CODE2

Cogeneration Observatory and Dissemination Europe



D2.4 First draft of final CHP roadmap **DENMARK**

May 2013

The Northern Europe CODE2 Region draft roadmap for non-pilot Member States.

The CODE2 Region 'Northern Europe' comprises the following Member States: Austria, Denmark, Finland, Germany, Sweden.



Introduction

The draft Roadmap for the non-pilot Member State Denmark in the Northern Europe CODE2 Region is submitted separately. The following update covers the non-pilot Member States.

A three parts structure has been agreed for the roadmaps:

- 1) Where are we now? Background and situation of cogeneration in the Member State
- 2) What is possible? Cogeneration potential and market opportunities
- 3) How do we arrive there: the Roadmap

Following the Northern Europe CODE2 Region Workshop, the format and final content outline for the individual non-pilot Roadmaps will be finalised. All of the Roadmaps for the Region will be available in September 2014.

What follows gives an overview of the progress on the Roadmaps for non-pilot Member States in the Region following the structure of the final Roadmap.

Chapter 1 - Where are we now? Background and situation of cogeneration in the Member State

1.1, 1.2, 1.3 Current status, Energy and Climate Strategy, Policy Development

Status of information gathering	 All government and industry reports 2007-2013 reviewed Attendance on a conference on 23.10.2012 in Kiel about Danish DH experience ("Fernwärme mit Erneuerbaren Energien - was können wir von Dänemark lernen?") Discussions with 5 representatives of the Danish Government, Danish CHP manufacturer, Science and electricity trade (incl. meeting in Aalborg with Prof. Henrik Lund, University of Aalborg, on connections between CODE2 and a planned EU heat road map 2050)
Significant gaps	Information on status and additional potentials of industry CHP and possible contributions by ESCOs in this area. The reasons of a registered decrease of CHP in DH are being further explored
Planned actions	4 more phone discussions with stakeholders in June and July 2013 using a standardised questionnaire. In August 2013 draft roadmap; send it to experts for discussion. October 2013: finalise roadmap

1.4 Awareness

Process of developing awareness	Information gathering based on standard CODE2 awareness
assessment	form
Status of analysis	Discussion on awareness with 2 experts based on the
	standard awareness table used in the pilot roadmaps
Significant gaps	More opinions are needed to validate
Planned actions/key milestones	Phone calls with 4 experts in June and July 2013.
	Compiling the results for the Danish draft roadmap

1.5 The economics of CHP

Process of developing economics	Filling the CODE2 excel tool for calculation of CHP economic
assessment	indicators with support of experts
Status of analysis	First trials to get expert support, without success
Significant gaps	Required numbers still missing
Planned actions/key milestones	Further trials to find useful numbers in the context of the next
	discussions with experts in June and July 2013

1.6 Barriers to CHP

Process of developing barriers assessment	Literature review; structured discussions with experts based
	on a standardised agenda
Status of analysis	Preliminary results: no major barriers; to be further
	considered in the coming discussions with experts
Significant gaps	No relevant gaps found
Planned actions/key milestones	Phone calls with 4 experts in June and July 2013.
	Compiling the results for the Danish draft roadmap

Chapter 2 - What is possible? Cogeneration and market opportunities

2.1 Market opportunities

Method of assessment of opportunities	Literature review; structured discussions with experts based on a standardised agenda
Progress to date	Preliminary results; General agreement on Danish energy policy strategy grants further important role for CHP, mainly on biomass base
Planned actions	Further discussions with experts

2.2 Considering the framework of the EED

This section will be developed following the first Member State workshop and will be based on the regional pilot roadmap and the outputs from the workshops.

Chapter 3 - How do we arrive there: the Roadmap

3.1 Overcoming existing barriers and creating a framework for action

	Preliminary results: encouraging and supporting energy services for on-site CHP in the industry could be an issue; biomass gasification to biomethan could increase bio-energy CHP potential
Planned actions	Further discussions with experts in June and July 2013

3.2 Possible paths to growth

Status	Apart from the official energy plan not yet considered
Planned actions	In the frame of developing concrete roadmap measures
	possible target numbers shall be discussed with the experts