# CODE2

## Cogeneration Observatory and Dissemination Europe


# *Workshop Belgium*

*Deliverable D.4.2 – Workshop Report*
*12/12/2013*

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## 1. Summary of the workshop:

- Date: 12th December 2013
- Location: KBC Headoffice - Havenlaan 2 - 1080 Brussels
- Number of participants: 40 (Regional Energy Institutes, CHP associations and facilitators, research institutes, industry, producers, chemistry, sector organisations, utilities, …): see attachment
- Structure of the agenda and presentations (see also attachments)

9.30 Registration and welcome coffee
**SESSION 1: CODE2-PROJECT & LOCAL CHP FRAMEWORKS**
10.00 Welcome by KBC - Wim Storme, KBC Bank & Insurances
10.05 Welcome and introduction to the CODE2 project - Fiona Riddoch, COGEN Europe
10.30 Regional CHP goals and policies (Flanders) - Tine Stevens, Flemish Energy Agency
10.45 Regional CHP goals and policies (Wallonia) - Annick Lempereur, CHP-facilitator for Wallonia
11.00 Regional CHP goals and policies (Brussels) - Yves Lebbe, CHP-facilitator for Brussels
11.15 Coffee break
**SESSION 2: IMPLEMENTATION EUROPEAN ENERGY EFFICIENCY DIRECTIVE**
11.30 Translation of EED into regional Legislation - Eva Hoos, European Commission - DG TREN
12.00 Discussion
12.30 Lunch break
**SESSION 3: CHP ROADMAP AND BREAKOUT SESSIONS**
13.15 National CHP Roadmap - Joni Rossi, COGEN Vlaanderen
13.45 Breakout session 1: "Economics"
13.45 Breakout session 2: "Potential and Policy"
14.45 Coffee break
15:00 Summary and next steps
**VISIT TO CHP & DRINK**
15.15 Introduction to CHP at KBC headoffice
15.30 CHP Visit
16.00 Drink



## 2. Main conclusions regarding the Roadmap

<u>Areas of Roadmap which need to be revised</u>

It is generally agreed that the potential study for micro CHP made in the CODE2 project is highly over-estimated. It doesn't taken into account the different technologies and the assessment which technology is optimal in which situation, but it already presumes that micro CHP is the best solution to replace boilers. If a similar study would be made by every other sector (e.g.

solar water heaters, heat pumps, …) and if the 'potential' for each other technology would be estimated in the same way, the total potential would be much higher that the total amount of houses or SMEs.

Additions to the roadmap introduced by the workshop

*Economics:*

- Flexible electricity production of CHP in smaller installations can be offered through the use of buffer tanks. However, this will result in additional heat losses of the buffer tank. It might be interesting to start a study to compare the advantages and reduced costs for the grid and the smaller need of large scale energy storage, with the losses of heat, primary energy and costs when the use of buffer tanks is increased for flexible production.
- The demand for flexibility of increased/decreased capacity is often relatively well known for a medium term time span (about 2 weeks), because of weather predictions and prognoses from Elia. Therefore additional flexibility mechanisms could be offered in this medium term, between the short term regulation (day ahead and intraday) and the long term plans (e.g. capacity compensation).
- Small scale producers /CHP owners could organise themselves in an association and offer their production/flexibility to an aggregator as a group, thus increasing the advantages.
- In Wallonia it is possible for a producer to sell the electricity to specific customers. However this system is rarely being used. In Flanders private distribution grids are prohibited.
- CO2 rights can be used to further stimulate CHP in Belgium. Higher CO2 prices are favourable for CHP, since they stimulate higher efficiencies. It could therefore be an option to increase CO2 taxes at a federal or regional level, and to grant exceptions for CHP.
- Exceptions for taxes or grid costs can stimulate CHP.
- A 'blue label' for high efficiency CHP could be used for awareness, communication and promotion purposes. A first step should be an official acknowledgement of this label.
- There are still many misconceptions regarding energy balances and (renewable) production versus use of electricity. For example, for 'nearly energy neutral buildings', the energy balance has to be made over the total period of one year. This again can result in a further unbalance of the electricity production and consumption. E.g. a house with PV and heat pump can be energy neutral in the total yearly energy balance, but can create high imbalances during the year (large electricity production in the summer, large electricity consumption in the winter).
- An opportunity for an individual installation can be to use local (waste) streams as energy sources.
- Insecurity of the grid stability and risks for black-outs could convince potential end users to choose CHP.
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*Potential:*

- The potential of CHP in district heating is not estimated.

- There is a high potential for CHP in SMEs. However, it is not enough to create awareness at the beginning and convince SMEs to install CHP. They should also be guided during the process and during the implementation and operation of the CHP. In case something goes wrong, they need support and guidance in order to avoid that installations are being used suboptimal of even closed down. The same is true in common housing projects.
- SMEs also have problems with the investment costs for CHP. If something goes wrong, it can be a financial catastrophe for the company, which is less the case in larger companies. Therefore SMEs should receive guarantees for the financial risks.
- Demonstrations projects are important, for example for SMEs.
- Owners of small CHP installations don't know if their CHP is performing optimal. A kind of benchmarking would be helpful.
- There is still a large potential in large warehouses or shopping malls.
- In a long term vision based on renewables, fossil fired CHP could be coupled to CCS.

*Politics:*

- The CHP roadmap should align its numbers (potential capacity) with the 'Plan Wathelet' for gas fuelled electrical capacity.
- There should be a framework for biomethane injection.

## 3. Main conclusions regarding the creation of the heat coalition



This was the first time for Belgian CHP stakeholders from the three regions to have such an event. The participants were positive about the cooperation. Especially among the sector organisations it was realised that more cooperation is needed; e.g. when changes in the certificate systems are at stake, it is important to exchange information between regions and stakeholders.

## 4. Main lessons learnt

- experience from Irish workshop was used to improve this workshop
- a lot of interaction during the breakout sessions, maybe even more time for interaction could have been interesting
- a lot of interest for the CHP installation; it was an advantage to combine the workshop and the visit in one day
- administrations of regional governments were present, but no high level representatives
- very positive feedback from the EU Commission representative (Eva Hoos) on the roadmap and workshop.