Mjøls, Lovtrup, Uge Mark eller Åbenråvej. Opgravning af råmaterialet i A1 foregår enten ved en tørharper, slæbeskovsspil, flydegraver eller ralsuger. Transporten i A2 er internt transport mellem grusgravene samt transport af diesel og andre hjælpemidler til produktionen. Produktionen af grusgravsprodukterne foregår efter opgravning af råmateriale af processerne; vaskeanlæg, knuser, dosseringsanlæg, dumpere, sortering, gummiged, nedknuser og blanding.

Materials	kg/ton	%
Grusgravsprodukt	1000	100

Til produktion i af grusgravsprodukterne i A3 er der modelleret med 100% grøn elektricitet med dokumentation fra Guarantee og Origin certifikater. Sammensætningen af den grønne elektricitet er 39,62% vind, 58,5% sol og 1,88% vand.

Produktgrupper for deklarerede grusgravsprodukter

På næste side ses de deklarerede produktgrupper med tilhørerende grusgravsprodukter som er indeholdt i de respektive grupper. Heri ses også densiteterne af de forskellige grusgravsprodukter.

På baggrund af resultaterne for de deklarerede grusgravsprodukter, er der for GWP-IOBC i A1-A3 regnet produktgrupper hvor forskellen mellem A1-A3 er mindre end 10%.

Produktgruppe	Antal grusgravsprodukter i gruppen	Maksimal forskel i GWP-IOBC, A1-A3
Betonproduktion – Gruppe 1	6	6,9%
Betonproduktion – Gruppe 2	2	1,3%
Betonproduktion – Gruppe 3	6	4,7%
Betonproduktion – Gruppe 4	1	-
Diverse – Gruppe 1	1	-
Diverse – Gruppe 2	3	4,9%
Diverse – Gruppe 3	6	6,3%
Vejmateriale – Gruppe 1	3	0%
Vejmateriale – Gruppe 2	10	7,4%
Vejmateriale – Gruppe 3	25	8,2%
Vejmateriale – Gruppe 4	1	-

I hver produktgruppe er det vægtede gennemsnit regnet for hvert livscyklusmodul til at beregne alle påvirkningskategorierne for hver produktgruppe.

Produktgrupper Bedsted Lø Grusværk:

Nedenstående tabeller viser hvilke produkter som tilhører de forskellige produktgrupper.

Betonproduktion - Gruppe 1	Størrelse [mm]	Densitet [kg/m³]
2/8 afrensede	2/8	1500
Gydegrus	8/32	1500
Mørtelsand	0/2	1600
Nøddesten	16/32	1500
Støbesand	0/4 KL.E	1600
Ærtesten	8/22	1500
Betonproduktion - Gruppe 2	**Størrelse [mm]**	**Densitet [kg/m³]**
Perlesten	2/8	1500
Ærtesten	8/16	1500
Betonproduktion - Gruppe 3	**Størrelse [mm]**	**Densitet [kg/m³]**
Faldgrus certificeret	2/5	1500
Gydegrus	16/80	1500
Støbemix	0/16	1620
Støbemix	0/8	1620
Støbemix	0/32	1620
Ærtesten kl M	8/16	1500
Betonproduktion - Gruppe 4	**Størrelse [mm]**	**Densitet [kg/m³]**
Støbesand	0/4	1500

Diverse – Gruppe 1	Størrelse [mm]	Densitet [kg/m³]
Muld	0/32	1650
Diverse – Gruppe 2	**Størrelse [mm]**	**Densitet [kg/m³]**
FLL m balance	0616	1620
Harpet muld	0/8	1650
Tagmuld	0/8	1620
Diverse – Gruppe 3	**Størrelse [mm]**	**Densitet [kg/m³]**
Frasorterede ærtesten	8/16	1480
Håndsorterede digesten	140/300	1550
Håndsorterede piksten	110/140	1550
Håndsorterede piksten	60/110	1550
Muld	0/8	1650
Muldstabil	0/32	1620

Vejmateriale - Gruppe 1	Størrelse [mm]	Densitet [kg/m³]
Fyldsand	0/8	1600
Topdres	0/2	1600
Tørharpet	4/32	1520
Vejmateriale - Gruppe 2	**Størrelse [mm]**	**Densitet [kg/m³]**
Bundsikring	0/8	1600
SG II	0/32	1650
Skærver	5/45	1400
Skærver	4/16	1400
Skærver	8/16	1400
Skærver	16/32	1400
Skærver	32/45	1400
Stenmel	0/5	1450
Tørharpet 8/32	8/32	1520
Upcycle m PH	0/16	1620
Vejmateriale - Gruppe 3	**Størrelse [mm]**	**Densitet [kg/m³]**
Filtergrus	0/8	1550
Filtersand	0/4	1600
Frasorterede	8/32	1400
Frasorterede	2/10	1400
FSK	0/32	1650
Gartner makadam	0/80	1650
Grov vasket sand	0/32	1550
Kampesten	600/1000	1500
Klimastabil	0/32	1550
Kørestabil	0/32	1650
Kørestabil m knust	0/16	1650
Kørestabil m. knust	0/32	1650
Overløbere jigget	20/40	1500
Paksten	60/180	1500
Ral/singels	30/60	1500
SG I	0/32	1650
Singels	40/80	1500
Stigrus	0/8	1600
Store sten	200/500	1500
Store sten	80/200	1500
TVT	0/32	1650
Vejgrus	0/16	1620
Vejgrus m. knust	0/16	1620
Vejgrus m. knust	0/22	1620
Vejmaterialer - frasorterede	2/32	1450
Vejmateriale - Gruppe 4	**Størrelse [mm]**	**Densitet [kg/m³]**
Kabelsand	0/4	1600

I nedenstående vises eksempler af foto for et produkt i hver deklarerede produktgruppe:

Beton – Gruppe 1
Nøddesten 16/32

Beton – Gruppe 2
Perlesten 2/8

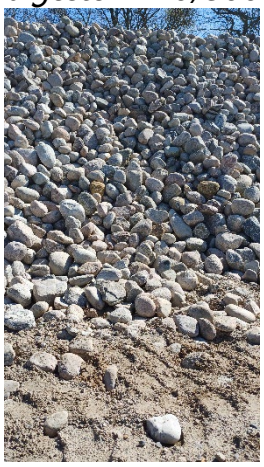
Beton – Gruppe 3
Støbemix 0/16

Beton – Gruppe 4
Støbesand 0/4

Diverse – Gruppe 1
Muld 0/32

Diverse – Gruppe 2
Harpet muld 0/8

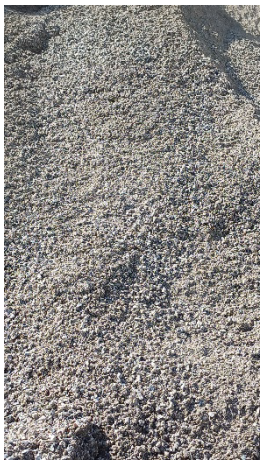
Diverse – Gruppe 3
Håndsorteret digesten 140/300



Vej – Gruppe 1
Fyldsand 0/8

Vej – Gruppe 2
SG II 0/32

Vej – Gruppe 3
Kørestabil m knust 0/16



Vej – Gruppe 4
Kabelsand 0/4

Tekniske data:
Certificeret iht. EN12620.

Markedsområde:
Danmark

Referencelevetid, produkt:
Ikke relevant

Referencelevetid, bygning:
Ikke relevant

Yderlig teknisk information:
Yderligere teknisk information om produkterne kan findes på producentens hjemmeside.

LCA: Beregningsregler

Deklareret enhed:
1 ton grusgravsprodukt

Cut-off kriterier:
Alle vigtige råmaterialer og alt væsentligt energiforbrug er inkluderet. Produktionsprocesser for råmaterialer og energistrømme, der er involveret i meget små mængder (mindre end 1%), kan udelades i henhold til EN 15804. Disse cut-off kriterier gælder ikke for farlige materialer og stoffer. Der er ikke foretaget kendte cut-offs i denne EPD.

Allokering:
EPD'en for Bedsted Lø Grusværker er beregnet for produktion på forskellige grusgrave, hvor nogle af produkterne produceres flere steder. Der er derfor lavet en %-vis allokering for forskellige produktionssteder baseret på masse ud fra den producerede mængde af samme produkt på to eller flere grusgrave for at regne gennemsnitsværdien for disse produkter.

Jf. EN15804+A2 §6.4.3.2 skal allokering undgås så vidt muligt ved at underinddele enhedsprocesser i sub-processer. Der er derfor beregnet specifikke produktionsprocesser for de enkelte grusgravsprodukter baseret på input af energimængde og output af mængde grusgravsprodukt, som gennemgår de enkelte sub-processer. For hver sub-proces i produktionen er der allokeret baseret på masse ift. output, da forskel i omsætning er lille. Når alle produkter er beregnet, er de grupperet i gennemsnitsgrupper inddelt på materialetyper ud fra reglen om at alle produkter ligger inde for +/-10% i GWP-IOBC i A1-A3.

Datakvalitet:
Specifik data er indsamlet af producenten, Bedsted Lø Grusværker, og er baseret på 1 års produktion i 2023.

LCA-modellen for 1 ton grusgravsprodukt fra Bedsted Lø Grusværker er modelleret i SimaPro version 9.6.0.1 med brug af data fra Ecoinvent 3.10 databasen.

LCIA-resultaterne beregnes ved hjælp af Environmental Footprint (EF 3.1) og impact metode til klassificering og karakterisering af input- og outputstrømme. Dette er i overensstemmelse med EN15804+A2:2019.

Systemgrænser (X=inkluderet, MND=modul ikke deklareret, MNR=modul ikke relevant)

Produkt			Bygge-proces		Brug							Endt levetid				Udenfor systemgrænse
Råmaterialer	Transport	Fremstilling	Transport	Indbygning	Brug	Vedligehold	Reparation	Udskiftning	Renovering	Energiforbrug	Vandforbrug	Nedrivning	Transport	Affaldsbehandling	Bortskaffelse	Genbrug og genanvendelse
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X

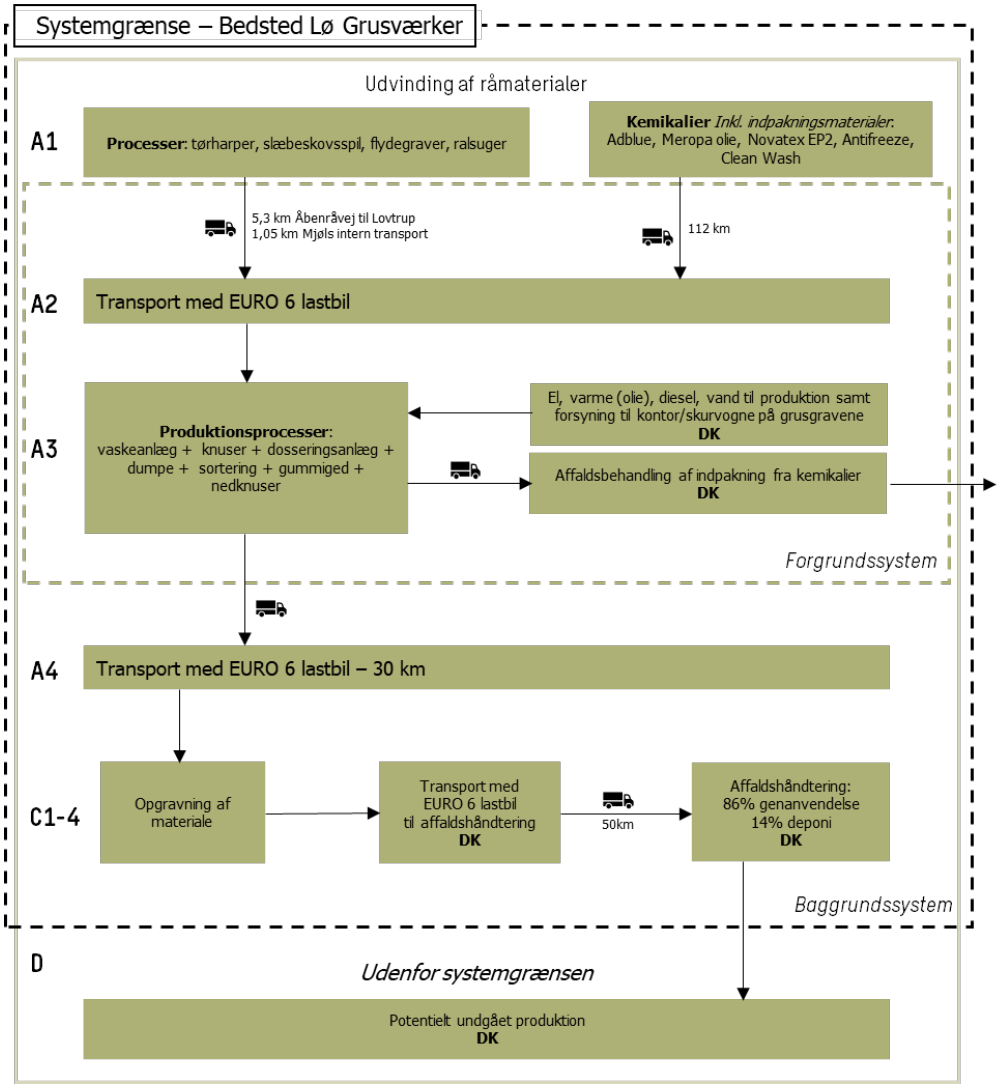
Systemgrænse:

I nedenstående figur ses systemgrænsen som behandles i denne EPD. Den inkluderer livscyklusmodulerne A1-A4, C1-C4 og D.

For produkter under "Betonproduktion" og "Vejmaterialer" kan produkterne enten benyttes i deres rå form eller indgå i blanding til f.eks. støbemix eller asfalt. "Diverse" vil benyttes i deres rå form og indgår ikke i blandinger af andre materialer. Derfor er EoL altid gældende for produkter i "Diverse" produktgruppen.
Hvis produktet indgår i blanding til f.eks. støbemix eller asfalt, vil scenariet indeholdt i resultattabellerne for endt levetid (C1-C4) og potentialet uden for systemgrænsen (modul D) ikke være relevant da det opfylder følgende 3 kriterier i henhold til PCR Del A og EN15804+A2:2019 §5.2,

- *Produktet eller materialet er fysisk integreret med andre produkter under installationen, så de ikke kan adskilles fra dem ved livets afslutning,*
- *Produktet eller materialet er ikke længere identificerbart ved livets afslutning som følge af en fysisk eller kemisk transformationsproces, og*
- *Produktet eller materialet indeholder ikke biogen kulstof.*

C1-C4 og D i resultattabellerne er derfor gældende når produkterne benyttes i deres rå form. Hvis de benyttes i støbemix eller asfalt vil C1-C4 og D ikke være gældende.



LCA: Scenarier og yderligere teknisk information

Følgende information beskriver scenarier for de forskellige moduler i EPD'en.

Transport fra produktionssted til samling/bruger (A4)

Transportafstanden i A4 er baseret på den gennemsnitlige afstand fra produktionssted til de største kunder i 2023.

Transport from production place to assembly/user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy consumption	Unit	Value
transport, freight, lorry >32 metric ton, EURO6	53,8%	30	0,0192	l/tkm	0,576

Endt levetid (C1, C3, C4)

Der er regnet et dansk endt levetidsscenarie som tager udgangspunkt i at produkterne bliver affaldshåndteret i den form de er i ved produktionen. Ud fra dansk affaldsstatistik er der regnet med 86% genbrug og 14% bortskaffelse/deponi.

Der er antaget dieselforbrug til opgravning af materialet ved endt levetid på 0,558 liter pr. opgravet ton materiale. Diesel har en brændværdi (LHV) på 42,8 MJ/kg og en massefylde på 0,85 kg/liter.

	Unit	Value
Diesel til opgravning	liter	0,558
Hazardous waste disposed	kg	0
Collected as mixed construction waste	kg	1000
Reuse	kg	860
Recycling	kg	0
Energy recovery	kg	0
To landfill	kg	140

Transport til affaldsbehandling (C2)

Der er regnet med en gennemsnitlig transportafstand fra opgravning af materialet til videre genbrug eller deponi på 50 km.

Transport from production place to assembly/user (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy consumption	Unit	Value
transport, freight, lorry >32 metric ton, EURO6	53,8%	50	0,0192	l/tkm	0,96

Potentiale for genbrug, genanvendelse og energigenvinding (D):

I D-modulet er der regnet med erstatning for produktion af nyt grusgravsmateriale med 86%, svarende til 860 kg pr. deklarerede enhed på 1 ton.

Benefits and loads beyond the system boundaries (D)	Unit	Value
Erstatning af nyt produceret grusgravsmateriale	kg	860

LCA: Resultater

Resultaterne i nedenstående tabeller vises for de 11 produktgrupper for 1 ton grusgravsprodukt.

Betonproduktion – Gruppe 1

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	1,95E-01	5,25E-01	2,70E+00	3,42E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-2,95E+00
GWP-fossil	kg CO2 eq	1,95E-01	5,25E-01	2,69E+00	3,41E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-2,93E+00
GWP-biogenic	kg CO2 eq	1,92E-04	3,50E-04	1,34E-02	1,39E-02	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-1,20E-02
GWP-luluc	kg CO2 eq	2,53E-04	1,69E-04	1,49E-03	1,91E-03	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-1,64E-03
ODP	kg CFC11 eq	1,16E-08	1,03E-08	4,24E-08	6,44E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-5,54E-08
AP	molc H+ eq	1,45E-03	1,25E-03	2,18E-02	2,45E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-2,10E-02
EP-freshwater	kg P eq	1,30E-05	4,00E-06	5,32E-05	7,02E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-6,04E-05
EP-marine	kg N eq	2,07E-04	3,41E-04	8,93E-03	9,48E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-8,15E-03
EP-terrestrial	molc N eq	2,32E-03	3,76E-03	9,81E-02	1,04E-01	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-8,96E-02
POCP	kg NMVOC eq	8,74E-04	2,05E-03	2,95E-02	3,24E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-2,79E-02
ADP-M&M[1]	kg Sb-Eq	1,23E-05	1,64E-06	7,06E-06	2,10E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,80E-05
ADP-fossil[1]	MJ	1,25E+00	5,99E-01	9,13E+00	1,10E+01	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-9,44E+00
WDP[1]	m^3	1,76E-01	2,99E-02	9,36E+01	9,38E+01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-8,07E+01

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	1,33E-08	4,27E-08	5,51E-07	6,06E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-5,22E-07
IRP[2]	kBq U235 eq.	5,49E-03	3,31E-03	8,19E-02	9,07E-02	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-7,80E-02
ETP-fw[1]	CTUe	2,44E+00	1,96E+00	1,29E+01	1,73E+01	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-1,49E+01
HTP-c[1]	CTUh	2,54E-09	3,65E-09	3,06E-08	3,68E-08	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-3,16E-08
HTP-nc[1]	CTUh	8,89E-09	4,47E-09	4,17E-08	5,51E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-4,74E-08
SQP[1]	Dimensionless	8,27E-01	4,29E+00	4,77E+00	9,88E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-8,50E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	1,39E+01	1,23E-01	5,39E+00	1,94E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,67E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	1,39E+01	1,23E-01	5,39E+00	1,94E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,67E+01
NRPE	MJ	1,30E+00	6,25E-01	9,46E+00	1,14E+01	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-9,79E+00
NRPM	MJ	1,08E-02	0,00E+00	-9,67E-03	1,12E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-9,63E-04
TRPE	MJ	1,31E+00	6,25E-01	9,45E+00	1,14E+01	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-9,79E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	1,48E-03	1,08E-03	2,57E+00	2,58E+00	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,22E+00

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	2,04E-03	1,80E-04	1,53E-03	3,75E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-3,22E-03
NHW	kg	1,39E-02	3,41E-01	1,14E-01	4,68E-01	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-4,03E-01
RW	kg	3,75E-06	2,31E-06	6,49E-05	7,10E-05	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-6,11E-05

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 1		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Betonproduktion – Gruppe 2

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	1,87E-01	7,60E-01	2,05E+00	3,00E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-2,58E+00
GWP-fossil	kg CO2 eq	1,86E-01	7,60E-01	2,03E+00	2,98E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-2,56E+00
GWP-biogenic	kg CO2 eq	1,86E-04	4,57E-04	1,71E-02	1,77E-02	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-1,52E-02
GWP-luluc	kg CO2 eq	2,40E-04	2,23E-04	1,82E-03	2,28E-03	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-1,96E-03
ODP	kg CFC11 eq	1,10E-08	1,46E-08	3,41E-08	5,97E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-5,13E-08
AP	molc H+ eq	1,37E-03	2,41E-03	1,49E-02	1,87E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,61E-02
EP-freshwater	kg P eq	1,23E-05	5,42E-06	6,52E-05	8,30E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-7,13E-05
EP-marine	kg N eq	1,97E-04	8,12E-04	5,36E-03	6,37E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-5,48E-03
EP-terrestrial	molc N eq	2,21E-03	8,94E-03	5,90E-02	7,02E-02	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-6,03E-02
POCP	kg NMVOC eq	8,49E-04	3,85E-03	1,80E-02	2,27E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-1,95E-02
ADP-M&M[1]	kg Sb-Eq	1,15E-05	2,13E-06	1,04E-05	2,41E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-2,07E-05
ADP-fossil[1]	MJ	1,19E+00	8,12E-01	1,11E+01	1,31E+01	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,13E+01
WDP[1]	m^3	1,67E-01	4,07E-02	1,21E+02	1,21E+02	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-1,04E+02

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	1,26E-08	7,76E-08	3,33E-07	4,23E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-3,64E-07
IRP[2]	kBq U235 eq.	5,23E-03	4,43E-03	1,03E-01	1,12E-01	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-9,67E-02
ETP-fw[1]	CTUe	2,32E+00	2,67E+00	1,42E+01	1,92E+01	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-1,65E+01
HTP-c[1]	CTUh	2,48E-09	5,01E-09	3,40E-08	4,15E-08	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-3,57E-08
HTP-nc[1]	CTUh	8,37E-09	5,85E-09	5,27E-08	6,69E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-5,75E-08
SQP[1]	Dimensionless	7,86E-01	5,55E+00	4,92E+00	1,13E+01	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-9,68E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	1,30E+01	1,65E-01	8,92E+00	2,21E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,90E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	1,30E+01	1,65E-01	8,92E+00	2,21E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,90E+01
NRPE	MJ	1,23E+00	8,48E-01	1,15E+01	1,36E+01	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,17E+01
NRPM	MJ	1,55E-02	0,00E+00	-9,64E-03	5,84E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-5,02E-03
TRPE	MJ	1,24E+00	8,48E-01	1,15E+01	1,36E+01	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,17E+01
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	1,40E-03	1,46E-03	3,40E+00	3,41E+00	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,93E+00

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1,92E-03	2,40E-04	2,10E-03	4,26E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-3,66E-03
NHW	kg	1,32E-02	4,36E-01	1,36E-01	5,85E-01	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-5,03E-01
RW	kg	3,58E-06	3,07E-06	8,20E-05	8,86E-05	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-7,62E-05

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 2		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Betonproduktion – Gruppe 3

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	1,60E-01	4,72E-01	1,46E+00	2,09E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-1,80E+00
GWP-fossil	kg CO2 eq	1,59E-01	4,71E-01	1,46E+00	2,09E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-1,80E+00
GWP-biogenic	kg CO2 eq	1,63E-04	1,76E-04	2,89E-04	6,28E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-5,40E-04
GWP-luluc	kg CO2 eq	2,03E-04	9,34E-05	2,47E-04	5,43E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-4,67E-04
ODP	kg CFC11 eq	9,34E-09	8,19E-09	2,69E-08	4,45E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-3,82E-08
AP	molc H+ eq	1,17E-03	2,77E-03	1,27E-02	1,66E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,43E-02
EP-freshwater	kg P eq	1,04E-05	2,58E-06	1,14E-05	2,44E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-2,10E-05
EP-marine	kg N eq	1,68E-04	1,18E-03	5,62E-03	6,97E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-5,99E-03
EP-terrestrial	molc N eq	1,89E-03	1,30E-02	6,16E-02	7,65E-02	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-6,57E-02
POCP	kg NMVOC eq	7,30E-04	4,26E-03	1,85E-02	2,35E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-2,02E-02
ADP-M&M[1]	kg Sb-Eq	9,73E-06	7,88E-07	6,80E-06	1,73E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,49E-05
ADP-fossil[1]	MJ	1,01E+00	3,87E-01	1,35E+00	2,74E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-2,36E+00
WDP[1]	m³	1,44E-01	1,98E-02	1,10E+00	1,26E+00	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-1,08E+00

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	1,07E-08	8,17E-08	3,45E-07	4,37E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-3,76E-07
IRP[2]	kBq U235 eq.	4,47E-03	1,97E-03	6,01E-03	1,25E-02	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-1,07E-02
ETP-fw[1]	CTUe	1,98E+00	1,30E+00	3,71E+00	6,98E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-6,00E+00
HTP-c[1]	CTUh	2,15E-09	2,52E-09	6,41E-09	1,11E-08	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-9,54E-09
HTP-nc[1]	CTUh	7,06E-09	2,31E-09	6,81E-09	1,62E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-1,39E-08
SQP[1]	Dimensionless	6,69E-01	2,05E+00	1,67E+00	4,40E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-3,78E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	1,09E+01	7,25E-02	7,22E+00	1,82E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,57E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	1,09E+01	7,25E-02	7,22E+00	1,82E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,57E+01
NRPE	MJ	1,04E+00	4,04E-01	1,42E+00	2,86E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,46E+00
NRPM	MJ	1,72E-02	0,00E+00	-4,65E-03	1,26E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,08E-02
TRPE	MJ	1,05E+00	4,04E-01	1,41E+00	2,87E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,47E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	1,20E-03	6,90E-04	2,76E-01	2,78E-01	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,39E-01

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1,61E-03	1,06E-04	1,22E-03	2,94E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-2,53E-03
NHW	kg	1,13E-02	1,47E-01	1,81E-02	1,77E-01	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-1,52E-01
RW	kg	3,06E-06	1,34E-06	3,93E-06	8,34E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-7,17E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 3		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Betonproduktion – Gruppe 4

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	1,43E-01	5,42E-03	1,53E+00	1,67E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-1,44E+00
GWP-fossil	kg CO2 eq	1,42E-01	5,41E-03	1,53E+00	1,67E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-1,44E+00
GWP-biogenic	kg CO2 eq	1,44E-04	3,75E-06	2,45E-04	3,92E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-3,37E-04
GWP-luluc	kg CO2 eq	1,83E-04	1,80E-06	1,75E-04	3,60E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-3,09E-04
ODP	kg CFC11 eq	8,38E-09	1,08E-10	2,52E-08	3,37E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-2,89E-08
AP	molc H+ eq	1,05E-03	1,13E-05	1,33E-02	1,43E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,23E-02
EP-freshwater	kg P eq	9,40E-06	4,22E-08	7,51E-06	1,70E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,46E-05
EP-marine	kg N eq	1,51E-04	2,64E-06	6,03E-03	6,18E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-5,32E-03
EP-terrestrial	molc N eq	1,69E-03	2,92E-05	6,61E-02	6,78E-02	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-5,83E-02
POCP	kg NMVOC eq	6,46E-04	1,87E-05	1,99E-02	2,05E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-1,76E-02
ADP-M&M[1]	kg Sb-Eq	8,81E-06	1,76E-08	2,80E-06	1,16E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,00E-05
ADP-fossil[1]	MJ	9,04E-01	6,33E-03	1,01E+00	1,92E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,65E+00
WDP[1]	m³	1,28E-01	3,16E-04	7,37E-02	2,02E-01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-1,73E-01

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	9,65E-09	3,97E-10	3,70E-07	3,80E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-3,26E-07
IRP[2]	kBq U235 eq.	3,99E-03	3,51E-05	4,57E-03	8,60E-03	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-7,39E-03
ETP-fw[1]	CTUe	1,77E+00	2,07E-02	3,14E+00	4,93E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-4,24E+00
HTP-c[1]	CTUh	1,87E-09	3,84E-11	6,11E-09	8,02E-09	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-6,89E-09
HTP-nc[1]	CTUh	6,39E-09	4,78E-11	4,10E-09	1,05E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-9,06E-09
SQP[1]	Dimensionless	6,01E-01	4,60E-02	1,52E+00	2,17E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-1,86E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	9,93E+00	1,31E-03	2,63E+00	1,26E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,08E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	9,93E+00	1,31E-03	2,63E+00	1,26E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,08E+01
NRPE	MJ	9,35E-01	6,61E-03	1,05E+00	1,99E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,71E+00
NRPM	MJ	1,22E-02	0,00E+00	3,68E-03	1,58E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,36E-02
TRPE	MJ	9,47E-01	6,61E-03	1,05E+00	2,01E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,73E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	1,07E-03	1,15E-05	2,20E-03	3,28E-03	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,82E-03

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1,46E-03	1,91E-06	5,55E-04	2,02E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,74E-03
NHW	kg	1,01E-02	3,68E-03	1,47E-02	2,84E-02	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-2,45E-02
RW	kg	2,73E-06	2,45E-08	2,94E-06	5,69E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-4,90E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Betonproduktion – Gruppe 4		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Diverse – Gruppe 1

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	3,49E-01	1,33E-02	3,32E+00	3,68E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-3,17E+00
GWP-fossil	kg CO2 eq	3,49E-01	1,32E-02	3,32E+00	3,68E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-3,17E+00
GWP-biogenic	kg CO2 eq	4,35E-05	9,18E-06	3,69E-04	4,22E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-3,63E-04
GWP-luluc	kg CO2 eq	3,28E-05	4,40E-06	2,88E-04	3,25E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-2,80E-04
ODP	kg CFC11 eq	5,42E-09	2,63E-10	5,08E-08	5,64E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-4,85E-08
AP	molc H+ eq	3,13E-03	2,76E-05	2,99E-02	3,31E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-2,85E-02
EP-freshwater	kg P eq	1,31E-06	1,03E-07	1,17E-05	1,31E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,13E-05
EP-marine	kg N eq	1,45E-03	6,46E-06	1,39E-02	1,53E-02	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-1,32E-02
EP-terrestrial	molc N eq	1,59E-02	7,15E-05	1,52E-01	1,68E-01	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-1,44E-01
POCP	kg NMVOC eq	4,74E-03	4,59E-05	4,53E-02	5,01E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-4,31E-02
ADP-M&M[1]	kg Sb-Eq	1,55E-07	4,31E-08	1,18E-06	1,38E-06	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,19E-06
ADP-fossil[1]	MJ	1,96E-01	1,55E-02	1,76E+00	1,97E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,69E+00
WDP[1]	m³	1,42E-02	7,73E-04	9,39E-02	1,09E-01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-9,36E-02

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	8,87E-08	9,71E-10	8,50E-07	9,40E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-8,08E-07
IRP[2]	kBq U235 eq.	8,77E-04	8,60E-05	7,56E-03	8,52E-03	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-7,33E-03
ETP-fw[1]	CTUe	6,81E-01	5,07E-02	6,15E+00	6,88E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-5,92E+00
HTP-c[1]	CTUh	1,47E-09	9,40E-11	1,30E-08	1,45E-08	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-1,25E-08
HTP-nc[1]	CTUh	5,90E-10	1,17E-10	5,37E-09	6,08E-09	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-5,23E-09
SQP[1]	Dimensionless	3,27E-01	1,13E-01	3,05E+00	3,49E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-3,00E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	3,12E-02	3,21E-03	2,67E-01	3,01E-01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-2,59E-01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	3,12E-02	3,21E-03	2,67E-01	3,01E-01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-2,59E-01
NRPE	MJ	2,01E-01	1,62E-02	1,84E+00	2,06E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,77E+00
NRPM	MJ	4,44E-03	0,00E+00	-4,44E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,77E-19
TRPE	MJ	2,05E-01	1,62E-02	1,84E+00	2,06E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,77E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	3,35E-04	2,80E-05	3,06E-03	3,42E-03	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,94E-03

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	4,35E-05	4,67E-06	4,00E-04	4,48E-04	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-3,85E-04
NHW	kg	2,95E-03	9,00E-03	2,66E-02	3,85E-02	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-3,31E-02
RW	kg	5,67E-07	6,01E-08	4,77E-06	5,40E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-4,64E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 1		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Diverse – Gruppe 2

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	3,06E-01	2,78E-01	1,81E+00	2,39E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-2,06E+00
GWP-fossil	kg CO2 eq	3,06E-01	2,78E-01	1,81E+00	2,39E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-2,06E+00
GWP-biogenic	kg CO2 eq	5,54E-05	3,54E-05	2,46E-04	3,37E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-2,89E-04
GWP-luluc	kg CO2 eq	4,05E-05	2,62E-05	1,64E-04	2,30E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-1,98E-04
ODP	kg CFC11 eq	5,16E-09	4,29E-09	2,81E-08	3,76E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-3,23E-08
AP	molc H+ eq	2,71E-03	2,45E-03	1,59E-02	2,11E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,81E-02
EP-freshwater	kg P eq	1,74E-06	1,01E-06	6,63E-06	9,38E-06	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-8,06E-06
EP-marine	kg N eq	1,23E-03	1,13E-03	7,34E-03	9,70E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-8,34E-03
EP-terrestrial	molc N eq	1,35E-02	1,24E-02	8,04E-02	1,06E-01	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-9,14E-02
POCP	kg NMVOC eq	4,06E-03	3,71E-03	2,41E-02	3,19E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-2,74E-02
ADP-M&M[1]	kg Sb-Eq	6,46E-07	1,24E-07	1,01E-06	1,78E-06	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,53E-06
ADP-fossil[1]	MJ	2,30E-01	1,53E-01	9,83E-01	1,37E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,17E+00
WDP[1]	m³	2,32E-02	8,12E-03	5,60E-02	8,72E-02	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-7,50E-02

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	7,54E-08	6,96E-08	4,50E-07	5,95E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-5,11E-07
IRP[2]	kBq U235 eq.	1,06E-03	6,69E-04	4,42E-03	6,15E-03	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-5,29E-03
ETP-fw[1]	CTUe	7,10E-01	5,32E-01	3,36E+00	4,60E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-3,96E+00
HTP-c[1]	CTUh	1,46E-09	1,11E-09	6,98E-09	9,55E-09	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-8,22E-09
HTP-nc[1]	CTUh	8,80E-10	5,12E-10	3,22E-09	4,61E-09	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-3,97E-09
SQP[1]	Dimensionless	3,22E-01	3,21E-01	1,68E+00	2,32E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-2,00E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	5,57E-01	2,37E-02	5,09E-01	1,09E+00	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-9,38E-01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	5,57E-01	2,37E-02	5,09E-01	1,09E+00	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-9,38E-01
NRPE	MJ	2,29E-01	1,60E-01	1,03E+00	1,42E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,22E+00
NRPM	MJ	1,21E-02	0,00E+00	1,07E-03	1,31E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,13E-02
TRPE	MJ	2,41E-01	1,60E-01	1,03E+00	1,43E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,23E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	3,63E-04	2,66E-04	2,16E-03	2,79E-03	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,40E-03

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1,18E-04	3,52E-05	2,78E-04	4,31E-04	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-3,71E-04
NHW	kg	3,26E-03	8,03E-03	1,50E-02	2,63E-02	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-2,26E-02
RW	kg	7,10E-07	4,26E-07	2,80E-06	3,94E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-3,39E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 2		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Diverse – Gruppe 3

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	1,59E-01	3,35E-01	1,55E+00	2,05E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-1,76E+00
GWP-fossil	kg CO2 eq	1,59E-01	3,35E-01	1,55E+00	2,04E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-1,76E+00
GWP-biogenic	kg CO2 eq	1,44E-04	4,39E-05	2,77E-04	4,64E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-3,99E-04
GWP-luluc	kg CO2 eq	1,73E-04	3,21E-05	2,12E-04	4,17E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-3,59E-04
ODP	kg CFC11 eq	8,22E-09	5,18E-09	2,68E-08	4,02E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-3,46E-08
AP	molc H+ eq	1,19E-03	2,94E-03	1,34E-02	1,76E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,51E-02
EP-freshwater	kg P eq	8,86E-06	1,23E-06	9,41E-06	1,95E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,68E-05
EP-marine	kg N eq	2,39E-04	1,35E-03	6,05E-03	7,64E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-6,57E-03
EP-terrestrial	molc N eq	2,66E-03	1,48E-02	6,63E-02	8,38E-02	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-7,21E-02
POCP	kg NMVOC eq	9,38E-04	4,45E-03	1,99E-02	2,53E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-2,18E-02
ADP-M&M[1]	kg Sb-Eq	8,16E-06	1,56E-07	4,62E-06	1,29E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,11E-05
ADP-fossil[1]	MJ	8,61E-01	1,86E-01	1,19E+00	2,23E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,92E+00
WDP[1]	m^3	1,23E-01	9,86E-03	5,31E-01	6,64E-01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-5,71E-01

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	1,50E-08	8,36E-08	3,71E-07	4,69E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-4,04E-07
IRP[2]	kBq U235 eq.	3,83E-03	8,16E-04	5,36E-03	1,00E-02	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-8,61E-03
ETP-fw[1]	CTUe	1,72E+00	6,46E-01	3,49E+00	5,85E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-5,03E+00
HTP-c[1]	CTUh	1,94E-09	1,35E-09	6,44E-09	9,73E-09	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-8,37E-09
HTP-nc[1]	CTUh	5,96E-09	6,32E-10	5,41E-09	1,20E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-1,03E-08
SQP[1]	Dimensionless	5,87E-01	4,03E-01	1,64E+00	2,63E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-2,26E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	9,14E+00	2,89E-02	4,69E+00	1,39E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,19E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	9,14E+00	2,89E-02	4,69E+00	1,39E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,19E+01
NRPE	MJ	8,84E-01	1,94E-01	1,24E+00	2,32E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,00E+00
NRPM	MJ	1,76E-02	0,00E+00	-1,84E-03	1,57E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,35E-02
TRPE	MJ	9,01E-01	1,94E-01	1,24E+00	2,34E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,01E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	1,03E-03	3,24E-04	1,24E-01	1,26E-01	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-1,08E-01

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1,35E-03	4,29E-05	8,62E-04	2,26E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,94E-03
NHW	kg	9,71E-03	1,10E-02	1,67E-02	3,74E-02	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-3,22E-02
RW	kg	2,63E-06	5,20E-07	3,47E-06	6,62E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-5,70E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Diverse – Gruppe 3		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Vejmateriale – Gruppe 1

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	3,49E-01	1,33E-02	3,32E+00	3,68E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-3,17E+00
GWP-fossil	kg CO2 eq	3,49E-01	1,32E-02	3,32E+00	3,68E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-3,17E+00
GWP-biogenic	kg CO2 eq	4,35E-05	9,18E-06	3,69E-04	4,22E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-3,63E-04
GWP-luluc	kg CO2 eq	3,28E-05	4,40E-06	2,88E-04	3,25E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-2,80E-04
ODP	kg CFC11 eq	5,42E-09	2,63E-10	5,08E-08	5,64E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-4,85E-08
AP	molc H+ eq	3,13E-03	2,76E-05	2,99E-02	3,31E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-2,85E-02
EP-freshwater	kg P eq	1,31E-06	1,03E-07	1,17E-05	1,31E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,13E-05
EP-marine	kg N eq	1,45E-03	6,46E-06	1,39E-02	1,53E-02	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-1,32E-02
EP-terrestrial	molc N eq	1,59E-02	7,15E-05	1,52E-01	1,68E-01	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-1,44E-01
POCP	kg NMVOC eq	4,74E-03	4,59E-05	4,53E-02	5,01E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-4,31E-02
ADP-M&M[1]	kg Sb-Eq	1,55E-07	4,31E-08	1,18E-06	1,38E-06	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,19E-06
ADP-fossil[1]	MJ	1,96E-01	1,55E-02	1,76E+00	1,97E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,69E+00
WDP[1]	m³	1,42E-02	7,73E-04	9,39E-02	1,09E-01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-9,36E-02

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	8,87E-08	9,71E-10	8,50E-07	9,40E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-8,08E-07
IRP[2]	kBq U235 eq.	8,77E-04	8,60E-05	7,56E-03	8,52E-03	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-7,33E-03
ETP-fw[1]	CTUe	6,81E-01	5,07E-02	6,15E+00	6,88E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-5,92E+00
HTP-c[1]	CTUh	1,47E-09	9,40E-11	1,30E-08	1,45E-08	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-1,25E-08
HTP-nc[1]	CTUh	5,90E-10	1,17E-10	5,37E-09	6,08E-09	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-5,23E-09
SQP[1]	Dimensionless	3,27E-01	1,13E-01	3,05E+00	3,49E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-3,00E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	3,12E-02	3,21E-03	2,67E-01	3,01E-01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-2,59E-01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	3,12E-02	3,21E-03	2,67E-01	3,01E-01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-2,59E-01
NRPE	MJ	2,01E-01	1,62E-02	1,84E+00	2,06E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,77E+00
NRPM	MJ	4,44E-03	0,00E+00	-4,44E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,77E-19
TRPE	MJ	2,05E-01	1,62E-02	1,84E+00	2,06E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,77E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	3,35E-04	2,80E-05	3,06E-03	3,42E-03	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,94E-03

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	4,35E-05	4,67E-06	4,00E-04	4,48E-04	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-3,85E-04
NHW	kg	2,95E-03	9,00E-03	2,66E-02	3,85E-02	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-3,31E-02
RW	kg	5,67E-07	6,01E-08	4,77E-06	5,40E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-4,64E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 1											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 1		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Vejmateriale – Gruppe 2

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	2,21E-01	4,60E-01	1,55E+00	2,23E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-1,91E+00
GWP-fossil	kg CO2 eq	2,21E-01	4,59E-01	1,54E+00	2,22E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-1,91E+00
GWP-biogenic	kg CO2 eq	1,18E-04	1,23E-04	2,80E-04	5,21E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-4,48E-04
GWP-luluc	kg CO2 eq	1,33E-04	7,04E-05	2,26E-04	4,30E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-3,70E-04
ODP	kg CFC11 eq	7,52E-09	7,60E-09	2,72E-08	4,23E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-3,64E-08
AP	molc H+ eq	1,81E-03	3,28E-03	1,34E-02	1,85E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,59E-02
EP-freshwater	kg P eq	6,70E-06	2,15E-06	1,02E-05	1,90E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,64E-05
EP-marine	kg N eq	6,14E-04	1,46E-03	6,01E-03	8,09E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-6,96E-03
EP-terrestrial	molc N eq	6,77E-03	1,60E-02	6,59E-02	8,87E-02	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-7,63E-02
POCP	kg NMVOC eq	2,13E-03	5,01E-03	1,98E-02	2,70E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-2,32E-02
ADP-M&M[1]	kg Sb-Eq	5,82E-06	5,25E-07	5,41E-06	1,18E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,01E-05
ADP-fossil[1]	MJ	6,73E-01	3,23E-01	1,26E+00	2,25E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,94E+00
WDP[1]	m³	9,21E-02	1,67E-02	1,10E-01	2,18E-01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-1,88E-01

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	3,79E-08	9,49E-08	3,69E-07	5,02E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-4,31E-07
IRP[2]	kBq U235 eq.	3,01E-03	1,57E-03	5,63E-03	1,02E-02	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-8,79E-03
ETP-fw[1]	CTUe	1,43E+00	1,10E+00	3,62E+00	6,15E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-5,29E+00
HTP-c[1]	CTUh	1,86E-09	2,19E-09	6,54E-09	1,06E-08	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-9,11E-09
HTP-nc[1]	CTUh	4,40E-09	1,64E-09	5,95E-09	1,20E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-1,03E-08
SQP[1]	Dimensionless	5,20E-01	1,37E+00	1,67E+00	3,56E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-3,06E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	6,47E+00	5,71E-02	5,60E+00	1,21E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,04E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	6,47E+00	5,71E-02	5,60E+00	1,21E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,04E+01
NRPE	MJ	6,88E-01	3,38E-01	1,32E+00	2,35E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,02E+00
NRPM	MJ	1,63E-02	0,00E+00	-2,69E-03	1,36E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,17E-02
TRPE	MJ	7,05E-01	3,38E-01	1,32E+00	2,36E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,03E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	8,37E-04	5,72E-04	2,41E-03	3,82E-03	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-3,28E-03

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	9,69E-04	8,38E-05	9,92E-04	2,05E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,76E-03
NHW	kg	7,83E-03	8,73E-02	1,74E-02	1,12E-01	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-9,67E-02
RW	kg	2,06E-06	1,05E-06	3,66E-06	6,77E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-5,82E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 2											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 2		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Vejmateriale – Gruppe 3

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	2,04E-01	6,72E-01	1,27E+00	2,14E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-1,84E+00
GWP-fossil	kg CO2 eq	2,03E-01	6,72E-01	1,27E+00	2,14E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-1,84E+00
GWP-biogenic	kg CO2 eq	1,55E-04	3,45E-04	2,18E-04	7,18E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-6,17E-04
GWP-luluc	kg CO2 eq	1,93E-04	1,72E-04	1,76E-04	5,41E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-4,65E-04
ODP	kg CFC11 eq	9,49E-09	1,24E-08	2,19E-08	4,38E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-3,77E-08
AP	molc H+ eq	1,59E-03	2,83E-03	1,11E-02	1,55E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,33E-02
EP-freshwater	kg P eq	9,85E-06	4,36E-06	7,85E-06	2,21E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,90E-05
EP-marine	kg N eq	3,91E-04	1,09E-03	4,99E-03	6,47E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-5,57E-03
EP-terrestrial	molc N eq	4,33E-03	1,20E-02	5,47E-02	7,11E-02	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-6,11E-02
POCP	kg NMVOC eq	1,44E-03	4,43E-03	1,64E-02	2,23E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-1,92E-02
ADP-M&M[1]	kg Sb-Eq	9,04E-06	1,59E-06	3,91E-06	1,45E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,25E-05
ADP-fossil[1]	MJ	9,59E-01	6,53E-01	9,85E-01	2,60E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-2,23E+00
WDP[1]	m³	1,34E-01	3,30E-02	2,15E-01	3,82E-01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-3,29E-01

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	2,44E-08	8,70E-08	3,06E-07	4,18E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-3,59E-07
IRP[2]	kBq U235 eq.	4,24E-03	3,49E-03	4,38E-03	1,21E-02	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-1,04E-02
ETP-fw[1]	CTUe	1,93E+00	2,16E+00	2,89E+00	6,98E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-6,00E+00
HTP-c[1]	CTUh	2,19E-09	4,11E-09	5,32E-09	1,16E-08	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-9,99E-09
HTP-nc[1]	CTUh	6,63E-09	4,44E-09	4,50E-09	1,56E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-1,34E-08
SQP[1]	Dimensionless	6,69E-01	4,14E+00	1,34E+00	6,16E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-5,29E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	1,02E+01	1,29E-01	4,00E+00	1,43E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,23E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	1,02E+01	1,29E-01	4,00E+00	1,43E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,23E+01
NRPE	MJ	9,91E-01	6,82E-01	1,04E+00	2,71E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,33E+00
NRPM	MJ	1,39E-02	0,00E+00	-5,26E-03	8,61E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-7,40E-03
TRPE	MJ	1,00E+00	6,82E-01	1,03E+00	2,72E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,34E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	1,16E-03	1,17E-03	3,92E-02	4,16E-02	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-3,57E-02

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1,50E-03	1,89E-04	7,29E-04	2,42E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-2,08E-03
NHW	kg	1,08E-02	3,18E-01	1,37E-02	3,42E-01	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-2,94E-01
RW	kg	2,90E-06	2,41E-06	2,84E-06	8,15E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-7,01E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 3											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton grusgravsprodukt – Bedsted Lø, Vejmateriale – Gruppe 3		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Vejmateriale – Gruppe 4

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton Grus – Bedsted Lø, Vejmateriale – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO2 eq	1,43E-01	5,42E-03	1,53E+00	1,67E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-1,44E+00
GWP-fossil	kg CO2 eq	1,42E-01	5,41E-03	1,53E+00	1,67E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-1,44E+00
GWP-biogenic	kg CO2 eq	1,44E-04	3,75E-06	2,45E-04	3,92E-04	1,66E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-3,37E-04
GWP-luluc	kg CO2 eq	1,83E-04	1,80E-06	1,75E-04	3,60E-04	1,10E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-3,09E-04
ODP	kg CFC11 eq	8,38E-09	1,08E-10	2,52E-08	3,37E-08	6,47E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-2,89E-08
AP	molc H+ eq	1,05E-03	1,13E-05	1,33E-02	1,43E-02	7,34E-03	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-1,23E-02
EP-freshwater	kg P eq	9,40E-06	4,22E-08	7,51E-06	1,70E-05	2,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,46E-05
EP-marine	kg N eq	1,51E-04	2,64E-06	6,03E-03	6,18E-03	1,88E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-5,32E-03
EP-terrestrial	molc N eq	1,69E-03	2,92E-05	6,61E-02	6,78E-02	2,08E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-5,83E-02
POCP	kg NMVOC eq	6,46E-04	1,87E-05	1,99E-02	2,05E-02	1,27E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-1,76E-02
ADP-M&M[1]	kg Sb-Eq	8,81E-06	1,76E-08	2,80E-06	1,16E-05	8,68E-06	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,00E-05
ADP-fossil[1]	MJ	9,04E-01	6,33E-03	1,01E+00	1,92E+00	3,83E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,65E+00
WDP[1]	m³	1,28E-01	3,16E-04	7,37E-02	2,02E-01	2,22E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-1,73E-01

GWP-total: *Global Warming Potential;* ***GWP-fossil:*** *Global Warming Potential fossil fuels;* ***GWP-biogenic:*** *Global Warming Potential biogenic;* ***GWP-LULUC:*** *Global Warming Potential land use and land use change;* ***ODP:*** *Depletion potential of the stratospheric ozone layer;* ***AP:*** *Acidification potential, Accumulated Exceedance;* ***EP-freshwater:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO4 eq.* ***EP-marine:*** *Eutrophication potential, fraction of nutrients reaching freshwater end compartment;* ***EP-terrestrial:*** *Eutrophication potential, Accumulated Exceedance;* ***POCP****: Formation potential of tropospheric ozone;* ***ADP-M&M****: Abiotic depletion potential for non-fossil resources (minerals and metals);* ***ADP-fossil:*** *Abiotic depletion potential for fossil resources;* ***WDP:*** *Water deprivation potential, deprivation weighted water consumption*

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

Additional environmental impact indicators

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 ton Grus – Bedsted Lø, Vejmateriale – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	9,65E-09	3,97E-10	3,70E-07	3,80E-07	3,02E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-3,26E-07
IRP[2]	kBq U235 eq.	3,99E-03	3,51E-05	4,57E-03	8,60E-03	2,06E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-7,39E-03
ETP-fw[1]	CTUe	1,77E+00	2,07E-02	3,14E+00	4,93E+00	1,10E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-4,24E+00
HTP-c[1]	CTUh	1,87E-09	3,84E-11	6,11E-09	8,02E-09	1,99E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-6,89E-09
HTP-nc[1]	CTUh	6,39E-09	4,78E-11	4,10E-09	1,05E-08	2,99E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-9,06E-09
SQP[1]	Dimensionless	6,01E-01	4,60E-02	1,52E+00	2,17E+00	4,69E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-1,86E+00

PM: *Particulate matter emissions;* ***IRP:*** *Ionising radiation, human health;* ***ETP-fw:*** *Ecotoxicity (freshwater);* ***ETP-c:*** *Human toxicity, cancer effects;* ***HTP-nc:*** *Human toxicity, non-cancer effects;* ***SQP:*** *Land use related impacts / soil quality*

[1] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[2] The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource use

RESOURCE USE PER 1 ton Grus – Bedsted Lø, Vejmateriale – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
RPEE	MJ	9,93E+00	1,31E-03	2,63E+00	1,26E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,08E+01
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	9,93E+00	1,31E-03	2,63E+00	1,26E+01	7,43E-01	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,08E+01
NRPE	MJ	9,35E-01	6,61E-03	1,05E+00	1,99E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,71E+00
NRPM	MJ	1,22E-02	0,00E+00	3,68E-03	1,58E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,36E-02
TRPE	MJ	9,47E-01	6,61E-03	1,05E+00	2,01E+00	4,01E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,73E+00
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m3	1,07E-03	1,15E-05	2,20E-03	3,28E-03	8,63E-03	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,82E-03

RPEE *Renewable primary energy resources used as energy carrier;* ***RPEM*** *Renewable primary energy resources used as raw materials;* ***TPE*** *Total use of renewable primary energy resources;* ***NRPE*** *Nonrenewable primary energy resources used as energy carrier;* ***NRPM*** *Nonrenewable primary energy resources used as materials;* ***TRPE*** *Total use of non-renewable primary energy resources;* ***SM*** *Use of secondary materials;* ***RSF*** *Use of renewable secondary fuels;* ***NRSF*** *Use of non-renewable secondary fuels;* ***W*** *Use of net fresh water.*

End of life – Waste

WASTE CATEGORIES PER 1 ton Grus – Bedsted Lø, Vejmateriale – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
HW	kg	1,46E-03	1,91E-06	5,55E-04	2,02E-03	1,31E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,74E-03
NHW	kg	1,01E-02	3,68E-03	1,47E-02	2,84E-02	3,99E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-2,45E-02
RW	kg	2,73E-06	2,45E-08	2,94E-06	5,69E-06	1,40E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-4,90E-06

HW *Hazardous waste disposed;* ***NHW*** *Non-hazardous waste disposed;* ***RW*** *Radioactive waste disposed.*

End of life – output flow

OUTPUT FLOWS PER 1 ton Grus – Bedsted Lø, Vejmateriale – Gruppe 4											
Indicator	**Unit**	**A1**	**A2**	**A3**	**A1-A3**	**A4**	**C1**	**C2**	**C3**	**C4**	**D**
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,60E+02	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CR *Components for reuse;* ***MR*** *Materials for recycling;* ***MER*** *Materials for energy recovery;* ***EEE*** *Exported electric energy;* ***ETE*** *Exported thermal energy.*

Information describing the biogenic carbon content at the factory gate

BIOGENIC CARBON CONTENT PER 1 ton Grus – Bedsted Lø, Vejmateriale – Gruppe 4		
Biogenic carbon content	**Unit**	**At the factory gate**
Biogenic carbon content in product	kg C	0.00E+00
Biogenic carbon content in the accompanying packaging	kg C	0.00E+00
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2		

Supplerende information

Lokationsbaseret elektricitetsmix for brug af elektricitet i produktionsfasen

Der er ikke benyttet national elektricitetsmix i produktionen i A3.

Guarantees of origin, GoO, for brugen af elektricitet I produktionsfasen

EPD'en beregnes med oprindelsesgrantier (GoO) for elektriciteten. Oprindelsesgarantien, der anvendes i denne EPD, leveres af Centrica Energy Trading A/S.

Resultater med nationalt elektrictetsmix er ikke beregnet.

Electricity source	Foreground / core [kWh]	GWP_{total} [kg CO2 -eq/kWh]	SUM [kgCO2 -eq]
Guarantee of origin electricity used in the foreground	Varierer pr. grusgravsprodukt	0,0541	Varierer pr. grusgravsprodukt
Residual mix electricity used in the foreground	0	0,633*	0

**Ecoinnvent 3.10: redisualmix low voltage – baseret på AIB 2023*

Supplerende miljøpåvirkningskategorier krævet for byggematerialer

For at øge gennemsigtigheden af det biogene kulstofbidrag til klimapåvirkningen er indikatoren GWP-IOBC nødvendig, da den deklarerer klimapåvirkningen beregnet i henhold til princippet om øjeblikkelig oxidation. GWP-IOBC henvises også til som GWP-GHG i forbindelse med svensk offentlig indkøbslovgivning.

Parameter - **GWP-IOBC**	Unit	A1-A3	A4	C1	C2	C3	C4	D
Betonproduktion – Gruppe 1	kg	3,41E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-2,94E+00
Betonproduktion – Gruppe 2	kg	2,98E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-2,56E+00
Betonproduktion – Gruppe 3	kg	2,10E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-1,80E+00
Betonproduktion – Gruppe 4	kg	1,67E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-1,44E+00
Diverse – Gruppe 1	kg	3,68E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-3,17E+00
Diverse – Gruppe 2	kg	2,39E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-2,06E+00
Diverse – Gruppe 3	kg	2,05E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-1,76E+00
Vejmateriale – Gruppe 1	kg	3,68E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-3,17E+00
Vejmateriale – Gruppe 2	kg	2,23E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-1,91E+00
Vejmateriale – Gruppe 3	kg	2,14E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-1,84E+00
Vejmateriale – Gruppe 4	kg	1,67E+00	3,11E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-1,44E+00

GWP-IOBC *Global warming potential calculated according to the principle of instantaneous oxidation.*

Farlige stoffer

Erklæringen er baseret på reference til grænseværdier og/eller testresultater og/eller sikkerhedsdatablade, der er givet til EPD-verifikator. Dokumentation er tilgængelig efter anmodning til EPD-ejeren.

☒ The product contains no substances given by the REACH Candidate list.

Indeklima
Ikke relevant

Carbon footprint
Carbon footprint er ikke beregnet for dette produkt.

Referencer

ISO 14025:2010	Environmental labels and declarations - Type III environmental declarations - Principles and procedures
ISO 14044:2006	Environmental management - Life cycle assessment - Requirements and guidelines
EN 15804:2012+A2:2019	Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products
ISO 21930:2007	Sustainability in building construction - Environmental declaration of building products

epd-norge Global program operatør	**Program Operator**	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo	e-post:	post@epd-norge.no
	Norway	web	www.epd-norge.no
epd-norge Global program operatør	**Publisher**	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo	e-post:	post@epd-norge.no
	Norway	web	www.epd-norge.no
BEDSTED LØ GRUSVÆRKER A CRH COMPANY	**Owner of the declaration**	tlf	+45 74 66 22 14
	Bedsted Lø Grusværker ApS	Fax	
		e-post:	grus@grus.dk
		web	https://www.grus.dk/
SWECO	**Author of the life cycle assessment**	tlf	+45 72 20 72 07
	Nana Lin Rasmussen og Michael Grandby-Larsen,	Fax	
	Sweco Denmark A/S, Ørestads Boulevard 41,	e-post:	info@sweco.dk
	2300 København S, Danmark	web	https://www.sweco.dk/
ECO PLATFORM EPD VERIFIED	ECO Platform	web	www.eco-platform.org
	ECO Portal	web	ECO Portal