

SESSION 4

Review of LCA Parameters and PEFCR default parameters for Perovskites, emerging PV and PV technologies

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Académie de recherche et d'enseignement supérieur (ARES), Brussels.

Organized by



LCA Methodology Harmonization Workshop, Brussels, 2023

LCA Parameters: Survey Results for 11 EU Projects and 1 Industry Project

LCA Parameters	Option 1	Option 2	Option 3	Option 4
Functional unit(s)	kWh: 11	m ² : 8	kWp: 5	
System boundary	Cradle to Cradle: 3(+2)	Cradle to Grave: 7	Cradle to Gate: 5	
System model approach(es)	Cut-off:7	Cut-off, EN15804: 3	APOS: 2	
Database(s):	Ecoinvent (different version): 12	UVEK:1		
Impact assessment method(s)	Environmental Footprint 3: 11	Recipe: 1		
Software used	SimaPro: 10	GaBi: 1	OpenLCA: 2	Activity Browser (Brightway): 1

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Technology Parameters	Option 1	Option 2	Option 3	Option 4
Lifetime (years)	7 > 25 y	1: 1 y,	1: 20 y	2: TBD
Performance ratio (%)	4: 0.75	2:0.85	5: TBD	
Degradation rate (%)	1: 4%	1: 1.5%	4: 0,7%	6: TBD
Reference source for parameters	8: IEA PVPS Task 12	3: unspecified	2: TBD	
Irradiation for energy yield calc	6: specified: different irradiation	4: TBD		
Type of installation	2: BIPV	4: Rooftop	2: ground-mounted	5: TBD
EoL/Recycling (scenarios)	7: recycling	1: circularity	2: TBD	1: N