



Aalto University
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Developing a joint perspective on community energy: Best practices and challenges in the Baltic Sea Region

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Aim of the synthesis report

To explore the overall situation of CE in the Baltic Sea Region.
In particular, to identify:

1. Drivers, barriers and benefits of CE
2. Best practices
3. Policy recommendations

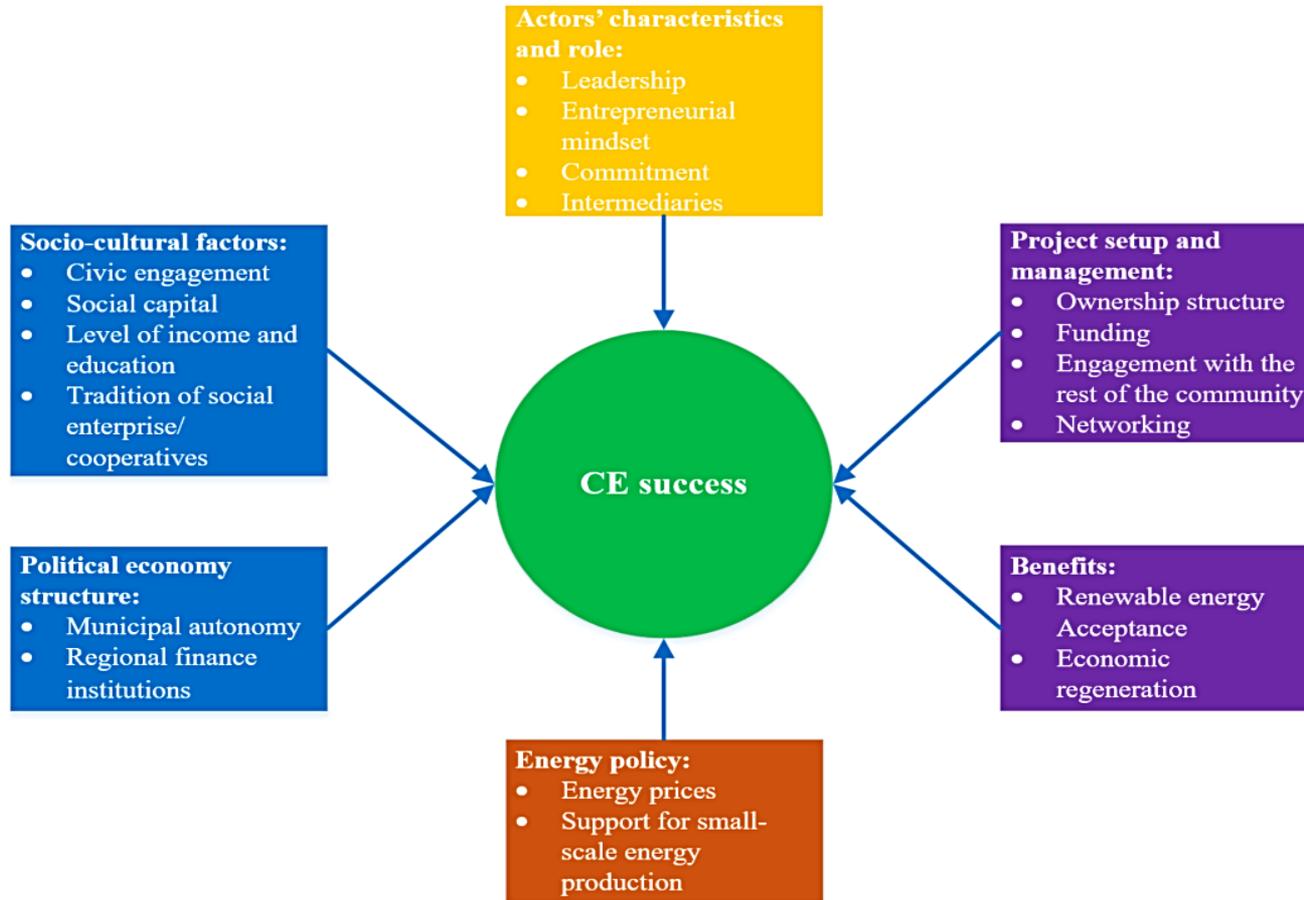
Definition of CE

...any initiative that aims at the generation of energy from renewable energy sources that fulfills the following criteria:

- The main actors are natural persons (not businesses or municipalities)
- They are owned and managed mainly by citizens who live in the region
- They are inclusive initiatives, i.e. not limited to a particular group of individuals.

Different legal entities including SMEs, cooperatives and non-profit organizations can be established to run CE projects.

Grassroots innovation and success factors in CE development

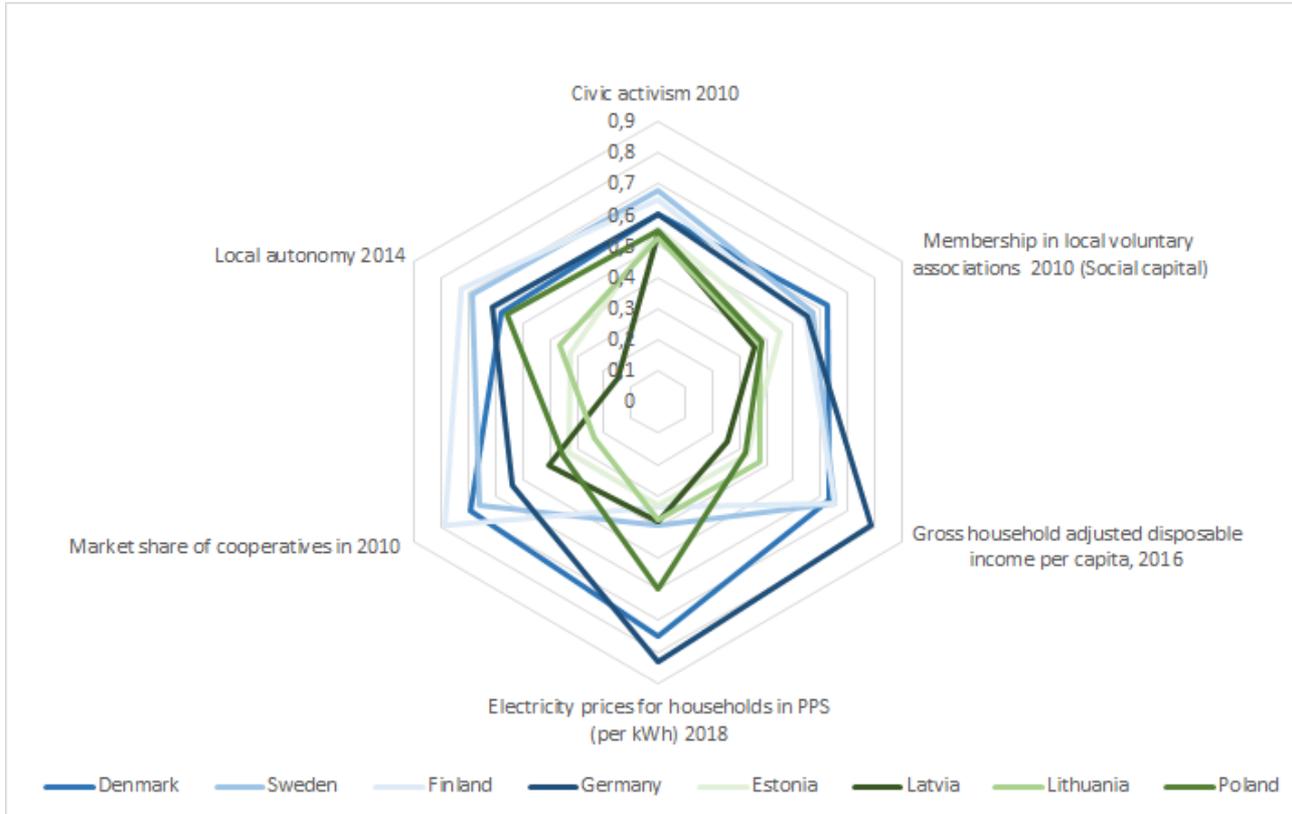


Research material and methods

- 11 case studies of CE projects from the BSR
- 37 semi-structured interviews with project leaders and experts
- Archival data including policy documents, reports, and statistics
- The selection of the cases followed a two-step process:
 - A. Collection of CE case examples from the Co2mmunity consortium partners => generated a list of about 60 possible cases.
 - B. Selection of the relevant cases for the study based on the following criteria:
 - 1) Diversity of renewable energy sources adopted (e.g. wind, solar, biomass),
 - 2) Broad spectrum of activities (both electricity and heat generation),
 - 3) Scale of an initiative (both large and small projects),
 - 4) Different governance models (e.g. cooperatives, associations, housing companies, etc.),
 - 5) Different project outcomes (successful, partially successful, failed)
- The data were analyzed with thematic and descriptive statistical analysis.

Results (I): Contextual factors

Figure 1. Strength of sociocultural and political economy conditions in the BSR's countries.



Results (II): Policy factors

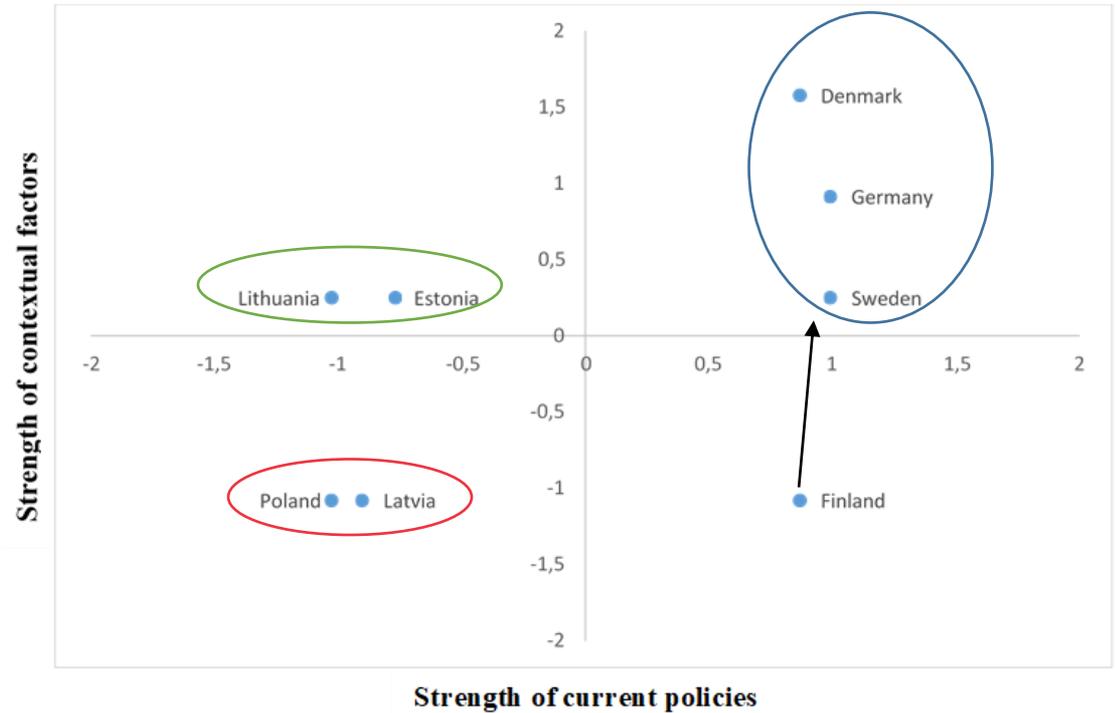
Table 4. Strength of historical and current energy policies in the BSR's countries.

Countries	Historical policies for CE	Current policies for CE
Denmark	high	moderate/high
Estonia	low	low/moderate
Finland	low	low
Germany	high	moderate
Latvia	low	low
Lithuania	low	low/moderate
Poland	low	low
Sweden	moderate	low/moderate

Results (III): Clustering of the countries

Three clusters of countries can be distinguished on the basis of the **strength of contextual factors** and **current policies**:

- a) Denmark, Germany and Sweden lead the way
- b) Finland has good potential
- c) Lithuania and Estonia making progress with legislation
- d) Poland and Latvia lag behind



Results (IV): Case studies

Barriers

The main barriers are: policy and regulation, cultural factors, limited knowledge about CE, lack of experience/expertise, local opposition, administration costs (bureaucracy) and lack of good financing mechanisms.

Benefits

- a) **Direct benefits:** Reduction of energy costs, increased apartment value, strengthen community spirit, income, skills
- b) **Indirect benefits:** jobs, tax income for the municipalities, green branding and policy tourism, increased local competitiveness through new local know-how, reinvestment in local infrastructures and other renewable energy projects

Best practices

Based on the analysis of the 11 case studies, we identified five key best practices:

- Community engagement
- Cooperation
- Collective decision-making
- Expertise acquisition
- Benefits sharing

Policy recommendations

- Guarantee a stable policy framework
- Eliminate regulatory barriers
- Promote training and access to information.
- Provide early stage funding
- Create dedicated financing instruments
- Support CE projects considering the benefits for society
- Promote cultural change
- Establish the right conditions for intermediary organizations to operate

Collaboration between community energy groups and cities

Cities can support community energy development by:

1. Including community ownership target in long term climate and energy strategies (e.g. in Scotland 500 MW of “community energy capacity” by 2020).
2. Securing urban-rural partnerships (territorial alliances between cities and their rural hinterland)
3. Procuring energy from community energy schemes (e.g. PPA)
4. Creating a dedicated body to support citizens’ projects (e.g. one-stop-shops or information hubs)
5. Providing access to public sites and infrastructures (e.g. public land, buildings and facilities)
6. Securing finance and fundraising (e.g. seed funding for feasibility studies)
7. Opening the capital of municipal energy projects (e.g. in Germany, 40% of local utilities have offered the citizens the possibility to invest in the projects they operate)

Thank you for your attention!

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Definition and limitations of the concept of best practice

- We defined best practices as: **as helpful principles to guide practice** (Patton, 2001)
- This definition implies that we tried to identify general and “holistic” principles rather than a “magic formula” for CE success.
- To determine the “best practice” one should identify all the possible practices in the field, which would be extremely time-consuming and possibly not even feasible.
- The concept of “best practice” is often a subjective evaluations given by experts
- What could be considered as “best” today may not still the same tomorrow