Keeping our cities sustainably warm

Inspiring the Efficient Renewal of District Heating for the Just Transition

Thursday 12 November, 2020

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KeepWarm makes modernising your district heating feasible.

KeepWarm prioritises a step-by-step approach to renovate your district heating system (DHS) in the way, which is most suitable to your context:

1. Retrofit and optimise DHS networks to increase your grid efficiency

2. Accelerate the use of nearby renewable energy in heat production

3. Integrate sustainable excess heat from industrial processes and commercial facilities

4. Use acceptable waste-to-energy solutions in line with waste-reduction strategies

5. Deploy smart heat distribution and control systems for a more effective management
Green Deal
Going Local

- Achieving climate neutrality
- Sustainable transport
- Preserving Europe’s natural capital
- Transition to a circular economy
- A zero-pollution Europe
- Clean, reliable and affordable energy
- Financing the transition
- Leave no one behind (Just Transition)
- Towards a modernised and simplified CAP
- From farm to fork
- The transformation of agriculture and rural areas

More energy and resource efficient homes by 2030
#RenovationWave
1. Thermal Cheaper at All Scales

2. Bigger is Better i.e. Cheaper

There is more excess heat in Europe than all of the heat demand in buildings

Recommended district heating levels in Europe
EU budget powering recovery

Investing in a green, digital and resilient Europe

Supporting Member States to recover
- Recovery and Resilience Facility
- Recovery Assistance for Cohesion and the Territories of Europe - REACT-EU
- Reinforced rural development programmes
- Reinforced Just Transition Mechanism

Within European Semester framework
- Supporting investments and reforms
- Supporting a just transition

Kick-starting the economy and helping private investment
- Solvency Support Instrument
- Strategic Investment Facility
- Strengthened InvestEU programme

Learning the lessons from the crisis
- New Health programme
- Reinforced rescEU
- Reinforced programmes for research, innovation and external action

- Supporting key programmes for future crises
- Supporting global partners

Source: European Commission
Direct employment in coal mines and coal-fired power plants (2018, 1,003 persons)

The map on this page shows the number of direct jobs associated with coal mining and coal-fired power generation in the EU-27 NUTS2 regions. Almost half of the employment is located in Poland, with the vast majority in the mining sector (mostly in the Śląskie region).

Potential for renewable energy in selected coal regions

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential for renewable energy (Gigawatt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES-Castilla y León</td>
<td>224</td>
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<tr>
<td>ES-Castilla-La Mancha</td>
<td>149</td>
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<tr>
<td>ES-Aragon</td>
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<td>IT-Sardegna</td>
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<td>RO-Sud-Vest-Olténia</td>
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<td>PL-Wielkopolskie</td>
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<td>PL-Lubelskie</td>
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<td>SI-Štajerska Slovenija</td>
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<td>DE-Saarland</td>
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<table>
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<tr>
<th>Energy Source</th>
<th>Potential (Gigawatt)</th>
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<tr>
<td>Wind</td>
<td>1,334</td>
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<tr>
<td>Solar</td>
<td>44.1%</td>
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<td>Bioenergy</td>
<td>1.0%</td>
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<tr>
<td>Geothermal</td>
<td>0.2%</td>
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</table>
SUPPORTIVE FRAMEWORKS DRIVING DECARBONISATION THROUGH A SWITCH TO RES-DH

 JKPK “TOPLANA-ŠABAC”
 JAVNO KOMUNALNO PREDUZEĆE
 JKP Toplana-Šabac, Serbia

 City of Ljubljana, Slovenia

 Fortum Jelgava Ltd., Latvia

 Optit S.r.l., Italy

 KeepWarm

 Signe Mārtiņkrista, ZREA

 SUPPORTIVE FRAMEWORKS DRIVING DECARBONISATION THROUGH A SWITCH TO RES-DH

 KeepWarm

 POLICY AND PLANNING SOLUTIONS IN Š

 • DH Company “Toplana-Šabac” borrowed 1.5 M€UR for the financing of thermal insulation of 40 buildings that have been connected to DH grid.

 • Average consumption measured at substations in 2013 amounted 99 kWh/m² a.

 • At the national level, it was higher.

 KeepWarm

 MODERATOR

 Jure Čitanja
 Jožef Stefan Institute

 Slbojad Jerožič
 JKP Toplana-Šabac

 Alenka Loose
 City of Ljubljana

 Gunders Petersens
 Fortum Jelgava Ltd.

 Matteo Pozzi
 Optit S.r.l.
LOCAL ASPECTS, CHALLENGES AND POLICY SOLUTIONS FOR ENERGY EFFICIENCY IN DH SYSTEMS

Aksana Krasatsenka, Euroheat & Power
A ROADMAP FOR DH WHICH KEEPS THE EU’S DEAL BOTH GREEN & WARM

Lessons learned - policy level

For transformation/development of DH you need:
1. Clear vision of DH systems role in overall energy system / decarbonization effort
2. Transformation plan for DH outlining costs, benefits, solutions on national and regional level
3. Level playing field = uniform cost of carbon for DH and local heating solutions
4. Proper incentives for DH refurbishment/development
5. Open dialogue with stakeholders / public support

Martin Hájek,
Association for District Heating of the Czech Republic
FINANCING INSTRUMENTS TO DEPLOY MODERN DISTRICT HEATING ACROSS EUROPE

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DG REGIO