

Greenet



The network of Horizon Europe
Cluster 5 National Contact Point.



CEA I-Tésé : Energy Economics Research

GREENET Brokerage Event
6th May 2025

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The GREENET project has received funding from the EU Horizon Europe programme under Grant Agreement No 101069604

Our ambition

We want to accelerate the transition to carbon neutrality by highlighting economically, environmentally and socially sustainable trajectories.

Our approach

We combine economics, humanities, social sciences, and engineering sciences to produce knowledge for public authorities, for CEA and for our partners.

Our method

We function in project mode, encouraging collaborations and leveraging on other CEA Research Institutes' expertise.

Our research themes

**Low-carbon
production and
storage technologies**

**Resources of the
energy transition**

**Energy demand and
consumption patterns**

**Regulation
and market design**

Supported by modelling capabilities, tools and data

Modelling and economics

Human and social sciences



- SISYPHE -

Demand for hydrogen and derived molecules (e-fuels) in Europe

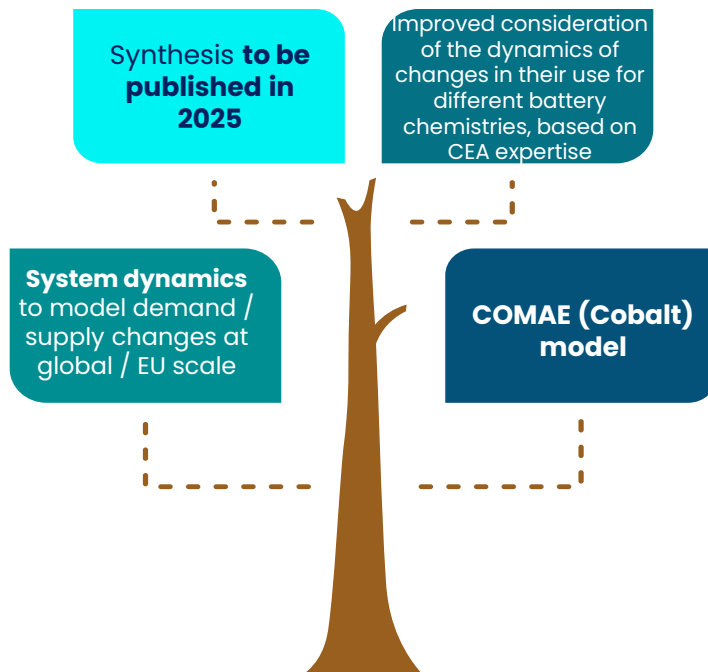
Bottom-up assessment of demand dynamics based on 70 interviews and 9 business sectors
Identification **of levers and obstacles**, **quantifications of a significant gap with EU objectives**

Presented to French authorities (2023), shared at EU level (Parliament, DG Ener, Court of Auditors - 2024), **impact on public policies**

[CEA-CahierActeur-Sisyphe-EN-2403021-1316.indd](#)

- ANTIBES -

Strategic resources availability and sovereignty issues
Focus on Lithium and Cobalt



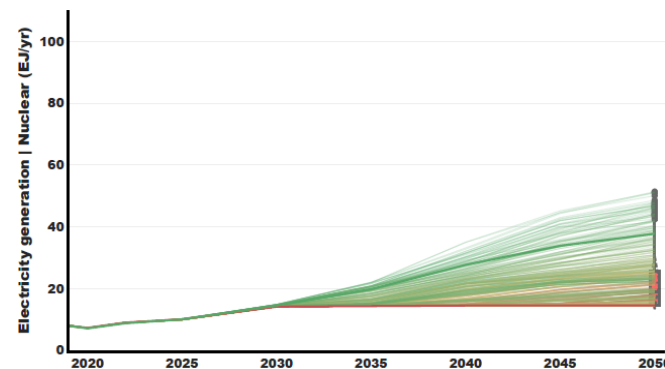
- TIMES -

Times model for building energy transition scenarios

Representation of energy transition pathways using 2 narratives (net-zero 2050 / implemented policies)

Ability to forecast the role various technologies will play according to different scenarios

Illustration : electricity production from nuclear, worldwide, until 2050



Topics of interest

Potential contributions to proposals

DESTINATION 1 - CLIMATE SCIENCES AND RESPONSES FOR THE TRANSFORMATION TOWARDS CLIMATE NEUTRALITY

- **CL5-2025-06-D1-01**: Climate simulations data and knowledge for optimal support of IPCC Assessments and International Policy

DESTINATION 3 - SUSTAINABLE, SECURE AND COMPETITIVE ENERGY SUPPLY

- **CL5-2026-02-D3-02** : Competitiveness, energy security and integration aspects of advanced biofuels and renewable fuels of non-biological origin value chains
- **CL5-2025-02-D3-17**: Control and operation tools for a RES-based energy system
- **CL5-2025-02-D3-21**: Cross-regional network and market model for optimisation of long duration storage
- **CL5-2025-01-Two-stages-D3-23**: Critical elements for energy security of grid and storage technologies
- **CL5-2025-02-D3-27**: Using captured CO2 as a resource to replace fossil hydrocarbons in industrial production

DESTINATION 5 - CLEAN AND COMPETITIVE SOLUTIONS FOR ALL TRANSPORT MODES

- **CL5-2025-04-D5-06**: Strategies, tools and concepts for optimised road Battery Electric Vehicles (BEV) long-haul logistics use cases (2ZERO Partnership)



Thanks!

I-Tésé web site



I-Tésé press review
(in French)



[I-Tésé - accueil](#)



<https://fr.linkedin.com/company/cea-itese>



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