

# Workshop **Materials scarcity and recycling for the energy transition**

June 24-25, 2025

Center for Environmental Economics - Montpellier

Venue: salle Caryatide, site Saint-Charles 2, Université Paul-Valéry Montpellier  
Rue du Professeur Henri Serre, 34080 Montpellier, France

Sponsor: Agence Nationale de la Recherche ScarCyclET project (grant ANR-21-CE03-0012)

## **Tuesday June 24**

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- 9:15 Miao Dai (VU Amsterdam)  
Strategic recycling of critical raw materials  
Discussant: Sophie Bernard (Polytechnique Montréal)
- 10:00 Benteng Zou (U Luxembourg)  
Strategic consideration and optimal timing of critical mineral depletion, recycling, and substitution  
Discussant: Gerard van der Meijden (VU Amsterdam)
- 10:45 break
- 11:15 Pauline Bucciarelli (IFPEN, EconomiX)  
Can European strategic autonomy be achieved without sufficiency? Modelling the implications of the European Critical Raw Materials Act on the value chain of lithium  
Discussant: Aude Pommeret (U Savoie MB, IREGE)
- 12:00 lunch
- 13:30 Francesco Quatraro (U Torino)  
Exposure to critical raw materials and innovation: Evidence from the Industrial R&D Investment Scoreboard  
Discussant: Joëlle Noailly (VU Amsterdam, Geneva Graduate Institute)
- 14:15 François Verzier (IS-Terre)  
MATER: An open-source modular framework featuring dynamic input/output modelling  
Discussant: Clément Bonnet (U Montpellier, ART-Dév)
- 15:00 break
- 15:45 François Guy (U Savoie MB, IREGE)  
Optimizing resource uses: Understanding the role of circular economy levers and their interaction  
Discussant: Gilles Lafforgue (TBS Education)
- 16:30 Antonia Kurz (DW Berlin)  
Mining critical minerals for the energy transition: Trade, market power and policy  
Discussant: Francesco Ricci (U Montpellier, CEE-M)
- 17:15 break
- 17:40 Working group on finalizing the ScarCyclET program
- 20:00 Diner (au Petit Jardin, rue J-J Rousseau)

## Wednesday June 25

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- 9:00 Harrison Dyde-Nairn (INERIS, U Montpellier CEE-M)  
Assessing supply chain vulnerabilities in renewable energy: A multi-regional input-output approach  
Discussant: Florian Fizaine (U Savoie MB, IREGE)
- 9:45 Dorothee Charlier (U Savoie MB, IREGE)  
Extensive vs intensive margins in copper mining: Empirical evidence from a global micro panel  
Discussant: Maria-Eugenia Sanin (Evry U, CEPS)
- 10:30 break
- 11:00 Aina Mas Fons (BRGM)  
Understanding the production of natural and synthetic battery-grade graphite:  
European Union perspective on supply risk and environmental impact implications
- 11:30 Early stage starting projects:  
Aude Pommeret (U Savoie MB, IREGE) Opening new mines?  
Timothé Catimel (PSE) Empirical determinants of recycling rate for metals  
Sophie Bernard (Polytechnique Montréal) Circular value chain in the battery sector in Québec
- 12:30 lunch
- 14:00 Nihal Yilmaz (Geneva Graduate Institute)  
Trade shocks on rare earth elements: firm level effects from France  
Discussant: Francesco Quatraro (U Torino)
- 14:45 Beyond protectionism: Circular Economy policies as a geopolitical strategy for sufficiency and equity  
Discussant: Pauline Bucciarelli (IFPEN, EconomiX)
- 15:30 break
- 16:00 Maylis Peyres (LEDa)  
Integrating secondary supply – The role of recycling in long-term metal market sustainability  
Discussant: Mouez Fodha (U Paris 1, PSE) Julie Metta (Tilburg U)
- 16:45 Conclusion: Looking forward program to TAEF PEPR Sous-Sol and new collaborations
- Local organizing committee: Julie Martinez, Gersende Gatellet, Arun Thiagarajah, Laurent Garnier, Francesco Ricci

