

ETN's 2024 technical objectives and roadmaps

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ETN Roadmap

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

> Define & advocate for a suitable regulatory framework

> > **Policy**

Enhance

collaboration and

impact

Global outreach

of ETN

Define GT User's needs and priorities

Portfolio of pathways

Explore technical solutions in WG's

Pathways explorations

R&D Report

& Roadmap

Dissemination/ education

> Shifting the **Technology Perception**

Projects initiation and Dissemination **Platform**

Accelerate **Technology Development**

Portfolio of net-zero pathways

Research & **Demonstration Projects**



ETN's Technology Development

Platform 2024





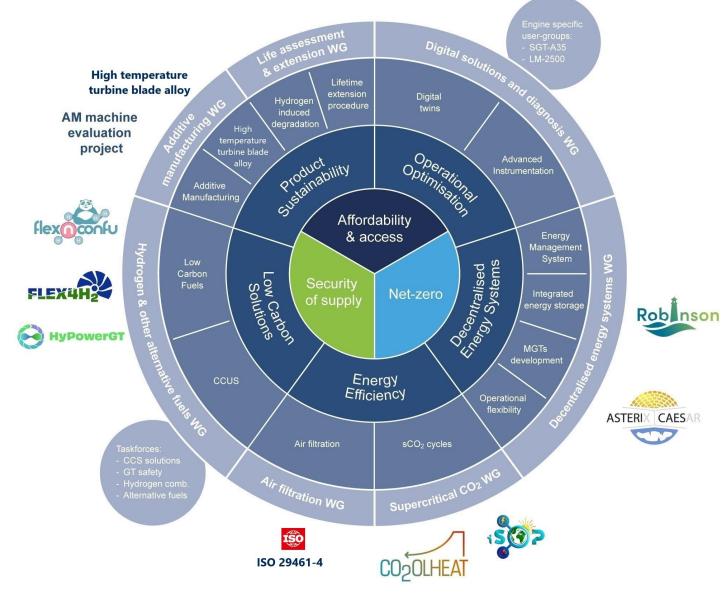
Key objectives



Issues

Working Group's

ETN Projects





Managing the innovation cycle





- Need for a better-defined project charter that identifies the scope, timeline, objectives and contributors
- Definition of reviews moment in initiation and progress of initiatives
- Provide full transparency of all the initiatives for all members
- Demonstrate our follow up in all project activities



Launch a one-pager to define the initiatives and install a process to monitor initiation and progress





Scope definition

ETN has hosted a consortium to carry out a study of Additive Manufacturing (AM) machine producers (machine OEMs) to better understand the capabilities and boundaries of the technology.

Objective setting

The study intended to investigate similarities and differences between execution and results when several AM producers were asked to manufacture the same parts, all using the same powder feedstock as basis.

Expected outcome

The involved manufacturers will be manufacturing parts with Nickel Alloy 718 powder, according to specifications defined in collaboration with members of the ETN Additive Manufacturing Working Group. The parts to be produced include features of specific interest to the energy sector, such as thin walls and cooling channels. Performance, quality and productivity are key elements that will be evaluated.

Implementation of the activities

Project execution

DNV is assigned as the project manager. The consortium members actively contribute to the consortium. The consortium is organised under the ETN embralla.

Project finances

The project (165 kEURO) is funded by the participating members of the consortium

Meeting schedule and dissemination

Within the consortium all Documentation is transparently distributed via share point.

A full report will be issued to the consortium members only (restricted)

A synopsis of the report will be issued to ETN members and is public available

Deliverables & Milestones			
Deliverable 1	Final consortium Report	Timing	28-02-2024
Explain briefly.			
Deliverable 2	Public report	Timing	19-03-2024
Explain briefly.		•	
Milestone 1	Project start	Start date	xx-07-2021
Explain briefly.			
Milestone 2	Project end	End date	28-02-2024
Explain briefly.		•	



Research & Innovation

R&D Reports

Projects & Proposals

- H2-IGCC

- OMSoP

- FLEXnCONFU

Working Groups

- ETN Additive Manufacturing (L-PBF) Machine Evaluation Initiative

- Air Filtration WG

- GT Life Assessment and Extension WG - Decentralised Energy Systems WG

- Hydrogen and alternative fuels WG

- Supercritical CO2 WG

EU Strategic Energy Technology

Best Practice Award

Additive Manufacturing WG



SEND AN EMAIL TO THE MEMBERS OF THIS WORKING GROUP

🖹 Description 🖎 Partners 🗸 Latest development (ETN) 🚔 Documentation (ETN) 🙎 Members (ETN) 🍧 AM Equipment database (ETN) 📋 Events

ETN AM Evaluation

Please review the dedicated page, with added documentation for logged in users:

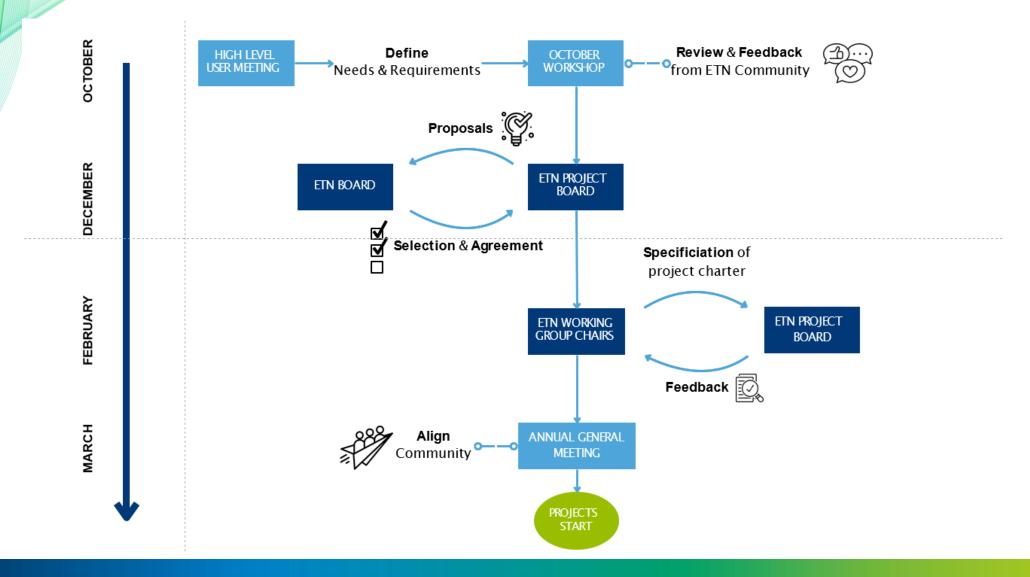
https://etn.global/research-innovation/working-groups-technical-committees/additive-manufacturing/etn-am-machine-evaluation-initiative.

Objective settings 2024

- High Temperature Turbine Blade Alloy for Additive Manufacturing_v2_1
- AM (L-PBF) Machine Evaluation Initiative v2 0

New initiatives





Ongoing initiatives



