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Evaluating and Labeling the Performance of DHC

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- *Well working technology with high environmental performance and great potential for sustainable cities.*
- But how can we show it?
- We need a way to evaluate, compare, inform, promote, develop our sector



Ec*heat 4 cities

- Project to establish the foundation for a common European voluntary label
- Started almost 3 years ago
- IEE financed project

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Objectives

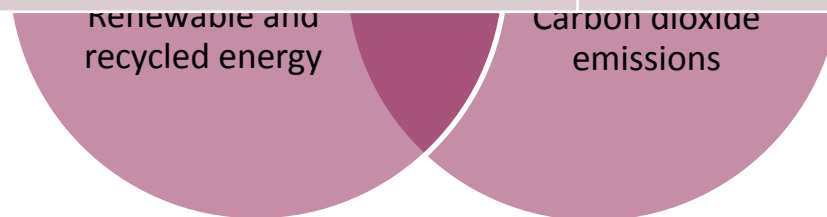
- Support the implementation of the Renewable Energy Directive as regards its DHC related components by greater municipal and public acceptance of the systems
- Promote understanding and acceptance for sustainable District Heating among the EU's citizens and their local representatives and authorities
- Establish more and improve DHC. Monitor and encourage renewable energy and efficiency developments in the DHC sector

Objectives

- Facilitating sustainable urban planning by providing guidance documents, training and workshops to trigger locally integrated and increasingly cost-effective solutions for buildings, energy efficiency, renewables and infrastructures
- Cities and DHC companies!



Criteria	Main motive 20/20/20	Main motive EHP
Non-ren primary energy factor	Reduction of primary energy use	REDUCE
CO ₂	Reduction of GHG emissions	REPLACE
Renewable and recycled energy	Increased use of renewables	RECYCLE



Adapting to national situations and regulations through national annexes



HEATING PERFORMANCE

Resource efficiency

0,8
Primary Energy Factor

PLANNED PERFORMANCE
REF. EU-00001

YDEEVNE FOR FJERNVARME

Brædstrup

Brædstrup

<p>Ressourceudnyttelse</p> <p>0,69</p> <p>Primær energifaktor</p>	<p>Vedvarende ressourcer</p> <p>7,6 %</p> <p>Vedvarende ressourcer & overskudsvarme (Nationalt mål 40%)</p>	<p>CO₂-udledning</p> <p>199,1 kg/ CO₂-udledning</p>
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NB: Hvis den Ecobædecertificeret eller Europe-Kommisjonen i henhold til gældsansvarlig for følgerne af dette mærkes brug eller misbrug

www.Ec*heat4cities.eu

PERFORMANCE

CO₂ efficiency

4 kg/MWh
CO₂ Emission

t4cities.eu

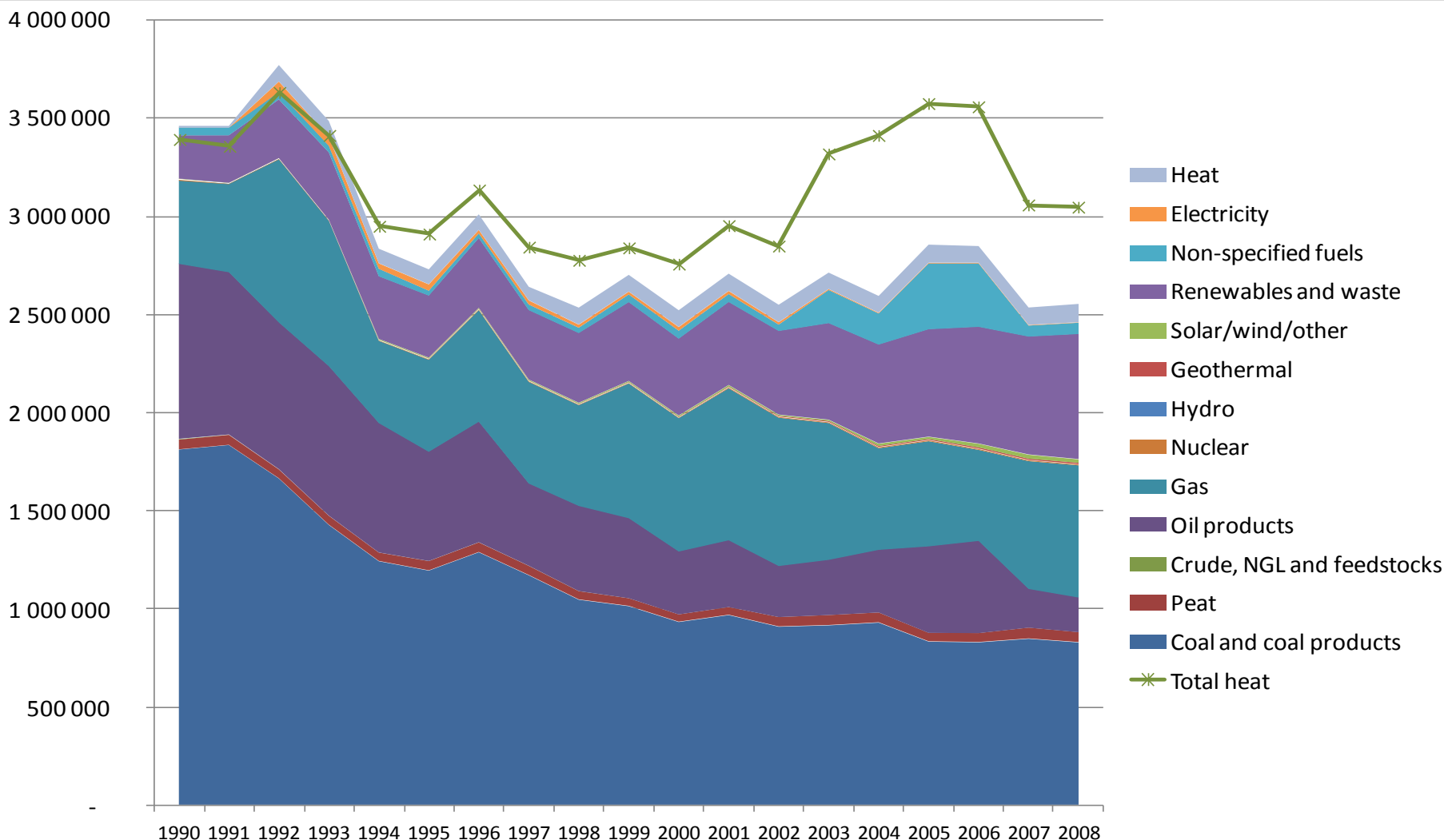
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”Baseline performance and improvement potential of the DHC sector”

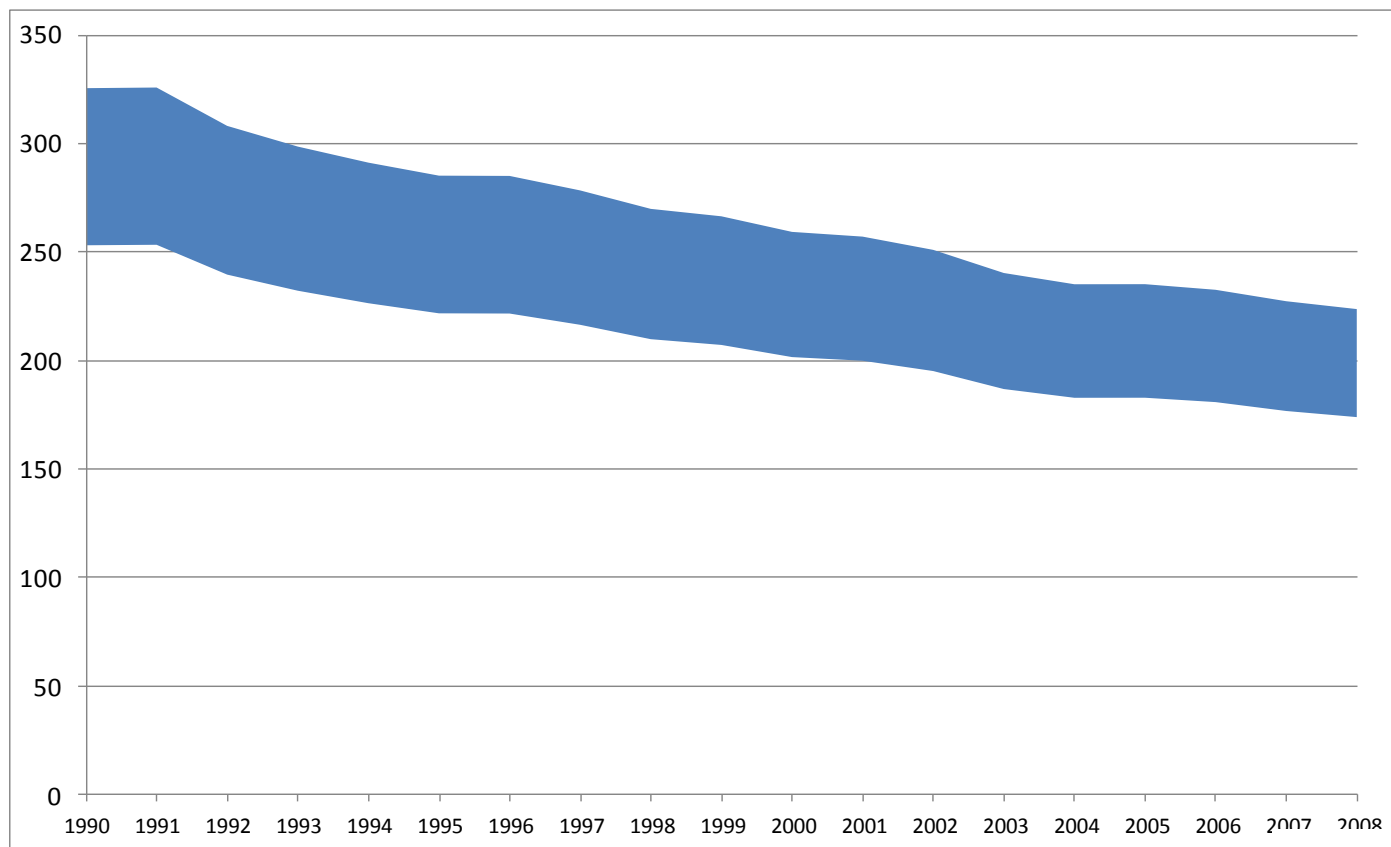
- Analysis of the European district heating system in order to show the performance of the EU27 since 1990
 - Data from EuroHeat&Powers Country by Country statistics and the EcoHeatCool project
 - The baseline study has been calculated with the initially decided label parameters used for the first phase of test labelling, the final calculation method slightly deviates.

Development 1990-2008





The development of specific CO2 emission within EU27





Future potential

- The criteria can be used not only to label individual DH systems but also to follow the development in the sector.
- Aggregated statistic- shows a promising trend!



Project is finished – what's next?

- We have created a common European labeling scheme with
 - **Labeling governance**
 - Guidelines for technical **performance assessment** of District Heating and Cooling Systems
 - **User guide** and **excel tool** for calculating fuel inputs and outputs
 - Guidance for cities **Comparison** of different heating and cooling options
 - Guidance to DHC companies on the **benefits of labeling**
 - A label designed for recognition and other outreach and marketing materials
- Implementation!



Implementation –

Questions remain to resolve

- Labeling structure
- National annexes and national incentives
- Increase knowledge and awareness amongst DHC and cities
- Connecting more countries



Thank you for your attention!

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www.**Ec**  **heat**  **cities**.eu