

**COGEN Europe Response:  
COMMISSION WORKING DOCUMENT  
CONSULTATION ON THE FUTURE  
"EU 2020" STRATEGY  
Brussels, COM(2009)647 final**



15 January 2010

COGEN Europe welcomes the European Commission's consultation on the EU2020 strategy and acknowledges the vision set out by Commission President Mr. Barroso as to where the European Union should be in 2020. The belief that the exit from the current financial and economic crisis should be "the point of entry into a new sustainable social market economy, a smarter, greener economy" is a welcome indication of the direction which this Commission seeks to take.

COGEN Europe has considered how the cogeneration sector might contribute to this smarter greener economy.

**1) Creating Value by Basing Growth on Knowledge and empowering people in an inclusive society**

Europe is one of the world's most advanced cogeneration economies. Europe as a consequence also houses core skills, knowledge and innovation in this sector. Most recently the sector (which employs over 100 thousand people in Europe directly) has produced significant steps forward in technology including engine design in micro CHP, fuel cell technology and bio-energy cogeneration. Cogeneration engineering is a core knowledge base in Europe which can generate further growth.

Strong engineering and design activities build a robust vibrant skill set and supply chain around them. The home market is important for the sustained health of a sector and COGEN Europe welcomes and fully supports the policy structure which the European Union has put in place to expand the cogeneration sector. Legislation in Energy Efficiency and Cogeneration policy initiatives are particularly important.

Europe's energy efficiency and low carbon agenda is already driving innovation and should be firmly pursued. Under the impetus of a mandatory 2020 target the renewables sector has seen a considerable expansion in the range of electricity and heat generating technologies with the commercialisation of photovoltaics, a resurgence in heat pumps and the entry of wave and tidal technologies at the larger scale. The same impetus must now be found for the energy efficiency sector where the innovation will come not only in the technology but also in the market model, channel, the services and the delivery sector. Energy efficiency provides a wide range of skilled and semiskilled opportunities, many of them locally based and with up-skilling opportunities. Energy services companies ESCOs are currently at an early stage and relatively few in number, however a clear commitment to energy efficiency through a stable supportive policy framework, will attract many more players into the market: a growth which COGEN Europe would welcome.

COGEN Europe supports:

- Expansion of the cogeneration market through implementation of the cogeneration Directive and necessary additional measures. Thus securing and expanding the existing indigenous knowledge base and creating export opportunities.
- Stimulation of private sector energy efficiency investment as a whole by de-risking investment (through secure short and medium term policy structures) and releasing public investment in a range of appropriate financing products to meet the specific needs of the main energy efficiency opportunities and leverage additional private sector funds. Thus bringing

opportunities for innovation and skill development in the areas of green buildings, buildings services products, appliances and cogeneration.

## **2) Creating a competitive connected and greener economy**

The supply of energy, its competitiveness and sustainability, are at the heart of this objective. The climate change reduction and renewables mandatory targets are driving the greener economy but the additional change which Europe still requires to embrace is energy efficiency. Energy efficiency lies at the heart of competitiveness. It is also the first step in reducing energy consumption overall. Moreover energy efficiency encompasses a range of mature technologies which are deployable today but which require a supportive policy structure to implement. We can start work on a cogeneration plant or a building insulation project tomorrow with no more development needs. What is needed is the policy to encourage the wider civil and industrial up take of these technologies.

The Emissions trading scheme is the preferred European policy tool to de-carbonise the large industrial economy at capacities over 20MW. However, if Europe wishes to ensure achieving a specific target and particularly to secure a specific timescale then it seems unwise to rely on the market alone to deliver it. Given the reported poor performance of Europe against its 2020 energy efficiency objective (heading for 13% compared to the 20% target saving in 2020) it is time to consider additional measures.

The European Union has made less progress than necessary in the area of energy efficiency and while there is a considerable portfolio of relevant European legislation it has typically been only slowly implemented within the member states. This may reflect the sometimes broad scope of such legislation and significant lead time in some elements however it is also true that energy efficiency tends not to have the same visibility, priority or staffing level of other energy “vectors” within the Commission and member state structures.

Cogeneration has a unique role to play in improving the competitiveness of industry. It is already widely used in the paper, chemical, refining and other sectors but its use is by no means universal. Policy structures should be strengthened to support industrial CHP development.

With a strong focus on energy efficiency industry, joins ESCOs as substantial new entrants to the electricity sector by 2020. The vast industrial heat loads still untapped for cogeneration in Europe should be harnessed for high efficiency heat AND electricity generation. This reduces the need for new power station development, reduces the cooling load placed on rivers and coastal zones, reduces the “new generation” requirement to extend the grid and creates further opportunities for the development of the ESCO sector.

Member states are currently reporting on the potential for cogeneration in Europe and estimate that there is 122GWe of cogeneration potential still un-exploited. Around half of this is in industrial applications. However member state efforts to realise this potential is patchy and the Cogeneration Directive on its own does not appear sufficient to drive the change.

COGEN Europe supports

- A mandatory target of energy efficiency in Europe
- Member state energy efficiency sub targets for new cogeneration based on the identified potential
- A full implementation of the cogeneration Directive and consideration of the need for additional legislation, or strengthening of the Directive, to accelerate the wider deployment of cogeneration.

### **Conclusion**

2020 is just around the corner in policy and engineering terms. COGEN Europe draws attention again to the benefits of making energy efficiency a primary goal of climate, energy, and industry policy up to 2020. A focus on energy efficiency including cogeneration is completely compatible with the European Commission’s stated objectives. The technology is here today and delivers competitiveness, jobs and sustainability. Actions started today in policy will not be fully implemented in member states before 2016 leaving little time to take effect. COGEN Europe recommends strong policy leadership from the European Commission on energy efficiency with a focus on implementation and the addition of only the few measures needed to close final gaps in coverage.

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**About cogeneration:**

*Cogeneration (also known as CHP or Combined Heat and Power) is the simultaneous production of heat and electricity. 11% of Europe's electricity and heat requirements today are produced using this proven energy efficiency technology. The estimated growth potential is for a further 150 GWe of cogeneration which will lead to an improved environment and greater economic competitiveness in Europe. Cogeneration units can be found in different sizes and applications: industry, households and tertiary sector and spans applications with capacities ranging from 5kw to hundreds of Megawatts.*

*It is a highly efficient energy solution that delivers substantial reductions in CO2 emissions and can be a large contributor to delivering the targets of the Kyoto Protocol on climate change for Europe. In EU Member States where cogeneration has been seriously supported as in Denmark their electricity supply system operates at 65% efficiency overall compared to the current EU average of an unacceptable 33% efficiency overall.*

**About COGEN Europe:**

*COGEN Europe is Europe's umbrella organisation representing the interests of the cogeneration industry, users of the technology and promoting its benefits in the EU and the wider Europe. The association is backed by the key players in the industry including gas and electricity companies, ESCOs, equipment suppliers, consultancies, national promotion organisations, financial and other service companies.*