

Key messages from ETN's High-Level User Meeting 2023

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20 October 2023 ETN's 11th IGTC

ETN Roadmap 2023-

ETN Gl@bal

Map out and accelerate development of net-zero carbon pathways lead by the GT user community

a suitable regulatory framework **Policy**

Define GT User's needs and priorities

Portfolio of pathways

Explore technical solutions in WG's

Pathways explorations

Enhence collaboration and impact

Define & advocate for

Global expansion of ETN

Dissemination/ education

Shifting the Technology Perception

Projects initiation and Dissemination Platform

Accelerate Technology Development Portfolio of net-zero pathways

Chiad Reconsider on Nation

R&D Report & Roadmap

Research & Demonstration Projects

ETN's Technology Development Platform 2023





Key objectives

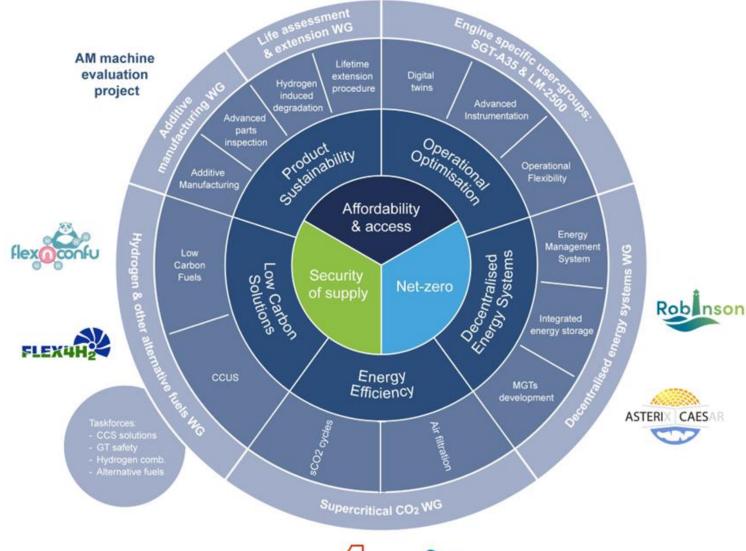


Tech. solutions

Working Group's



ETN Projects











- Dispatchable energy is required to support the intermittent nature of renewable energy. Gas turbine offer the best solution.
- Decarbonisation is the main target for gas turbine users. Targets are clear and implementation plans demanding.
- Most important low carbon solutions are hydrogen and CC(U)S. In some instances, biofuels are an alternative.
- Development and deployment timelines for low carbon solutions are drafted, however need to be completed with additional projects. We need your support to complete this action.
- Reformation of the energy market should include mechanisms that support the dispatchability of the best low carbon emitting gas turbine technologies.

Hydrogen



HELIOS

EU-Horizon Flamesheet retrofit

MHI-Japan

H20 100% Hydrogen **DEA: USA**

Raytheon FT4000 burner FLEX4H2

EU-Horizon GT36

MHI-Japan

H25 100% Hydrogen

2023

2024

2025

2026

2027

2028

2029

2030

H2GT-Lingen

RWE/KAWASAKI Micromixer

HYFLEXPOWER

EU-Horizon, SGT400 Full scale demo

HyPowerGT

EU-Horizon 100% Hydrogen

Fundamentals

Development

Deployment



Key messages

- Investigate the flexibility and stability constraints in the future power system with a high share of variable renewable energy.
- Development of service packages that improve the operational efficiency of existing assets need attention and dedicated support.
- More activities are required to push automation and digitalisation of assets.
- Outage turnaround time and spare parts delivery times need substantial improvements.