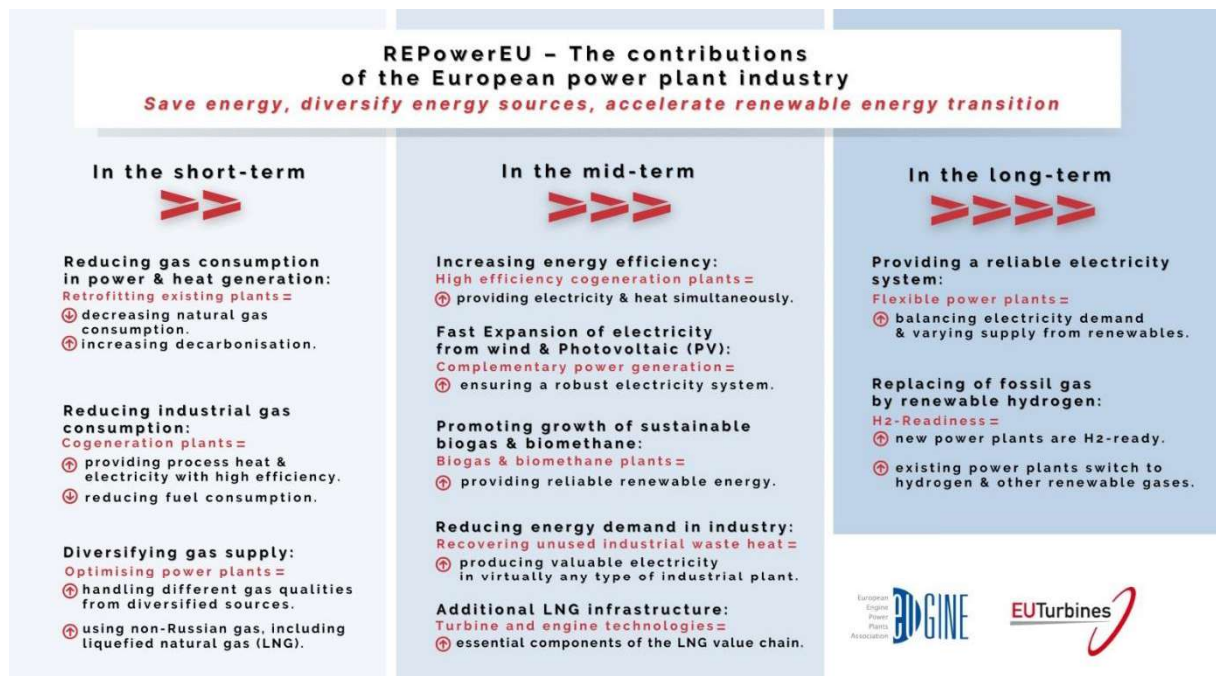


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REPowerEU – The contributions of the European power plant industry

The European power plant industry, represented by EUTurbines and EUGINE, welcomes the REPowerEU Plan and supports the necessary efforts to become independent from Russian fossil fuels, aiming at ensuring a stable energy supply for Europe, while moving towards climate-neutrality.

We stand ready to contribute to the series of measures set out by REPowerEU – *save energy, diversify energy sources, and accelerate renewable energy transition* – in the short, medium, and long terms. Here is how:



In the short-term

Reduction of gas consumption in power & heat generation:

A retrofit of existing power plants, implementing the latest and most efficient technological solutions, can not only reduce the consumption of natural gas in the short-term, but also contribute to decarbonisation – with limited investments.

Reduction of industrial gas consumption:

A large share of gas is used in industry for the provision of process heat. Also in industrial settings, cogeneration plants combine heat generation with electricity generation, thus reaching a much higher efficiency than heat-only generation – and so, keeping fuel consumption as low as possible.

Diversification of gas supply:

Our industry ensures that gas power plants can handle the different gas qualities that result from a diversified sourcing – including liquified natural gas (LNG).

In the mid-term

Increased energy efficiency:

Cogeneration plants provide heat for district heating grids (in combination with heat pumps), for industrial purposes, and for decentral applications with a much higher efficiency compared to the separate generation of power and heat.

Fast expansion of electricity from wind & Photovoltaic (PV):

A fast growth of variable renewable electricity requires a reliable back-up generation capacity, flexibly filling the gaps. As an important contributor to a robust electricity system, our industry supports the transition by providing H2-ready power plant technologies.

Strong growth of sustainable biogas & biomethane:

Biogas plants operating with engine technology are a highly efficient and decentral solution that allows using agricultural waste to generate dispatchable electricity and heat from renewables.

Reduction of energy demand in industry:

Our members' solutions are designed to recover, at the highest possible efficiency, waste heat – be it from industrial processes or from other heat sources – to produce valuable power in virtually any type of industrial plant.

Additional LNG infrastructure:

Turbine and engine technologies are essential components in the LNG value chain, not only as elements of liquefaction and regassification plants, but also for transport on specialised ships and as compressors in the pipeline system. The necessary solutions are mature and can be provided by our industry.

In the long-term

A reliable electricity system:

As the importance of electricity as main energy carrier grows, and the share of highly variable renewables in generation expands, the challenge of constantly balancing electricity supply and demand increases. Highly flexible power plants operate less hours but are essential back-ups.

Replacement of fossil gas by renewable hydrogen:

We ensure that newly built power plants are H2-ready based on our industry definition of “H2-readiness”. Once the necessary hydrogen quantities are available, plants can switch operation to either hydrogen blends or pure hydrogen.

Existing gas power plants can be assessed and upgraded for the use of alternative fuels. Presently, a share of up to 25% of hydrogen blended into natural gas can be used without substantial modifications.

In essence, our industry is committed and fit to provide solutions to help Europe develop an energy system that is reliable, sustainable, and affordable, and to become independent from Russian energy supplies.

To achieve all these goals, we have the following policy recommendations:

- The contributions of H2-ready power plants to a robust electricity system, both in the transition and in the long-term should be better recognised.
- Energy users need to be incentivised to implement energy efficiency solutions – such as cogeneration plants – as quickly as possible.
- Financial support should be made available for upgrades of industrial base, waste-heat recovery, cogeneration, CCUS projects and hydrogen-ready technologies.
- The permitting rules proposed in the REPowerEU Package should also facilitate the permitting process of H2-ready cogeneration and power projects and need to be immediately adopted and implemented across Member States.
- A clear set of standards must be developed to enable blending and hydrogen-ready technologies.
- For energy-intensive industrial applications, where the use of fossil fuels is inevitable in the short-term, carbon capture, utilisation and storage (CCUS) should be supported – allowing a fast decarbonisation of these activities.

About EUGINE and EUTurbines:

EUGINE is the voice of the European engine power plants industry, representing the leading European manufacturers of this flexible, efficient, reliable and environmentally sound technology. Engine power plants are an optimal solution for both backing-up and generating renewable energy (e.g. with biogas). Cogeneration, the combined generation of power and heat/cold, is a typical engine power plant application providing highest efficiency. For more information please see www.eugine.eu

EUTurbines is the only association of European gas and steam turbine manufacturers. Its members are Ansaldo Energia, Baker Hughes, GE Power, MAN Energy Solutions, Mitsubishi Power Europe, Siemens Energy and Solar Turbines. EUTurbines advocates an economic and legislative environment for European turbine manufacturers to develop and grow R&I and manufacturing in Europe and promotes the role of turbine-based power generation in a sustainable, decarbonised European and global energy mix. For more information please see www.euturbines.eu