Industrial Energy Cooperation for Electricity Solutions in Austria

Austria has energy efficiency, renewable energy and sustainability goals that are supported by various institutions, regulatory framework, roadmaps and subsidy schemes. Nevertheless, legal and regulatory barriers to industrial energy cooperation exist and they cannot be tackled without law/regulatory amendments, possibly influencing a large number of projects despite specific individualities. S-PARCS aims at providing concrete solutions to overcome these barriers. We provide policy recommendations on the subject of electricity, based on real experiences from our Austrian Lighthouse industrial parks.

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Background

Boosting the use of clean electricity is a well-known strategy to meet future decarbonization and renewable energy targets. In S-PARCS, our Austrian Lighthouse industrial parks have pursued this strategy through various paths: shore-side electrification, installation of photovoltaic (PV) power plants and direct lines and electric mobility.

Ennshafen industrial park

The supply of shore-side electricity is a European measure to reduce the local environmental impact of anchoring ships at ports and necessary infrastructure is to be installed as a priority in ports of the TEN-T Core Network and in other ports by 2025, unless there is no demand and the costs are disproportionate to the benefits, including environmental benefits.

The installation of cooperative PV plants is evaluated according to different schemes (cfr. D2.1, see below for further reading):

- installation on multiple roofs, with joint purchase of engineering and hardware equipment to lower the burden on each company;
- installation on multiple roofs, jointly financed by companies and local communities;
- installation on a large facility, the spaces on which are rented by many companies.

Also, considering the possibility of installing an electricity generation plant and sharing the energy produced, the concept of direct lines (i.e.: electricity lines that do not exploit the infrastructure of the existing national grid) is discussed.

Finally, the installation of shared charging stations in the premises of the park to promote electric mobility is analysed.

The policy challenges

Policy challenges to these solutions do not pose major limitations, however legal issues do appear during their implementation.

Shore-side electricity supply requires effort at the European level to ensure a homogeneous taxation across countries and in comparison with other fuels. This is expected to minimize the risk of shifting anchoring to ports with less strict requirements and costs as well as to pay back as much as possible of the high upfront investments.

In the context of the project, the installation of PV power plants is legally feasible according to current national legislation, and relevant taxation is also regulated.

Considering the large size of companies involved, the latest concept of an energy community for electricity sharing (as for Clean Energy Package) does not apply. Indeed, participation of large corporate players in communities may lead to an imbalance in value sharing and may impact the decision-making power within the energy community itself. Direct lines thus appear as a solution, but they are heavily restricted as they are not allowed to cross public properties or land from third parties and also because there are strict requirements on certain hardware components.

Finally, the main steps to comply with when evaluating the installation of charging stations are reported below:

- identification of current legislative framework, in terms of e.g.: electricity, market, buildings, space occupancy;

- identification of technical requirements for physical installation;
- identification of technical and economic requirements for operation.

Solutions and Policy Recommendations

There are already solutions in place to face the legal barriers presented.

The proper taxation of shore-side electricity is a topic of the revision process of the directive on the deployment of alternative fuels infrastructure, in preparation at EU level.

Then, legal constructs to enable a certain number of legal or personal entities the operation of a common PV power plant are plentiful (e.g.: non-trading partnership, general partnership, private limited partnership, limited liability company, limited partnership with a limited liability company as general partner, (registered) association, cooperative). Which company construct is most reasonable depends on the contractual details and objective (and vice-versa) and should be evaluated beforehand. It is also highlighted that – differently from other countries – Austria allows shared generation facilities for building owners and tenants, as far as they are located in the very same building.

Owing to the lessons learned in S-PARCS when analysing the implementation of electricity solutions, and thanks to lessons learnt for the development of this solution**,** a set of policy recommendations is proposed.

Policy Recommendations

- Ensure tax equality for all types of energy carriers potentially substituted by shore-side electricity at the European level.
- Improve possibilities for electricity sharing for large enterprises, without forcing them to register as official electricity suppliers.
- Diminish existing restrictions on direct lines, especially facilitating permissions to cross public property or land from third parties.

Further reading

The complete list of policy recommendations based on the results of the legal, regulatory and standardization analysis was developed in Work Package 2 of the S-PARCS project. Detailed information is included in Deliverable 2.1, Deliverable 2.4 and Deliverable 5.4 and is available for download at:

https://www.sparcs-h2020.eu/results/deliverable/

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Contact information

We are looking forward to hearing from you and are happy to discuss with you.

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