

Supplementary material

A Review Analysis of Electricity Generation Studies with Social Life Cycle Assessment

The supplementary material presents a Table with detailed information of all reviewed studies.

Table S1. Detailed information of reviewed studies

Author		<i>Takeda et al.</i>	<i>Nubi et al.</i>	<i>Martin-Gamboa et al.</i>	<i>Contreras-Lisperguer et al.</i>	<i>Bonilla-Alicea and Fu</i>	<i>Corona et al.</i>	<i>Martin-Gamboa et al.</i>	<i>Aung et al.</i>	<i>Corona and San Miguel</i>	<i>Kaiser et al.</i>	<i>Buchmayr et al.</i>	<i>Martinez-Hernandez et al.</i>	<i>Nubi, Morse, and Murphy</i>	<i>Zhang et al.</i>	<i>Halliste Perez et al.</i>
Year		2019	2021	2021	2018	2022	2017	2022	2021	2019	2022	2022	2022	2022	2021	2023
Geographical context		Malaysia	Nigeria	Portugal	Jamaica	USA	Spain	Portugal	Myanmar	Spain	Italy	Belgium	Mexico	Nigeria	China	Spain
Analysis object	Solar power	x				x	x			x	x					x
	Bioelectricity		x	x	x			x								
	Hydropower								x							x
	Wind energy											x				x
	Bioelectricity												x	x	x	
	Coal power															x
	Nuclear energy															x
	Gas electricity															x
Sector	Electricity, gas, steam and air conditioning supply	x							x	x	x			x		

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	Water supply; sewerage, waste management and remediation activities		x													
	Agriculture, forestry and fishing; Electricity, gas, steam, and air conditioning supply			x	x			x							x	
	Manufacturing					x	x									
	Mining and quarrying; Electricity, gas, steam and air conditioning supply; Construction											x				x
	Social Hotspot Database												x			
Division		35	38	01 35	01 35	27	25	02 35	23 35	35	35	07 35 42	35	35	02 35	35
Assessment Type	Generic	x		x			x	x		x		x	x			x
	Site specific		x		x	x	x		x	x	x			x	x	
Database	SHDB	x					x			x			x			
	PSILCA			x				x				x				
Functional unit	1 kWh	x		x				x								
	1 MWh						x		x	x		x	x			x
	Other		x		x										x	
System boundaries	Raw materials	x		x	x		x	x		x		x				x
	Labor	x		x								x				
	Construction	x		x			x	x	x	x	x	x				x

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	Operation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Fuel supply chain	x		x	x	Not needed	Not needed	x	Not needed	Not needed	Not needed	Not needed			x	x
	Demolition					x	x			x						x
Impact subcategories / Stakeholder group	Workers	Child Labour	x		x	x	x	x	x	x		x	x			x
		Forced Labour	x		x		x	x	x	x		x	x			
		Fair salary							x	x		X			x	x
		Working hours					x		x	x		x	x		x	
		Health & Safety	x	x		x	x	x	x	x			x	x	x	x
		Equal opportunities				x	x		x	x						x
		Social benefits					x		x	x		x			x	
		Collective bargaining	x			x	x		x			x	X		x	x
	Local community	Respect of indigenous rights	x							x		x	x			
		Delocalisation & Migration				x	x		x	x						
		Cultural heritage					x		x	x						
		Employment		x		x	x		x	x				x	x	x
		Access to resources	material			x	x		x	x						
			immaterial			x	x		x	x						
		Living conditions	Secure				x		x	x						
			Safe & healthy				x		x	x						
		Community engagement					x		x	x						

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	Society	Contribution to Economic development	x	x		x	x	x	x	x					x	x
		Prevention & mitigation of armed conflicts					x		x	x						
		Corruption					x		x	x						
		Technology development					x		x	x						x
		Public commitment to sustainability issues				x	x		x	x					x	x
	Consumer	End-of-life responsibility				x										
	Value Chain	Fair competition					x		x	x						
		Supplier relationships					x									
		Promoting social responsibility					x		x	x						
	Social indicators	Lowest paid worker			x											
		Safety measures										x				
		Education and training		x	x											
		Legal system	x													
		Population living in Poverty	x													
		Unemployment	x										x			
		Gender Equity	x										x			
		Labor laws	x										x			
		Gender wage gap	x		x			x				x				

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	Women in sectoral wage force			x				x								
	Access to Improved Drinking Water	x											x			
	Access to Improved Sanitation	x											x			
	Industrial water depletion											x				
	Children Out of School	x														
	Risk of conflicts	x										x	x			
	Health expenditure			x				x								