Providing support to the French ministries in charge of energy and construction, Cerema’s District Heating Team produces and spreads knowledge and methodology to help implement the national scheme of development for district heating and cooling networks across the country. Targeting local authorities and their partners, the team focuses on how renewable heat networks can improve territorial development and urban planning in order to build environment-friendly areas.

Our fields of competence

District heating and territorial strategy
A local energy tool by nature, district heating allows using local, renewable energy resources (like biomass and geothermal heat) at a massive scale, particularly in cities, and recovering waste heat from industry or power stations.

We support local authorities in developing district heating networks by providing guides about such topics as local energy schemes, energy dimension in land use plans and territorial data access.

District heating, urban and land planning
Many criteria influence the development of district heating on a territory: urban renewal, building density, coordination with other urban networks, heterogeneous functionality within an area…

Therefore, energy planning must be integrated to urban development policies. The study of opportunity for renewable energy is to be thought before and while a new district is built. By analyzing heat sources and heat demands, priority areas for district heating development can be identified. On the long run, and because district heating and urban planning both last for decades, defining a heat network scheme for expansion or modernization for the years to come is a useful tool for the local authorities to possess.

District heating networks and buildings
In France, energy consumption in buildings weighs about half of the total national consumption. In existing buildings, the objectives are to reduce energy needs and convert sources to increase the renewable/recovered energy share and reduce greenhouse gases emissions. Heat networks are a very powerful tool to meet these targets.

In new buildings, district heating engineering evolves, in par with strong reductions of energy needs and a move towards buildings that, tomorrow, will be producing some energy.
Our interventions

On the three issues described above, our interventions are mainly upstream and indirect regarding assistance to projects carriers – starting with local authorities. Guides, leaflets, website, experience feedback, training… We also intervene in national workshops, as group manager or participant, in relation with the national stakeholders of district heating and cooling (AMORCE, ADEME, FEDENE…).

Portfolio abstract (in French)

- Leaflet and guide : district heating networks and regulatory rules for buildings
- Methodology guide for renewable energy studies in new neighborhoods
- Conferences for regional stakeholders and their partners
- Guidebook for implementing priority zones of heat network development
- Contribution to the steering committee of France’s national heat map
- Training (CVRH, ENTPE, Ponts Formation Conseil…)

Our organization

Our missions are defined by a yearly schedule, established for the French Directorate General for Energy and Climate. Some of our studies and assistance missions benefit directly to the ministry’s Directorates, but most of our outputs remains oriented towards local players and third parties (municipalities, associations, regional units of the Ministry…).

Our team can also draw on its skills for one-off missions, out of the ministry framework, provided they are still consistent with our missions of general interest.

Team and contact information

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Find our publications online

Every document produced by Cerema’s District Heating Team is available online, free of charge, on our website www.reseaux-chaleur.fr

You can also follow the news related to district energy and territorial development, on our blog blog.reseaux-chaleur.fr