

# ETN Roadmap, key activities and projects to accelerate the transition

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Global



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ETN GLOBAL'S VISION  
Safe, secure, affordable and dispatchable  
carbon-neutral energy solutions by 2030,  
implemented globally by 2050

2050  
AND BEYOND

2030

ETN Global  
[www.etn.global](http://www.etn.global)



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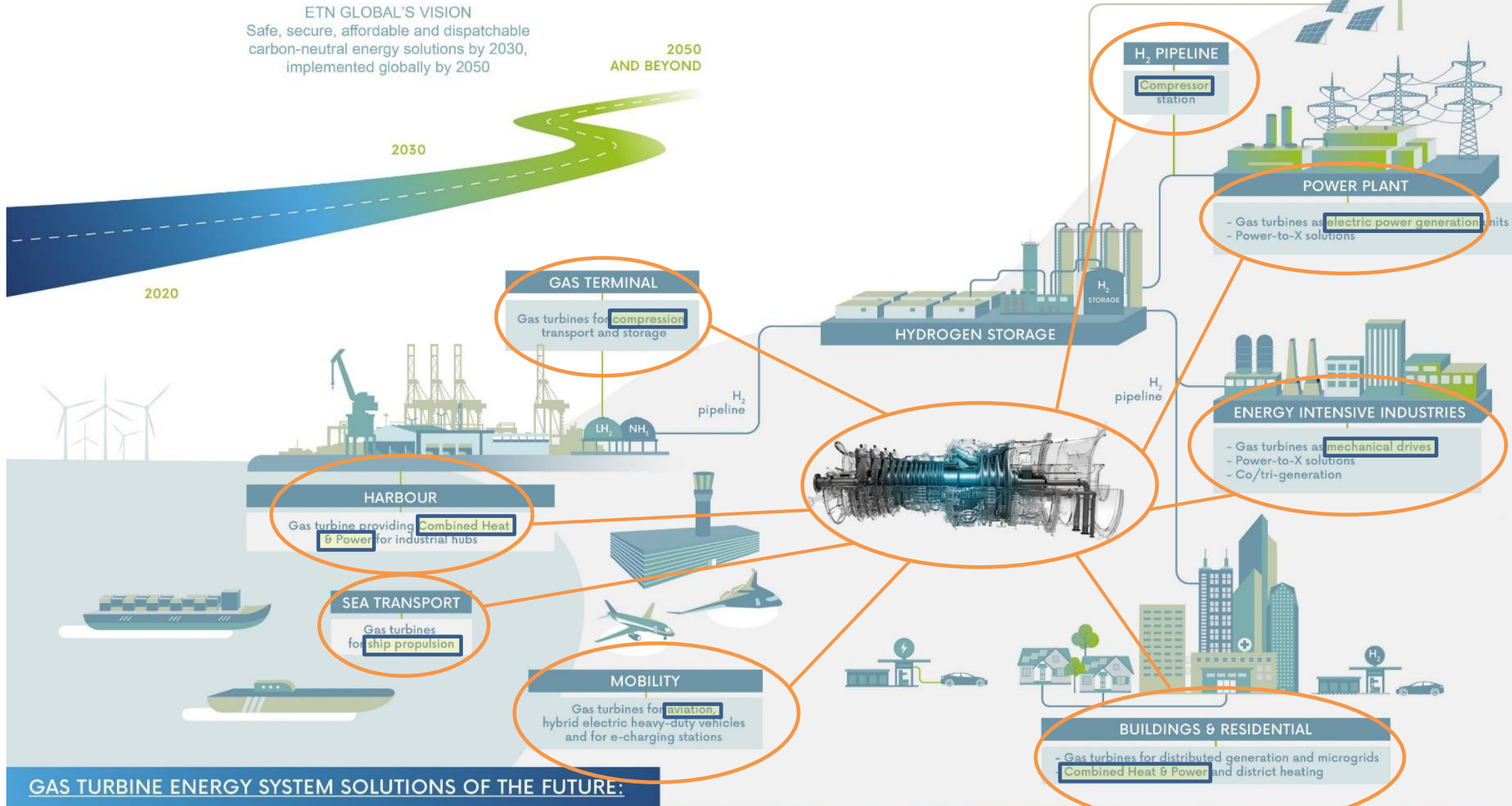
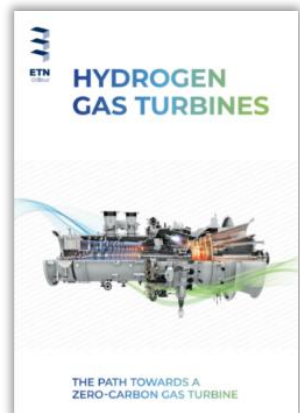
# GAS TURBINE APPLICATIONS IN A CARBON-NEUTRAL SOCIETY

ETN GLOBAL'S VISION  
Safe, secure, affordable and dispatchable carbon-neutral energy solutions by 2030, implemented globally by 2050

2050 AND BEYOND

2030

2020



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COMPACT POWER DENSITY

DISPATCHABLE

FLEXIBLE

RENEWABLE FUELS

ENERGY STORAGE

COST COMPETITIVE

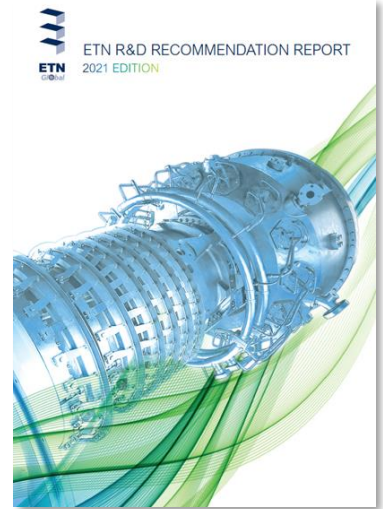
NET-ZERO SOLUTIONS



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# ETN R&D Recommendation Report

## Edition 2021



**Topics:** Market conditions & policy framework

Operational flexibility

High efficiency (also at part load)

Extended fuel spectrum

Emissions

Decarbonisation

Advanced cycles

System integration and energy storage

Decentralisation

Materials

Advanced repair

Digitalisation

Reliability, availability, maintenance

Sensors & instrumentation

Condition monitoring & lifing

**Power  
Generation**

**Oil & Gas**

**Industrial**

**Systems integration**

**Decentralised systems**

**Flexibility (Fuel & Operation)**

**Digital solutions**



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# Strategy and Objectives

Key pillars

supported by ETN Working Groups and projects



Market Trends,  
Policy, Legislation



Optimised Operations



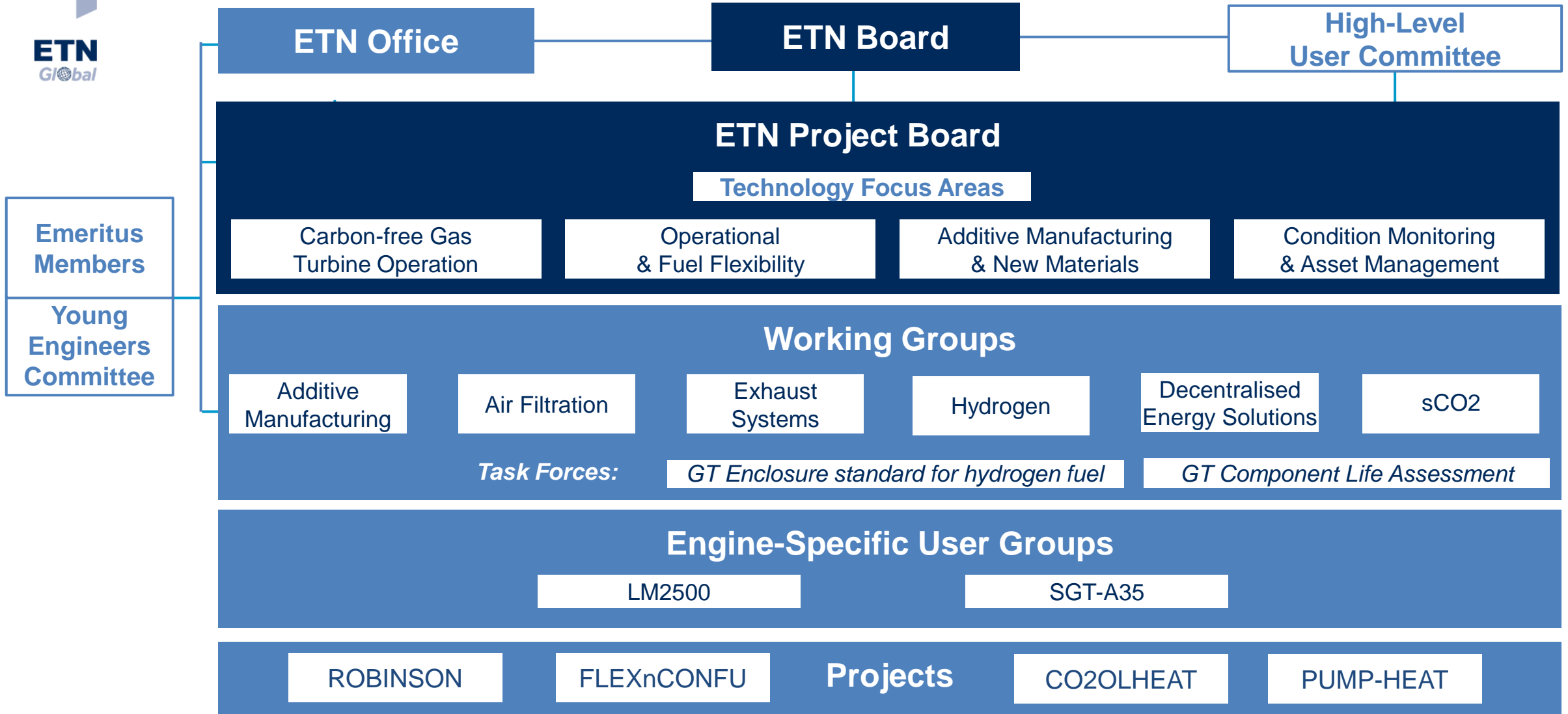
Research and  
Development



Working Groups and Projects



# Organisational Structure





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# Ongoing EU projects



- 2021-2025
- ETN's role: coordination, dissemination and communication activities



[co2olheat-h2020.eu](http://co2olheat-h2020.eu)



- 2017-2021
- ETN's role: dissemination activities



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



- 2020-2024
- ETN's role: dissemination and communication activities



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



- 2020-2024
- ETN's role: coordination, dissemination and communication activities



[robinson-h2020.eu](http://robinson-h2020.eu)



These projects have received funding from the European Union's Horizon 2020 research and innovation programme: NEXBTOWER: GA 721045; PUMP-HEAT: GA 764706; FLEXnCONFU: GA 884157; ROBINSON: GA 957752

# A need for Global Cooperation

to accelerate the Energy transition and ensure a wide role for dispatchable clean turbine technology in the energy transition and beyond



Mission to:

- ✓ encourage and facilitate information exchange
- ✓ foster cooperation among the stakeholders of the turbine industry and collaboration with related sectors
- ✓ accelerate research, development, and demonstration of sustainable energy solutions
- ✓ Ensure a regulatory and market framework that will incentivise the required investments

