



# EUROPE'S FUTURE ENERGY SYSTEM

THE ROLE OF COGENERATION



[cogeneurope.eu](http://cogeneurope.eu)

# EUROPE'S FUTURE ENERGY SYSTEM

## THE ROLE OF COGENERATION

**THE WORLD IS CHANGING.  
EUROPE IS CHANGING WITH IT.**

**The challenge of climate change is stirring a wave of positive innovation around Europe. Exciting new ideas are emerging to improve our way of life. Supplying the energy needed by people and the economy, the energy sector has a key role to play in driving this change: we cannot afford to waste energy if we are to successfully move to a clean, reliable and affordable future energy system.**

**As Europe moves to reduce greenhouse gas emissions and shifts to a sustainable society, it is leading the way in building the future energy system. The EU has set ambitious energy and climate change objectives to ensure that Europe relies on secure, affordable and climate-friendly energy, putting consumers at the centre while boosting competitiveness and growth.**

## OUR VISION

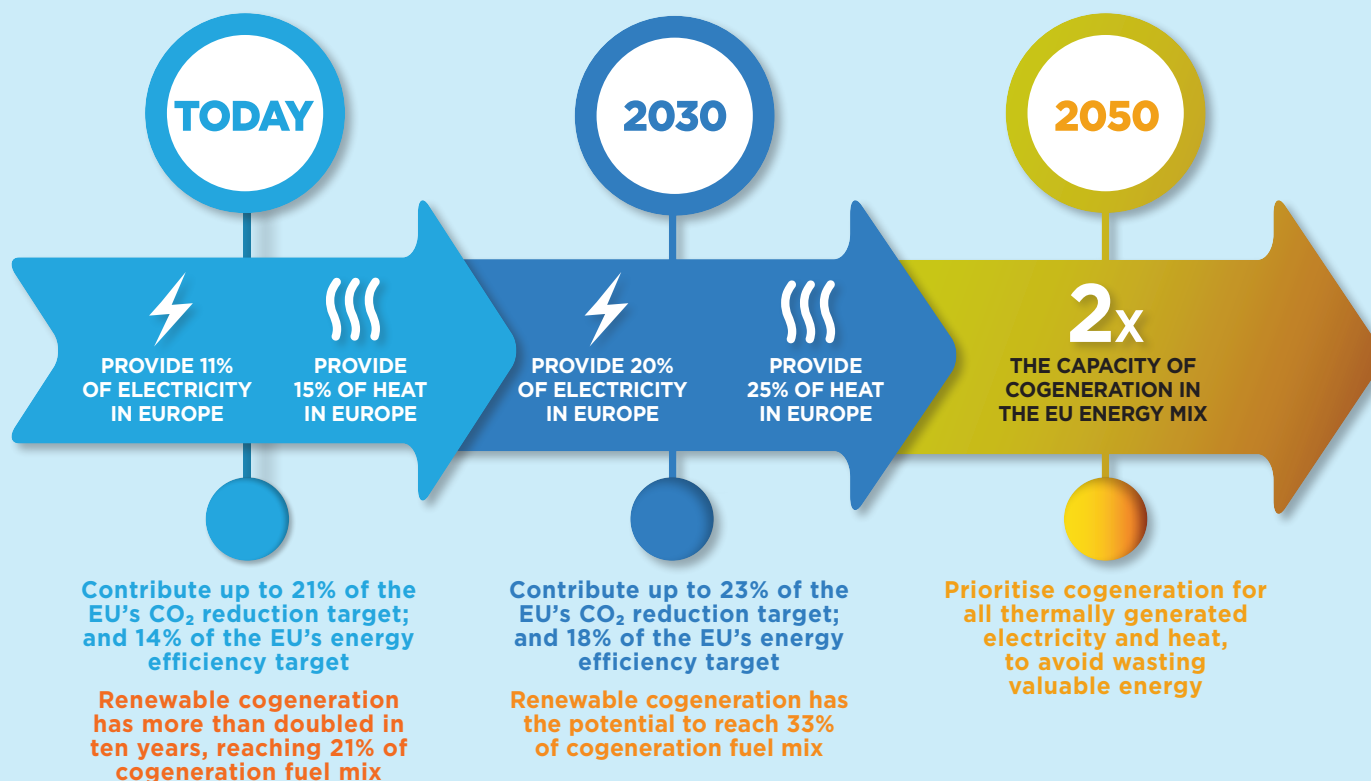
**The cogeneration sector is committed to creating a resilient, decentralised, carbon neutral European energy system by 2050, with cogeneration as its backbone:**

**empowering European citizens and industry to generate their own efficient, reliable and affordable clean heat and power locally**

**bringing together heat, electricity and gas networks, allowing the efficient integration of substantial amounts of renewable energy and providing energy when and where needed**

**enabling an integrated energy system and a cost-effective transition towards a sustainable future**

## OUR VISION OF COGENERATION PATHWAY FOR EUROPE

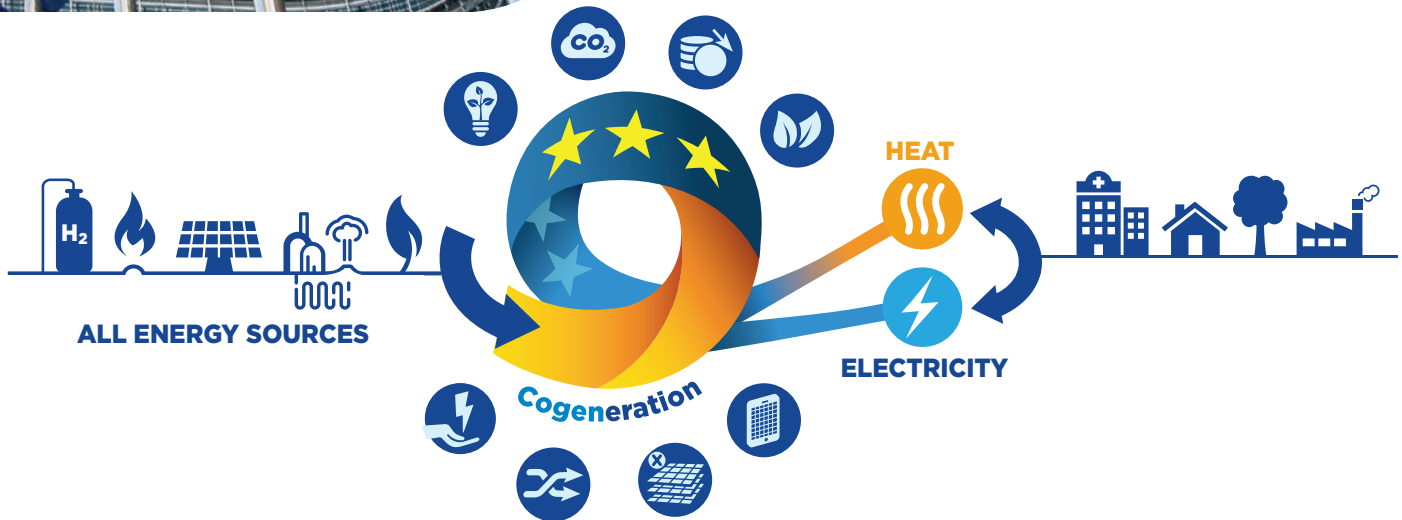






## COGENERATION: KEY BENEFITS TO EUROPE'S ENERGY SYSTEM

Also known as combined heat and power (CHP), cogeneration is the simultaneous production of useful heat and electricity from a single energy source.



### Cogeneration responds to the new challenges of the EU's energy system



#### **SAVES ENERGY**

by capturing heat that would normally be wasted in power-only generation processes, reaching an efficiency above 80%



#### **CUTS CARBON EMISSIONS**

helping to meet the climate and energy efficiency goals cost-effectively



#### **LOWERS ENERGY COSTS**

making energy more affordable and boosting the competitiveness of industry



#### **INTEGRATES RENEWABLE ENERGY**

both variable renewable energy and dispatchable renewable sources like biomass, biogas and hydrogen

## PUTTING ENERGY CONSUMERS AT THE CENTRE

Being user-led, cogeneration is a local and efficient solution, already playing a key role in enabling an increasingly distributed, integrated and sustainable energy system:

- **many key industries use large cogeneration installations**, from pulp and paper, aluminium, chemicals, ceramics, glass, textiles, food & drink to steel manufacturers.
- **some well-known and iconic buildings use cogeneration** for their heat and electricity, including the Reichstag Building in Berlin and the European Commission headquarters in Brussels
- **90 million European households enjoy efficient heating** thanks to cogeneration as part of their district heating network, while the electricity from cogeneration is also consumed locally
- **over 100,000 active energy consumers** like homes, hospitals and SMEs already self-generate their heat and power with to on-site cogeneration

Cogeneration helps consumers and businesses to take control over their energy future by making them the active beneficiaries of an integrated energy system, and rewarding them for the benefits they bring to the system.

## IMAGINE WHAT COGENERATION CAN DO FOR THE NEXT GENERATION.

## OUR MISSION

COGEN Europe, the European Association for the Promotion of Cogeneration, is the cross-sectoral voice of the cogeneration industry. Its mission is to work with EU institutions and stakeholders to shape better policies and eliminate administrative, regulatory and market barriers to the wider use of cogeneration in Europe by:

- building a robust evidence-base demonstrating the benefits of cogeneration
- using the expertise of its membership
- establishing strong coalitions and partnerships

We believe a reliable, affordable and climate-friendly energy system can be built with these collaborative efforts.



### EMPOWERS CITIZENS AND BUSINESSES

to produce and consume their own clean heat and power locally and reliably



### PROVIDES FLEXIBILITY

balancing energy supply and demand, leveraging short, medium and long-term storage across heat, electricity and gas networks



### AVOIDS COSTLY GRID REINFORCEMENTS

by being located close to the point of consumption, reducing losses in energy transportation and distribution



### IS SMART GRID READY

responding to the challenge of increasing peak demand and/or low wind and sun generation

## NATIONAL ASSOCIATIONS



## CORPORATE MEMBERS



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