District heating and cooling networks in an integrated energy system context

The integration of district heating and cooling (DHC), electricity and gas networks into a hybrid energy network (HEN) is enabling the transformation, storage and distribution of energy and thus creating synergies that cannot be realized by only considering the individual networks. However, a high degree of hybridization also creates obstacles, e.g. a higher competition between the different domains.

Aim of the Annex is to promote the opportunities and to overcome the challenges for district heating and cooling (DHC) networks in an integrated energy system context.

The Annex provides a holistic approach for assessing, planning and operating HEN, considering both technical (system configuration, operational strategy) and strategic aspects (business model, regulatory frame).

How it works?

The activities in the Annex are funded through a task-sharing approach, where each participant contributes resources in-kind (for example personnel or materials).

The task-sharing approach allows to connect existing national and international projects via the international platform and thus benefit from international experience and exchange.

What we offer?

- An unique opportunity for networking between international experts from academia and industry,
- Dedicated know-how exchange at industry workshops and special sessions at key conferences
- An intensive cooperation with the International Smart Grids Action Network (and others)

For whom?

- Utilities, energy suppliers & network operators (DHC, electricity, gas)
- Policy makers & regulative bodies
- R&D institutions and consultancies

How do I get involved?

The project is open to new participants during its whole runtime, however, an early involvement enables a deep interaction with the other participants.

To join the project participants need to bring completed, ongoing or upcoming projects that address hybrid energy networks with a focus on DHC in the participants own country. Furthermore resources for processing the project results (e.g. translation) and participating in the workshops as well as special secessions are required.

Time line:

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