CORBIER Darius
RFF-CMCC
European Institute on Economics and the Environment
Via Bergognone 34, 20144 Milan, Italy
darius.corbier@cmcc.it
+393516121361

EDUCATION

2017-2021 **PhD in Economics from Paris Sciences & Letters PSL University (Paris, France)**
Economics Laboratory of Paris-Dauphine (LEDa), CGEMP, PSL University Paris-Dauphine
Grant by the French Ministry of Higher Education and Research under the French Industrial Agreement for Training through Research (CIFRE) n° 2017/0886
Dissertation title: The macroeconomic impacts of low-carbon energy transition policies in France
Supervisor: Prof. Gonand Frédéric

2015-2016 **PSL University Paris-Dauphine (Paris, France)**
Master's degree in energy and environmental economics
Supervisors: Prof. Gonand Frédéric and Prof. Geoffron Patrice

2012-2013 **PSL University Paris-Dauphine (Paris, France)**
Bachelor's degree in applied economics

RESEARCH EXPERIENCE

2022-present **RFF-CMCC European Institute on Economics and the Environment (Milan, Italy)**

2022-2023 Post-doctoral researcher
2024-present Junior Scientist

1. Investigator in the Horizon-Europe CIRCOMOD project funded by the European Union under the grant agreement n°101056868 :

- Developing a stylized model, the CIRCular Energy-Economy model, to capture the basic socio-economic-climatic effects of CE measures in a dynamic context. This stylized model serve as a learning tool to explore and demonstrate ideas before implementation in large scale quantitative models.

Deliverables contribution :

- https://circomod.eu/wp-content/uploads/2024/05/Circomod_deliverable1.1.pdf (2024)
- https://circomod.eu/wp-content/uploads/2024/04/Circomod-Deliverable-1.2.pdf (2024)
- https://circomod.eu/wp-content/uploads/2024/04/Circomod-Deliverable-3.1.pdf (2023)

2. Investigator of the Horizon-Europe PRISMA project funded by the European Union under the grant agreement n°101081604, and involved in the following tasks for research :

- Understand the global, long-term dynamics of lifestyle change as an endogenous model process in the CIRCular Energy-Economy model
- Understand material consequences of low-carbon transformation
- Improve the representation of materials and related circular economy-based mitigation options in IAMs, including recycling, reuse and remanufacturing

Deliverable contribution :

- "Open-Source lifestyle change model and IAM linkage source code. The LIFE model: empirical foundations, generic coupling process, demonstration case studies, and linkage source code." *A report prepared by Alessio Mastrucci, Hazel Pettifor, Darius Corbier and Thomas Le Gallic for the European Commission (2024)*

3. Scientific Coordinator of the Horizon-Europe PRISMA project funded by the European Union under the grant agreement n°101081604:

- Responsible for monitoring the progress and scientific quality of research activities (deliverables and milestones) across the project's partners, and ensuring the compliance with the Horizon-Europe research and innovation guidelines
- Organize and lead bi-monthly Steering Committee Meetings to facilitate communication, coordination and alignment of efforts among project partners.

2017-2020 **Réseau Transport d'Électricité, RTE (Paris, France)**
Researcher at the French Electricity Transmission System Operator

1. Developed an economy-electricity hybrid model (combining a dynamic general equilibrium model and a bottom-up power generation dispatch model) to analyze the aggregate effects of energy transition policies on the French power system.
2. Conducted macroeconomic impact assessments of low-carbon energy transition policies in France.

TEACHING EXPERIENCE

2018-2020 **Panthéon-Assas University (Paris, France)**
Teaching Assistant in Macroeconomics for bachelor students

ACADEMIC PAPERS

Peer-reviewed

Corbier, D., Pettifor, H., Agnew, M., Drouet, L. (2024). CIRCEE, the CIRCular Energy Economy model: Bridging the gap between economic and industrial ecology concepts. *Journal of Industrial Ecology*, 1–16. https://doi.org/10.1111/jiec.13587

Corbier, D., and Gonand, F. (2024). A hybrid electricity-economy model to assess the aggregate impacts of low-carbon transition: An application to France. *Ecological Economics* ***216***, 108027. https://doi.org/10.1016/j.ecolecon.2023.108027

Corbier, D., and Gonand, F. (2023). The aggregate effects of the structure of information in low-carbon transition policies: An application to France. *Energy and Climate Change* ***4***, 100115. https://doi.org/10.1016/j.egycc.2023.100115

Corbier D., Bessec M. and Gonand F. (2018). The impacts of decentralized power generation on distribution networks: a statistical typology of European countries. *Environmental Modelling and Assessment* ***23***, 471-496 . https://doi.org/10.1007/s10666-018-9621-7

Technical Contribution

Corbier D. and Gonand F. (2024) The macroeconomic effects of a low-carbon transition in France: some lessons from an empirical academic model. *Revue de l'Énergie (forthcoming)*

Under review

Corbier, D., Pettifor, H., Agnew, M. and Nagashima M. (2024). Shaping sustainable consumption practices: changing consumers' habits through lifestyle changes and Extended Producer Responsibility schemes in Japan. *Under review in Resources, Conservation & Recycling*

Corbier, D., Pettifor, H., Agnew, M. and Schlegel, N. (2024). Extending the Lifetime of Consumer Goods: The Combined Effects of Fiscal Incentives and Lifestyle Changes on Consumer Participation in Repair and Environmental Outcomes in Japan. *Under review in Ecological Economics*

In progress

Corbier, D., Pettifor, H., Agnew, M. and Schlegel N. (2024). From Low-Use to High-Use Energy Goods: Assessing the Economic, Environmental, and Resource Impacts of the Sharing Economy.

Corbier, D., Joltreau, E., Verdolini, E. and Song, R. (2025). Eco-Modulation of Extended Producer Responsibility Fees and Green Product Design: Understanding Consumer Behaviors to Durability and Repairability.

Corbier, D. (2025). Revisiting the Melitz Trade Model with an auction-based mechanism for Waste: Inter-Country Waste Reallocation and Recycling Comparative Advantage.

Corbier, D. (2025). Assessing Socioeconomic and Climatic Impacts of Rethink, Repair and Reuse Strategies : Insights from Japan and the EU27.

Corbier, D., Joltreau, E. and Verdolini, E. (2025). Endogenous Green Product Design Innovation and Extended Producer Responsibility Schemes: A Micro to Macroeconomic Analysis for Japan and the EU27.

COMPUTER SKILLS

Advanced DYNARE (advanced), MATLAB (advanced), MS Office (advanced)

LANGUAGES

French (mother tongue), English (advanced), Japanese (JLPT4, JLPT 3 in preparation)

PRESENTATIONS

Invited Lectures and Seminars

Commission de Régulation de l'Energie (Paris, France) - 2021

KDI Public School of Policy and Management (Sejong, South Korea) Seminar – 2022

International Global IAM Workshop (Seoul, South Korea) – 2022

Research Institute of Innovative Technology for the Earth (RITE) (Kizugawa, Japan) – 2022&2023

Waseda University (Tokyo, Japan) Special Lecture – 2024

KDI Public School of Policy and Management (Sejong, South Korea) Special Lecture - 2024

Conferences

International Industrial Ecology Day (online) – 2022

43rd IAEE International Conference (Tokyo, Japan) – 2022

17th IAEE European Energy Conference (Athens, Greece) – 2022

International Industrial Ecology Conference (Leiden, Netherlands) – 2023

Circular Economy workshop of the EAERE conference (Leven, Belgium) – 2024

REFERENCES

Prof. Gonand Frédéric, PhD Advisor

(email : frederic.gonand@gmail.com)

Full-time Professor at PSL Paris-Dauphine University, Paris, France

Dr. Drouet Laurent

(email : laurent.drouet@cmcc.it)

Senior Scientist at RFF-CMCC European Institute on Economics and the Environment, Milan, Italy

Dr. Pettifor Hazel

(email : hazel.pettifor@eci.ox.ac.uk)

Senior Research Associate at the Environmental Change Institute of the University of Oxford, Oxford, the UK

Dr. Nagashima Miyuki

(email : mnagashi@rite.or.jp)

Senior Researcher at the Research Institute of Innovative Technology for the Earth (RITE), Kizugawa, Japan