

Day 1 | 5th October | Mid-term targets towards Net Zero and sectoral challenges

Zoom link day 1: <https://cmcc-it.zoom.us/meeting/register/tZArfuGorjMjHdDdBVpoAEJit0hoh53dOrXx> (registration required for each day)

10:30-11:00	ECEMP Welcome	<i>Johannes Emmerling</i> , RFF-EIEE/CMCC; <i>Philippe Tulkens</i> , EC
11:00-13:00	Plenary 1: Net Zero in the EU - implications from IAMs and the role of near-term targets	<u>Presentations</u> Chair: <i>Johannes Emmerling</i> , RFF-EIEE/CMCC <ul style="list-style-type: none">• Deep and just transition pathways to net zero: New results from the NAVIGATE project - <i>Elmar Kriegler</i>, PIK• The policy framework of the 2040 Climate Target - <i>Francesco Ferioli</i>, EC - DG ENER• Role of modeling in energy and climate policy: Experiences in Germany and the EU - <i>Barbara Schlomann</i>, Fraunhofer ISI• Insights on EU2040 targets - a model intercomparison exercise of EU Climate Neutrality Pathways - <i>Robert Pietzcker</i>, PIK
13:00-14:00	Lunch Break	
14:00-15:30	Parallel sessions	<u>Zoom Room 1: Near-term action and mid-term targets</u> Chair: <i>Will Usher</i> (ECEMF) <ul style="list-style-type: none">• Fit for 90ish: 2040 greenhouse gas reduction targets and energy transitions in line with the EU Green Deal - <i>Renato Rodrigues</i>, PIK• Towards closing the fairness gap: What is the highest possible ambition for the European Union's pathway towards greenhouse gas neutrality? - <i>Gunnar Luderer</i>, PIK• A multi-model assessment of the EU's path to net zero: aligning near-term action with long-term visions - <i>Baptiste Boitier</i>, SEURECO• Mitigation pledges in light of effort sharing and cost-optimality - <i>Mark Dekker</i>, PBL

Zoom Room 2: Carbon Pricing and the EU ETS | Chair: *Severin Reissl* (CAPABLE)

- Optimal carbon taxation and income distribution - *Armon Rezai*, WU
- Beyond benchmark: Using a myopic model to design more robust policy instruments for the EU - *Joanna Sitarz*, PIK
- Changing the scope of the EU Emissions Trading System - *Jakub Boratynski*, KOBiZE
- The eco-social tax reform in Austria: economy-wide and distributional effects of a CO2 tax under a region- and income-specific revenue recycling scheme - *Laura Wallenko*, University of Graz - Wegener Center

Zoom Room 3: Hydrogen | Chair: *Gunhild Reigstad* (SINTEF)

- H2 supply, demand and trade in a global 1.5C scenario - *Burkhard Schade*, EC JRC
- Capture prices for wind and solar generation in net-neutral Europe: Impacts of hydrogen import prices, cross-border exchange, and transport sector flexibility - *Philipp Härtel*, Fraunhofer IEE & University of Kassel
- Dealmaker or dealbreaker: Does the climate impact of hydrogen leakage jeopardise climate neutrality? - *Johannes Hampp*, PIK
- The interplay between hydrogen demand and the power system in achieving climate neutrality in Europe - *Rebeka Béres*, ESRIG

Zoom Room 4: The role of the Building Sector | Chair: *Heike Brugger* (newTRENDS)

- Deep mitigation strategies for the European building sector - *Alessio Mastrucci*, IIASA
- Comparative Analysis of Decarbonization Strategies for Building Stock: Evaluating Electrification and Alternative Approaches through Multi-Model Scenarios - *Ece Özer*, Technische Universität Wien
- Modelling decarbonised district heating in EU-27: What are the main factors influencing the technology mix? - *Lukas Kranzl*, TU Wien
- Prosumer impact on electricity load profiles: A model comparison - *Philipp Mascherbauer*, TU Wien

Zoom Room 5: Freight Transport | Chair: *Alice Di Bella* (PRISMA)

- Integrating air passenger and air freight transport into a global CGE model to analyse European Union policies tackling greenhouse gas emissions from aviation - *Ana Norman*, EC JRC
- Road freight decarbonization in the TEN-T network in the context of future energy supply infrastructures - *Antonia Golab*, TU Wien
- Public Megawatt Charging for Trucks in Europe - a Review and Model Comparison - *Sonia Yeh*, Chalmers University of Technology
- Paris-compatible pathways for heavy-duty freight transport in Europe - *Johanna Hoppe*, PIK

15:30-16:00 **Coffee break**

16:00-17:30 **Skills workshop 1**

Zoom Room 1: Energy and Climate Modeling - *Görkem Güngör*, METU

Zoom Room 2: Agent-based simulation of electricity markets with AMIRIS - *Christoph Schimeczek*, German Aerospace Center (DLR)

Day 2 | 6th October | Macroeconomic and geopolitical challenges and the Net Zero transition

Zoom link day 2: https://cmcc-it.zoom.us/meeting/register/tZEtd6vqT8tHtReXR_z3KylkV858sPFqLMq (registration required for each day)

9:00-10:30	Skills workshop 2	<p><u>Zoom Room 1: How to define an intervention strategy to foster the energy transition?</u> - <i>Diego Casado-Mansilla and Armando Aguayo</i>, DEUSTO</p> <p><u>Zoom Room 2: HiSim: Household Infrastructure and Building Energy Simulation</u> - <i>Noah Pflugradt</i>, IEK 3</p>
10:30-12:30	Plenary 2: New challenges for scenarios. Feasibility, fairness, finance	<p><u>Presentations</u> Chair: <i>Meta Thurid Lotz</i>, Fraunhofer ISI</p> <ul style="list-style-type: none">• Feasible scenarios to increase climate ambition – insights from the ENGAGE project - <i>Bas van Ruijven</i>, IIASA• TradeRES Project: renewables and energy communities as game changers for electricity markets- <i>Zita Vale</i>, Polytechnic of Porto, ISEP, GECAD• Fairness aspects in EU climate policy - <i>Matthias Weitzel</i>, EC, Joint Research Centre• Public finance resilience in the transition towards carbon neutrality - <i>Jean Fouré</i>, OECD
12:30-13:30	Lunch Break	
13:30-15:00	Parallel sessions	<p><u>Zoom Room 1: Distributional Impacts</u> Chair: <i>Johannes Emmerling</i> (NAVIGATE)</p> <ul style="list-style-type: none">• A Multi-Model Assessment of Inequality and Climate Change – <i>Johannes Emmerling</i>, RFF-EIEE/CMCC• The equity-pollution dilemma of EU climate policy - <i>Simon Feindt</i>, MCC Berlin & TU Berlin• EU climate action through an energy poverty lens – <i>Toon Vandyck</i>, OECD• Efficiency and redistribution in burden-sharing - <i>Ulrike Kornek</i>, Kiel University <p><u>Zoom Room 2: Macroeconomy</u> Chair: <i>Harro van Asselt</i> (NDC-ASPECTS)</p> <ul style="list-style-type: none">• The effects of the EU Fit for 55 package on labour markets and the demand for skills – <i>Laura Atarody</i>, OECD

- The environmental and macro-economic effects of international cooperation on restricting fossil fuel supply - *Panagiotis Fragkos, E3Modelling*
- Employment Implications of Transitioning to Net Zero: Revealing Transition Risks through Downscaling - *Augustin Danneaux, SMASH-CIRED*
- Warming the MATRIX: a climate assessment under uncertainty and heterogeneity - *Massimiliano Rizzati, FEEM*

Zoom Room 3: Industry and Trade in Europe | Chair: *Leonidas Paroussos* (DECIPHER)

- Hard-to-abate industry sector CO2 emissions in Paris compatible scenarios: a model comparison study - *Nico Bauer, PIK*
- The Circular Economy's Role in Industry Decarbonisation Scenarios - *Meta Thurid Lotz, Fraunhofer ISI*
- Direct and embodied energy and emissions trade in a decarbonised world - *Rafael Garaffa, EC JRC*
- Mapping the transition: Industrial European regions at risk within the fit for 55 - *Marc Vielle, Ecole Polytechnique Fédérale de Lausanne*

Zoom Room 4: Dependency & Energy Security | Chair: *Georgios Xexakis* (DIAMOND)

- A multi-model assessment of European strategies to eliminate Russian gas imports - *Natasha Frilingou, Energy Policy Unit, National Technical University of Athens*
- The effects of higher energy prices on the EU economy - *Matthias Weitzel, EC JRC*
- Navigating energy price shocks: A counterfactual analysis of government mitigation strategies options in an agent-based integrated assessment model – *Elise Kremer, RFF-EIEE/CMCC*
- Dodging the energy crisis? Renewable deployment pathways to 2030 - *Serafeim Michas, TEESlab*

Zoom Room 5: Behavioural trends and consumption patterns in net zero scenarios | Chair: *Fiona Breucker* (FULFILL)

- Modeling the impact of energy sufficiency measures in European integrated energy systems using PyPSA-Eur - *Muhammad Umair Tareen, University of Liege*

- Linking Behavior and Energy System Modeling of Households in Hourly Resolution: FLEX Framework – *Songmin Yu*, Fraunhofer ISI
- Endogenous Simulation of Low-Carbon Lifestyle Change in Global Climate Mitigation Pathways – *Hazel Pettifor*, University of Oxford
- Demand-side mitigation potentials: An integrated modeling perspective on shifts in transport activity – *Jarusch Muesel*, PIK

15:00-15:30 **Coffee break**

15:30-17:00 **Parallel sessions**

Zoom Room 1: Policies for the Building Sector | Chair: *Leandro Martin Ferron* (WHY)

- CO2 pricing or installation ban - how to decarbonise space heating in the EU? – *Ricarda Rosemann*, PIK
- What buildings decarbonisation means for the EU ETS – *Sebastian Osorio*, PIK
- Examining the potential of buildings insulation policy measures to mitigate the global residential buildings sector energy demand and CO2 emissions - *Efstathios Mikropoulos*, Utrecht University
- Impact of a systemic energy transition on residential sector: Role of urbanisation, financial access and inflation – *Kezia Sharma*, NITIE

Zoom Room 2: Power-to-X | Chair: *Jakob Rager* (Scilake)

- Role of electrification, hydrogen and e-fuels on the road to climate neutrality - *Meixi Zhang*, PSI LEA
- Power-to-X export potential from Chile to Europe on the pathway to carbon neutrality – *Lukas Jansen*, University of Kassel
- Flexibilities in a sector coupled, net-zero energy system – *Patrick Jürgens*, Fraunhofer ISE
- The role of hydrogen in global mitigation scenarios across sectors – an index decomposition analysis – *Matia Riemer*, Fraunhofer ISI

Zoom Room 3: Renewable Generation and System Flexibility | Chair: *Fernando Lezama* (TradeRES)

- The role and impact of generation technology availability, transmission and demand response to achieve zero emissions grids in 2050 - *Patricia Hidalgo Gonzalez*, University of California/San Diego

- Comparison of Support Schemes for Renewables: German Case Study of project TradeRES – *Christoph Schimeczek*, DLR
- Price Formation in 100% Variable Renewable Electricity Systems: Storage Bidding and Demand Elasticity – *Fabian Neumann*, Technical University Berlin
- Improved climate-energy modeling with Destination Earth – *Bruno Schyska*, DLR

Zoom Room 4: Multi-Model Comparisons for robust policy insights | Chair: *Alexandros Nikas* (IAM COMPACT)

- Energy used for adaptation adjusts over the long-run: from the empirical evidence to a multi-model assessment of sector-specific energy needs due to climate change – *Francesco Colelli*, CMCC-Ca' Foscari
- Nuclear Energy in Mitigation Pathways towards Net Zero: a multi-model comparison of IPCC Sixth Assessment Report scenarios – *Hal Turton*, International Atomic Energy Agency
- Reducing cost of capital to finance the energy transition in developing countries: a multi-model analysis – *Matteo Calcaterra*, RFF-EIEE/CMCC
- How do different social storylines effect the options for a climate-neutral European energy system in 2050? Results from linking QTDIAN and Euro-Calliope – *Francesco Sanvito*, TU Delft

Zoom Room 5: National-level energy and climate modelling | Chair: Severin Reissl

- Can the UK Achieve Net-zero Greenhouse Gas Emissions by 2050? – *David Hendry*, Oxford University
- Mapping Portugal's transition to net zero: mid-term challenges and opportunities under high and competing uses of renewable energy – *Patricia Fortes*, CENSE NOVA
- The value of smart charging at home and its impact on EV market shares – a German case study – *Till Gnann*, Fraunhofer ISI
- Spatial assessment of climate change impacts on heating and cooling demand in Poland under present and future climate scenarios – *Ekaterina Fedotova*, MPEI

17:00-17:30 **Closing Plenary**

Johannes Emmerling, RFF-EIEE/CMCC;
Will Usher, KTH