



## Driving the European heating transition

**As we progress towards carbon neutrality, we have to make greater use of the possibilities of European co-operation. In border regions especially, the heating transition can benefit if players join forces across borders. We therefore need to provide such projects with support and targeted funding. The “Kehl-Strasbourg Heating Partnership” can act as a role model.**

*By Franca Diechtl and Mariann Freund*

A heating connection will be established between the city of Kehl and the Eurometropolis of Strasbourg to take previously unused waste heat from a steelworks in the Kehl port area and feed it into Strasbourg’s district heating network. This will enable Strasbourg to save around 20,000 tonnes of CO<sub>2</sub> annually from 2025 onwards and is an important step towards a carbon-neutral heating supply. The cities of Kehl and Strasbourg, the Grand Est region, the Federal State of Baden-Württemberg, the Caisse des Dépôts and the Badische Stahlwerke Group will all have a stake in the heating company, which will be responsible for the construction of the heating connection and its operation. The Franco-German Energy Platform, which is operated by the the German Energy Agency (dena) on behalf of the German Federal Ministry for Economic Affairs and Climate Action, and in cooperation with the French energy agency ADEME, supports and advises the members of the heating partnership.

Its cross-border nature makes this project unique: the heating connection will make it possible to transport heat from Germany to France – and vice versa. The project shows how regions on both sides of the Rhine benefit from a common energy infrastructure both economically and ecologically. The project could serve as a role model for the success of the European heating transition. For this to succeed, the following obstacles need to be overcome.

### **Funding must be simplified and better coordinated**

The EU supports the construction of effective, sustainable and efficiently networked trans-European energy infrastructures in order to guarantee the integrity of the common energy market. Programmes such as the Trans-European Energy Network (TEN-E) and the “Connecting Europe” facility provide substantial public funding and risk reduction for large-scale energy infrastructure projects. At the moment, the provision is limited to “priority corridors” in the areas of electricity, fossil gas and oil, and “thematic areas” such as intelligent electricity grids and CO<sub>2</sub> grids.

Because there is no instrument of this kind for heating networks, it was necessary for the heating connection between Kehl and Strasbourg to tap into three different funding programmes at the regional, national and European level, and submit four funding applications. These different funding programmes provide different incentives for the design of the project, which have to be coordinated with one another. This makes it challenging, for example, to exclude accumulation of funding elements and organise the funding strategy in accordance with the regulations on EU assistance.

A consistent funding mechanism at the EU level is therefore needed for cross-border heating projects: district heating networks should be incorporated into a revised TEN-E framework in order to complete the common en-



energy market. At the same time, national funding programmes should be designed such that transnational projects can be flexibly funded in conjunction with the funding programmes of the neighbouring country. CO<sub>2</sub> emissions do not stop at borders.

### **Risks arising from high up-front costs must be reduced**

The preliminary investigations for heating projects are cost-intensive and require intensive exchange between the stakeholders on both sides of the border. There are also technical challenges involved both in the planning of heating pipelines and in the extraction and utilisation of the heat. Both of these lead to high expenditures and costs at the preliminary investigation stage, without any initial guarantee of success.

Funding is therefore already required for the preliminary investigation stage, in order to establish the technical and economic feasibility of this kind of project, particularly when it needs to be carried out in two languages. In the case of the Kehl-Strasbourg Heating Partnership, this phase of the project was funded by the Interreg Oberrhein programme and the Federal State of Baden-Württemberg. To make sure that other such projects can also be initiated, a funding mechanism for feasibility studies – regardless of their outcome – is vital.

### **Profitability must be ensured**

Due to the initial investments, which can be high, and the long duration of waste heat projects, plus the competition between waste heat and other, still relatively cheaper heat sources, district heating networks without funding are often unprofitable. For this reason, there is a continuing need for funding programmes so that potentials for decarbonisation can be used. In addition, clear price signals are needed to make fossil fuels relatively more expensive and carbon-neutral heat sources cheaper. In France, for example, CO<sub>2</sub>-free district heating benefits from a reduced tax rate.

### **Removing further regulatory obstacles**

Besides simplification of the funding system and a structural or pricing incentive for the use of waste heat, the removal of regulatory obstacles plays a key role. These are among others the legal form of the company, which has to be founded to operate the heating connection, and the participation of federal institutions of both countries to reduce the risks of the project. The latter aim might, for example, be achieved by a fund, in which provision would have to be made for projects with smaller investment amounts.

The form taken by the company that operates the heating connection must be suited to the needs of all stakeholders involved. A European legal form for companies, which is designed to enable public agencies to found a company for precisely such ends, already exists: a “European Grouping for Territorial Cooperation” (EGTC). However, in the case of the Kehl-Strasbourg Heating Partnership this legal instrument was not chosen, because there were many uncertainties regarding its legal complexity and the possible claim for funding. Eventually, a French legal form – the SEM – was chosen instead. Reducing these uncertainties would help projects to make better use of this instrument.

Currently, the necessary approval processes must be carried out separately in both countries, and to a certain extent with differing requirements. A cooperative agreement between the approval authorities, and the establishment of a single point of contact (one-stop shop) would therefore simplify the process.



As we progress towards a carbon-neutral heating supply, we have to make greater use of collective European potentials. Cross-border projects must receive better support and funding. The Kehl-Strasbourg Heating Partnership has demonstrated what kind of specific steps can contribute to that goal. A better framework would allow us to overcome the practical obstacles – already formidable in any case – such projects involve: from language barriers to demanding requirements for coordination.

You can find out more about the Kehl-Strasbourg Heating Partnership here: <https://www.d-f-plattform.de/un-sere-projekte/waermebuendnis-kehl-strassburg/>

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