

Levensfase	Onderdeel	Subdeel	Product			Eenheid	Profiel	Bron	Einde leven					
			Air-source heat pump	Ground-source heat pump	Water-source heat pump				Profiel	Laten zitten	Stort	AVI	Recycling	Hergebruik
A1-3	Evaporator and condenser	Low alloyed steel	32	20	20	kg	0214-fab&Staal, ongelegerd (o.b.v. Steel, unalloyed [GLO]) market for   Cut-off, U; 78,7% primair, 21,3% secundair	SBK NMD	Staal, licht	0%	1%	0%	87%	12%
A1-3	Housing and compressor	Reinforcing steel	120	75	75	kg	0167-fab&Staal, wapening, ongelegerd (betonstaal, wapeningsnet, vezels, voorspanstaal) (o.b.v. 21,5% Steel, unalloyed, 78,5% Steel, low-alloyed & Hot rolling, steel [GLO]) market for   Cut-off, U; 17,8% primair, 82,2% secundair	SBK NMD	Staal, wapening	0%	5%	0%	95%	0%
A1-3	Wiring, piping and expansion valve	Copper	35,2	22	22	kg	0059-fab&Koper, kathode, voor draad (European mix for cathodes o.b.v. 49% Copper [RER]) production, primary, 9% Copper [RER]) treatment of scrap by electrolytic refining & 42% Copper [GLO]) market for: 79% primair, 21% secundair	SBK NMD	Koper, gemengd	0%	10%	5%	85%	0%
A1-3	Pipework insulation	Elastomere	16	10	10	kg	0014-fab&EPDM, rubber, chloropreen, neopreen, styrene butadiene rubber - SBR (o.b.v. Synthetic rubber [GLO]) market for   Cut-off, U)	SBK NMD	Rubber, via restmateriaal	0%	0%	100%	0%	0%
A1-3	Wiring insulation	Polyvinylchloride	1,6	1	1	kg	0200-fab&PVC, folie (o.b.v. Polyvinylchloride, suspension polymerised [GLO]) market for   Cut-off, U + Extrusion, plastic film [GLO]) market for   Cut-off, U)	SBK NMD	PVC, leidingen	0%	10%	20%	70%	0%
A1-3	Lubricating oil	Polyester oil	2,7	1,7	1,7	kg	0456-fab&Smeerolie (o.b.v. Lubricating oil [RER]) market for lubricating oil   Cut-off, U)	SBK NMD	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A1-3	Air fan	Copper	1,4	0	0	kg	0059-fab&Koper, kathode, voor draad (European mix for cathodes o.b.v. 49% Copper [RER]) production, primary, 9% Copper [RER]) treatment of scrap by electrolytic refining & 42% Copper [GLO]) market for: 79% primair, 21% secundair	SBK NMD	Joper	0%	5%	0%	95%	0%
A1-3		HDPE	0,5	0	0	kg	0185-fab&Polyetheen, HDPE, geëxtrudeerd (o.b.v. Polyethylene, high density, granulate [GLO]) market for   Cut-off, U & Extrusion, plastic pipes [GLO]) market for   Cut-off, U)	SBK NMD	Kunststoffen, overig	0%	0%	90%	10%	0%
A1-3		R-134a	4,9	3,09	3,09	kg	Refrigerant R134a [GLO]) market for   Cut-off, U	EI 3.6	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A1-3	Refrigerant	Manufacturing losses	3	3	3	%	Refrigerant R134a [GLO]) treatment of used refrigerant R134a, reclamation   Cut-off, U	EI 3.6	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
B1		Operational losses	6	6	6	%/yr	Refrigerant R134a [GLO]) treatment of used refrigerant R134a, reclamation   Cut-off, U	EI 3.6	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A1-3	Assembly of pump units	Medium voltage electricity (EU)	504	337	337	MJ	0124-pro&1 kWh, uit stopcontact (o.b.v. Electricity, low voltage [NL]) market for   Cut-off, U)	SBK NMD	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A1-3		Natural gas	1400	875	875	MJ	0111-pro&Aardgas, algemeen gebruik, per m3 (o.b.v. 31,7 MJ Heat, district or industrial, natural gas [RER]) market group for   Cut-off, U)	SBK NMD	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A1-3	Heat collector pipework	HDPE (HHC)	0	301,2	301,2	kg	0185-fab&Polyetheen, HDPE, geëxtrudeerd (o.b.v. Polyethylene, high density, granulate [GLO]) market for   Cut-off, U & Extrusion, plastic pipes [GLO]) market for   Cut-off, U)	SBK NMD	Drainage buizen, horizontale	80%	2%	18%	0%	0%
A1-3		HDPE (VHC)	0	183,1	183,1	kg	0185-fab&Polyetheen, HDPE, geëxtrudeerd (o.b.v. Polyethylene, high density, granulate [GLO]) market for   Cut-off, U & Extrusion, plastic pipes [GLO]) market for   Cut-off, U)	SBK NMD	Drainage buizen, verticale	100%	0%	0%	0%	0%
A1-3	Heat collector pipework insulation	LDPE	0	4,7	4,7	kg	0012-fab&Polyetheen, LDPE, folie (o.b.v. Packaging film, low density polyethylene [GLO]) market for   Cut-off, U)	SBK NMD	Drainage buizen, verticale	100%	0%	0%	0%	0%
A1-3	Heat carrier liquid	Ethylene glycol (HHC)	0	167	167	kg	Diethylene glycol [RER]) ethylene glycol production   Cut-off, U	EI 3.6	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A1-3		Ethylene glycol (VHC)	0	100,2	100,2	kg	Diethylene glycol [RER]) ethylene glycol production   Cut-off, U	EI 3.6	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A1-3	Weights	Cast iron (HHC)	0	0	34	kg	0220-fab&Gietijzer (o.b.v. Cast iron [GLO]) market for   Cut-off, U; 61,3% primair, 38,7% secundair	SBK NMD	Metalen, overig	0%	5%	5%	90%	0%
A1-3		Cast iron (VHC)	0	0	8,5	kg	0220-fab&Gietijzer (o.b.v. Cast iron [GLO]) market for   Cut-off, U; 61,3% primair, 38,7% secundair	SBK NMD	Metalen, overig	0%	5%	5%	90%	0%
A1-3	Manifold	Brass	0	6,6	6,6	kg	0056-fab&Messing (o.b.v. Brass [Row]) production   Cut-off, U)	SBK NMD	Metalen, overig	0%	5%	5%	90%	0%
A1-3	Back-fill	Cement (VHC only)	0	19,1	1,3	kg	0172-fab&Cement, CEM I (o.b.v. CEM I 52,5 R)	SBK NMD	Kalkandsteen	0%	1%	0%	99%	0%
A1-3		Bentonite (VHC only)	0	3,8	0,3	kg	0188-fab&Klei (o.b.v. Clay [Row]) market for clay   Cut-off, U)	SBK NMD	Zand, grond	100%	0%	0%	0%	0%
A1-3	Scaffolding, rods, supports	Reinforcing steel	0	33	33	kg	0167-fab&Staal, wapening, ongelegerd (betonstaal, wapeningsnet, vezels, voorspanstaal) (o.b.v. 21,5% Steel, unalloyed, 78,5% Steel, low-alloyed & Hot rolling, steel [GLO]) market for   Cut-off, U; 17,8% primair, 82,2% secundair	SBK NMD	Staal, wapening	0%	5%	0%	95%	0%
A5	Installation	Diesel (VHC)	0	22,6	15,1	l	0095-pro&Diesel, gasolie, gebruik, liter (o.b.v. 35,8 MJ Diesel, burned in building machine [GLO]) processing   Cut-off, U)	SBK NMD	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
A5		Diesel (HHC)	0	271,5	0	l	0095-pro&Diesel, gasolie, gebruik, liter (o.b.v. 35,8 MJ Diesel, burned in building machine [GLO]) processing   Cut-off, U)	SBK NMD	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	
B2	Maintenance	Refrigerant	0,294	0,185	0,185	kg/yr	Refrigerant R134a [GLO]) market for   Cut-off, U	EI 3.6	N.V.T.	N.V.T.	N.V.T.	N.V.T.	N.V.T.	

Uit: Greening & Azapagic, 2012, Domestic heat pumps - life cycle environmental impacts and potential implications for the UK