

Conference

Innovation Pathways, Strategies and Policies for the Low-carbon Transition in Europe

31 May - 1 June 2021

Online event

Organised by UCL and FSR Climate, European University Institute

Chaired by **Paul Ekins** | UCL, and **Simone Borghesi** | European University Institute

Introduction

The transition to climate neutrality in Europe will require deep structural changes to the full range of energy, economic and societal systems. These changes, and their economic, social and environmental implications, must be examined and understood if policymakers are to take the best decisions possible to achieve this overarching objective.

The INNOPATHS final conference will focus on requirements and implications of low-carbon pathways, ranging from technology development and innovation dynamics, labour markets and equity, financing of the transition to policy priorities and knowledge gaps for Europe's decarbonisation.

Programme

31 May

10:00 - 10:10 *Welcome & Housekeeping*

Paul Ekins | UCL, and **Simone Borghesi** | European University Institute

10:10 - 10:30 *Keynote Speech*

Jos Delbeke | European University Institute



The project INNOPATHS has received funding from the European Union's Horizon 2020 research and innovation program under Grant Agreement No. 730403.

- 10:30 - 11:30 *Session "Sectoral transformation towards deep decarbonisation"*
- Chair: **Panagiotis Fragkos** | E3-Modelling
- Decarbonising the EU transport sector: Options and challenges*, **Pelopidas Siskos** | E3-Modelling
- The CO₂ reduction potential for the European industry via direct electrification*, **Silvia Maddedu** | Potsdam Institute for Climate Impact Research
- Respondent: **Oreane Edelenbosch** | PBL Netherlands Environmental Assessment Agency
- 11:30 - 11:45 Break
- 11:45 - 12:45 *Session "Technology development"*
- Chair: **Elena Verdolini** | CMCC
- Comparing expert- and model-based probabilistic energy technology cost forecast*, **Laura Diaz Anadon** | University of Cambridge
- Improving the economic feasibility of 2°C and 1.5°C emission pathways through R&D*, **Lara Aleluia Reis** | CMCC
- Respondent: **Sonia Yeh** | Chalmers University of Technology
- 12:45 - 13:45 Lunch break
- 13:45 - 14:45 *Session "Innovation dynamics, drivers and co-benefits"*
- Chair: **Laura Diaz Anadon** | University of Cambridge
- Systematic review of the outcomes and trade-offs of ten types of decarbonization policy instrument*, **Cristina Penasco** | University of Cambridge
- Lessons on technology diffusion from global coal power flue gas desulfurisation*, **Stijn van Ewijk** | Yale University
- Jessica Jewell** | Chalmers University of Technology
- 14:45 - 15:00 Break
- 15:00 - 16:00 *Session "Finance for the European Energy Transition"*
- Chair: **Simone Borghesi** | European University Institute
- Mapping demand and supply*, **Friedemann Polzin** | Utrecht University
- Dynamics of financing conditions and policy implications*, **Florian Egli** | ETH Zurich
- Respondent: **Nadia Ameli** | UCL
- 16:00 - 16:15 *Closing remarks*
- Paul Ekins** | UCL

1 June

10:15 - 10:30 *Welcome & Housekeeping*

Paul Ekins | UCL and **Simone Borghesi** | European University Institute

10:30 - 11:30 *Session "Pathways to Net Zero"*

Chair: **Robert Pietzcker** | Potsdam Institute for Climate Impact Research

Scenarios for climate neutrality: A multi-model assessment, **Renato Rodrigues** | Potsdam Institute for Climate Impact Research

Increasing 2030 ambitions: the energy system impacts, **Alessia de Vita** | E3-Modelling

Respondent: **Ilkka Keppo** | Aalto University

11:30 - 11:45 Break

11:45 - 12:45 *Session "Decarbonisation and equity"*

Chair: **Cristina Penasco** | University of Cambridge

The ethics and justice of low-carbon transitions, **Benjamin Sovacool** | University of Sussex

Climate Policies, Green Stimulus and Labour Market Outcomes, **Francesco Vona** | CMCC

Discussant: **Jim Skea** | Intergovernmental Panel on Climate Change

12:45 - 13:45 Lunch break

13:45 - 14:45 *Session "Policies toward transformation"*

Chair: **Paul Drummond** | UCL

Strengthening the EU ETS, **Robert Pietzcker** | Potsdam Institute for Climate Impact Research

Socio-economic and industrial impacts of decarbonisation: the role of CBAM, **Panagiotis Fragkos** | E3-Modelling

Respondent: **Toon Vandyck** | European Commission

14:45 - 15:00 Break

15:00 - 16:00 *Panel session "Policy for Net Zero – What do policy makers need to know?"*

Chair: **Paul Ekins** | UCL

Maja Goepel | The New Institute

Elizabeth Press | International Renewable Energy Agency (IRENA)

Peter Vis | European University Institute

16:00 - 16:15 *Closing remarks*

Simone Borghesi | European University Institute



SPEAKERS' BIOS

Lara Aleluia Reis | CMCC

Lara is a Scientist at RFF-CMCC EIEE. She holds PhD in engineering sciences from the University of Luxembourg (2013) and a Master and a degree in Environmental Engineering from the New University of Lisbon (2008). She developed an air quality impact module for the WITCH integrated assessment model. She is a modeler on the field of climate and air pollution policies. She is a consultant for the World Bank and a contributing author of the next IPCC AR6.

Nadia Ameli | UCL

Nadia Ameli is an experienced researcher on economic, finance and policy aspects of climate change and related energy issues. Currently, she is a Principal Research Fellow with a proleptic Academic Appointment at UCL Institute for Sustainable Resources.

Since she started her PhD, her work explores the cross-cutting role of finance in the global transition to a low-carbon economy. In particular, she is applying complexity thinking and systemic approaches to the study of market structures for low-carbon finance, to identify points of policy intervention that can influence the behaviour of the system and lead to non-linear growth trajectories. Nadia has recently been awarded an ERC starting grant to advance the understanding of the role of climate finance to foster the low-carbon transition.

Nadia is also bringing research insights into policymaking and practical experience to bear upon academic studies. Her research supported the work at several international public policy organizations, including the OECD, the European Commission and the United Nations.

Nadia completed her PhD in Business Administration at Polytechnic University of Marche and University of California, Berkeley (co-tutorship of doctoral thesis) with a focus on energy financing policy. Her research interests include climate finance, financial networks, policy evaluation methods, financing schemes, low-carbon investments and energy policy.

Simone Borghesi | European University Institute

Simone Borghesi is Director of the Florence School of Regulation – Climate at the European University Institute, Secretary General of the Policy Outreach Committee of the European Association of Environmental and Resource Economists and Full Professor of Economics at the University of Siena. He has been President of the Italian Association of Environmental and Resource Economists (2018-19). He received a M.Sc. at University College London (1996) and a Ph.D. at the European University Institute (2001). He worked at the International Monetary Fund (1998) and FEEM Milan (1999). He was visiting scholar at INRA (2013), University of

Cambridge (2015), ETH Zurich (2016). He currently directs at EUI the LIFE DICET project on Deepening International Cooperation on Emissions Trading.

Jos Delbeke | European University Institute

Jos Delbeke (1954, Belgium) is Professor at the European University Institute in Florence in the School of Transnational Governance and at the KU Leuven in Belgium. He holds the first EIB Chair on Climate Policy and International Carbon Markets. He has been the Director-General of the European Commission's DG Climate Action since its creation in 2010 until 2018. He holds a PhD in economics (Leuven).

Jos Delbeke was very involved in setting the EU's climate and energy targets for 2020 and 2030, and was a key person in developing EU legislation on the Emissions Trading System (ETS), cars and fuels, air quality, emissions from big industrial installations and chemicals (REACH). As an economist, he underlined the role of market-based instruments and of cost-benefit analysis in the field of the environment. He has been responsible for developing Europe's International Climate Change strategy and was for several years the European Commission's chief negotiator at the UNFCCC Conference of the Parties. In that capacity he played a key role on the EU's implementation of the Kyoto Protocol and in the negotiations on the Paris Agreement.

Laura Diaz Anadon | University of Cambridge

Professor Laura Diaz Anadon holds the Chaired Professorship of Climate Change Policy at the University of Cambridge and is Director of the Centre for Environment, Energy and Natural Resource Governance (C-EENRG) and Bye-Fellow at Peterhouse. She is also Research Associate at the Harvard Kennedy School at Harvard University. She is an expert on energy, climate and innovation policy, the drivers of technological change and policy evaluation and has engaged with governments across the world and international organizations on these topics. In 2018 she was awarded the XVII Fundacion Banco Sabadell Prize for Economic Research for the best young Spanish economist. She is a Lead Author in the 6th Assessment Report of the Intergovernmental Panel on Climate Change Working Group III on Climate Change Mitigation, a member of the Carbon Trust Breakthrough Ideas Steering Group and a member of the UK Innovation Caucus.

Paul Drummond | UCL

Paul Drummond is a Senior Research Fellow at the UCL Institute for Sustainable Resources. His research surrounds energy, climate and innovation economics and policy, with a particular focus on Europe.

Oreane Edelenbosch | PBL Netherlands Environmental Assessment Agency

Oreane Edelenbosch is a researcher at PBL Netherlands Environmental Assessment Agency. While working at PBL previously (2012-2017), she obtained a Ph.D at Utrecht University, and contributed to large international projects as well as the UNEP Emissions Gap Report 2017, and IPCC special report on 1.5 °C global warming. Between 2017-2019 she was postdoc a

researcher at the Polytechnic University of where her work focused on modelling the impacts of behavior and heterogeneity on energy consumption. Her main topic of research is energy efficiency in global scenarios, and mainly in the largest energy consuming sectors (buildings, transport and industry).

Florian Egli | ETH Zurich

Florian Egli is a Senior Researcher and a Lecturer at ETH Zurich, an Honorary Research Fellow at the Institute for Innovation and Public Purpose (IIPP) at UCL, and a Senior Associate at foraus – the Swiss Think Tank on Foreign Policy. His research and teaching investigates questions around the role that finance can play in transitioning different systems worldwide towards more sustainability. A second research stream concerns the political economy and ramifications of phasing out fossil fuels. His PhD thesis «The role of finance in mitigating climate change» won the ETH medal for outstanding doctoral theses and the best dissertation award from the Swiss Association of Energy Economics (SAEE).

Florian has co-founded several initiatives at the science-policy interface and he serves on the board of the Swiss Young Academy. He is a regular commentator on climate, finance and foreign policy issues in the Swiss media. Previously, he has worked for think-tanks, the Swiss administration, a consulting firm and a start-up. He was a Mercator Fellow on International Affairs in 2015/16, and he holds a Master's degree in International Economics from the Graduate Institute of International and Development Studies (IHEID) in Geneva and a Bachelor's degree in Economics from the University of Bern with an exchange semester at the Toulouse School of Economics.

Paul Ekins | UCL

Paul Ekins is Professor of Resources and Environment Policy and Director of the UCL Institute for Sustainable Resources Paul Ekins has a Ph.D. in economics from the University of London and is Professor of Resources and Environmental Policy at and Director of the UCL Institute for Sustainable Resources, University College London. From 2004-2014 he was a Co-Director of the UK Energy Research Centre, and from 2014-19 its Deputy Director, leading on its Energy Resources theme, with research publications on low-carbon futures, fossil fuels and hydrogen. In addition, he is a member of UNEP's International Resource Panel and was a lead author on its publications on resource efficiency and mineral resource governance.

From 2005-10 he was Chairman of the Government-funded National Industrial Symbiosis Programme (NISP). From 2002-2008 he was a Member of the Royal Commission on Environmental Pollution. From 1997-2005 he was a specialist adviser to the Environmental Audit Committee of the House of Commons, from 2003-2007 was a Member of the Government's Sustainable Energy Policy Advisory Board, and in 2007 was a Specialist Adviser to the Joint Parliamentary Committee on the Climate Change Bill.

He has extensive experience consulting for business, government and international organisations, which has included over 50 projects and consultancies over the last ten years, and many advisory positions.

Stijn van Ewijk | Yale University

Stijn is a Postdoctoral Associate at the Center for Industrial Ecology at Yale University. His research is in the field of energy, environment, and resources. Stijn's work is at the intersection of industrial ecology and sustainability transitions, with a focus on engineering and public policy for waste management and the circular economy. He previously worked as a Research Associate at University College London (UCL), where he also obtained his PhD in Sustainable Resources and Engineering. His thesis focused on the climate benefits of circular use of materials. Stijn graduated with MSc degrees in Sustainable Energy Technology and Public Administration from the University of Twente in the Netherlands.

Panagiotis Fragkos | E3-Modelling

Dr. Panagiotis Fragkos is a senior researcher and manager of the global energy, economy and climate team of E3-Modelling with over 11 years of experience in the field of macroeconomics, energy system modelling and climate economics. Throughout his career, he has been tackling the fields of quantitative analysis of the global "energy-economy-environment" domain and strategic planning of climate change mitigation and adaptation. Panagiotis has also experience in developing and operating large-scale mathematical models with a particular focus on the simulation of energy systems and markets. He served as the leader of INNOPATHS WP4 on Managing the socio-economic impacts of the low-carbon transition. Panagiotis has graduated from the Department of Electrical and Computer Engineering of National Technical University of Athens and holds a PhD in "Stochastic modelling of the global energy system".

Maja Göpel | The New Institute

Maja Göpel is a political economist and important voice for a sustainable transformation of society working at the intersection of economy, politics and society. She presents her ideas in scientific publications ("The Great Mindshift") as well as public books "Unsere Welt neu denken", which has been on the German bestseller list for months. From 2017 to 2020, she was Secretary-General of the German Advisory Council on Global Change (WBGU), a body that advises the government on the design of global transformations towards sustainability.

Previously, she headed the Berlin office of the Wuppertal Institute for Climate, Environment and Energy and represented the interests of future generations in EU and UN processes as Director Future Justice at the World Future Council. In 2019, Maja Göpel was appointed honorary professor at the Leuphana University of Lüneburg. She is a member of the Club of Rome, the World Future Council, the Balaton Group, and the German Sustainable Development Solutions Network and a co-initiator of the Scientists for Future network. In November 2020, Maja Göpel joined THE NEW INSTITUTE in Hamburg, leading the programme "Shaping Regenerative Economies" as Director of Research and developing new ways of science communication.

Jessica Jewell | Chalmers University of Technology

Jessica Jewell is with Chalmers University in Sweden and the University of Bergen in Norway, where her research focuses on the feasibility of climate action and the mechanisms of energy

transitions. She is a recipient of an ERC grant as well as a Work Package leader in CINTRAN, an H2020 project on coal transitions and MISTRA Electric supported by Swedish Foundation for Strategic Environmental Research. She is also a PI of the project funded by the Norwegian Research Council on the feasible decline rates of fossil fuels. Previously, she worked at the International Institute for Applied Systems Analysis and the International Energy Agency.

Ilkka Keppo | Aalto University

Ilkka Keppo is an Associate Professor in Energy System at Aalto University. Before joining Aalto University in 2020 he worked in a similar role at UCL (2011-2020), where he led the Energy and Environment Systems research theme at UCL Energy Institute. He has also worked as a researcher at ECN policy studies, the Netherlands (2008-2011), and at the International Institute for Applied Systems Analysis (IIASA) in Austria (2004-2007).

Prof Keppo specializes in the use and development of energy and integrated assessment models and has previously used such tools for various purposes, ranging from techno-economic analyses of small energy systems to studies of global issues, such as climate change mitigation. A cross cutting theme of his research involves the assessment, description and modelling of uncertainty related to long term energy transitions.

Silvia Madeddu | Potsdam Institute for Climate Impact Research

Silvia Madeddu is a postdoctoral researcher specialised on decarbonisation strategies for energy-intensive industries. She holds a PhD in Materials Science and Engineering from The University of Sheffield (United Kingdom). After completing her PhD, she worked as Chief Scientist for the development of new Carbon Capture and Utilisation (CCU) technologies. In 2018, she joined the Global Energy Systems modelling group at PIK, where she has focused on the analysis of the electrification potential in industry and in the energy transition at European and global level. Her areas of expertise are energy use and materials demand in industrial processes, innovation and economic opportunities arising from the industrial energy transition.

Cristina Peñasco | University of Cambridge

Dr Cristina Peñasco is a University Lecturer in Public Policy at the Department of Politics and International Studies (POLIS) at the University of Cambridge and the Programme Director of the MPhil in Public Policy. She is a fellow at the Centre for the Environment, Energy and Natural Resources Governance (C-EENRG) and at the Bennett Institute both at the University of Cambridge. Her research lines bring together multidisciplinary research in environmental economics, innovation policy and energy economics in green and energy efficiency technologies, with a focus on the policy instruments enabling the transition to low-carbon economies. She joined the INNOPATHs team in May 2017 to work on a Decarbonisation Policy Evaluation Tool intended to be a helpful reference for policy makers and academics as it allows them to foresee possible trade-offs and co-benefits in environmental policy. She is also co-leading the work analysing the empirical evidence for general principles for policy making in the Economics of Energy Innovation and Systems Transitions (EEIST) project funded by the BEIS (UK Government) which develops complexity-based modelling solutions to support

decision making around low-carbon innovation and technological change to facilitate low-carbon transitions.

Robert Pietzcker | Potsdam Institute for Climate Impact Research

Robert Pietzcker (PhD in Economics, Master in Physics) co-leads the National Energy Transitions Team in the Department for Transformation Pathways at the Potsdam Institute for Climate Impact Research (PIK). His research focuses on decarbonization strategies across the power, transport, industry and building sectors, as well as the EU climate and energy policies to implement these strategies, especially the EU Emissions Trading System (EU-ETS).

He supervises the development of the EU-focused energy-economy-climate model REMIND-EU. His current project work includes leading the decarbonization modelling work package in the INNOPATHS Horizon2020 project, the work package on climate neutrality pathways in the European Climate and Energy Modelling Forum (ECEMF) as well as the modelling work on mid-term EU climate targets in the German KOPERNIKUS research project ARIADNE. His previous work focused on systems integration challenges of wind and solar power.

Friedemann Polzin | Utrecht University

Friedemann Polzin is Assistant Professor at Utrecht University School of Economics and has been a visiting researcher at SPRU – Science Policy Research Unit, University of Sussex. He is also a senior advisor to the Sustainable Business Institute (SBI) in Germany. Friedemann holds a PhD in Business Economics from EBS Business School and a MSc in Business Administration from the University of Jena.

He investigates the financing of sustainable innovation and entrepreneurship, corresponding organizational, legal and institutional arrangements as well as the political environment required for a transition towards a green economy. His work has been published in leading innovation, entrepreneurship, sustainability and energy journals as well as practitioner outlets. Friedemann teaches highly evaluated courses on entrepreneurship, innovation, business economics and research methods at the BSc and MSc level. In 2018 he was awarded the ECU'92 teacher talent award.

Elizabeth Press | International Renewable Energy Agency (IRENA)

As Director of the Planning and Programme Support (PPS), Elizabeth Press oversees the internal co-ordination and the strategic integration of extra-budgetary resources in IRENA's programmatic work. She leads the reporting on programmatic matters to governing bodies and individual donors, facilitates Agency-wide participation in global or thematic initiatives and contributes to strengthening IRENA's presence in Europe, including at the EC level and with Germany as Host Country.

Ms. Press joined IRENA in November 2010 and was a member of the team that led the transition from the Preparatory Commission to becoming a full-fledged Agency in April 2011. Prior to joining IRENA, Ms. Press had some 18 years of international experience, mainly with the United Nations, in the field of development, humanitarian assistance, rule of law and political affairs. She has served in HQ duty stations in New York and Geneva, as well as in different field locations, including Rwanda, Kenya, Burundi, DRC, Cambodia, and Kosovo. Ms. Press holds an MA in Public Administration.

Renato Rodrigues | Potsdam Institute for Climate Impact Research

Dr. Renato Rodrigues is a Brazilian economist with over 13 years of experience in energy and economics fields. He holds a PhD in Electrical Engineering, a Master in Industrial Economics and a Master in Power Systems. In 2017, he joined the Department for Transformation Pathways at the Potsdam Institute for Climate Impact Research (PIK) to assume a post-doc position after ten years working in Spain and Brazil with power system markets regulation and operation.

Currently he is one of the lead developers of the REMIND model - a state of art and policy relevant Integrated Assessment Model - and the main developer of the REMIND-EU energy-economy-climate model version. He is engaged to a number of European decarbonization projects: the Horizon2020 INNOPATHS project; the German KOPERNIKUS research project ARIADNE; and the European Climate and Energy Modelling Forum (ECEMF). His main professional expertise areas are in decision support systems in the energy sector, operations research supporting tools, regulation and energy economics, European climate and energy policies, and transition pathways to low carbon economies.

Pelopidas Siskos | E3-Modelling

Pelopidas Siskos, manager of the transport modelling group of E3-Modelling. Pelopidas has 13 years of experience in the field of applied energy and transport economic policy analysis. Pelopidas leads the activities of the transport modelling group of E3-Modelling, by managing projects related to the transition of the transport system towards low-/zero-carbon solutions. He also leads new model developments and conducts policy relevant quantitative research using the PRIMES-TREMOVE transport model. Pelopidas has been heavily involved in the quantitative analysis of key EU initiatives such as CO₂ standards on vehicle manufacturers, Climate Target Plan, White Paper in transport, ETS on maritime, Alternative Fuel Infrastructure (AFID), the REFUEL EU aviation and maritime initiatives and many others. He also actively participates in H2020 research projects (INNOPATHS, NAVIGATE, New Trends, ECEMF) with a focus on decarbonising the transport sector. Pelopidas also serves as a member of the Editorial Board of the Energy Systems journal (Springer). He holds an engineering (BSc and MSc) degree from the School of Mechanical Engineering (NTUA) and also a PhD in energy and transport economics from the School of Electrical & Computer Engineering Department (NTUA).

Jim Skea | Intergovernmental Panel on Climate Change

Jim Skea is Research Councils UK Energy Strategy Fellow at Imperial College London, supporting the UK Research Councils in deciding where and how to invest their energy

research resources. From 2004-2012, he was Director of the interdisciplinary UK Energy Research Centre, a collaboration between 14 institutions with 200 members at the peak of its cycle of activities. He was previously Director of the Economic and Social Research Council's Global Environmental Programme and of the London-based Policy Studies Institute.

Benjamin Sovacool | University of Sussex

Dr. Benjamin K. Sovacool is Professor of Energy Policy at the Science Policy Research Unit (SPRU) at the School of Business, Management, and Economics, part of the University of Sussex in the United Kingdom. There he serves as Director of the Sussex Energy Group and Director of the Center on Innovation and Energy Demand which involves the University of Oxford and the University of Manchester. He is also Director of the Center for Energy Technologies and Professor of Business and Social Sciences in the Department of Business Development and Technology at Aarhus University in Denmark. He held previous positions at the Vermont Law School, National University of Singapore, and Oak Ridge National Laboratory. Professor Sovacool works as a researcher and consultant on issues pertaining to energy policy, energy security, climate change mitigation, and climate change adaptation. More specifically, his research focuses on renewable energy and energy efficiency, the politics of large-scale energy infrastructure, designing public policy to improve energy security and access to electricity, and building adaptive capacity to the consequences of climate change.

Toon Vandyck | Joint Research Centre, European Commission

Toon Vandyck is an economic modeller at the European Commission's Joint Research Centre. His research has focused on climate policy and its interactions with clean air and social inequality. As co-leader of the climate policy modelling team at the JRC, he has contributed model-based analyses to impact assessments for climate, environmental and taxation policy, such as the EU Green Deal.

Elena Verdolini | CMCC

Elena is Professor in Political Economy at the Law Department, Università degli Studi di Brescia and Senior Scientist at the RFF-CMCC European Institute on Economics and the Environment. Her main interest is in applied analysis, with a focus on the dynamics of innovation, technology transfer, green growth, and the economic impacts of environmental and energy policies. Elena has been involved in several internationally-funded research projects (EDITS, INNOPATHS, CD-LINKS among others).

She is the PI of a 5-year European Research Council Starting Grant project called 2D4D, "Disruptive Digitalization for Decarbonization". In 2D4D, she will research the energy and socio-economic implications (including impacts of energy demand, the labour market, and distributional issues) of key digital technologies in three hard-to-decarbonize sectors, namely industry, transportation and the built environment.

Elena is a Lead Author of the 6th Assessment Report of the IPCC in Working Group III.

Peter Vis | European University Institute

Peter worked at the European Commission for 30 years in the areas of climate policy, energy, transport and taxation. He now works half time at the European University Institute in Florence for the School of Transnational Governance. There, as a Senior Project Associate, he participates in teaching and executive training related to climate change policies. Peter also works part-time as a Senior Advisor for Rud Pedersen Public Affairs in Brussels.

For the 2014-2015 academic year Peter was EU Visiting Fellow at St. Antony's College, Oxford University, UK.

From 2010-2014 he was Head of Cabinet to the European Commissioner for Climate Action, Connie Hedegaard. He worked in the Cabinet of Andris Piebalgs, European Commissioner for Energy from 2007-2010, where he was responsible for renewable energy.

Peter has co-edited two books on EU climate policies, the most recent "Towards a Climate-Neutral Europe: Curbing the Trend" was published by Routledge in October 2019.

Alessia de Vita | E3-Modelling

Alessia De Vita (energy and process engineer from the TU Berlin) is a senior expert collaborator in the energy and transport modelling teams of E3-Modelling, focusing on policy analysis and scenario design mainly for the PRIMES modelling team. She has 11 years of experience in energy, transport, economy and environmental policy modelling and impact assessment studies, working on Long Term Strategies for the EU and individual countries. She has collaborated on all major energy and climate policy packages of the EU in recent years; her focus is on the demand side and biomass supply.

Francesco Vona | Sciences Po

Francesco Vona is senior economist at the OFCE (Observatoire Français des Conjonctures Économiques) of Sciences-Po, research associate at the Euro-Mediterranean Center on Climate Change and at SKEMA Business School, visiting research fellow at the Grantham Institute of the London School of Economics and adjunct visiting professor at Ca' Foscari University of Venice.

His research focuses on long-term trends and structural transformations, with a particular focus on the green transition. His recent work is on the analysis of green labour, developing a new task-based measure of green employment and skills, as well as on the evaluation of the labour market impacts of energy taxes, green subsidies and other environmental policies, both in a single country and in a comparative perspective. He is currently working on an evaluation of the labour market effects of the green part of the US American Recovery and Reinvestment Act, on measuring the green economy using product-level data for EU countries and on the economic and environmental performance of French manufacturing companies.

Sonia Yeh | Chalmers University of Technology

Dr. Sonia Yeh is Professor in Transport and Energy Systems in the Department of Space, Earth and Environment. Her expertise is in energy economics and energy system modeling, alternative transportation fuels, sustainability standards, technological change, and consumer behavior and urban mobility. She served as Fulbright Distinguished Chair Professor in Alternative Energy Technology in 2016-2017 and received Håkan Frisinger Award by Volvo Research and Educational Foundations in 2019. She is an adjunct professor at the Department of Engineering and Public Policy, Carnegie Mellon University and a senior Editor for Energy Policy journal since 2018.