

Environmental Product Declaration

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

Gunderup Grus- og Stenleje



**GUNDERUP
GRUS- OG STENLEJE**
A CRH COMPANY

Deklarationens ejer:
Gunderup Grus- og Stenleje 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-11111-11058

Registreringsnummer:
NEPD-11111-11058

Udstedt: 20.05.2025

Gyldig til: 20.05.2030

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-11111-11058

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:

Gunderup Grus- og Stenleje ApS
Kontaktperson: Bjarne Overgaard
Telefon: 7466 2214
e-mail: grus@grus.dk

Producent:

Gunderup Grus- og Stenleje ApS
Kjellerupvej 6, 9550 Mariager, Danmark
Telefon: 7466 2214
e-mail: grus@grus.dk

Produktionssted:

Gunderup: Kjellerupvej 6, 9550 Mariager, 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:

2024

Sammenlignelighed:

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 og Michael Grandby-Larsen,
Sweco Danmark A/S

Godkendt:



Manager of EPD Norway

Produkt

Produktbeskrivelse:

EPD'en for Gunnderup Grus- og Stenleje ApS for 1 ton grusgravsprodukt, er en gennemsnits EPD for 5 produktgrupper beregnet på specifikke data.

Det er danske grusgravsprodukter, som er inddelt i 2 materialetyper; Betonproduktion og Vejmaterialer.

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

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 en specifik grusgrav; Gunnderup Grus- og Stenleje. Opgravningen af råmaterialet i A1 foregår ved brug af en gummiged. Transporten i A2 er transport af diesel og andre hjælpemidler til produktionen. Produktionen af grusgravsprodukterne foregår efter opgravning af råmateriale af processerne; hydrerende gravemaskine, fødekasse, tørharper, transportbånd, sorterings- og vaskeproces, cyklon og afvander, knuser, jigg og sigte.

Materials	kg/ton	%
Grusgravsprodukt	1000	100

Til produktion 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 tilhørende 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	16	1,4%
Vejmateriale – Gruppe 1	8	4,5%
Vejmateriale – Gruppe 2	1	-
Vejmateriale – Gruppe 3	2	0%
Vejmateriale – Gruppe 4	3	3,8%

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

Produktgrupper Gunderup Grus- og Stenleje:

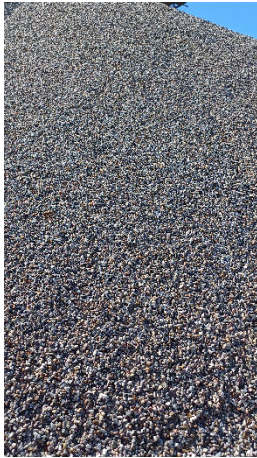
Nedenstående tabeller viser hvilke produkter som tilhører de forskellige produktgrupper.

Betonproduktion - Gruppe 1	Størrelse [mm]	Densitet [kg/m³]
Hvide nøddesten	16/32	1500
Hvide perlesten	2/8	1500
Hvide ærtesten	8/16	1500
Mørke nøddesten	16/32	1550
Nøddesten KL.P	16/32	1550
Perlegrus	1/4	1500
Perlegrus	2/8	1500
Perlegrus Jigget	1/4	1550
Perlegrus Jigget	2/8	1550
Sand KL.E / Pudssand	0/2	1620
Støbemix	0/4	1600
Støbemix	0/8	1550
Støbemix	0/16	1550
Støbesand	0/4	1600
Ærtesten KL.M	8/16	1550
Ærtesten KL.P	8/16	1500

Vejmateriale - Gruppe 1	Størrelse [mm]	Densitet [kg/m³]
Fyldsand/bundsikring II	0/8	1600
Knust	0/11	1450
Knust	2/11	1450
Knust	4/16	1450
Knust	16/22	1450
Singelse	32/64	1500
Stenmel	0/2	1550
Knust	8/16	1450
Vejmateriale - Gruppe 2	Størrelse [mm]	Densitet [kg/m³]
Brolæggersand	0/4	1600
Vejmateriale - Gruppe 3	Størrelse [mm]	Densitet [kg/m³]
Stabilgrus	0/16	1650
Stabilgrus SG II	0/32	1650
Vejmateriale - Gruppe 4	Størrelse [mm]	Densitet [kg/m³]
Drængrus/Filtergrus	1/4	1500
Kampesten	600/-	1500
Kosand	0/0,5	1620

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

Beton – Gruppe 1
Ærtesten KL.M
8/16



Vej – Gruppe 1
Stenmel 0/2



Vej – Gruppe 2
Brolæggersand 0/4



Vej – Gruppe 3
SG II 0/4



Vej – Gruppe 4
Kosand 0/0,5



Tekniske data:

Certificering iht. EN 12620.

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 Gunderup Grus- og Stenleje er beregnet for produktion på en specifik grusgrav, dvs. det er ikke en gennemsnit af flere produktionssteder.

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, Gunderup Grus- og Stenleje, og er baseret på 1 års produktion i 2024.

LCA-modellen for 1 ton grusgravsprodukt fra Gunderup Grus- og Stenleje 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

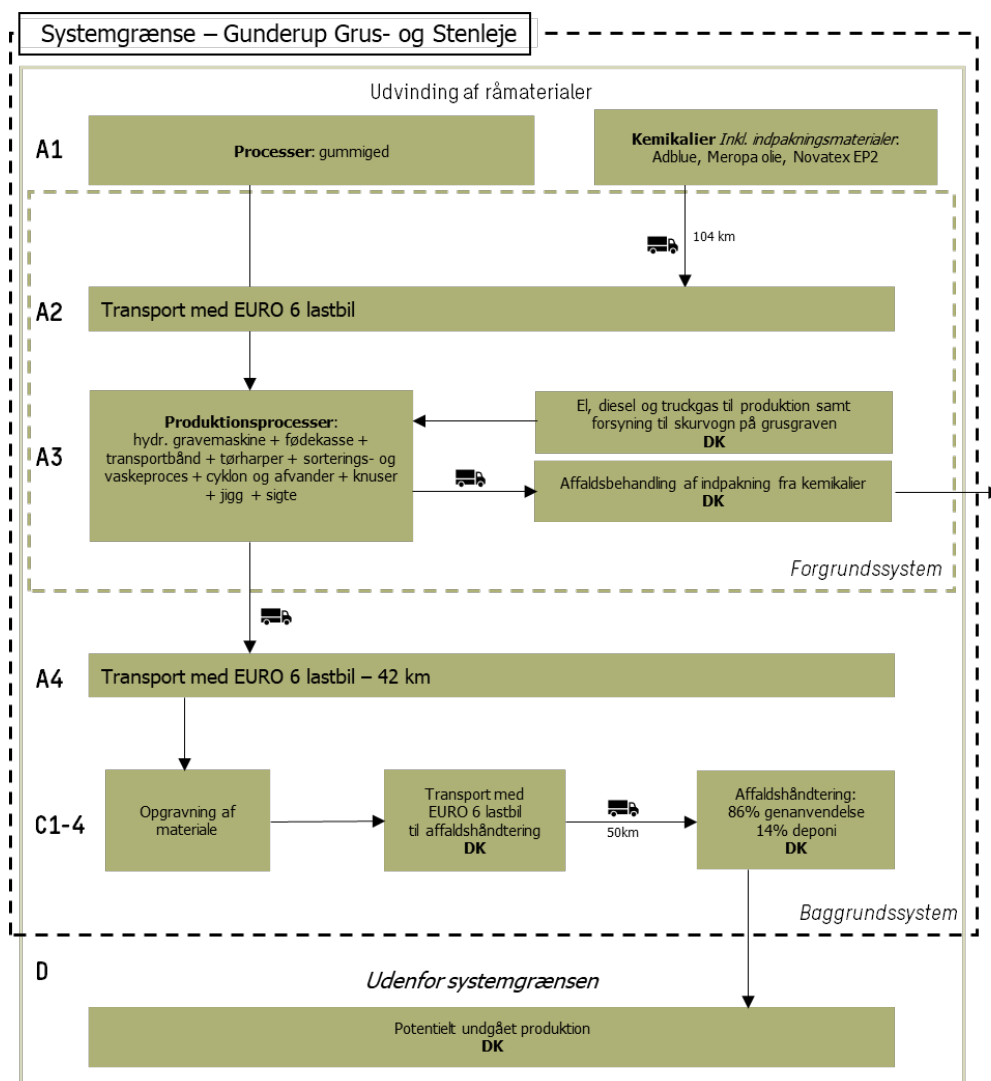
Systemgrænse:

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

For produkter i begge deklarerede produktgrupper "Betonvarer" og "Vejmaterialer" kan produkterne enten benyttes i deres rå form eller indgå i blanding til f.eks. støbemix eller asfalt. 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%	42	0,0192	l/tkm	0,806

Endt levetid (C1, C3, C4)

Der er regnet et dansk endt levetidsscenario 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. deklareret 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 5 produktgrupper for 1 ton grusgravsprodukt.

Betonproduktion – Gruppe 1

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Gunderup, Betonproduktion – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	2,06E+00	1,22E-02	9,06E-01	2,98E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-2,56E+00
GWP-fossil	kg CO2 eq	2,06E+00	1,22E-02	9,05E-01	2,98E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-2,56E+00
GWP-biogenic	kg CO2 eq	2,35E-04	8,47E-06	2,05E-04	4,49E-04	2,33E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-3,86E-04
GWP-luluc	kg CO2 eq	1,94E-04	4,06E-06	1,71E-04	3,69E-04	1,54E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-3,17E-04
ODP	kg CFC11 eq	3,19E-08	2,43E-10	1,72E-08	4,94E-08	9,06E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-4,25E-08
AP	molc H+ eq	1,85E-02	2,55E-05	8,04E-03	2,65E-02	1,03E-02	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-2,28E-02
EP-freshwater	kg P eq	7,74E-06	9,54E-08	8,03E-06	1,59E-05	3,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,36E-05
EP-marine	kg N eq	8,52E-03	5,96E-06	3,54E-03	1,21E-02	2,64E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-1,04E-02
EP-terrestrial	molc N eq	9,35E-02	6,60E-05	3,88E-02	1,32E-01	2,92E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-1,14E-01
POCP	kg NMVOC eq	2,79E-02	4,23E-05	1,16E-02	3,96E-02	1,78E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-3,41E-02
ADP-M&M ¹	kg Sb-Eq	9,36E-07	3,98E-08	5,15E-06	6,12E-06	1,22E-05	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-5,27E-06
ADP-fossil ¹	MJ	1,15E+00	1,43E-02	9,27E-01	2,09E+00	5,37E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-1,80E+00
WDP ¹	m ³	9,27E-02	7,13E-04	9,14E-02	1,85E-01	3,11E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-1,59E-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 – Gunderup, Betonproduktion – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
PM	Disease incidence	5,23E-07	8,96E-10	2,17E-07	7,41E-07	4,22E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-6,37E-07
IRP ²	kBq U235 eq.	5,05E-03	7,93E-05	4,01E-03	9,14E-03	2,88E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-7,86E-03
ETP-fw ¹	CTUe	4,03E+00	4,68E-02	2,48E+00	6,56E+00	1,55E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-5,64E+00
HTP-c ¹	CTUh	8,73E-09	8,67E-11	4,17E-09	1,30E-08	2,78E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-1,12E-08
HTP-nc ¹	CTUh	3,49E-09	1,08E-10	4,86E-09	8,45E-09	4,19E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-7,27E-09
SQP ¹	Dimensionless	1,93E+00	1,04E-01	1,08E+00	3,12E+00	6,57E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-2,68E+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 – Gunderup, Betonproduktion – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
RPEE	MJ	1,82E-01	2,96E-03	5,57E+00	5,75E+00	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-4,95E+00
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	1,82E-01	2,96E-03	5,57E+00	5,75E+00	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-4,95E+00
NRPE	MJ	1,18E+00	1,49E-02	9,98E-01	2,19E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,88E+00
NRPM	MJ	2,75E-02	0,00E+00	-2,75E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,25E-18
TRPE	MJ	1,20E+00	1,49E-02	9,70E-01	2,19E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-1,88E+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	1,98E-03	2,59E-05	1,34E-03	3,35E-03	1,21E-02	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-2,88E-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 – Gunderup, Betonproduktion – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
HW	kg	2,55E-04	4,31E-06	9,33E-04	1,19E-03	1,83E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,03E-03
NHW	kg	1,75E-02	8,30E-03	1,21E-02	3,79E-02	5,58E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-3,26E-02
RW	kg	3,25E-06	5,54E-08	2,63E-06	5,93E-06	1,96E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-5,10E-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 – Gunderup, 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 – Gunderup, 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 CO ₂		

Vejmateriale – Gruppe 1

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Gunderup, Vejmateriale – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	2,07E+00	2,30E-02	5,79E+00	7,88E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-6,78E+00
GWP-fossil	kg CO2 eq	2,06E+00	2,30E-02	5,79E+00	7,88E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-6,77E+00
GWP-biogenic	kg CO2 eq	2,37E-04	1,59E-05	8,30E-04	1,08E-03	2,33E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-9,31E-04
GWP-luluc	kg CO2 eq	1,99E-04	7,63E-06	7,09E-04	9,16E-04	1,54E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-7,88E-04
ODP	kg CFC11 eq	3,22E-08	4,57E-10	9,61E-08	1,29E-07	9,06E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-1,11E-07
AP	molc H+ eq	1,85E-02	4,79E-05	5,20E-02	7,05E-02	1,03E-02	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-6,06E-02
EP-freshwater	kg P eq	7,91E-06	1,79E-07	3,12E-05	3,93E-05	3,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-3,38E-05
EP-marine	kg N eq	8,53E-03	1,12E-05	2,37E-02	3,22E-02	2,64E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-2,77E-02
EP-terrestrial	molc N eq	9,35E-02	1,24E-04	2,59E-01	3,53E-01	2,92E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-3,04E-01
POCP	kg NMVOC eq	2,80E-02	7,96E-05	7,75E-02	1,06E-01	1,78E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-9,08E-02
ADP-M&M ¹	kg Sb-Eq	9,97E-07	7,48E-08	1,29E-05	1,40E-05	1,22E-05	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-1,20E-05
ADP-fossil ¹	MJ	1,17E+00	2,69E-02	4,07E+00	5,27E+00	5,37E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-4,53E+00
WDP ¹	m ³	1,04E-01	1,34E-03	3,11E-01	4,17E-01	3,11E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-3,58E-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 – Gunderup, Vejmateriale – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
PM	Disease incidence	5,23E-07	1,69E-09	1,45E-06	1,98E-06	4,22E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-1,70E-06
IRP ²	kBq U235 eq.	5,17E-03	1,49E-04	1,75E-02	2,29E-02	2,88E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-1,97E-02
ETP-fw ¹	CTUe	4,11E+00	8,80E-02	1,25E+01	1,67E+01	1,55E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-1,44E+01
HTP-c ¹	CTUh	8,97E-09	1,63E-10	2,40E-08	3,32E-08	2,78E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-2,85E-08
HTP-nc ¹	CTUh	3,54E-09	2,03E-10	1,70E-08	2,07E-08	4,19E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-1,78E-08
SQP ¹	Dimensionless	1,94E+00	1,95E-01	5,89E+00	8,03E+00	6,57E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-6,90E+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 – Gunderup, Vejmateriale – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
RPEE	MJ	1,88E-01	5,57E-03	1,28E+01	1,30E+01	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,12E+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	1,88E-01	5,57E-03	1,28E+01	1,30E+01	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-1,12E+01
NRPE	MJ	1,19E+00	2,81E-02	4,29E+00	5,51E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-4,74E+00
NRPM	MJ	3,55E-02	0,00E+00	-3,55E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,90E-19
TRPE	MJ	1,22E+00	2,81E-02	4,26E+00	5,51E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-4,74E+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	2,01E-03	4,86E-05	6,47E-03	8,53E-03	1,21E-02	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-7,34E-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 – Gunderup, Vejmateriale – Gruppe 1											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
HW	kg	2,58E-04	8,10E-06	2,52E-03	2,78E-03	1,83E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-2,39E-03
NHW	kg	1,78E-02	1,56E-02	5,72E-02	9,06E-02	5,58E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-7,79E-02
RW	kg	3,34E-06	1,04E-07	1,13E-05	1,47E-05	1,96E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-1,27E-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 – Gunderup, 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 – Gunderup, 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 CO ₂		

Vejmateriale – Gruppe 2

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Gunderup, Vejmateriale – Gruppe 2											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	2,05E+00	7,37E-03	5,12E+00	7,18E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-6,17E+00
GWP-fossil	kg CO2 eq	2,05E+00	7,36E-03	5,12E+00	7,18E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-6,17E+00
GWP-biogenic	kg CO2 eq	2,29E-04	5,10E-06	6,40E-04	8,74E-04	2,33E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-7,52E-04
GWP-luluc	kg CO2 eq	1,85E-04	2,44E-06	5,28E-04	7,16E-04	1,54E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-6,16E-04
ODP	kg CFC11 eq	3,16E-08	1,46E-10	8,14E-08	1,13E-07	9,06E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-9,73E-08
AP	molc H+ eq	1,84E-02	1,53E-05	4,61E-02	6,45E-02	1,03E-02	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-5,55E-02
EP-freshwater	kg P eq	7,46E-06	5,75E-08	2,24E-05	2,99E-05	3,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-2,57E-05
EP-marine	kg N eq	8,52E-03	3,59E-06	2,12E-02	2,97E-02	2,64E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-2,56E-02
EP-terrestrial	molc N eq	9,34E-02	3,98E-05	2,32E-01	3,26E-01	2,92E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-2,80E-01
POCP	kg NMVOC eq	2,79E-02	2,55E-05	6,93E-02	9,72E-02	1,78E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-8,36E-02
ADP-M&M ¹	kg Sb-Eq	8,33E-07	2,40E-08	6,19E-06	7,05E-06	1,22E-05	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-6,06E-06
ADP-fossil ¹	MJ	1,12E+00	8,61E-03	3,12E+00	4,24E+00	5,37E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-3,65E+00
WDP ¹	m ³	7,52E-02	4,30E-04	2,04E-01	2,80E-01	3,11E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-2,41E-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 – Gunderup, Vejmateriale – Gruppe 2											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
PM	Disease incidence	5,22E-07	5,40E-10	1,30E-06	1,82E-06	4,22E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-1,57E-06
IRP ²	kBq U235 eq.	4,85E-03	4,78E-05	1,34E-02	1,83E-02	2,88E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-1,58E-02
ETP-fw ¹	CTUe	3,91E+00	2,82E-02	1,02E+01	1,42E+01	1,55E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-1,22E+01
HTP-c ¹	CTUh	8,36E-09	5,23E-11	2,06E-08	2,90E-08	2,78E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-2,49E-08
HTP-nc ¹	CTUh	3,39E-09	6,50E-11	1,14E-08	1,48E-08	4,19E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-1,27E-08
SQP ¹	Dimensionless	1,90E+00	6,26E-02	4,94E+00	6,90E+00	6,57E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-5,94E+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 – Gunderup, Vejmateriale – Gruppe 2											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
RPEE	MJ	1,73E-01	1,78E-03	5,38E+00	5,56E+00	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-4,78E+00
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	1,73E-01	1,78E-03	5,38E+00	5,56E+00	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-4,78E+00
NRPE	MJ	1,15E+00	8,99E-03	3,28E+00	4,44E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-3,82E+00
NRPM	MJ	1,35E-02	0,00E+00	-1,35E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,30E-19
TRPE	MJ	1,17E+00	8,99E-03	3,26E+00	4,44E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-3,82E+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	1,93E-03	1,56E-05	5,18E-03	7,12E-03	1,21E-02	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-6,13E-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 – Gunderup, Vejmateriale – Gruppe 2											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
HW	kg	2,49E-04	2,59E-06	1,35E-03	1,60E-03	1,83E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,38E-03
NHW	kg	1,69E-02	5,00E-03	4,54E-02	6,73E-02	5,58E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-5,78E-02
RW	kg	3,09E-06	3,34E-08	8,57E-06	1,17E-05	1,96E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-1,01E-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 – Gunderup, 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 – Gunderup, 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 CO ₂		

Vejmateriale – Gruppe 3

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton grusgravsprodukt – Gunderup, Vejmateriale – Gruppe 3											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	2,06E+00	1,17E-02	2,78E+00	4,85E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-4,17E+00
GWP-fossil	kg CO2 eq	2,06E+00	1,17E-02	2,78E+00	4,85E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-4,17E+00
GWP-biogenic	kg CO2 eq	2,34E-04	8,13E-06	4,04E-04	6,46E-04	2,33E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-5,55E-04
GWP-luluc	kg CO2 eq	1,94E-04	3,90E-06	3,25E-04	5,22E-04	1,54E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-4,49E-04
ODP	kg CFC11 eq	3,19E-08	2,33E-10	4,56E-08	7,77E-08	9,06E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-6,69E-08
AP	molc H+ eq	1,85E-02	2,44E-05	2,50E-02	4,35E-02	1,03E-02	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-3,74E-02
EP-freshwater	kg P eq	7,73E-06	9,16E-08	1,42E-05	2,20E-05	3,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,89E-05
EP-marine	kg N eq	8,52E-03	5,72E-06	1,14E-02	1,99E-02	2,64E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-1,71E-02
EP-terrestrial	molc N eq	9,35E-02	6,33E-05	1,25E-01	2,19E-01	2,92E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-1,88E-01
POCP	kg NMVOC eq	2,79E-02	4,06E-05	3,73E-02	6,53E-02	1,78E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-5,62E-02
ADP-M&M ¹	kg Sb-Eq	9,31E-07	3,82E-08	5,36E-06	6,33E-06	1,22E-05	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-5,44E-06
ADP-fossil ¹	MJ	1,15E+00	1,37E-02	1,88E+00	3,04E+00	5,37E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-2,61E+00
WDP ¹	m ³	9,26E-02	6,85E-04	1,38E-01	2,31E-01	3,11E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-1,99E-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 – Gunderup, Vejmateriale – Gruppe 3											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
PM	Disease incidence	5,23E-07	8,60E-10	7,00E-07	1,22E-06	4,22E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-1,05E-06
IRP ²	kBq U235 eq.	5,04E-03	7,62E-05	8,09E-03	1,32E-02	2,88E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-1,14E-02
ETP-fw ¹	CTUe	4,03E+00	4,49E-02	5,88E+00	9,95E+00	1,55E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-8,56E+00
HTP-c ¹	CTUh	8,73E-09	8,33E-11	1,14E-08	2,02E-08	2,78E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-1,74E-08
HTP-nc ¹	CTUh	3,48E-09	1,04E-10	7,57E-09	1,12E-08	4,19E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-9,59E-09
SQP ¹	Dimensionless	1,93E+00	9,97E-02	2,79E+00	4,81E+00	6,57E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-4,14E+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 – Gunderup, Vejmateriale – Gruppe 3											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
RPEE	MJ	1,82E-01	2,84E-03	5,20E+00	5,38E+00	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-4,63E+00
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	1,82E-01	2,84E-03	5,20E+00	5,38E+00	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-4,63E+00
NRPE	MJ	1,17E+00	1,43E-02	1,99E+00	3,18E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,74E+00
NRPM	MJ	2,66E-02	0,00E+00	-2,66E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,19E-18
TRPE	MJ	1,20E+00	1,43E-02	1,97E+00	3,18E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,74E+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	1,98E-03	2,48E-05	3,02E-03	5,02E-03	1,21E-02	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-4,32E-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 – Gunderup, Vejmateriale – Gruppe 3											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
HW	kg	2,54E-04	4,13E-06	1,08E-03	1,34E-03	1,83E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,15E-03
NHW	kg	1,75E-02	7,97E-03	2,67E-02	5,21E-02	5,58E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-4,48E-02
RW	kg	3,24E-06	5,32E-08	5,20E-06	8,50E-06	1,96E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-7,31E-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 – Gunderup, 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 – Gunderup, 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 CO ₂		

Vejmateriale – Gruppe 4

Core environmental impact indicators

CORE ENVIRONMENTAL IMPACTS PER 1 ton Grus – Gunderup, Vejmateriale – Gruppe 4											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	2,06E+00	1,22E-02	9,64E-01	3,03E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,27E-01	-2,61E+00
GWP-fossil	kg CO2 eq	2,06E+00	1,22E-02	9,63E-01	3,03E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,24E-01	-2,61E+00
GWP-biogenic	kg CO2 eq	2,35E-04	8,47E-06	2,60E-04	5,04E-04	2,33E-03	2,22E-04	2,77E-03	0,00E+00	2,11E-03	-4,33E-04
GWP-luluc	kg CO2 eq	1,94E-04	4,06E-06	2,47E-04	4,45E-04	1,54E-03	1,77E-04	1,84E-03	0,00E+00	1,31E-04	-3,83E-04
ODP	kg CFC11 eq	3,19E-08	2,43E-10	2,07E-08	5,29E-08	9,06E-08	3,11E-08	1,08E-07	0,00E+00	3,07E-08	-4,55E-08
AP	molc H+ eq	1,85E-02	2,55E-05	8,47E-03	2,70E-02	1,03E-02	1,84E-02	1,22E-02	0,00E+00	5,13E-03	-2,32E-02
EP-freshwater	kg P eq	7,74E-06	9,54E-08	1,20E-05	1,98E-05	3,51E-05	7,16E-06	4,18E-05	0,00E+00	4,65E-06	-1,70E-05
EP-marine	kg N eq	8,52E-03	5,96E-06	3,60E-03	1,21E-02	2,64E-03	8,50E-03	3,14E-03	0,00E+00	2,19E-03	-1,04E-02
EP-terrestrial	molc N eq	9,35E-02	6,60E-05	3,95E-02	1,33E-01	2,92E-02	9,32E-02	3,47E-02	0,00E+00	2,40E-02	-1,14E-01
POCP	kg NMVOC eq	2,79E-02	4,23E-05	1,19E-02	3,99E-02	1,78E-02	2,78E-02	2,12E-02	0,00E+00	9,69E-03	-3,43E-02
ADP-M&M ¹	kg Sb-Eq	9,35E-07	3,98E-08	8,90E-06	9,88E-06	1,22E-05	7,26E-07	1,45E-05	0,00E+00	1,03E-06	-8,50E-06
ADP-fossil ¹	MJ	1,15E+00	1,43E-02	1,30E+00	2,47E+00	5,37E+00	1,08E+00	6,39E+00	0,00E+00	7,90E-01	-2,12E+00
WDP ¹	m ³	9,27E-02	7,13E-04	1,44E-01	2,37E-01	3,11E-01	5,76E-02	3,70E-01	0,00E+00	7,10E-02	-2,04E-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 – Gunderup, Vejmateriale – Gruppe 4											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
PM	Disease incidence	5,23E-07	8,96E-10	2,21E-07	7,45E-07	4,22E-07	5,21E-07	5,03E-07	0,00E+00	1,30E-07	-6,41E-07
IRP ²	kBq U235 eq.	5,05E-03	7,93E-05	5,64E-03	1,08E-02	2,88E-02	4,63E-03	3,43E-02	0,00E+00	6,63E-03	-9,26E-03
ETP-fw ¹	CTUe	4,03E+00	4,68E-02	3,21E+00	7,28E+00	1,55E+01	3,77E+00	1,84E+01	0,00E+00	2,10E+00	-6,26E+00
HTP-c ¹	CTUh	8,73E-09	8,67E-11	4,88E-09	1,37E-08	2,78E-08	7,95E-09	3,31E-08	0,00E+00	3,47E-09	-1,18E-08
HTP-nc ¹	CTUh	3,48E-09	1,08E-10	7,57E-09	1,12E-08	4,19E-08	3,29E-09	4,99E-08	0,00E+00	3,03E-09	-9,60E-09
SQP ¹	Dimensionless	1,93E+00	1,04E-01	1,33E+00	3,36E+00	6,57E+01	1,87E+00	7,82E+01	0,00E+00	4,16E+01	-2,89E+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 – Gunderup, Vejmateriale – Gruppe 4											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
RPEE	MJ	1,82E-01	2,96E-03	9,83E+00	1,00E+01	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-8,61E+00
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	1,82E-01	2,96E-03	9,83E+00	1,00E+01	1,04E+00	1,64E-01	1,24E+00	0,00E+00	4,20E-01	-8,61E+00
NRPE	MJ	1,18E+00	1,49E-02	1,39E+00	2,58E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,22E+00
NRPM	MJ	2,74E-02	0,00E+00	-2,74E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,23E-18
TRPE	MJ	1,20E+00	1,49E-02	1,36E+00	2,58E+00	5,61E+00	1,13E+00	6,68E+00	0,00E+00	8,20E-01	-2,22E+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	1,98E-03	2,59E-05	1,79E-03	3,79E-03	1,21E-02	1,87E-03	1,44E-02	0,00E+00	2,19E-02	-3,26E-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 – Gunderup, Vejmateriale – Gruppe 4											
Indicator	Unit	A1	A2	A3	A1-A3	A4	C1	C2	C3	C4	D
HW	kg	2,55E-04	4,30E-06	1,56E-03	1,82E-03	1,83E-03	2,43E-04	2,18E-03	0,00E+00	2,94E-04	-1,56E-03
NHW	kg	1,75E-02	8,30E-03	1,63E-02	4,21E-02	5,58E+00	1,63E-02	6,64E+00	0,00E+00	1,40E+02	-3,62E-02
RW	kg	3,25E-06	5,54E-08	3,75E-06	7,05E-06	1,96E-05	2,92E-06	2,34E-05	0,00E+00	4,14E-06	-6,06E-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 – Gunderup, 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 – Gunderup, 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 CO ₂		

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 oprindelsesgarantier (GoO) for elektriciteten. Oprindelsesgarantien, der anvendes i denne EPD, leveres af Centrica Energy Trading A/S.

Resultater med nationalt elektricitetsmix er ikke beregnet.

Electricity source	Foreground / core [kWh]	GWP _{total} [kg CO ₂ -eq/kWh]	SUM [kgCO ₂ -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

*Ecoinvent 3.10: residualmix 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	2,98E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-2,56E+00
Vejmateriale – Gruppe 1	kg	7,88E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-6,78E+00
Vejmateriale – Gruppe 2	kg	7,18E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-6,17E+00
Vejmateriale – Gruppe 3	kg	4,85E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-4,17E+00
Vejmateriale – Gruppe 4	kg	3,03E+00	4,35E+00	2,03E+00	5,18E+00	0,00E+00	8,25E-01	-2,61E+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 operator	Program Operator	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo Norway	e-post: web	post@epd-norge.no www.epd-norge.no
 epd-norge Global program operator	Publisher	tlf	+47 23 08 80 00
	The Norwegian EPD Foundation		
	Post Box 5250 Majorstuen, 0303 Oslo Norway	e-post: web	post@epd-norge.no www.epd-norge.no
 GUNDERUP GRUS- OG STENLEJE A CRH COMPANY	Owner of the declaration	tlf	+45 74 66 22 14
	Gunderup Grus- og Stenleje ApS	Fax	
		e-post: web	grus@grus.dk 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, 2300 København S, Danmark	e-post: web	info@sweco.dk https://www.sweco.dk/
 ECO PLATFORM EPD VERIFIED	ECO Platform ECO Portal	web	www.eco-platform.org
		web	ECO Portal