

Public acceptance of renewable energy



Knowledge need

In addition to the technical and economic aspects of renewable energy, and other climate friendly technologies, it is essential that social issues are taken into account. Technologies that are technically and economically feasible in a given context may not be successfully implemented due to social resistance, lack of awareness of the technology, etc. Public opposition could then delay or obstruct the implementation of sustainable technologies and measures, which could lead to difficulties in the

attainment of environmental and societal goals, such as greenhouse gas emission reduction goals. Against this background, it is vital to improve public acceptance in order for technologies to live up to their technical and economic potential.

Policy framework

Public participation in the European Union is ensured by Directive 2003/35/EC, which is based on the Aarhus Convention of 1998. The Convention provides for access to environmental information, public participation in environmental decision-making and access to justice or the right to challenge. The European Union and all of its Member States are signatories to the Convention, and the Member States have transposed the Directive into national legislation.

At a glance

Thematic area Renewable energy

Key words Renewable energy, public acceptance, awareness, transparency, participation, community

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Summary

Large-scale GHG emission reductions are only feasible if also social aspects are considered. A lack of public acceptance of renewable energy projects may delay or halt these. Public acceptance levels are determined by elements including awareness, fairness, the overall evaluation, the local context and trust in stakeholders. Clear strategies are needed for the attainment of acceptance for renewables, both at the project level and at the higher policy-making level.

POLIMP knowledge

Elements of public acceptance

The POLIMP project has identified five categories of elements that influence the public acceptance of renewable energy projects.

- Awareness of climate change and knowledge of the renewable energy technology in question. Timely, complete and balanced knowledge needs to be provided;
- Fairness and inclusiveness of the decision-making process: the extent to which stakeholders are involved in the decision-making process. Economic participation by the community may also increase the public acceptance;
- Overall evaluation of costs, risks and benefits of the renewable energy project. It has to be reckoned that this assessment is inherently subjective;
- Local context: suitability of a project in a local situation, and local 'fears and emotions';
- Trust in the decision-makers and other relevant stakeholders. Trust generally depends on the perception of a stakeholder's competence and integrity.

Policy transfer from non-EU contexts

Public participation is fairly well embedded in the EU, as defined in the Aarhus Convention. As a result, the EU may function as a 'best practice' example for the rest of the world.

With regard to raising awareness and creating acceptance of new and innovative technologies, such as carbon capture and storage (CCS), a comprehensive (EU-wide or on Member State level) programme could be established such as the Wind Powering America Initiative in the United States, started in 1999. This initiative has created a wide network of working groups and a dissemination strategy to profoundly spread awareness of wind energy and facilitate open dialogues around this issue. Such a programme could be implemented for technologies in their infancy, just as wind energy was in the US in 1999.

Policy implications

Considering that the success of the development of a low-carbon economy depends to a large extent on the social acceptance of renewable energy projects, it is important to have clear insight on the social implications of deploying such projects. The elements defining social acceptance, as identified above, therefore need to be considered before projects are prepared and implemented.

As every project is unique and in a distinctive context, no 'one-size-fits-all' policy is available for fostering public acceptance. However, by taking these issues into account, possible setbacks can be avoided or minimised.

Firstly, public acceptance should be taken into account by renewable energy developers and related local and regional government policy makers. However, also at the higher policy-making level, such as at EU and Member State level, public acceptance has to be considered as a determining factor of the possibilities to reach climate targets.

Project-level public acceptance

Project developers have an especially large influence on the first two elements of public acceptance: awareness and fairness. In order to increase acceptance, project implementation should be embedded in bottom-up processes rather than top-down solutions. In practice, this means that active engagement of the community should be encouraged, in a 'strategy of transparency'. In the longer term, such a strategy will also lead to trust, as the community can act in partnership with government and developer,

rather than that a project is unilaterally imposed on them.

Policy design for public acceptance

At a higher level, the government should spread comprehensive information on renewable energy technologies, its costs, risks and benefits, and the underlying reasons for implementation. It is also suggested that the government should proactively respond to negative media coverage, as misconceptions about renewable energy could damage its acceptance.

In addition, standard rules, procedures and guidelines can be made and enforced to ensure procedural fairness. Awareness (provision of information) and fairness (feedback mechanisms) can be ensured through such standards. The Aarhus Convention and related EU Directive are clear examples of this.

Encouraging and supporting community (co-) ownership of renewable energy is another way to increase public acceptance. This can be done through either shared ownership (between a developer and the local community), or through a cooperative. A minimum share of community ownership may be imposed through government regulation.

Read more

The [1st POLIMP Policy Brief](#) (April 2014) covers the role of social acceptance in the acceleration of clean technology deployment in the EU.

A Background Paper is available on the same page, providing additional information, case studies and references on the elements of public acceptance of clean technology.

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The **POLIMP** project aims to address gaps in knowledge and to inform policy at various decision-making levels regarding the implications of international climate policies under discussion. www.polimp.eu

