

This appendix refers to the EPD MD-24034\_EN\_rev1. Results in the appendix communicates LCA results in the format described in EN15804+A1:2013, in order to accommodate a need in the transition period between the two standard revisions. The appendix cannot stand alone, as the reference EPD describes the basis of the assessment.

RT392 DK-NF BS

ENVIRONMENTAL IMPACTS PER TONNES RT392 DK-NF BS										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP	[kg CO <sub>2</sub> eq.]	1,40E+02	5,27E+00	3,21E+00	0,00E+00	0,00E+00	7,35E+00	3,44E+00	5,41E-02	-5,53E+00
OPD	[kg CFC 11 eq.]	6,05E-06	9,49E-08	1,36E-08	0,00E+00	0,00E+00	1,32E-07	4,48E-08	1,53E-09	-9,74E-08
AP	[kg SO <sub>2</sub> eq.]	7,48E-01	1,58E-02	2,80E-03	0,00E+00	0,00E+00	2,14E-02	2,96E-02	3,24E-04	-3,32E-02
EP	[kg SO <sub>4</sub> <sup>3-</sup> eq.]	8,99E-02	3,45E-03	9,01E-04	0,00E+00	0,00E+00	4,68E-03	5,41E-03	6,22E-05	-1,17E-02
POCP	[kg ethene-eq.]	1,54E-02	8,30E-04	1,19E-04	0,00E+00	0,00E+00	1,15E-03	6,21E-04	1,41E-05	-2,35E-03
ADPE	[kg Sb-eq.]	5,48E-04	1,43E-05	1,57E-06	0,00E+00	0,00E+00	2,37E-05	1,21E-06	5,79E-08	-5,57E-05
ADPF	[MJ]	1,42E+03	7,60E+01	1,03E+01	0,00E+00	0,00E+00	1,02E+02	4,50E+01	1,37E+00	-6,07E+01
Caption	GWP = Global warming potential; OPD = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources									
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.									

RESOURCE USE PER TONNES										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
PERE	[MJ]	3,26E+02	1,13E+00	2,56E-01	0,00E+00	0,00E+00	1,62E+00	2,57E-01	2,77E-02	-3,90E+01
PERM	[MJ]	3,64E+01	0,00E+00	-3,64E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,62E+02	1,13E+00	-3,62E+01	0,00E+00	0,00E+00	1,62E+00	2,57E-01	2,77E-02	-3,90E+01
PENRE	[MJ]	4,04E+02	7,76E+01	1,06E+01	0,00E+00	0,00E+00	1,05E+02	4,53E+01	1,40E+00	-7,12E+01
PENRM	[MJ]	3,29E+01	0,00E+00	-3,29E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,37E+02	7,76E+01	-2,22E+01	0,00E+00	0,00E+00	1,05E+02	4,53E+01	1,40E+00	-7,12E+01
SM	[kg]	9,06E+01	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
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
FW	[m <sup>3</sup> ]	8,31E-01	1,22E-02	7,28E-03	0,00E+00	0,00E+00	1,49E-02	3,55E-03	1,63E-03	-3,65E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.									

WASTE CATEGORIES AND OUTPUT FLOWS PER TONNES										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
HWD	[kg]	7,14E-03	4,82E-04	6,30E-05	0,00E+00	0,00E+00	6,67E-04	3,04E-04	6,81E-06	-3,79E-04
NHWD	[kg]	1,54E+01	6,79E+00	3,38E+01	0,00E+00	0,00E+00	5,10E+00	6,48E-02	9,69E+00	-9,46E-01
RWD	[kg]	4,63E-04	2,36E-05	5,58E-06	0,00E+00	0,00E+00	3,40E-05	4,96E-06	3,02E-07	-1,63E-04

CRU	[kg]	9,20E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,70E+01	0,00E+00	1,03E+00	0,00E+00	0,00E+00	0,00E+00	9,60E+02	0,00E+00	0,00E+00
MER	[kg]	1,94E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE	[MJ]	0,00E+00	0,00E+00	1,16E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.									

RT390 DK-NF BS

ENVIRONMENTAL IMPACTS PER TONNES RT390 DK-NF BS										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP	[kg CO <sub>2</sub> eq.]	1,18E+02	5,27E+00	3,21E+00	0,00E+00	0,00E+00	7,35E+00	3,44E+00	5,41E-02	-5,51E+00
OPD	[kg CFC 11 eq.]	5,85E-06	9,48E-08	1,36E-08	0,00E+00	0,00E+00	1,32E-07	4,48E-08	1,53E-09	-9,68E-08
AP	[kg SO <sub>2</sub> eq.]	7,41E-01	1,58E-02	2,78E-03	0,00E+00	0,00E+00	2,14E-02	2,96E-02	3,24E-04	-3,31E-02
EP	[kg SO <sub>4</sub> <sup>3-</sup> eq.]	9,00E-02	3,45E-03	8,88E-04	0,00E+00	0,00E+00	4,68E-03	5,41E-03	6,22E-05	-1,16E-02
POCP	[kg ethene-eq.]	1,47E-02	8,29E-04	1,18E-04	0,00E+00	0,00E+00	1,15E-03	6,21E-04	1,41E-05	-2,34E-03
ADPE	[kg Sb-eq.]	5,91E-04	1,43E-05	1,56E-06	0,00E+00	0,00E+00	2,37E-05	1,21E-06	5,79E-08	-5,56E-05
ADPF	[MJ]	1,32E+03	7,59E+01	1,03E+01	0,00E+00	0,00E+00	1,02E+02	4,50E+01	1,37E+00	-6,04E+01
Caption	GWP = Global warming potential; OPD = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources									
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*102 or 195, while 1,12E-11 is the same as 1,12*10-11 or 0,0000000000112.									

RESOURCE USE PER TONNES										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
PERE	[MJ]	3,24E+02	1,13E+00	2,51E-01	0,00E+00	0,00E+00	1,62E+00	2,57E-01	2,77E-02	-3,86E+01
PERM	[MJ]	3,46E+01	0,00E+00	-3,46E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,58E+02	1,13E+00	-3,44E+01	0,00E+00	0,00E+00	1,62E+00	2,57E-01	2,77E-02	-3,86E+01
PENRE	[MJ]	3,99E+02	7,75E+01	1,06E+01	0,00E+00	0,00E+00	1,05E+02	4,53E+01	1,40E+00	-7,09E+01
PENRM	[MJ]	3,29E+01	0,00E+00	-3,29E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,32E+02	7,75E+01	-2,23E+01	0,00E+00	0,00E+00	1,05E+02	4,53E+01	1,40E+00	-7,09E+01
SM	[kg]	1,59E+02	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]	4,30E+01	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
FW	[m <sup>3</sup> ]	6,99E-01	1,21E-02	7,25E-03	0,00E+00	0,00E+00	1,49E-02	3,55E-03	1,63E-03	-3,65E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*102 or 195, while 1,12E-11 is the same as 1,12*10-11 or 0,0000000000112.									

WASTE CATEGORIES AND OUTPUT FLOWS PER TONNES										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
HWD	[kg]	6,85E-03	4,82E-04	6,26E-05	0,00E+00	0,00E+00	6,67E-04	3,04E-04	6,81E-06	-3,79E-04
NHWD	[kg]	1,58E+01	6,78E+00	3,37E+01	0,00E+00	0,00E+00	5,10E+00	6,48E-02	9,69E+00	-9,44E-01
RWD	[kg]	4,40E-04	2,36E-05	5,41E-06	0,00E+00	0,00E+00	3,40E-05	4,96E-06	3,02E-07	-1,62E-04

CRU	[kg]	9,20E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,70E+01	0,00E+00	9,66E-01	0,00E+00	0,00E+00	0,00E+00	9,60E+02	0,00E+00	0,00E+00
MER	[kg]	1,94E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE	[MJ]	0,00E+00	0,00E+00	1,14E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*102 or 195, while 1,12E-11 is the same as 1,12*10-11 or 0,0000000000112.									

RT307 DK-17 BS

ENVIRONMENTAL IMPACTS PER TONNES RT307 DK-17 BS										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP	[kg CO <sub>2</sub> eq.]	1,18E+02	5,23E+00	3,19E+00	0,00E+00	0,00E+00	7,35E+00	3,44E+00	5,41E-02	-5,39E+00
OPD	[kg CFC 11 eq.]	5,84E-06	9,42E-08	1,31E-08	0,00E+00	0,00E+00	1,32E-07	4,48E-08	1,53E-09	-9,34E-08
AP	[kg SO <sub>2</sub> eq.]	7,40E-01	1,57E-02	2,67E-03	0,00E+00	0,00E+00	2,14E-02	2,96E-02	3,24E-04	-3,26E-02
EP	[kg SO <sub>4</sub> <sup>3-</sup> eq.]	8,97E-02	3,43E-03	8,19E-04	0,00E+00	0,00E+00	4,68E-03	5,41E-03	6,22E-05	-1,13E-02
POCP	[kg ethene-eq.]	1,46E-02	8,24E-04	1,14E-04	0,00E+00	0,00E+00	1,15E-03	6,21E-04	1,41E-05	-2,32E-03
ADPE	[kg Sb-eq.]	5,90E-04	1,42E-05	1,50E-06	0,00E+00	0,00E+00	2,37E-05	1,21E-06	5,79E-08	-5,50E-05
ADPF	[MJ]	1,32E+03	7,54E+01	9,98E+00	0,00E+00	0,00E+00	1,02E+02	4,50E+01	1,37E+00	-5,91E+01
Caption	GWP = Global warming potential; OPD = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources									
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*102 or 195, while 1,12E-11 is the same as 1,12*10-11 or 0,0000000000112.									

RESOURCE USE PER TONNES										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
PERE	[MJ]	3,17E+02	1,13E+00	2,25E-01	0,00E+00	0,00E+00	1,62E+00	2,57E-01	2,77E-02	-3,63E+01
PERM	[MJ]	2,49E+01	0,00E+00	-2,49E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	3,42E+02	1,13E+00	-2,46E+01	0,00E+00	0,00E+00	1,62E+00	2,57E-01	2,77E-02	-3,63E+01
PENRE	[MJ]	3,96E+02	7,71E+01	1,02E+01	0,00E+00	0,00E+00	1,05E+02	4,53E+01	1,40E+00	-6,91E+01
PENRM	[MJ]	3,29E+01	0,00E+00	-3,29E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,29E+02	7,71E+01	-2,26E+01	0,00E+00	0,00E+00	1,05E+02	4,53E+01	1,40E+00	-6,91E+01
SM	[kg]	1,59E+02	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]	4,87E+01	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
FW	[m <sup>3</sup> ]	7,29E-01	1,21E-02	7,05E-03	0,00E+00	0,00E+00	1,49E-02	3,55E-03	1,63E-03	-3,62E-01
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*102 or 195, while 1,12E-11 is the same as 1,12*10-11 or 0,0000000000112.									

WASTE CATEGORIES AND OUTPUT FLOWS PER TONNES										
Parameter	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
HWD	[kg]	6,83E-03	4,79E-04	6,04E-05	0,00E+00	0,00E+00	6,67E-04	3,04E-04	6,81E-06	-3,74E-04
NHWD	[kg]	1,57E+01	6,74E+00	3,30E+01	0,00E+00	0,00E+00	5,10E+00	6,48E-02	9,69E+00	-9,35E-01
RWD	[kg]	4,37E-04	2,35E-05	4,51E-06	0,00E+00	0,00E+00	3,40E-05	4,96E-06	3,02E-07	-1,55E-04

CRU	[kg]	9,20E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	6,70E+01	0,00E+00	6,43E-01	0,00E+00	0,00E+00	0,00E+00	9,60E+02	0,00E+00	0,00E+00
MER	[kg]	1,94E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE	[MJ]	0,00E+00	0,00E+00	1,03E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy									
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*102 or 195, while 1,12E-11 is the same as 1,12*10-11 or 0,0000000000112.									

---

Checked and approved by



---

Mirko Miseljic, FORCE Technology Denmark  
*Third party verifier of MD-24034\_EN\_rev1*

---

Martha Katrine Sørensen  
*EPD Danmark*