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The IFPEN Transports Energie Carnot Institute is an active player in the energy and environmental transition towards low-carbon and sustainable mobility. It proposes and develops innovative, technological and/or digital solutions for industry, users and public decision-makers, aimed at increasing the energy efficiency and reducing the environmental impacts of transport systems. It supports the changes associated with the ecological, energy and digital transition of the mobility sector.

Carnot IFPEN Transports Energie



Innovate

Innovative solutions for the decarbonization and digitalization of mobility, such as:

- electric machines for a broad power range and highly efficient control electronics and associated supervision systems,
- electrochemical energy storage and production systems (batteries and fuel cells) and optimal vehicle energy management,
- hydrogen and low-carbon propulsion (gas, biogas): optimized IC engine and associated pollution control system,
- web services dedicated to energy, economic and environmental analyses of private and public transport,
- tools for the design engineering of propulsion systems in order to improve their energy efficiency and limit their environmental impact.

Collaborate

- Close ties with industry: from start-ups, micro-companies, SMEs and intermediate-sized companies through to major French and international industrial groups.
- A strong commitment within competitiveness clusters (NextMove, CARA, etc.)
- Synergy with networks of academic partners and R&D laboratories with an international influence.
- Active participation in European bodies representing research and industry (EARPA, ERTRAC, EGVIafor2ZERO, POLIS, CCAM, BEPA).

Technology transfer

Support for industrial sectors, covering a very broad range of technological readiness levels (TRL 2 to 9)
Transfer of our R&D results via:

- joint product development with licensing out operations,
- strategic partnerships,
- collaborative research contracts.

Did you know ?

The IFPEN Transports Energie Carnot Institute was awarded the “Carnot Institute” label by the French Ministry of Higher Education, Research and Innovation in 2006. For nearly 15 years, within this multidisciplinary R&D network currently made up of 39 Carnot Institutes, it has been pursuing its mission: to prepare the industrial and economic future by accelerating the transfer of research technologies to the socio-economic world.

News



Innovation and Industry
News
July 2023

ELABORATOR: a laboratory supporting sustainable mobility in European towns and cities



Innovation and Industry
Events
14 - 15 June 2023

IFPEN at SIA Powertrain 2023: concentrated expertise for low-carbon mobility

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Innovation and Industry

Events

22 - 24 May 2023

Le Carnot IFPEN TE at the 15th ITS European Congress (Lisbon)

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