

European Power Plant Suppliers Association



Developing the Future

# “Clean Energy for All Europeans” Package: innovative thermal power enabling a low- carbon energy transition

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EPPSA Technology Evening  
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[www.eppsa.eu](http://www.eppsa.eu)

# Who we are

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**EPPSA - The European Power Plant Suppliers Association** - is the voice at European level of companies supplying the most advanced power plants, their components and related services for energy providers and industrial applications of all sizes.

EPPSA members, located throughout Europe, represent a leading sector of technology employing more than 100 000 highly skilled employees.

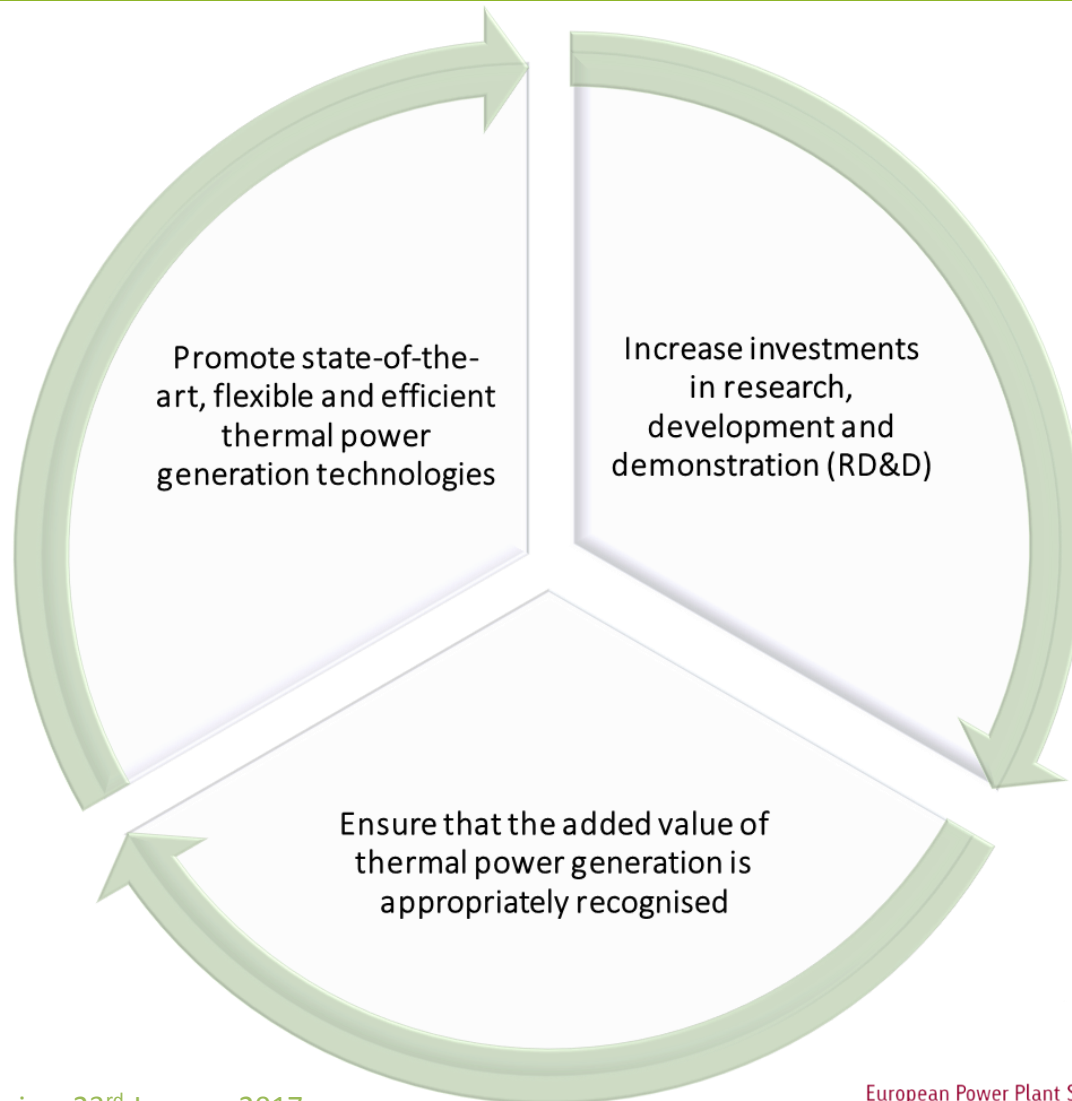
EPPSA members provide the most advanced and innovative thermal power technologies in the world. Virtually all thermal power plants in the EU are built by members of EPPSA or equipped with their components, and provide around 50% of Europe's electricity.

# The European Power Plant Suppliers Association



# EPPSA Objectives

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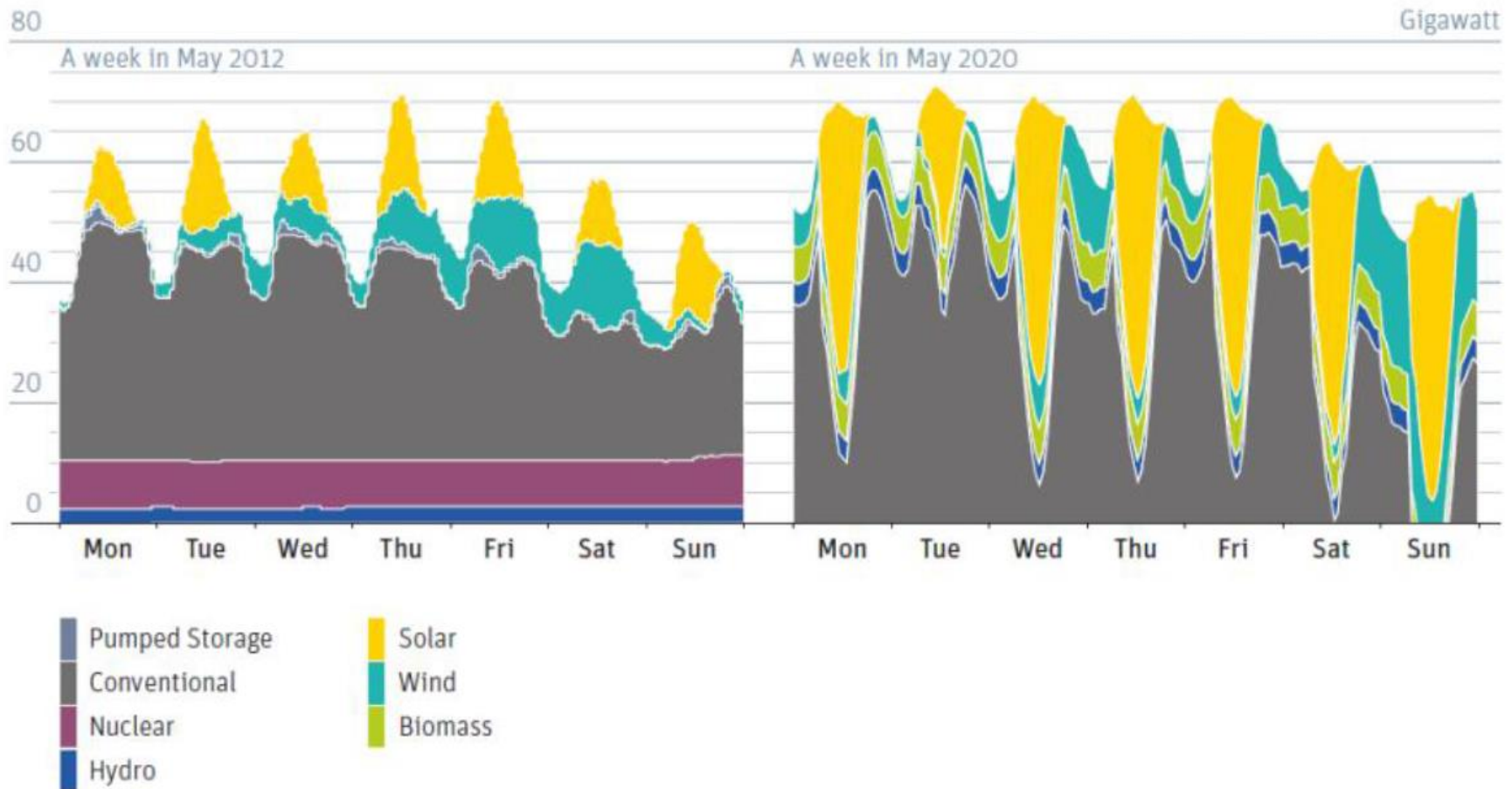


# Challenges in the Energy Transition

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- Pace of decentralisation of power generation, 'green' innovation and digitisation
- Disruption of existing policy, practice, energy sector business models and financing
- Threat to both grid stability and security of supply
- Need for evolutionary 'transition' instead of a revolutionary 'switch' to accommodate different national and local situations

# Today's situation and a glimpse into the future



Source: Volker Quaschnig, HTW Berlin

# Tackling the energy transition challenges: New EPPSA Strategy

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- Promoting benefits of ever more flexible and efficient state-of-the-art thermal power generation in Europe, as part of the solution to enable a clean, affordable and secure energy transition.
- Striving to make research and innovation create value to society, through re-industrialising Europe, boosting its competitiveness and supporting the transition to a sustainable future.
- Thermal power is a key enabler of the energy transition
  - Allows the integration of more renewable energy sources (RES) in the system
  - Ensures the grid stability and security of supply
  - Supplies affordable energy for Europeans citizens and businesses

# Thermal Power: a Key Enabler

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Thermal Power will not only enable the energy transition through flexibility by being the backup for variable RES (wind and photovoltaic) but will also:

- Enable the integration of large scale renewable energy sources (RES) by:
  - Converting to dispatchable RES (e.g. from biogas to solid biomass), offering increased efficiency through scale
  - Facilitating the use of bioenergy in all thermal power generation solutions (sizes and technologies) for its potential to produce heat and electricity
- Making solar power dispatchable (via Concentrated Solar Power)
- Becoming hubs with large scale energy storage for RES integration



# Thermal Power: a Key Enabler

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- Serve as a primary asset for industrial symbiosis via Power to Heat/Fuel developments, utilising and converting excess electricity generation from RES to other useable resources
- Offer game-changing CO<sub>2</sub> abatement capability through centralised Carbon Capture Utilisation and Storage
- Become agile centralised counter-parts digitally enabling decentralised generation
- Make other sectors more efficient by supplying them with heat and electricity produced in ever more efficient and clean power plants

# Setting an enabling EU regulatory framework

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EPPSA welcomes the 'Clean Energy for All Europeans' package

The package offers a key opportunity to create the enabling framework that will

- Foster cost-effective solutions
- Encourage public and private investments
- Boost EU's competitiveness, energy efficiency and technological leadership worldwide
- Help reindustrialise Europe

# High level policy recommendations

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- Establish a fair and balanced EU regulatory framework, ensuring a level playing field and undistorted markets allowing all technologies to contribute to the energy transition
- E.g. carefully oversee the allocation of subsidies and feed-in tariffs
- Ensure well-functioning markets and favour a market-driven approach for mature technologies. Well-functioning markets will
  - send the right signals for investments in best technologies and flexible electricity generation capacity to balance the intermittency of variable renewables as well as to guarantee a reliable and secure energy system.
  - set the right remuneration for every service

# High level policy recommendations

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- Set balancing obligations for all energy generators once technology is mature
- Foster state-of-the-art thermal power plants meeting the best flexibility, efficiency and environmental performance according to Best Available Technologies (BAT)
- Unleash all potentials in the existing energy system to deliver the energy transition
- Support research & innovation activities for thermal power generation technologies as a key enabler