Supplementary Material

Integrating Individual Behavior Dimension in Social Life Cycle Assessment in an Energy Transition Context

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Table S1 in this section consists of an extended version of Table 2 of the manuscript file and shows in detail which indicators are assigned to stakeholders and subcategories shown in Table 2 of the main text. In Table S1, the term "organization" may be replaced with "individual" when S-LCA practitioners are aiming to include social impacts for individuals. Lastly, Table S2 regards the detailed version of Table 6 of the manuscript.

Table S1. Subcategories indicators based on social impacts targeting organizations and individuals shown in Table 2.

Stakeholder	Subcategories	Indicators
Local community	Community Engagement	Strength of written policies on community engagement at an organization level Diversity of community stakeholder groups that engage with the organization Number and quality of meetings with community stakeholders Organizational support (volunteer-hours or financial) for community initiatives
	Local employment	Percentage of the workforce hired locally Strength of policies on local hiring preferences Percentage of spending on locally-based suppliers
	Safe and Healthy Living Conditions	Management oversight of structural integrity Organization efforts to strengthen community health (e.g., through shared community access to organization health resources) Management effort to minimize the use of hazardous substances
	Secure living conditions	Management policies related to private security personnel Number of legal complaints per year against the organization with regard to security concerns Number of casualties and injuries per year ascribed to the organization
Consumer	Health and Safety	Number of consumer complaints Presence of Management measures to assess consumer health and safety Quality of labels of health and safety requirements
	Privacy	Strength of the internal management system to protect consumer privacy Number of consumer complaints related to breach of privacy or loss of data within the last year Number of complaints by regulatory bodies related to breach of consumer privacy or loss of data within the last year
Worker	Health and Safety	Number/percentage of injuries or fatal accidents in the organization by job qualification inside the company Hours of injuries per level of employees Presence of a formal policy concerning health and safety Adequate general occupational safety measures are taken Preventive measures and emergency protocols exist regarding accidents & injuries Appropriate protective gear required in all applicable situations Number of (serious/nonserious) Occupational Safety and Health Administration (OSHA) violations reported within the past 3 years and status of violations GRI LA8
Society	Public Commitment to Sustainability Issues	Presence of publicly available documents as promises or agreements on sustainability issues Complaints issued related to the non fulfillment of promises or agreements by the organization by the local community or other stakeholders at OECD contact points or Global Reporting Initiative Presence of mechanisms to follow-up the realization of promises the organization has pledged to comply with the Global Compact principles and has engaged itself to present yearly communication on progress implementation/signing of principles or other codes of conduct
		Contribution of the product/service/organization to economic progress

Contribution to Economic Development	Involvement in technology transfer program or projects
	Partnerships in research and development
Technology Development	Investments in technology development/technology transfer

Table S2. Social performance based on the scoring scheme of Figure 2 of the Dutch energy sector with developed S-LCA hotspot indicators, a detailed version of Table 6.

Stakeholder Categories	Subcategories	Hotspots Inventory Indicators	Netherlands
Local community	Community engagement	Number of energy cooperatives engaged in renewable energy plants on a national level	In EU top three countries, but still far away from Germany [104]
	Community identity	Percentage of entrepreneurs in the country	8th out of 27 innovation-driven economies [105]
Prosumer	Social acceptability	Individual's awareness of climate change	64% [106]
	Common enemy	Environmental concern	74% [106]
	Policies for end-users	Ease of installing or converting to RE	Top EU countries which have more favorable frameworks for collective prosumers [107]
		Governmental budget for environment	46.3% [108–110]
		Civil society actors involvement in decision making	Civil society actors are relatively not active and Dutch citizens prefer to participate at micr- level decisions [84,85]
	Communication to individuals	Effective two ways communication or one way?	Developed Climate Plan and entrusted the country's different regions to develop their own, local strategies to meet climate goals [113,114]
Society	Environmentally focused mainstream media	Mass media and their popularity	Decreasing coverage by major newspapers-media [115]