

Call for papers

The IGTC-25 Conference Advisory Board (CAB) welcomes submission of papers of the following types:

- **Technical papers** describing advances in technology and innovative solutions
- **Review papers** giving a comprehensive technology overview of the past two years
- **Case study papers** describing recent experiences

The submitted papers should be relevant to the energy and turbomachinery user community and relate to one or several of the five categories (A-E) below. The selected topics reflect the challenges expressed by users which are gathered every year at ETN Global High-Level User Meeting (HLUM). For further details please consult the ETN Global's 2023 [R&D Recommendation Report](#).

The highlighted topics of each category include, but are not limited to:

Topics	
<p>A - Decarbonisation and emissions reduction</p> <ul style="list-style-type: none"> • Power-to-X-to-power technologies • Technologies for H₂ gas turbines (GTs) (GT upgrades, retrofit and new concepts) • Environmental life cycle assessment • Technologies and solutions for alternative fuels and fuel flexibility (hydrogen, biomass, ammonia, LNG/LPG...) • CCS Impact on CCGT performance (ramping rate, efficiency, start-up) and integration with dynamic operation • Backbone development for CO₂ storage and transport infrastructure 	<p>B - operational optimisation, digitalisation and decentralised energy</p> <ul style="list-style-type: none"> • Operational GT flexibility, including emission at flexible load and efficiency at partial load • Decentralisation and distributed generation concepts • GT hybrid solutions and integration with energy storage for optimised and flexible operations • Digital engine modelling, digital twins • Plant and system integration • Virtual power plant • Data management, architecture & security • Artificial Intelligence and data driven design
<p>C- Decarbonisation through energy efficiency</p> <ul style="list-style-type: none"> • Overall system efficiency • GT advanced cycles (wet cycles, sCO₂, exhaust gas recirculation, hybrid cycles, integration of storage solutions, heat pumps etc.) • Waste Heat Recovery • Air filtration system 	<p>D - Product sustainability</p> <ul style="list-style-type: none"> • Condition-based maintenance • Extension of service intervals and total engine life • Component lifing • Predictive maintenance • New component developments • Additive manufacturing and repair • Reliability (material and life impact)
<p>E- Economic, market, policy and social</p> <ul style="list-style-type: none"> • Economic impact of technical solutions in line with the market conditions and policy framework • Emissions legislation and regulatory framework • Profitability of thermal assets and implementation remuneration models for flexible thermal capacity • Certification of low carbon ready solutions and conditions for business incentives to be developed • Forecast on operation, utilisation modes and requirements of GT in the route to 2050. • Definition and mitigation of the risks that changing ambient conditions and extreme climate hazards pose to the resilience and operations of GT power plants • Public/social perception 	
Deadlines	
Submission of abstracts: 8 December 2024	Notification of abstract acceptance: <i>07 February 2025</i>
Submission of draft papers: <i>6 April 2025</i>	Notification of first decision: <i>9 May 2025</i>
Submission of final papers: <i>30 May 2025</i>	Notification of final decision: <i>20 June 2025</i>

Format and submission

Abstracts must be/contain

- A Word document of maximum 400 words.
- Relate to one or several of the five categories (A-E) listed above.
- Title of the paper.
- Names, affiliations, and full addresses of all authors.
- Up to five keywords in descending order of importance.
- Language: All abstracts must be written in high quality English and authors must be able to present in English.

The Conference Advisory Board will only select abstracts of promising high-quality papers. Authors of the accepted abstracts will be invited to submit a final paper.

Submission

An abstract should be submitted in a Word document by email with the title "Abstract" to igtc@etn.global by 8 December 2024. When your abstract is submitted correctly, you will receive a confirmation email.

Final paper acceptance

The final acceptance of the paper is based on a positive review by the CAB. The CAB may also give comments to improve a paper, which must be implemented before the final submission.

Accepted papers will appear in the conference proceedings available in electronic format at the conference. Authors of the accepted papers must present their paper in respective technical sessions and will be expected to submit their PowerPoint presentation 1 month before the conference.

About the conference

The International Gas Turbine Conference (IGTC), a well-established and renowned biennial event, is dedicated to demonstrating significant opportunities for turbomachinery in the energy transition and in a net-zero society. The conference highlights the latest technical developments in identified net-zero pathways, serving as a crucial information platform for the user community. It also provides opportunities for the Research & Development (R&D) community to meet and discuss with users, suppliers, service providers, and policymakers. Additionally, it offers an outlook on the European and key energy markets globally, while sharing current R&D activities and the latest achievements in flexible, efficient, reliable, and sustainable energy solutions.

Parallel technical sessions

Designed to address critical R&D activities necessary for turbomachinery advancements. These sessions, which cover operational, environmental, and cost perspectives, will present recent technology developments and innovative solutions, ensuring a balanced view of current and future research needs.

Keynote sessions and panel discussions

Designed to address critical issues related to net-zero strategies and technical pathways. Special attention will be given to increased operational flexibility needs, low-carbon solutions, energy efficiency, and product sustainability. Distinguished experts and high-level policymakers will engage in discussions on the suitability of the current energy policy framework to meet the market needs.

Attendees

Turbomachinery user community (utilities, industrial users and energy companies), OEMs, equipment and service providers, universities and R&D institutes, consultancies and policymakers.

Conference organisation

Conference organiser

ETN Global
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For conference updates and further details:
<https://etn.global/events/igtc-25/>

IGTC-25 Conference Advisory Board

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