



The Common Impact Model

A community engagement methodology to facilitate local energy systems

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Relevance

Distributed renewable energy sources and smart grids allow generating power dose to where it is consumed. Cities, rural towns or industrial districts can become **local energy systems** (LESs), where local energy needs are powered by clean and local energy sources. However, the **successful and long-lasting adoption of LESs requires acceptance from different local stakeholders and community members.** The Common Impact Model (CIM) is a structured hands-on methodology to design LESs and energy communities compatible with local stakeholders' views, values, and priorities. It is informed by academic literature on governance of commons and social acceptance of energy projects. The CIM is the community tool of E-LAND toolbox, a modular set of tools to establish, optimize and control multi-vector local energy systems.

Goals and structure

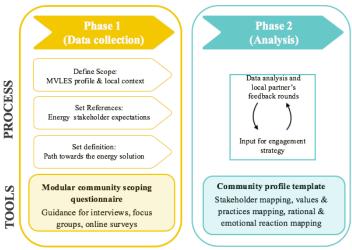
Goals

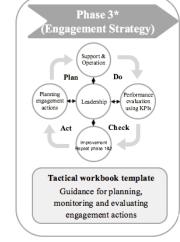
- Identify the local stakeholders who matter for successful implementation of LESs and/or who are affected by it
- Assist a local partner in designing LESs compatible with local values, views and priorities, taking into account perceived benefits and concerns of local stakeholders
- 3. Help the local partner develop a **strategy to engage** local stakeholders.

The CIM comprises **3 phases**, each phase is matched with a **tool** that helps scalability and replicability to different contexts.

Common Impact Model

E-LAND community engagement methodology for local energy systems





*in line with the highest standard for environmental management systems (ISO 14001)

E-LAND Toolboo

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Table 1. Main sites for the piloting of CIM

Pilot sites	Location	Key elements of the proposed LES	Local partner	
Auroville – residential township with ~3000 residents	South India	Installing new solar systems and battery storage in the town	Local non- for-profit organization	
Port of Borg - sea harbor in an industrial area	Norway	Shifting from fossil- fueled heavy trucks to electric ones, powered by local e- chargers	Port operator	
walqa technology park - initiative by local authorities, hosting ~60 companies, mostly small	North East of Spain	Establishing an industrial prosumers' energy community in the Park	Large tech company with office in the Park	

Applications

Figure 1. Community profile compiled for a pilot site



Figure 2. Stakeholder matrix compiled for a pilot site

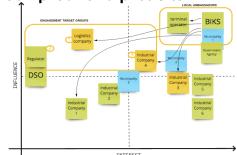


Figure 3. Tactical workbook compiled for an engagement action

Barrier: Opposition to new gridlines	Action: Educate residents about why local grid connections are needed and how they impact Auroville. Invite residents to communicate their opinions and ask experts for more information.
Objectives	The barrier is largely due to a lack of awareness. Address knowledge gapand build acceptance of local grid connection andget an overall buy in from the community for a carbon-free local electricity sourcing. Connecthomes to local grid.
Description	Provide educational resources by sharing information in small, digestible chunks in internal intranet. If possible, bring the discussion to the target group by arranging foromoting it around an existing event (e.g. monthly steward meeting)
Target group	Residential Assembly; Town Development Council
Timeline	The winter/rainy season is the best time to address thesetopics
Key Performance Indicators	Willingness to join the local grid (measuredwith survey), pre/postaction; number of off-grid homes
Cost	To be defined by Auroville Consulting
Leadership	Auroville Consulting
Localambassador	Expert1

Recommendations

Based on the experience in piloting the CIM, we share 5 recommendations for designing LESs and energy communities:

- **1. Identify and map local stakeholders**. Sorting them according to interest in the solution and influence in its implementation allows identifying local ambassadors and the main engagement target groups.
- **2. Understand local stakeholders' values, priorities and practices**, using interviews, surveys, focus group or a site visit. Solutions in line with local values, matching local priorities and relying on existing communication channels are typically successful.
- **3. Understand local stakeholders' views and emotions** towards energy technologies and solutions. It helps adapt accordingly project design and communication, and allows to address concerns at an early stage.
- **4. Develop an ongoing engagement strategy** with dedicated resources and leadership: a limited number of specific engagement actions that overcome barriers, are designed for the main engagement target groups and involve local ambassadors. It should not stop once the technology is operating; it should be adjusted after monitoring its impact using pre-defined key performance indicators.
- **5. Facilitate accessible and low-cost conflict resolution mechanisms.** This mechanism addresses concerns, prevents negative spill-overs and mitigate the risk of facing strong opposition, which usually comes from vocal minorities.