This appendix refers to the EPD MD-24200-EN, developed according to EN15804+A2:2019.

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.

ENVIRONMENTAL IMPACTS PER 1 m³ of insulation material with λ-value = 0,037W/mK

									Scenario 1			Scenario 2		
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**	**C3**	**C4**	**D**
GWP	kg CO2-eq.	3,92E+01	2,28E+00	1,33E+01	9,64E-02	2,35E+01	0,00E+00	1,20E-02	7,65E-03	0,00E+00	-4,06E+01	0,00E+00	6,77E+01	-2,46E+01
ODP	kg CFC11-eq.	9,34E-10	3,49E-13	4,42E-08	1,48E-14	2,45E-13	0,00E+00	1,84E-15	3,52E-13	0,00E+00	-9,20E-11	0,00E+00	3,50E-12	-2,33E-10
AP	kg SO2-eq.	4,91E-02	2,08E-03	3,82E-02	1,01E-04	2,46E-04	0,00E+00	1,26E-05	3,37E-17	0,00E+00	-4,69E-02	0,00E+00	3,56E-03	-3,91E-02
EP	kg PO4(3-)-eq.	6,76E-03	4,42E-04	7,37E-03	2,20E-05	4,94E-05	0,00E+00	2,76E-06	7,94E-09	0,00E+00	-6,64E-03	0,00E+00	8,00E-04	-6,36E-03
POCP	kg ethene-eq	9,55E-03	1,91E-04	4,98E-01	8,12E-06	2,19E-05	0,00E+00	1,01E-06	8,83E-10	0,00E+00	-9,19E-03	0,00E+00	3,77E-04	-3,94E-03
ADPE	kg Sb-eq	1,51E-06	1,50E-07	1,12E-05	6,37E-09	9,27E-09	0,00E+00	7,93E-10	1,06E-12	0,00E+00	-1,55E-06	0,00E+00	3,07E-08	-2,49E-06
ADPF	MJ	1,43E+03	3,05E+01	5,06E+02	1,29E+00	1,89E+00	0,00E+00	1,61E-01	1,52E-09	0,00E+00	-1,43E+03	0,00E+00	6,10E+00	-2,78E+02
Caption	GWP = Global warming potential; ODP = 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: $1.95*10^{2}$ or 195, while 1.12E-11 is the same as $1.12*10^{-11}$ or 0.0000000000112.													

RESOURCE USE PER 1 m³ of insulation material with λ-value = 0,037W/mK

									Scenario 1			Scenario 2		
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**	**C3**	**C4**	**D**
PERE	MJ	3,85E+01	2,26E+00	1,57E+01	9,57E-02	2,24E-01	0,00E+00	1,19E-02	2,65E-02	0,00E+00	-4,32E+01	0,00E+00	1,90E+00	-2,43E+02
PERM	MJ	5,80E+00	0,00E+00	5,16E+00	0,00E+00	-1,10E+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
PERT	MJ	4,43E+01	2,26E+00	2,09E+01	9,57E-02	-1,07E+01	0,00E+00	1,19E-02	2,65E-02	0,00E+00	-4,32E+01	0,00E+00	1,90E+00	-2,43E+02
PENRE	MJ	1,46E+03	3,11E+01	7,33E+02	1,32E+00	1,99E+00	0,00E+00	1,64E-01	9,91E-02	0,00E+00	-1,46E+03	0,00E+00	7,48E+00	-3,87E+02
PENRM	MJ	7,56E+02	0,00E+00	1,21E+01	0,00E+00	-1,35E+01	0,00E+00	0,00E+00	-7,54E+02	0,00E+00	0,00E+00	0,00E+00	-7,54E+02	0,00E+00
PENRT	MJ	2,22E+03	3,11E+01	7,46E+02	1,32E+00	-1,15E+01	0,00E+00	1,64E-01	-7,54E+02	0,00E+00	-1,46E+03	0,00E+00	-7,47E+02	-3,87E+02
SM	kg	2,96E-01	0,00E+00	1,32E+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	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	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	0,00E+00	0,00E+00	0,00E+00
FW	m3	2,03E-01	2,47E-03	2,50E-01	1,05E-04	3,64E-03	0,00E+00	1,30E-05	0,00E+00	0,00E+00	-2,15E-01	0,00E+00	1,29E-01	-1,47E-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, e.g., 1.95E+02. This number can also be written as: $1.95*10^{2}$ or 195, while 1.12E-11 is the same as $1.12*10^{-11}$ or 0.0000000000112.													

WASTE CATEGORIES AND OUTPUT FLOWS PER1 m³ of insulation material with λ-value = 0,037W/mK

									Scenario 1			Scenario 2		
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**	**C3**	**C4**	**D**
HWD	kg	9,28E-08	9,64E-11	4,91E-09	4,09E-12	1,17E-11	0,00E+00	5,08E-13	0,00E+00	0,00E+00	-9,88E-08	0,00E+00	1,69E-10	-1,63E-08
NHWD	kg	3,36E-01	4,75E-03	2,75E-01	2,01E-04	6,66E-02	0,00E+00	2,50E-05	2,31E-15	0,00E+00	-3,69E-01	0,00E+00	2,45E-01	-7,38E-01
RWD	kg	4,83E-03	5,83E-05	1,09E-03	2,47E-06	2,41E-05	0,00E+00	3,07E-07	1,71E-07	0,00E+00	-5,44E-03	0,00E+00	4,50E-04	-3,55E-02
CRU	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	0,00E+00	0,00E+00	0,00E+00
MFR	kg	0,00E+00	0,00E+00	2,53E-01	0,00E+00	1,33E+01	0,00E+00	0,00E+00	2,01E+01	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	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	8,80E-01	0,00E+00	2,22E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,22E+02	0,00E+00
EET	MJ	0,00E+00	0,00E+00	1,58E+00	0,00E+00	3,98E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,17E+02	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, e.g., 1.95E+02. This number can also be written as: $1.95*10^{2}$ or 195, while 1.12E-11 is the same as $1.12*10^{-11}$ or 0.0000000000112.													

Independent verification of the tool on which declaration and data is based, according to EN ISO 14025:2010.
Checked and approved by

David Althoff Palm
Third party verifier of MD-24200-EN

Martha Katrine Sørensen
EPD Danmark