

Program overview

Sunday 19 June

Time	Activity	Venue
9:00 a.m. - 5:00 p.m.	IAEE COUNCIL MEETING (BY INVITATION)	9th floor meeting room
9:00 a.m. - 11.45 a.m.	WORKSHOP: ENHANCING ACADEMIC PRESENTATION SKILLS	Aud. Jan Mossin
12:00 p.m. - 8:00 p.m.	REGISTRATION	Radisson Blu Royal Hotel
12:15 p.m. - 2:00 p.m.	WORKSHOP: CAPACITY MARKETS AND SECURITY OF ENERGY SUPPLY	Aud. Agnar Sandmo
1:15 p.m. - 5:00 p.m.	SPECIAL PhD SESSION	Aud. Jan Mossin
2:15 p.m. - 5:00 p.m.	WORKSHOP: FUTURE OF UTILITIES - UTILITIES OF THE FUTURE	Aud. Agnar Sandmo
6:00 p.m. - 8:00 p.m.	OPENING RECEPTION	Radisson Blu Royal Hotel - Kongesal 3 and 4
8:00 p.m. - 10:00 p.m.	IAEE STUDENT HAPPY HOUR	Radisson Blu Royal Hotel - Filini Bar

Monday 20 June

Time	Activity	Venue
7:00 a.m. - 5:00 p.m.	REGISTRATION	NHH - Foyer
7:30 a.m. - 8:30 a.m.	IAEE AFFILIATE LEADERS' MEETING (BY INVITATION)	Aud. 12
7:00 a.m. - 8:30 a.m.	STUDENT MENTORING BREAKFAST	Staff Canteen
8:30 a.m. - 9:00 a.m.	PRESIDENT'S WELCOME AND INTRODUCTION	Aud. Max
9:00 a.m. - 10:30 a.m.	OPENING PLENARY SESSION: ENERGY AND ENVIRONMENTAL POLICY FORMATION AND PRACTICE IN AN UNCERTAIN WORLD	Aud. Max & Aud. A - live video
10:30 a.m. - 10:45 a.m.	COFFEE BREAK	Mirror Room and Cafeteria
10:45 a.m. - 12:15 p.m.	DUAL PLENARY SESSION: ENERGY AND THE ECONOMY: SENSITIVITY AND EXPECTATIONS	Aud. Max
10:45 a.m. - 12:15 p.m.	DUAL PLENARY SESSION: PETROLEUM MARKET FUNDAMENTALS AND RISKS	Aud. A
12:15 p.m. - 1:15 p.m.	LUNCH AND POSTER SESSION - MOUNT ULRIKEN 643 m	Mirror Room and Cafeteria
1:15 p.m. - 3:00 p.m.	CONCURRENT SESSIONS 1 - 12	See Pages 8 - 10
3:00 p.m. - 3:30 p.m.	COFFEE BREAK	Mirror Room and Cafeteria
3:30 p.m. - 5:15 p.m.	CONCURRENT SESSIONS 13 - 24	See Pages 10 - 12
7:00 p.m. - 10:00 p.m.	IAEE AWARDS BANQUET	Grieghallen

Tuesday 21 June

Time	Activity	Venue
7:30 a.m. - 5:30 p.m.	REGISTRATION	NHH - Foyer
7:30 a.m. - 8:30 a.m.	EUROPEAN AFFILIATE LEADERS ' MEETING (BY INVITATION)	Aud. 12
7:30 a.m. - 8:30 a.m.	EJ BOARD OF EDITORS MEETING (BY INVITATION)	Aud. 13
8:30 a.m. - 10:00 a.m.	PLENARY SESSION: TECHNOLOGICAL CHANGE AND ENERGY IN TRANSPORT	Aud. Max & Aud. A - live video
10:00 a.m. - 10:30 a.m.	COFFEE BREAK	Mirror Room and Cafeteria
10:30 a.m. - 12:15 p.m.	CONCURRENT SESSIONS 25 - 36	See Pages 12 - 14
12:15 p.m. - 1:15 p.m.	LUNCH AND POSTER SESSION - MOUNT LØVSTAKKEN 477 m	Mirror Room and Cafeteria
1:15 p.m. - 2:45 p.m.	DUAL PLENARY SESSION: INSTITUTIONAL INVESTORS AND THE ENERGY SECTOR	Aud. A
1:15 p.m. - 2:45 p.m.	DUAL PLENARY SESSION: GAS, RUSSIA AND EUROPEAN MARKETS	Aud. D
2:45 p.m. - 3:15 p.m.	COFFEE BREAK	Mirror Room and Cafeteria
3:15 p.m. - 5:00 p.m.	CONCURRENT SESSIONS 37 - 48	See Pages 14 - 17
5:00 p.m. - 5:30 p.m.	IAEE GENERAL MEMBERSHIP MEETING	Aud. 24
7:00 p.m. - 8:00 p.m.	IAEE NETWORKING RECEPTION	Håkon 's Hall
7:00 p.m. - 10:00 p.m.	IAEE STUDENT RECEPTION: VON TANGEN	The Norwegian Fisheries Museum

Wednesday 22 June

Time	Activity	Venue
7:30 a.m. - 5:30 p.m.	REGISTRATION	NHH - Foyer
7:30 a.m. - 8:30 a.m.	2017 SINGAPORE IAEE CONFERENCE PLANNING MEETING	Aud. 12
7:30 a.m. - 8:30 a.m.	EEEE EDITORS MEETING (BY INVITATION)	Aud. 13
8:30 a.m. - 10:15 a.m.	CONCURRENT SESSIONS 49 - 60	See Pages 17 - 19
10:15 a.m. - 10:45 a.m.	COFFEE BREAK	Mirror Room and Cafeteria
10:45 a.m. - 12:30 p.m.	CONCURRENT SESSIONS 61 - 71	See Pages 19 - 21
12:30 p.m. - 1:30 p.m.	LUNCH	Mirror Room and Cafeteria
1:30 p.m. - 3:00 p.m.	DUAL PLENARY SESSION: FINANCIAL ASPECTS OF POWER MARKETS	Aud. A
1:30 p.m. - 3:00 p.m.	DUAL PLENARY SESSION: IN THE AFTERMATH OF PARIS: WHAT HAS HAPPENED AND WHAT TO EXPECT	Aud. D
3:00 p.m. - 3:30 p.m.	COFFEE BREAK	Mirror Room and Cafeteria
3:30 p.m. - 5:00 p.m.	CLOSING PLENARY SESSION: BUSINESS STRATEGIES FOR THE ENERGY SECTOR UNDER UNCERTAINTY: ROUND TABLE DISCUSSION AMONG BUSINESS LEADERS	Aud. Max

Thursday 23 June

Time	Activity	Venue
9:00 a.m. - 5:00 p.m.	TECHNICAL TOUR TO DALE AND SIMA HYDROELECTRIC POWER PLANTS	Dale and Sima
10:00 a.m. - 3:00 p.m.	TECHNICAL TOUR TO THE COMBINED HEAT AND POWER PLANT AT MONGSTAD	Mongstad

Plenary Sessions

Monday 20 June

Session Title	Speakers
<p>OPENING PLENARY SESSION: ENERGY AND ENVIRONMENTAL POLICY FORMATION AND PRACTICE IN AN UNCERTAIN WORLD</p> <hr/> <p>9:00 a.m. – 10:30 a.m. – Aud. Max</p>	<p>Einar Hope (<i>Presiding</i>) Professor, NHH - Norwegian School of Economics</p> <p>Georgette Lalis First Counselor, Directorate-General for Energy of the European Commission</p> <p>Wang Yi Vice President and Professor, Chinese Academy of Sciences (CAS) Member, Standing Committee of the National People's Congress of China (NPC)</p> <p>Eldar Sætre President and Chief Executive Officer, Statoil</p>
<p>DUAL PLENARY SESSION: ENERGY AND THE ECONOMY: SENSITIVITY AND EXPECTATIONS</p> <hr/> <p>10:45 a.m. – 12:15 p.m. – Aud. Max</p>	<p>Thomas Sterner (<i>Presiding</i>) Professor, University of Gothenburg</p> <p>Hans-Werner Sinn Professor, Ludwig Maximilian University of Munich</p> <p>Christoph Böhringer Professor, University of Oldenburg and Centre for European Economic Research(ZEW)</p> <p>James L. Sweeney Director of the Precourt Energy Efficiency Center, Professor, Stanford University</p>
<p>DUAL PLENARY SESSION: PETROLEUM MARKET FUNDAMENTALS AND RISKS</p> <hr/> <p>10:45 a.m. – 12:15 p.m. – Aud. A</p>	<p>Klaus Mohn (<i>Presiding</i>) Professor, University of Stavanger</p> <p>Amrita Sen Chief Oil Analyst, Energy Aspects</p> <p>James L. Smith Professor, Southern Methodist University</p> <p>Paul Stevens Professor, University of Dundee, Chatham House, the Royal Institute of International Affairs</p>

Tuesday 21 June

Session Title	Speakers
<p>PLENARY SESSION: TECHNOLOGICAL CHANGE AND ENERGY IN TRANSPORT</p> <hr/> <p>8:30 a.m. – 10:00 a.m. – Aud. Max</p>	<p>Gunnar S. Eskeland (<i>Presiding</i>) Professor, NHH - Norwegian School of Economics</p> <p>Benjamin Schlesinger President, BSA Energy</p> <p>Odd-Even Bustnes Director of Business Development, Tesla Motors</p> <p>Michel Derdevet Member of the Executive Board, ENEDIS (Électricité Réseau Distribution France)</p>
<p>DUAL PLENARY SESSION: INSTITUTIONAL INVESTORS AND THE ENERGY SECTOR</p> <hr/> <p>1:15 p.m. – 2:45 p.m. – Aud. A</p>	<p>Espen Henriksen (<i>Presiding</i>) Professor, BI Norwegian School of Business</p> <p>Paal Bjørnstad State Secretary, Ministry of Finance, Norway</p> <p>Espen Eckbo Professor, Tuck School of Business and NHH - Norwegian School of Economics</p> <p>John Hassler Professor, Stockholm University</p>

DUAL PLENARY SESSION:
GAS, RUSSIA AND EUROPEAN
MARKETS

1:15 p.m. – 2:45 p.m. – Aud. D

Arild Moe (*Presiding*) Senior Research Fellow, Fridtjof Nansen Institute

Tatiana Mitrova Head of Department, Energy Research Institute, Russian Academy of Sciences

James Henderson Senior Research Fellow, The Oxford Institute for Energy Studies

Andris Piebalgs Senior Fellow, Florence School of Regulation, European University Institute

Wednesday 22 June

Session Title

Speakers

DUAL PLENARY SESSION:
FINANCIAL ASPECTS OF
POWER MARKETS

1:30 p.m. – 3:00 p.m. – Aud. A

John Parsons (*Presiding*) Senior Lecturer, MIT Sloan School of Management and the MIT Center for Energy and Environmental Policy Research

Norman C. Bay Chairman, US Federal Energy Regulatory Commission (FERC)

Mar Reguant Assistant Professor, Northwestern University

Daniel Nordgren Director of Production Planning, Vattenfall

DUAL PLENARY SESSION:
IN THE AFTERMATH OF PARIS:
WHAT HAS HAPPENED AND
WHAT TO EXPECT

1:30 p.m. – 3:00 p.m. – Aud. D

Gunnar S. Eskeland (*Presiding*) Professor, NHH - Norwegian School of Economics

Scott Barrett Professor, Columbia University

Bård Harstad Professor, University of Oslo

Ottmar Edenhofer Professor, Potsdam Institute for Climate Impact Research, Potsdam

CLOSING PLENARY SESSION:
BUSINESS STRATEGIES FOR
THE ENERGY SECTOR UNDER
UNCERTAINTY: ROUND TABLE
DISCUSSION AMONG
BUSINESS LEADERS

3:30 p.m. – 5:00 p.m. – Aud. A

Karel Beckman (*Presiding*) Editor-in-Chief, Energy Post

Christian Rynning-Tønnesen President and CEO, Statkraft

David Hone Chief Climate Advisor, Shell

Fereidoon P. Sioshansi President, Menlo Energy Economics

Lucy Craig Vice-President Technology & Innovation, DNV GL- Energy

Concurrent Sessions

Concurrent S. 1 - 12 Mon. 1:15 p.m. - 3:00 p.m.

CONCURRENT SESSIONS 1 - 12 Monday 20 June, 1:15 p.m. - 3:00 p.m.

1. Decentralised PV and Other Systems (Aud. A)

Anne Neumann, *Presiding*
Chair for Economic Policy, Universität Potsdam

Regional Electricity System Modeling to Analyze the Impact of Storage Systems on a Renewable Energy System

Christoph Kost
Sven Längle
Verena Jülch
Charlotte Senkpiel
Fraunhofer Institute for Solar Energy Systems ISE

Decentralized Generation and Storage Technologies in Future Energy Systems of Swiss Communities

Mashaël Yazdanie
Martin Densing
Paul Scherrer Institute

Collaborative Consumption in Energy Issues - PV-owners' Preferences for Residential vs. Community Battery Storage Systems

Bernhard Kalkbrenner
Jutta Roosen
TUM School of Management, Technical University of Munich

Incentives from Network Charges for Self-supply with Small Scale PV

Christine Brandstät
Jacobs University Bremen

Storing the Sun: System Implications of Grid Defection

Ilan Momber
Samson Y Hadush
Leonardo Meeus
Vlerick Business School

2. Natural Gas Markets and Transportation (Aud. B)

Katerina Shaton, *Presiding*
PhD Candidate, Molde University College

Market Design to Provide Secure Gas Supplies before Shifting to State Measures

Chris Cuijpers
Commission for Electricity and Gas Regulation (CREG)

The Relationship Between Regulatory Reform and Pipeline Investment: The Case of the Japanese Natural Gas Industry

Satoru Hashimoto
Teikyo University
Koichiro Tezuka
Nihon University
Masahiro Ishii
Sofia University

Environmental Footprint of Gas Transportation: LNG vs. Pipeline

Katerina Shaton
Harald M Hjelle
Arild Hervik
Molde University College

Forecasting Natural Gas Markets Between Chile and Argentina Under Developments of Unconventional Gas and Expansion of LNG Regasification Plants

Mauro Chavez Rodriguez
Eveline Vasquez
Alexandre Koberle
Energy Planning Program COPPE/UFRJ
Fabiola Rodriguez
Innovaes
Javier Bustos
Universidad Mayor
Daniela Varela
University of Buenos Aires

Diversification Option: Is it Vital for Russian Gas Industry?

Hazem Heswani
Leeds Beckett University

3. Policies and Regulations in the Electricity Market (Aud. C)

Stefan Ambec, *Presiding*
Professor, TSE-R / INRA

Economic Impacts of Renewable Support Schemes

Georg Erdmann
Fernando Oster
TU Berlin

Operational Versus Managerial Flexibility: the Case of Renewable Energy

Ludovic Gaudard
University of Geneva and Imperial College London
Luca Taschini
London School of Economics and Political Science
Franco Romero
University of Geneva

Renewable Energy Deployment in EU Member States and Energy Community Contracting Parties - A Comparative Review of Past Progress and Potential Target Achievement by 2020

Lukas Liebmann
Gustav Resch
TU Wien - Energy Economics Group

Decarbonizing Electricity Generation with Intermittent Sources of Energy

Stefan Ambec
Toulouse School of Economics

Using General Equilibrium Models to Estimate the Rationing Cost in a Power System

Vinicius Botelho
Research Associate, Fundacao Getulio Vargas / Ibre

4. Aspects of Public Choice (Aud. 14)

Ottar Skagen, *Presiding*
Senior Advisor, Statoil

Who Should Pay for the Costs of the German Energy Transition? A Microeconomic Analysis of Preferences for Different Burden Sharing Rules

Elke Groh
Andreas Ziegler
University of Kassel

Economic and Environmental Impacts of Raising Revenues for Climate Finance from Public Sources

Jan Schneider
University of Oldenburg

Economic Instruments for the Energy Transition: Fiscal Choices to Maximize Short-term Health Benefits

Désirée Vandenberghe
Johan Albrecht
Ghent University

Cost Uncertainty, Fairness and Political Support for Subsidizing Renewables

Traub Stefan
Helmut-Schmidt-Universität
Ole Kutzschbauch
Helmut-Schmidt-University

On the Relevance of Economic Expectations, Ideological Identification, and Social Values and Norms for the Acceptance of the German Energy Transition: A Micro-econometric Analysis

Andreas Ziegler
University of Kassel

5. Electricity Grid Financing & Regulation (Aud. Finn Kydland)

Jerald Fletcher, *Presiding*
Professor and Director, West Virginia University

Persistent and Transient Productive Inefficiency in a Regulated Industry: Electricity Distribution in New Zealand

Massimo Filippini
ETH Zurich & USI
Bill Greene
New York University
Giuliano Masiero
USI & University Bergamo

Uncertainty in Benefit-cost Analysis of Smart Grid Demonstration Projects in the U.S., China and Italy

Nihan Karali
Lawrence Berkeley National Laboratory
Gianluca Flego
Silvia Vitiello
European Commission JRC
Chris Marnay
Lawrence Berkeley National Lab
Dong Zhang
Jiancheng Yu
State Grid Corp. of China

Disincentive Regulation: Evidence for Ratchet Effect Among German Electricity Distribution System Operators

Michael Hellwig
Dominik Schober
ZEW Centre for European Economic Research

Empirical Analysis of Local Opposition to New Energy Infrastructure

Johannes Reichl
Michael Schmidthaler
Energieinstitut JKU Linz
Klaus Moeltner
Department of Agricultural and Applied Economics, Virginia Tech
Jed J Cohen
Virginia Tech

Grid Financing Strategies in the Death Spiral: A Simulation Based Analysis of Grid Tariff Designs

Merla D. Kubli
Zürich University of Applied Sciences & University of St. Gallen

6. Intermittent Renewable Electricity Generation (Aud. Jan Mossin)

Thomas Leautier, *Presiding*
TSE Researcher, Toulouse School of Economics

Comparative Scenarios in Islanded Systems: Energy Supply-storage Sizing Problem Applied to Electricity and Mobility
Rodica Loisel
Lionel Lemiale
Université de Nantes, IEMN-IAE

Solar, Wind and Market Power in a Hydro Based Grid
Stephen Poletti
Mina Gholami
University of Auckland

Impact of Variable Renewable Energy Production on Electricity Prices Through a Modeling Approach
Cyril Martin de Lagarde
Anna Creti
Université Paris-Dauphine
Christophe Bonnerly
ERDF
Frédéric Lantz
IFP EN, IFP School

Electricity Storage and Flexibility Requirements on the Road to Decarbonization in European Electricity
Clemens Gerbaulet
Casimir Lorenz
TU Berlin

Estimating Emissions Offsets of Intermittent Renewable Energy
Miguel A Castro
Michigan State University

7. Financial Risk and Electricity Markets (Aud. Agnar Sandmo)

Patrick Narbel, *Presiding*
Partner, ADAPT Consulting AS

Financial Arbitrage and Efficient Dispatch in Wholesale Electricity Markets
John E Parsons
MIT Sloan School of Management
Cathleen Colbert
California ISO
Erin Mastrangelo
Jeremy Larriev
Taylor Martin
FERC

Zero-Variable Cost Power Systems: Implications for Electricity Market Design and Capacity Investments
Jesse D Jenkins
Nestor Sepulveda
Massachusetts Institute of Technology
Fernando J de Sisternes
Argonne National Laboratory

Risk Exposure in Electricity Markets: The Need for Intra-day Hedging
Raphaël Homayoun Boroumand
Associate Professor of Economics, PSB Paris School of Business

Market and Policy Risks for VRE Investment and their Impacts on Effectiveness and Efficiency of RES-E Policy Targets – An Agent-Based Modelling Approach
Matthias Reeg
German Aerospace Center (DLR) - Systems Analysis and Technology Assessment

The Corporate Social Responsibility of Hydropower Companies in Alpine Regions – A Welfare-economic Approach
Werner Hediger
HTW Chur

8. Innovations and Technologies (Aud. Terje Hansen)

Roger Fouquet, *Presiding*
Professor, Grantham Research Inst LSE

Life Cycle Analyses of End-User Electricity Generation in Ten Major European Countries
Gorkem F Uctug
Gizem Alevli
Bahcesehir University

The Welfare Effects of Energy Services and Technologies (1700-2010)
Roger Fouquet
London School of Economics and Political Science (LSE)

Technology Implications for an Integrated European Bioeconomy
Fabian Schipfer
Reinhard Haas
Lukas Kranzl
Energy Economics Group

Structuring Public Support for Radical Low-Carbon Innovation in the Materials Sector: Bridging the Valley of Death
Vera Zipperer
Karsten Neuhoff
DIW Berlin
Gregory Nemet
University of Wisconsin-Madison

Multinational Innovation, Product Life Cycles and Intellectual Property Rights Protection: Which is the Best Place to Invent Something?
Giulia Valacchi
IHEID

9. IAEE Best Student Paper Award Session (Aud. 24)

Knut Einar Rosendahl, *Presiding*
Professor, Norwegian Univ. of Life Science

Carbon Taxes, Oil Monopoly and Petrodollar Recycling
Waldemar Marz
Johannes Pfeiffer
IFO Institute for Economic Research at the University of Munich

Estimating the Potential for Electricity Savings in Households
Nina Boogen
ETH Zurich, Center of Economic Research (CER-ETH)

Reliability, Congestion and Investment in Electricity Transmission
Marten Ovaere
KU Leuven, Department of Economics

How to Sell Renewable Electricity - Interactions of the Intraday and Day-Ahead Market Under Uncertainty
Frank Obermüller
Andreas Knaut
Institute of Energy Economics, University of Cologne

10. Heat and Electricity (Aud. 23)

Benjamin Schlesinger, *Presiding*
President, Benjamin Schlesinger & Assoc LLC

CHP Plant Operation and Electricity Market Prices – Analytical Insights and Large-Scale Model Application
Björn Felten
Research Associate, University of Duisburg-Essen

Residential Energy Efficiency and European Carbon Policies: A CGE-analysis with Bottom-up Information on Energy Efficiency Technologies
Orvika Rosnes
Brita Bye
Taran Fæhn
Statistics Norway

Endogenous Power and Heat Generation Modelling in various CHP Plant Types
Andreas Bloess
DIW Berlin

Status-quo Bias and Consumers' Willingness to Pay for Green Electricity: A Discrete Choice Experiment With Real Economic Incentives
Fabian Grabicki
Roland Menges
Clausthal University of Technology

Technical-Economic Potential of PV Systems on Colombian Residential Sector
Rosa Esperanza González Mahecha
André Lucena
Alexandre Szklo
Raul Miranda
PPE/COPPE
Ferreira Paula
Universidade do Minho

11. Prospects for Nuclear Power (Aud. 22)

Christian von Hirschhausen, *Presiding*
Professor, TU Berlin

Phasing Out Nuclear Power in Europe
Rolf Golombek
Hilde H Le Tissier
Frisch Centre
Finn R Aune
Statistics Norway

Ambiguity Aversion and the Expected Cost of Rare Energy Disasters: An Application to Nuclear Power Accidents
Romain Bizet
François Lévêque
Mines ParisTech - CERN Centre for Industrial Economics

Logistics of Dismantling Nuclear Power Plants - A Model-Based Analysis of Low- and Intermediate-Level Waste Management in Germany
Tim Scherwath
German Institute for Economic Research (DIW Berlin)
Roman Mendelevitch
Technische Universität Berlin (TU Berlin)

Concurrent Sessions

Concurrent S. 13 - 24 Mon. 3:30 p.m. - 5:15 p.m.

Economic Aspects of Atomic Power in the 21st Century - Old Questions, But New Insights
Hannes Weigt
University Basel
Christian von Hirschhausen
TU Berlin

Decommissioning of Nuclear Power Plants and Storage of Nuclear Waste - International Comparison of Organisation Models and Policy Perspectives
Christian von Hirschhausen
TU Berlin / DIW Berlin
Ben Wealer
Jan Paul Seidel
TU Berlin

12. Wind Power (Aud. 21)

Jørgen Bjørndalen, *Presiding*
EC Group AS

Effects of Policies on Patenting in Wind Power Technologies
Joachim Schleich
Grenoble Ecole de Management
Mario Ragwitz
Rainer Walz
Fraunhofer Institute Systems and Innovation Research

Explaining the Slow Diffusion of New Renewable Energy in the Argentine Electricity Market: A Wrong Policy Mix or An Unfavourable Context?
Germán Bersalli
Grenoble-Alpes University

Has Wind Energy Forecasting Solved the Challenge Posed by Intermittency? Evidence from the United Kingdom
Kevin F Forbes
Ernest M Zampelli
The Catholic University of America

Paying the Premium? How Wind Power Policies Impact the Financing Costs of Renewables
Nils May
Karsten Neuhoff
DIW Berlin

Nearshore versus Offshore: Comparative Cost and Competitive Advantages
Henrik Klinge Jacobsen
Christoph Wolter
Pablo Hevia-Koch
Technical University of Denmark

CONCURRENT SESSIONS 13 - 24 Monday 20 June, 3:30 p.m. - 5:15 p.m.

13. Electricity Demand and Retail Prices (Aud. A)

Richard Green, *Presiding*
Professor, Imperial College Business School

The Impact of Electricity Price Liberalisation on Bangladesh Economy
Sakib B. Amin
North South University

Analysing the Impact of Energy Regulation on Electricity Retail Prices
Elisa Trujillo-Baute
University of Warwick & Barcelona Institute of Economics, Chair of Energy Sustainability
Pablo del Rio
IPP-CSIC
Pere Mir-Artigues
Universitat de Lleida & Chair of Energy Sustainability

Estimates from an Energy Demand System: Evaluating the Effects of Electricity Price Change on CO2 Emissions and Poverty in Germany
Dragana Nikodinoska
Christian Albrechts University of Kiel, Germany
Carsten Schröder
German Institute for Economic Research (DIW/SOEP) and Freie Universität Berlin, Germany

Intertwining Sectoral Electricity Load Profiles at City Level
João P Gouveia
Júlia Seixas
Ana Mestre
Lisandra Miguel
CENSE, FCT NOVA

Malmquist Productivity Analysis Based on StoNED
Endre Bjørndal
Xiaomei Cheng
Mette Bjørndal
NHH - Norwegian School of Economics

14. Oil Markets and Trade (Aud. B)

Tatiana Mitrova, *Presiding*
Research Scholar CGEP, Columbia University

A Macroeconomic Analysis of Lifting the U.S. Crude Export Ban
Nida C Melek
Federal Reserve Bank of Kansas City
Mine Yuçel
Michael Plante
Federal Reserve Bank of Dallas

Crude Oil Exports and Shipping Constraints in the Global Market. Empirical Evidence Explaining Global Crude Price Differentials.
Gregory B Upton
Louisiana State University Center for Energy Studies

Crude Inventory Accounting and Speculation in the Physical Oil Market
Ivan Diaz-Rainey
David Lont
Helen Roberts
University of Otago

Evolution of Prices and Margin in the Spanish Retail Automotive Fuels Market: What Do They Reflect?
Ignacio Contín-Pilart
Universidad Pública de Navarra and INARBE
Ma Blanca Palacios
Alejandro Bello
Universidad Pública de Navarra

Presentation on Shell's New Lens Scenarios and the World Energy Model
Anna Chroni
Shell

15. Renewable Energy Policy (Aud. C)

Adonis Yatchew, *Presiding*
Professor, University of Toronto

Assessing the Impact of Renewable Support Policies - Modelling Investors and Investment Decisions
Francesco Hipp
Christoph Weber
University of Duisburg-Essen

Policies for Decarbonizing A Liberalized Power Sector
David M Newbery
Professor, EPRG, University of Cambridge

The Impact of Public Policies in the Renewables Deployment: a Comparative Study Between Installed Capacity and Electricity Generation
António C Marques
Diogo A Pereira
José A Fuinhas
University of Beira Interior

Tradable Green Certificates vs. Feed-in tariffs: A Note on Risk
Kristin Linnerud
Senior Researcher, CICERO

Stimulating Renewable Energy and Policy Design: a Model Analysis of The Power Market
Yuyu Zeng
Machiel Mulder
University of Groningen

16. Emission Pricing (Aud. 14)

Jurgis Vilemas, *Presiding*
Leading Scientist, Vytautas Magnus University

Does Emission Permits Allocation Affect Carbon Cost Passthrough? A Theoretical Analysis
Mei Wang
Peng Zhou
Nanjing University of Aeronautics and Astronautics

Market Power in Performance-based Permit Trading Policies: Walk on the Thin Ice?
Yihsu Chen
University of California Santa Cruz
Makoto Tanaka
National Graduate Institute for Policy Studies
Afzal S. Siddiqui
University College London

Unilateral Emission Pricing and OPEC's Behaviour
Christoph Böhringer
Jan Schneider
University of Oldenburg
Knut Einar Rosendahl
Norwegian University of Life Science

Impacts of Carbon Prices on Competitiveness and Windfall Profits
Dominik Möst
Matthew Schmidt
Hannes Hobbie
TU Dresden

17. Changing Wholesale Market Structures
(Aud. Finn Kydland)

Finn Førsund, *Presiding*
Professor Emeritus, University of Oslo

Optimizing The Mix and Structure of Successor
Companies in Electricity Market Restructuring
Dzikri Hakam
University of Dundee

Hydropower and Nodal Pricing
Finn R Førsund
Professor Emeritus, University of Oslo

The RES-Induced Switching Effect Across Fossil
Fuels: an Analysis of the Italian Day-ahead and
Balancing Markets
Lucia V Parisio
Matteo Pelagatti
Angelica Gianfreda
University of Milan-Bicocca

Transmission Allocation for Bilateral Vs Competitive
Transactions: Prices, Market Power and Welfare in a
Simulation on a Power Exchange
Anoop Singh
Indian Institute of Technology Kanpur

Heading Towards Complete and Competitive Elec-
tricity Markets
Reinhard Haas
Hans Auer
TU Wien
Georg Erdmann
TU Berlin

18. Energy Services and Energy Demand
(Aud. Jan Mossin)

Christian von Hirschhausen, *Presiding*
Professor, TU Berlin

Transition to a 100% Renewable Transport Fuel
System and Implications for Economic Costs and
Greenhouse Gas Mitigation: A Simulation-Based
Comparison between Hydrogen and Electricity
Ehsan Shafiei
Brynhildur Davidsdottir
Iceland University
Eyjolfur Ingi Asgeirsson
Hlynur Stefansson
Reykjavik University
Jonathan Leaver
Unitec Institute of Technology

Analysis of Urban Energy in the Nordic Region
Kari Aa Espegren
Institute for Energy Technology (IFE)
Uwe Remme
IEA
Arne Lind
IFE
Tiina Koljonen
Tomi J Lindroos
VTT

The Impact of Policy Measures on Future Power
Generation Portfolio and Infrastructure -
A Combined Electricity and Carbon Capture
Investment and Dispatch Model
Pao-Yu Oei
TU Berlin
Roman Mendelevitch
DIW Berlin

Rebound Effect for Household Energy Services in
the UK

Mona Chitnis
University of Surrey
Roger Fouquet
London School of Economics and Political Science
Steve Sorrell
University of Sussex

Green Power Demand in the USA
Leila Dagher
American University of Beirut

19. Investments and Real Options
(Aud. Agnar Sandmo)

Thore Johnsen, *Presiding*
Professor, NHH - Norwegian School of Economics

Policy Uncertainty and Real Options in Switching of
Peak Generators
Stein-Erik Fleten
Alois Pichler
Marius Johansen
Norwegian University of Science and Technology
Carl J Ullrich
James Madison University

A Proposal of Reformulation of Hydropower Sales
Contracts in the Brazilian Electricity Sector
Glauca Fernandes
Luiz E Brandão
Leonardo L. Gomes
Gabriel R Vasconcelos
Pontifical Catholic University of Rio de Janeiro

Off-shore Enhanced Oil Recovery in the North Sea:
The Impact of Price Uncertainty on the Investment
Decisions
Tine Compennolle
Hasselt University
Kris Welkenhuysen
Kris Piessens
*Royal Belgian Institute of Natural Sciences -
Geological Survey of Belgium*
Peter Kort
Kuno Huisman
Tilburg University

Optimal Investment in Spare Capacity: A Real
Options Approach
Yaser Faquih
Economics Department, Rice University

Estimating the Value of Flexibility from Real Options -
on the Adequacy of Hybrid Electricity Price Models
Christian Pape
Christoph Weber
University of Duisburg-Essen
Oliver Woll
ZEW

20. Emissions in the Residential and Transportation
Sectors (Aud. Terje Hansen)

Lars Bergman, *Presiding*
Former President and Professor, Stockholm
School of Economics

The Determinants of Individuals' Efforts for
Reducing Energy Use in Transportation and
Residence
Wen-Hsiu Huang
Ling Tung University
Ming-Che Chao
National Chi Nan University

Environmental Regulations in Shipping: Policies
Leaning Towards Scrubbers Entail Important
Penalties
Haakon-Elizabeth Lindstad
*Norwegian Marine Technology Research Institute -
MARINTEK AS*
Gunnar S Eskeland
NHH - Norwegian School of Economics

Daily Travel Carbon Emissions and Mitigation
Potential Analysis Using Individual Data in Beijing
Can Wang
Yuan Yang
Tsinghua University
Wenling Liu
Beijing Institute of Technology

Evaluating the Impacts of a Proposed Carbon Tax,
and Other Policies, in Washington State
Greg L Nothstein
Washington State Dept. of Commerce
Keibun Mori
Deloitte Tohmatsu Consulting, LLC
Roel Hammerschlag
Hammerschlag & Co. LLC

Peak Car and Peak Rebound? A Closer Look at
Recent Trends in Car Travel in Great Britain
Lee Stapleton
Steve Sorrell
University of Sussex
Tim Schwanen
University of Oxford

21. Energy Efficiency Measures and Measurement
(Aud. 24)

Ron Ripple, *Presiding*
Professor, Energy Business and Finance
The University of Tulsa

Measuring the Efficiency of Energy-intensive
Industries Across 23 EU Countries
Georgia Makridou
Kostas Andriosopoulos
ESCP Europe
Constantin Zopounidis
Michael Doumpos
Technical University of Crete

Heterogeneity and Barriers to Organizational
Adoption of Cross-cutting Energy Efficiency
Measures
Mark Olsthoorn
Joachim Schleich
Grenoble Ecole de Management
Simon Hirzel
Fraunhofer ISI

Method Review of National Comprehensive
Assessments Performed under Article 14 EED
Richard Büchele
TU Wien, EEG

Tracking Energy Efficiency Progress in Key Emerging
Economies
Liu Yang
International Energy Agency
Bin Su
Energy Studies Institute, Singapore

Concurrent Sessions

Concurrent S. 25 - 36 Tue. 10:30 a.m. - 12:15 p.m.

Concurrent S. 13 - 24 Mon. 3:30 p.m. - 5:15 p.m.

How Technological Potentials are Undermined by Economic and Behavioral Responses - Selection Bias and Endogenous Energy Efficiency Measures
Helena Meier
Christian Tode
University of Cologne

22. Energy Security in Power Systems (Aud. 23)

James Smith, *Presiding*
Professor of Finance, Southern Methodist University

Optimal Level of Supply Security in the Power Sector with Growing Shares of Fluctuating Renewable Energy

Aaron Praktknjo
RWTH Aachen
Lars Dittmar
TU Berlin

Assessing the Interdependencies among Dimensions of Security of Supply in the Electricity Sector

Sebastian Osorio
Ann van Ackere
University of Lausanne
Erik Larsen
University of Lugano

Assessment of Renewable Energy Sources (RES) With Concerns of Policy and Technology in Chile:

Analytic Hierarchy Process (AHP) Approach
Shahriyar Nasirov
Claudio Agostini
Carlos Silva
Universidad Adolfo Ibáñez

Comparative Study of Electricity Sustainability Issues in ASEAN-5 Using the Electricity Sector Sustainability Indicators

Peerapat Vithayasrichareon
Centre for Energy and Environmental Markets, UNSW Australia
Xiyang Liu
Energy Studies Institute, National University of Singapore
Tue Anh Nguyen
University of Greenwich

Energy Security in a Low-carbon World: Identifying the Main Uncertain Drivers of Energy Security in Europe

Stéphanie Monjon
Université Paris Dauphine, PSL Research University, LEDa
Céline Guivarch
CIREDE, Ecole des Ponts

23. Energy Demand in Households and Industries (Aud. 22)

John Jimison, *Presiding*
Senior Advisor, Energy Future Coalition

Income and Energy Consumption in Asia
Ronald D. Ripple
The University of Tulsa
Raymond Li
Hong Kong Polytechnic University
Roselyne Joyeux
Macquarie University

Analysing the Convergence of the Electricity Intensities of the Production Sectors in Europe

María Jesús Gutiérrez
Miguel-Ángel Tarancón
Universidad de Castilla - La Mancha
Pablo del Río
National Research Council of Spain (CSIC)
Vicent Alcántara
Universitat de Barcelona

Energy Prices and Industrial Competitiveness: Is Shale Gas Triggering a U.S. Manufacturing Renaissance?

Aurélien Saussay
French Economic Observatory (OFCE)

Income, Energy Poverty and Individual Health in Spain

Euan Phimister
University of Aberdeen
Esperanza Vera-Toscano
Instituto de Estudios Sociales Avanzados, Consejo Superior de Investigaciones Científicas (IESA-CSIC)

Germany's Energy Accounts For Heat Services

Fernando Oster
Georg Erdmann
TU Berlin

24. Fossil Fuel Extraction (Aud. 21)

Toshihide Arimura, *Presiding*
Professor, Dept of Economics, Waseda University

Production Estimation of Undeveloped Unconventional Gas Development: The Case of Wells in the Bowland Shale Regions (England)

Ukadike Victor Nwaobi
Gabrial Anandarajah
UCL Energy Institute

Regulating Under Conditions of Uncertainty and Risk: Lessons Learned from the Regulation of Hydraulic Fracturing in the U.S.

Jonah J Ralston
Jason Kalmbach
University of Wisconsin

Rig Rates and Decreasing Productivity

Kristin H. Roll
Petter Osmundsen
University of Stavanger

Labor Mobility in the Energy Industry: Evidence from the Shale Boom

Mallory C Vachon
Louisiana State University

Natural Resource Extraction with Reversible Stock Pollution

Peifang Yang
China University of Petroleum (Beijing)
Graham A Davis
Colorado School of Mines

CONCURRENT SESSIONS 25 - 36 Tuesday 21 June, 10:30 a.m. - 12:15 p.m.

25. Flexibility Options (Aud. A)

Yves Smeers, *Presiding*
Professor, University Catholique de Louvain

Remuneration of Flexibility Using Operating Reserve Demand Curves: A Case Study of Belgium

Anthony Papavasiliou
Mathieu Van Vyve
Yves Smeers
Université catholique de Louvain

Energy Storage and Peak Load Pricing for More Efficient Deferrable Demand Management

Alberto J Lamadrid
Lehigh University
Timothy D Mount
Cornell University

Reserve Provision by Electric Vehicles: Scenarios for Germany

Wolf-Peter Schill
Jochen Diekmann
Alexander Zerrahn
DIW Berlin
Moritz Niemeyer

End of the Road for Peakers? The Future Economics of Electricity Storage at Peak Moments in National Electricity Systems

Lennert Thomas
Johan Albrecht
Sam Hamels
Ghent University

The Nano-Grid: A Sustainable Resolution to the Energy Infrastructure Crisis

Sarah B. von Helfenstein
CEO, Value Analytics & Design LLC

26. Upstream Petroleum Economics (Aud. B)

Peter Hartley, *Presiding*
Professor & Baker Institute Scholar, Rice University

Cost Overrun at the Norwegian Continental Shelf - The Element of Surprise

Sindre Lorentzen
Atle Øglend
Petter Osmundsen
University of Stavanger

Modelling and Forecasting Rig Rates on the Norwegian Continental Shelf

Terje Skjerpen
Statistics Norway

Innovation in the Supply and Procurement of Rig Services

Petter Osmundsen
Professor, University of Stavanger

The Crisis in the Oil Industry and its Impacts on the Brazilian Macroeconomic Indicators

Niágara Rodrigues
Federal Fluminense University
Marcelo C Ferraro
Federal University of Rio de Janeiro - UFRJ

Anatomy of a Shale Boom: The Roles of Long-Lived Capital, Leasing, and Productivity Differences
Mark Agerton
Rice University

27. Impacts of RE Use (Aud. C)

Barbara Breitschopf, *Presiding*
Fraunhofer Institute

Social Impacts of Renewables in Germany – Size, History and Alleviation
Ulrike G Lehr
Thomas Drosdowski
Institute of Economic Structures Research (GWS)
Barbara Breitschopf
FHG-ISI
Jochen Diekmann
German Economic Institute (DIW)

Distributional Effects of the Special Equalisation Scheme for Electricity-intensive Enterprises and Rail Operators Within the Scope of the Renewable Energy Sources Act in Germany
Juri Horst
Alexander Zipp
IZES gGmbH

Do Renewable Energies Reduce Regional Disparities in Germany
Luisa Sievers
Matthias Pfaff
Fraunhofer Institute for Systems and Innovation Research
Axel Schaffer
Universität der Bundeswehr München

Impact of RE Policy on Technology Costs – PV System Costs in Germany
Barbara Breitschopf
Fraunhofer ISI

Impact of RE Policy on Technology Costs – PV System Costs in Germany
Barbara Breitschopf
Martin Pudlik
Fraunhofer ISI
Alexander Schlotz
Markus Lau

28. Emission Permits Trading (Aud. 14)

Michael Pollitt, *Presiding*
Assistant Director EPRG, University of Cambridge

Joint Impacts of Emission Trading and Consumer Low-carbon Awareness on Firm's Decision
Wen Wen
Peng Zhou
Nanjing University of Aeronautics and Astronautics

Emissions Tax, Emissions Trading and Allowance Banking under Ambiguity Aversion
Simon Quemin
Paris-Dauphine University, Climate Economics Chair

The Impact of Risk Aversion on the European CO2 Emission Trade System
Jörn C. Richstein
DIW
Laurens J De Vries
Delft University of Technology

How Much is Enough? EU-ETS Induced National Climate Target Uncertainty
Michael Pahle
Paul Nahmmacher
Potsdam Institute for Climate Impact Research (PIK)
Christian Flachsland
Mercator Research Institute on Global Commons and Climate Change (MCC)

Ex-Post Analysis of Cost-Efficiency in the 2nd Trading Period of the EU ETS
Johanna Cludius
Katja Schumacher
Oeko-Institut
Nele Friedrichsen
Vicki Duscha
Fraunhofer Institute for Systems and Innovation Research ISI

29. Demand Response & Retail Markets (Aud. Finn Kydland)

Iain MacGill, *Presiding*
Joint Director, CEEM, University of NSW

Residual Demand Manipulations and Market Power in Electricity Markets
David Benatia
Université de Montréal, Département de Sciences Économiques
Pierre-Olivier Pineau
HEC Montréal
Étienne Billette de Villemeur
Université de Lille 1

An Assessment of the Economic Potential of Large-scale Demand Response: Is There a Business Opportunity in France?
Antoine Verrier
Paris Dauphine University, Chair of European Electricity Markets

Estimating Energy Rationing Costs in Brazil with Contingent Valuation Models
Edson Goncalves
FGV

Risk Implications of Investments in Demand Response from an Aggregator Perspective
Jonas Katz
Lena Kitzing
Technical University of Denmark

Competition in Retail Energy Markets: An Assessment of 10 Year Dutch Experience
Machiel Mulder
University of Groningen
Bert Willems
Tilburg University

30. Regional Electricity Markets and Network Constraints (Aud. Jan Mossin)

Massimo Filippini, *Presiding*
Professor of Economics, ETH Zurich CEPE & Univ. of Lugano

A System Approach to Optimize Regional Energy Systems with Power Distribution Constraints and Options
Alain Haurie
Ordecys
Marc Vielle
EPFL
Frédéric Babonneau
ORDECYS and EPFL

What is the Price of National Energy Policies? A Scenario-based Analysis of Market Integration Impact and Emission Targets on Electricity Generation and Grid Expansion in Europe until 2035
Jens Weibezahn
Mario Kendziorski
Pao-Yu Oei
Valentin Zinnecker
Technische Universität Berlin

Influence of Balancing Reserves on the Electricity Infrastructure in Europe Until 2050
Casimir Lorenz
DIW Berlin / TU Berlin
Clemens Gerbaulet
TU Berlin

Interdependencies Between Swiss Electricity Prices and the Neighbouring Energy Markets
Dogan Keles
Wolf Fichtner
Joris Dehler
Karlsruhe Institute of Technology (KIT)

Congestion Management in a Stochastic Dispatch Model for Electricity Markets
Mette Bjørndal
Endre Bjørndal
NHH - Norwegian School of Economics
Kjetil Midthun
SINTEF
Golbon Zakeri
University of Auckland

31. Management, Investment, Disinvestment and Bubbles (Aud. Agnar Sandmo)

Eirik Amundsen, *Presiding*
Professor, University of Bergen and University of Copenhagen

Business as Unusual: The Implications of Fossil Divestment for Financial Flows, Economic Growth and the Energy Market
Solveig Glomsrød
Taoyuan Wei
Center for International Climate and Environmental Research - Oslo (CICERO)

Blowing Bubbles? A Conceptual Analysis of the Carbon Bubble Hypothesis
Arjan Trinks
University of Groningen
Bert Scholtens
University of Groningen (NL), University of Saint Andrews (UK)

Carbon Risks and Corporate Valuation
Gianfranco Gianfrate
Harvard University

Probable Oil & Gas Reserves: Effect on Returns
Bård Misund
Petter Osmundsen
University of Stavanger

Government Performance in Managing the U.S. Special Petroleum Reserve (SPR)
Carol A Dahl
Colorado School of Mines
Yang Bai
Nanjing Normal University

Concurrent Sessions

Concurrent S. 37 - 48 Tue. 3:15 p.m. - 5:00 p.m.

32. Energy Use and Economic Growth (Aud. Terje Hansen)

Ottar Skagen, *Presiding*
Senior Advisor, Statoil

The Relationship Between Economic Growth and Energy Consumption in Newfoundland and Labrador: Sectoral and Fuel Type Consumption Analysis

Kayode E Olaide
Memorial University of Newfoundland

Long-term Endogenous Economic Growth and Transition Towards Renewable Energy

Victor Court
Pierre-André Jouvét
Université Paris Ouest Nanterre La Défense
Frédéric Lantz
IFP Energies Nouvelles

Energy Consumption and Human Capital: A Driver or Drag for Economic Growth

Youngho Chang
Zheng Fang
Nanyang Technological University

Economic Growth, Oil Consumption & Energy Conservation Policies: What are the Implications?

Kelly Burns
Curtin University

Fossil Energy in Economic Growth: A Study of the Energy Direction of Technical Change, 1950-2012

Gregor S Semieniuk
University of Sussex

33. Energy Efficiency Policies and Incentives (Aud. 24)

Ricardo Raineri Bernain, *Presiding*
Professor, Pontifica Univ Catolica de Chile

Government Policy and Energy Efficiency - Learnings From a Public Good Game

Roland Menges
Gregor Beyer
Clausthal University of Technology

Assesing the Impact of Energy Efficiency Standards on Residential Electricity Consumption in Mexico

Fernando H Navajas
FIEL and University of Buenos Aires
Hildegart A Ahumada
University Torcuato Di Tella

Seemingly Unrelated Intervention: Environmental Management Systems at Workplaces and Energy Conservation Behaviors at Home

Toshi H Arimura
Hajime Katayama
Waseda University
Mari Sakudo
Development Bank of Japan
Kazuyuki Iwata
Takasaki City University of Economics

Identifying Key Determinants of Energy-Efficient Renovations: Evidence from Slovenian Homeowners

Jelena Zoric
University of Ljubljana, Faculty of Economics
Nevenka Hrovatin
University of Ljubljana

Incentive Problems in the Implementation of Efficient International Energy Storage

Joachim Geske
Richard Green
Imperial College London

34. Household Energy Demand (Aud. 23)

John Parsons, *Presiding*
Senior Lecturer, Sloan School of Management MIT

Elasticity of Residential Electricity Demand in the State of New York (1994-2013)

Pierre-Olivier Pineau
HEC Montreal
Etienne Billette de Villemeur
Université de Lille

Time Use, Lifestyle and Energy Consumption: Lessons from Time Use and Budget Data for French Households

Simona De Lauretis
CIREN / EDF R&D
Frédéric Ghersi
CNRS/CIREN
Jean-Michel Cayla
EDF R&D

Impact of Tariff on the Household Consumption of Electricity in Brazil

Joao M L Moreira
Universidade Federal do ABC - UFABC
Maria J C Villarreal
Universidade Federal do ABC

Estimating Residential Gas Demand Using Household-level Data

Bettina Hirl
Università della Svizzera italiana
Massimo Filippini
Università della Svizzera italiana; Swiss Federal Institute of Technology Zurich (ETHZ)

Two-Period Household Electricity Demand Estimation with Limited Data

Olvar Bergland
Norwegian University of Life Sciences
H Alan Love
Washington State University

35. Electric and Hydrogen Vehicles (Aud. 22)

Amela Ajanovic, *Presiding*
Senior Research Scientist Vienna University of Technology

Policy Design and Environmental Benefits of Electric Vehicles

Amela Ajanovic
Reihard Haas
Vienna University of Technology

Cost-benefit Analysis of Hydrogen-based Transport in Europe

Carmen Amalia Cantuarias
Alexis Vignes
Benno Weinberger
Jean-Marc Brignon
INERIS
Leonardo Roses
HyGear B.V.

Environmental Policies for the Light Duty Vehicle Sector in the US: An Up to Date Modeling Approach

Nikos Zirogiannis
Sanya Carley
Saba Siddiki
John D. Graham
Denvil Duncan
Indiana University

Stochastic Non-routine Trips and the Potential of Vehicle-to-grid (V2G)

Joachim Geske
Research Associate, Imperial College London

Electricity Demand Projection for Electric Vehicles (EV) in Turkey: Bottom-up Modelling Approach, and Comparison with EU

Ozturk Zafer
Bogazici University

36. Bio and Geothermal Energy (Aud. 21)

Jean-Michel Glachant, *Presiding*
Director, Florence School of Regulation

Optimisation of the Bioeconomy - Cost-Effective Swedish Bioenergy Pathways

Erik O. Ahlgren
Chalmers University of Technology
Martin Börjesson Hagberg
IVL - Swedish Environmental Research Institute

Biofuel Potential in Mexico: Land Use, Economic and Environmental Effects

Hector M Nuñez
Anna D Mata
Centro de Investigación y Docencia Económicas

Success Factors For Geothermal Electricity Development: The Philippines Case-Can it Sustain Its Current Status?

Elvira T. Gelindon
Senior Researcher, Asia Pacific Energy Research Centre

The Effect of Biofuels on the Link between Oil and Agricultural Commodity Prices: A Smooth Transition Cointegration Approach

Anthony Paris
Ph.D. Student, IFPEN & EconomiX-CNRS, University Paris Ouest Nanterre La Défense

Case Studies in Alternate Uses of Biomethane from Wastewater Treatment Plants and Landfill Gas Facilities in California

Lori Smith Schell
Empowered Energy
Scott Samuelsen
Brendan P Shaffer
University of California-Irvine

CONCURRENT SESSIONS 37 - 48 Tuesday 21 June, 3:15 p.m. - 5:00 p.m.

37. Future Electricity Generation Mixes (Aud. A)

Fridrik Baldursson, *Presiding*
Professor, Reykjavik University

Assessing Possible Generation Portfolios for China's Future Carbon Constrained Electricity Industry

Peerapat Vithayasrichareon
Iain MacGill
UNSW Australia

Which Value of Nuclear Flexibility to Foster the Integration of Intermittent Renewable Energy Sources? Prospective Study on Technical Potentials and Economic Impacts in the French Power System

Camille Cany

CEA/I-tésé

Alizée Chazottes

CEA, Université Paris Saclay

Christine Mansilla

I-tésé, CEA, Université Paris Saclay

Gilles Mathonnière

I-tésé, CEA, Université Paris Saclay, F-91191

Gif-sur-Yvette, France

Pascal da Costa

Laboratoire Genie Industriel, CentraleSupélec, Université Paris-Saclay, Grande Voie des Vignes, 92290 Chatenay-Malabry, France

Optimal Reserve Provision in Electricity Markets With Increasing Shares of Renewable Energy Sources

Fridrik M Baldursson

Ewa Lazarczyk

Reykjavik University

Christoph Weber

Julia Bellenbaum

Lenja Niesen

University Duisburg-Essen

Long-run Power Storage Requirements for High Shares of Renewables: A New Open-source Model

Alexander Zerrahn

Wolf-Peter Schill

DIW Berlin

An Economic Assessment of Flexible Electricity-to-thermal Strategies to Enable High Shares of Variable Renewable Electricity

Torjus F Bolkesjø

Jon G Kirkerud

Åsa G Tveten

Erik Trømborg

Norwegian University of Life Sciences

38. Natural Gas: An Enabler for Large-Scale Penetration of Renewable Energy (Aud. B)

Silvia Pariente-David, *Presiding*
Senior Energy Specialist

Transition to Hub Indexation and More Flexible Natural Gas Contracts in East Asia

Xunpeng Shi

Hari MP

Energy Studies Institute, NUS

The Economics of Natural Gas Storage in Europe

Andreas Schroeder

Alexandre Haikel

Uniper

Natural Gas: Future Potential in Enabling Renewables

Nina Strøm Christensen

Karen Sund

Sund Energy

Phasing Out Coal for Global Electricity Production - Effects on Arctic Gas Deliveries

Lars Lindholt

Statistics Norway

Solveig Glomsrød

CICERO

Future Role of Natural Gas Storages and Competition with Alternative Flexibility Sources

Igor Riepin

Felix Müsgen

BTU Cottbus-Senftenberg

39. Solar Power (Aud. C)

Johannes Mauritzen, *Presiding*
BI Norwegian Business School

Lease or Buy? Quality Differences and Asymmetric Information in California Solar Panels

Johannes Mauritzen

BI Norwegian Business School

Value of Solar Photovoltaics in Singapore: Calculating the Merit Order Effect

Anthony D Owen

Anton G Finenko

Gautam Jindal

Xiyang Liu

Energy Studies Institute, National University of Singapore

Potential Socio-economic and Environmental Impacts of Future CSP Exports from Morocco to Europe

Natàlia Caldés

Yolanda Lechon

Cristina De la Rúa

CIEMAT

Franz Trieb

DLR

Inés López-Doriga

PwC

The Potential Role of Grid Connected Solar Thermal Heat in Austria

Andreas Müller

Energy Economics Group, Vienna University of Technology

Christian Halmdienst

Pink GmbH

Richard Heimrath

Technical University of Graz

40. Carbon Pricing Policies (Aud. 14)

Yukari Yamashita, *Presiding*
Board Member Director, Institute of Energy Economics

Addressing Policy Credibility Problems for Low-Carbon Investment

Gregory Nemet

University of Wisconsin-Madison

Ottmar Edenhofer

Jan Steckel

Michael Jakob

Mercator Research Institute on Global Commons and Climate Change

Carbon Internal Pricing in Oil and Gas Investment Decision: Scopes, Uncertainties and Impacts

Sidney Lambert-Lalitte

Nadine Bret-Rouzaut

Arash Farnoosh

IFP School

Carbon Pricing Strategies Under Binding Political Economy Constraints

Jesse D. Jenkins

Valerie J Karplus

Massachusetts Institute of Technology

Price or Policy Induced Energy-saving Innovation? Evidence from China's Industrial Patents Data

Banban Wang

Huazhong University of Science and Technology

Shaozhou Qi

Climate Change and Energy Economics Study Center, Wuhan University

Political Economy of Carbon Pricing Policies: Insights from a Panel of Countries

Geoffroy Dolphin

Michael G. Pollitt

University of Cambridge

David M. Newbery

Department of Economics, University of Cambridge

41. Resource Adequacy (Aud. Finn Kydland)

David Newbery, *Presiding*
Director EPRG, University of Cambridge

Cross-Border Effects Of Capacity Remuneration Schemes In Interconnected Markets: Who Is Free-Riding?

Xavier Lambin

Toulouse School of Economics -- ENGIE

Thomas-Olivier Léautier

Toulouse School of Economics

Comparative Analysis of Resource Adequacy Options in European and U.S. Electricity Markets

Hans Auer

Energy Economics Group (EEG)

Audun Botterud

Argonne National Laboratory

Energy Transition and the Need for Capacity Markets

Paul Giesbertz

Statkraft

Machiel Mulder

University of Groningen

An Experimental Study of Investment Incentives Mechanisms in the Electricity Industry

Stéphane Robin

GATE, Lyon University

Mohamed Haikel Khalfallah

EDDEN - University of Grenoble

Céline Jullien

KIC InnoEnergy

Carine Staropoli

Paris School of Economics

Generator Revenue Sufficiency in Electricity Markets with Variable Renewable Generation

Todd Levin

Audun Botterud

Argonne National Laboratory

42. Decarbonisation Policies (Aud. Jan Mossin)

Carol Dahl, *Presiding*
Senior Fellow, Colorado School of Mines

Environmental Policies that Maximise Social Welfare: the Role of Intergenerational Inequality

Frédéric D. Gonand

Professor, University Paris-Dauphine

Optimal Carbon Prices Worldwide

Carlo Andrea Bollino

University of Perugia

Tarek Atalla

KAPSARC

Simona Bigerna

Univ of Perugia

Concurrent Sessions

Concurrent S. 37 - 48 Tue. 3:15 p.m. - 5:00 p.m.

Farm-Level Modelling of Short-Rotation Coppice Cultivation with Flexibility in Planting and Harvesting: A Real Options Approach

Alisa Kostrova
Utkur Djanibekov
Wolfgang Britz
Institute for Food and Resource Economics, Chair of Production Economics, University of Bonn
Robert Finger
Agricultural Economics and Policy Group, ETH Zurich

The Paris Pledges: Global Implications for Energy Systems and Economic Impact

Toon Vandyck
Alban Kitous
Bert Saveyn
Zoi Vrontisi
Kimon Keramidis
European Commission

Regional Economic Costs of Achieving INDCs Under a Range of Low Carbon Technology Assumptions

Matthew A Winning
Paul Ekins
University College London

43. Energy and Market Risk (Aud. Agnar Sandmo)

Roy Endre Dahl, *Presiding*
Associate Professor, University of Stavanger

Evaluation of the Volatility of Prices and Volumes of an Energy Portfolio

Christian Wagner
Christian Rehtanz
TU Dortmund - Institute of Energy Systems, Energy Efficiency and Energy Economics
Daniel Waniek
Uiper Global Commodities SE

Energy and Agricultural Commodities Revealed through Hedging Characteristics: Evidence from Developing and Mature Markets

Simon JJ Spencer
Thomas Conlon
Don Bredin
University College Dublin, Smurfit School

Hedgers' Response to Price Changes in Energy Futures Markets

Yannick Le Pen
Marie Bessec
Université Paris Dauphine
Benoît Sevi
Université Grenoble Alpes

Evaluating Value-at-Risk Estimates for an Energy Portfolio

Roy Endre Dahl
Associate Professor, University of Stavanger

Equilibrium Relations Between the Spot and Futures Markets for Commodities: An Infinite Horizon Model

Edouard Jaeck
Ivar Ekeland
Delphine Lautier
Bertrand Villeneuve
Université Paris-Dauphine

44. Carbon Emissions Analyses (Aud. Terje Hansen)

Andre Plourde, *Presiding*
Dean Faculty of Public Affairs, Carleton University

China's Carbon Emissions Embodied in Normal and Processing Exports and Their Driving Forces, 2006-2012

Bin Su
Energy Studies Institute, National University of Singapore

Tracking Industry's CO₂ Emissions in Austria: An LMDI Decomposition Analysis

Claudia Kettner
Austrian Institute of Economic Research (WIFO)

Interactions of Industrial Water Withdrawal and Energy Consumption: a Multi-sectoral Decomposition Analysis in China

Xinzhu Zheng
Can Wang
Tsinghua University

Bifurcations in Chinese Greenhouse Gases Emissions: The Effects of Shale Gas Production in the United States and China

Florian Leblanc
CIRED

A Plant Level Analysis of GHG Emissions of the Canadian Pulp and Paper Industry, 2005-2013

Jean-Thomas Bernard
Professor, University of Ottawa

45. Rebound Effects, Prices and Information (Aud. 24)

Lester Hunt, *Presiding*
Senior Research Fellow, KAPSARC

A Quantitative Analysis of the Drivers of the Energy Mix: the Role of Energy Prices

Baltasar Manzano
KAPSARC and Universidad de Vigo
Lester Hunt
Jorge Blázquez
Tarek Atallah
KAPSARC

Boundedly Rational Consumers, Energy and Investment Literacy, and the Display of Information on Household Appliances

Julia Blasch
VU University Amsterdam and ETH Zurich
Nilkanth Kumar
ETH Zurich
Massimo Filippini
ETH Zurich and Università della Svizzera italiana

Reducing Rebound Without Sacrificing Macroeconomic Benefits of Increased Energy Efficiency

Karen Turner
Gioele Figus
Patrizio Lecca
Kim Swales
University of Strathclyde

Indirect Rebound Involving Embodied Energy Use in Re-spending Decisions: How Do We Treat Negative Multiplier Effects in Energy Supply Chains?

Karen Turner
Antonios Katris
Centre for Energy Policy, University of Strathclyde

Consumer Inattention and Energy Efficiency: The Causal Effect of Label Elements

Stephan Sommer
Andreas Gerster
Mark Andor
Rheinisch-Westfälisches Institut für Wirtschaftsforschung

46. Energy Security and Petroleum Markets (Aud. 23)

Gurkan Kumbaroglu, *Presiding*
Professor, Bogazici University

Reconsidering the Influence of Energy on the Middle Eastern State

Jim Krane
Wallace S. Wilson Fellow for Energy Studies, Rice University's Baker Institute

Export of Russian Natural Gas to Europe

Knut Einar Rosendahl
Norwegian University of Life Sciences
Arild Moe
Fridtjof Nansen Institute
Rolf Golombek
Hilde H Le Tissier
Frisch Centre
Finn R Aune
Statistics Norway

The Importance of Oil in the Allocation of Foreign Aid

Cécile Couharde
Fatih Karanfil
Eric Gabin Kilama
Luc D Omgba
EconomiX, University of Paris Ouest

Security of Gas Supply in Poland - New Perspective

Honorata Nyga-Lukaszewska
Warsaw School of Economics

Changing Oil Market Fundamentals and the Implications for OPEC Production Strategy

Daniel P Scheitrum
Lew Fulton
Amy Myers Jaffe
University of California, Davis

47. Energy Demand in Non-OECD Countries (Aud. 22)

Bente Halvorsen, *Presiding*
Statistics Norway

Adding Fuel to Fire? Role of Spatial Disparities and Peer-Effects in Clean Cooking Fuel Use in India

Suchita Srinivasan
Graduate Institute, Geneva
Stefano Carattini
London School of Economics and HES, Geneva

Energy Intelligence Development through Public Private Partnership Frameworks in Nigeria

Peter C Obutte
Center for Petroleum, Energy Economics and Law, University of Ibadan

Diesel Oil Demand in Brazil: Determinants and 2030 Forecast

Luciano D Losekann
Niagara Rodrigues
Universidade Federal Fluminense

From Supply to Demand: Reviewing Argentina's LPG Social Program

Fabiola Rodrigues
IAE Mosconi
Verónica Alonso
Daniela L. Varela
CEARE - University of Buenos Aires

Micro-Model Analysis of Fuel Consumption, Welfare and Distributional Impacts of Fuel Subsidies Reform In Nigeria

Ibrahim A Tajudeen
University of Manchester, UK

48. Natural Resource Markets and Trade (Aud. 21)

Knut Einar Rosendahl, *Presiding* Professor, Norwegian Univ. of Life Science (HH)

Long-term Uranium Market Dynamics
Antoine Monnet
PhD candidate, CEA

Energy World in 2040: Understanding INDCs Perspectives and Challenges

Manfred Hafner
Yasmine Arlasane
Sylvain Cail
Mélodie Mistré
Enerdata

A Comprehensive Taxonomy of Nuclear Non-electrical Markets: Application to the Market Perspective for France

Martin Leurent
Camille Cany
I-tésé, CEA, Université Paris Saclay

Energy Embodied in Trade 1970-2009

Viktoras Kulionis
Lund University

What is the Optimal Exhaustion Rate of Lithium Resources in South America?

Diana Rubiano
Knut Einar Rosendahl
NMBU

CONCURRENT SESSIONS 49 - 60 Wednesday 22 June, 8:30 a.m. - 10:15 a.m.

49. Hydropower in Europe (Aud. A)

Hannes Weigt, *Presiding* Forschungstelle Nachhaltige Energie, Wirtsch Fakultät Univ Basel

A Structural Model to Estimate the Impact of Hydro Inflow on Scandinavian Power Exports

Caroline Deilen
Christoph Weber
University Duisburg-Essen

Framework for Decision-making Process in Granting Rights to Use Hydropower in the European Context

Ludovic Gaudard
University of Geneva and Imperial College London
Werner Hediger
HTW Chur
Guillaume Voegeli
HTW Chur and University of Geneva
Franco Romero
University of Geneva

Hydropower Operation in a Changing Environment

Moritz Schillinger
Hannes Weigt
University of Basel
René Schumann
Michael Barry
HES-SO Valais

Interdependencies Between Hydro Storage Systems and the Allocation of Balancing Power

Richard Weinhold
TU Berlin
Casimir Lorenz
TU Berlin and DIW Berlin

50. Upstream Petroleum Contracting and Regulation (Aud. B)

Alenka Zumber Klopčič, *Presiding* Director and Editor-in-Chief, Energetika NET doo

Shocks and Stocks Part II: On the Time Varying Relationship Between Oil Shocks and Stock Market Returns in the U.S.

David C Broadstock
SWUFE (China)
George Filia
Panteion University of Social and Political Sciences

Peer Information Effects In Contract Negotiations: Evidence From Oil and Gas Leases

Bernhard Ganglmair
Anastasia V Shcherbakova
University of Texas at Dallas

Decision Making Under Uncertainty in Resource Markets

Daniel Spiro
University of Oslo

Finders, Keepers?

Niko Jaakkola
Ifo Institut
Arthur van Benthem
The Wharton School, University of Pennsylvania
Daniel Spiro
University of Oslo

Petroleum Fiscal System Performance Analysis under a Sustained Low Oil Price: A Case Study of Deepwater Operations in Nigeria

Omwumi O Iledare
Emmanuel Onwuka
Joseph Echendu
Emerald Energy Institute

51. Energy and Environmental Technology Improvements (Aud. C)

Georg Erdmann, *Presiding* Professor, Berlin University of Technology

Germany's Goodbye to Coal Power Technology

Stefan Vögele
Paul Kunz
Forschungszentrum Jülich
Dirk Rübbelke
TU Bergakademie Freiberg

Is Protecting Intellectual Property Rights Good for Renewable Energy Development?

Oluwasola E. Omoju
Graduate Student, Xiamen University

Innovation Strategies of Energy Firms

Jose Garcia-Quevedo
Maria-Teresa Costa-Campi
University of Barcelona
Nestor Duch-Brown
Institute for Prospective Technological Studies, European Commission

SO2 Emissions in the EU-28 Coal Power Sector - An LMDI Decomposition Analysis

Laura Prawatky
University College London
Will McDowall
UCL Institute for Sustainable Resources

The Creation of Renewable Energy Technology in Europe - Are Patents Per Capita Converging?

Jonas A Grafström
Luleå University of Technology

52. Carbon Capture and Leakages (Aud. 14)

Akinbolaji Iwayemi, *Presiding* Professor, University of Ibadan

Does Carbon Capture and Storage Lock People into Fossil Fuel Use? - A Cradle to Grave Analysis

Arne Steinkraus
Research Assistant, TU Braunschweig

Has the EU ETS Induced Carbon Leakage in Manufacturing? A Sector-level Analysis

Helene Naegele
Aleksandar Zaklan
DIW Berlin

Emissions Allocation Design to Avoid Leakage under the Clean Power Plan

Karen Palmer
Dallas Burtraw
Anthony Paul
Hang Yin
Resources for the Future

Evaluating Carbon Capture and Storage in a Climate Model with Endogenous Technical Change

Tunç Durmaz
SEE, City University of Hong Kong and Dept. of Econ., Yildiz Technical University
Fred Schroyen
NHH - Norwegian School of Economics

Carbon Leakage in South-East Europe Regional Electricity Markets under EU ETS

Verena Viskovic
University College London
Afzal S. Siddiqui
University College London, University of Stocholm
Yihsu Chen
University of California Santa Cruz

53. Wholesale Prices & Markets (Aud. Finn Kydland)

Anthony Owen, *Presiding* Principal Fellow - Head of Energy Economics National University of Singapore

Electricity Markets: Designing Auctions Where Suppliers Have Uncertain Costs

Par Holmberg
Research Institute of Industrial Economics (IFN)
Frank Wolak
Stanford University

Concurrent S. 49 - 60 Wed. 8:30 a.m. - 10:15 p.m.

Concurrent S. 37 - 48 Tue. 3:15 p.m. - 5:00 p.m.

Concurrent Sessions

Concurrent S. 49 - 60 Wed. 8:30 a.m. - 10:15 p.m.

Negative Electricity Prices and Risk Premia - New Empirical Evidence for the German/Austrian Day-ahead Market

Niyaz Valitov
University of Wuppertal

Accountability for Uncertainty in Electricity Markets

Athanasios Papakonstantinou
Pierre Pinson
DTU Electrical Engineering, Center for Electric Power and Energy

Wholesale Electricity Markets With High Shares Of Renewable Energies: Effects Of Uncertainty On Prices

Regina A Betz
Zurich University of Applied Sciences
Peiyao Shen
ShanghaiTech University
Jenny Riesz
Iain MacGill
UNSW Australia
Andreas Hefti
ZHAW

The Need for Intra-day Settlements in U.S. Electricity Markets

Ignacio Herrero
Pablo Rodilla
IIT - Comillas Pontifical University
Carlos Battle
IIT-Comillas & MIT Energy Initiative

54. Macroeconomic and General Equilibrium Effects of Energy (Aud. Jan Mossin)

Christophe Bonny, *Presiding*
Director, Economics & Prospective, ERDF

What if Oil is Less Substitutable? A New-Keynesian Model with Oil, Price and Wage Stickiness including Capital Accumulation

Verónica Acurio Vásconez
Paris School of Economics - Chair Energy and Prosperity

Economic Impact of Ethanol Promotion Under Uncertainty in Mexico: a General Equilibrium Analysis

Alejandra Elizondo
Centro de Investigación y Docencia Económicas, CIDE
Roy G Boyd
Economics Department/Ohio University

Steel Intensity as a Dynamic Function of Economic Growth

Mathieu Bordigoni
ERDF
François Cattier
EDF R&D

The Regressivity of Climate Policy in Taiwan: A General Equilibrium Analysis

Shih-Mo Lin
Feng-Ying Hsu
Jin-Xu Lin
Kuei-Feng Chang
Chung Yuan Christian University

Electricity Demand and Disaggregate Output: Evidence From Benin

Arnaud G Dakpogan
Eon Smit
University of Stellenbosch Business School

55. Investment in Capacity and Infrastructure (Aud. Agnar Sandmo)

Sarah Jezernik, *Presiding*
Deputy General Manager, PLINOVODI d.o.o

The Effect of Fuel Cost Uncertainty on Capacity Investment: Dual Fuel Capability and Technology Mix

Nurit Gal
Public Utility Authority
Asher Tishler
College of Management
Irena Milstein
Holon Institute of Technology
C.K. Woo
Hong Kong Institute of Education

The Traditional "Levelised Cost of Energy" (LCOE) is Not an Indicator for Grid Parity

Ulrich Nissen
Nathanael Harfst
Niederrhein University of Applied Sciences, Moenchengladbach

Impact of the Riskiness of Generating Technologies on Their Cost of Capital and Investment Decisions

Vitali Avagyan
Imperial College London
Richard Green
Imperial College Business School

Optimal Regulation of Network Expansion

Bert Willems
Tilburg University
Gijsbert Zwart
Gronigen University

Energy Infrastructure Investment Game with Spillover Effect

Akira Maeda
Professor, The University of Tokyo

56. Energy, Economic Development and the Macro Economy (Aud. Terje Hansen)

Arild Nystad, *Presiding*
President, PetroManagement AS

Energy Business Cycles

Olayinka Oyekola
David Meenagh
Patrick Minford
Cardiff University

Petroleum Prosperity and Housing Prices in Norway

Anne-Britt Halonen
Klaus Mohn
University of Stavanger Business School

Impact of Natural Resource Abundance on Economic Performance from a Technology Intensity Perspective

Sule Gunduz
Yesim Kustepeli
Dokuz Eylul University

Petroleum Resources, Institutions and Economic Development

Gregorio A Maciel
Coordinator, PETROBRAS

Understanding the Energy Productivity Diversification After the Global Financial Crisis

Carlo Andrea Bollino
Simona Bigerna
University of Perugia
Tarek Atalla
KAPSARC

57. Energy Efficiency Improvements (Aud. 24)

Omowumi Iledare, *Presiding*
Professor & Director, Emerald Energy Institute, UNIPOINT

Macroeconomic Benefits of Energy Efficiency in Emerging Economies

Taoyuan Wei
Center for International Climate and Environmental Research - Oslo (CICERO)
Yang Liu
International Energy Agency

The Potential for Improvement in On-road Truck Fuel Economy: Evidence From the VIUS

Jen Z He
University of Maryland
Virginia McConnell
Joshua Linn
Benjamin Leard
Resources For the Future

Fuel Efficiency Improvements - Feedback Mechanisms and Distributional Effects in the Oil Market

Snorre Kverndokk
Frisch Centre/CREE
Knut E Rosendahl
NMBU
Ann C Bøeng
Finn R Aune
Lars Lindholt
Statistics Norway

New Development of China's National Evaluation Standard for Green Building (ESGB-2014):

A comparison of ESGB 2014 to ESGB 2006
Jiefang Ma
Kun Song
Qing Ye
School of Architecture, Tianjin University
Queenen K Qian
Henk J Visscher
OTB Research for the Built Environment, Delft University of Technology
Qiang Zhao
Tianjin Planning Bureau

Energy Efficient Design in Shopping Centres - Energy Demand Scenario Modelling Until 2030

Raphael Bointner
Agne Toleikyte
Vienna University of Technology Institute of Energy Systems and Electric Drives, Energy Economics Group - EEG

58. Forecasting and Data (Aud. 23)

Mine Yucel, *Presiding*
SVP and Research Director, Federal Reserve Bank of Dallas

Extrapolated Trends versus Energy Model Projections -- Global Distribution Dynamics Derived from Regional Kaya Decomposition

Valeria Jana Schwanitz
August Wierling
Sogn og Fjordane University College

Creaming and the Likelihood of Discovering Further Giant Petroleum Fields

Jostein Lillestøl
NHH - Norwegian School of Economics
Richard Sinding-Larsen
NTNU

Dynamic Forecast Combination Using the Kalman Filter

Mathias Käso
Felix Müsgens
University of Technology Cottbus-Senftenberg
Oliver Grothe
Karlsruhe Institute of Technology

Distributing Costs in the Electricity Sector Using a Bottom-up Big-Data Approach

Magnus Lindén
Jakob Helbrink
Martin Nilsson
Mikael Andersson
Sweco

The Applicability of Empirical Prediction Intervals to Energy Forecasting

Lynn H Kaack
Granger Morgan
Jay Apt
Carnegie Mellon University
Patrick E McSharry
Oxford University and Carnegie Mellon University

59. Distributed Electricity, Prosumers and Electricity Demand (Aud. 22)

Reinhard Madlener, *Presiding*
Full Professor of Energy Econ Mgt.,
RWTH Aachen University

An Economics Simulation on the Smart Community Connecting the Commercial and Residential Sectors

Yoshiki Ogawa
Professor, Toyo University

Households' Preferences Regarding the Adoption of Micro-Generation Technologies

Christian Dr. Oberst
Reinhard Madlener
RWTH Aachen University

Modelling of Prosumer-Households for Economic Evaluations

Swantje Gährs
Bernd Hirschl
Astrid Aretz
Institute for Ecological Economy Research (IÖW)

Macroeconomic Effects of Prosumer-households in Germany

Markus Flaute
Anett Grossmann
Christian Lutz
GWS mbH Osnabrueck

Are Prosumer Households That Much Different? Evidence From Stated Residential Energy Consumption in Germany

Christian A Oberst
Reinhard Madlener
Hendrik Schmitz
Institute for Future Energy Consumer Needs and Behavior

60. Energy Security - Concepts and Policy (Aud. 21)

Joel Darmstadter, *Presiding*
Senior Fellow, Resources for the Future

Opening the Black Box of Energy Security: A Study of Conceptions in the UK

Emily M Cox
University of Sussex

Energy Expectations and Uncertainty: the World of Internal Contradictions Intensifies

Michael Jefferson
Professor, ECSP Europe Business School; University of Buckingham & Editor of Energy Policy

Industrial Energy Demand in Europe: A Dynamic Multilevel Modelling Approach

Akinsehina Sharimakin
David Saal
Anthony J Glass
Loughborough University

Understanding the Energy Union: A Single Concept for Many Systems

Antti Silvast
Mark Winskel
Ronan Bolton
University of Edinburgh

In Office After an 8.8 Earthquake: On the Resilience of Chilean Energy Sector

Ricardo Raineri Bernain
Professor, Pontificia Universidad Católica de Chile

CONCURRENT SESSIONS 61 - 71
Wednesday 22 June, 10:45 a.m. - 12:30 p.m.

61. Policies, Strategies & Market Values (Aud. A)

Reinhard Haas, *Presiding*
Professor, Vienna University of Technology

An Empirical Evaluation of the Role of U.S. Renewable Energy Certificate Markets in Renewable Energy Growth

Sanya Carley
Jessica Alcorn
Indiana University

Mathematical Modeling of Generation Expansion Planning Problem in a Partially Regulated Market: Private Company Perspective

Yildiz Arkan
Istanbul Kemerburgaz University
Ethem Canakoglu
Semra Agrali
Bahcesehir University
Fulya Terzi
Bogazici University

Forecasting the Evolution of Electricity Demand and Distributed Generation Towards 2035: an Innovative Bottom-up Approach

Florent Chiappini
Thomas Heggarty
ERDF

Assessment of RES Technology Market Values and the Merit-Order Effect - An Econometric Multi-Country Analysis

Marijke Welisch
Gustav Resch
André Ortner
TU Wien

Solar Feed-in Tariffs in a Post-Grid Parity World: A Risk-Return Perspective

Yuliya Karneyeva
Rolf Wüstenhagen
University of St. Gallen

62. Oil and Energy Market Econometrics (Aud. B)

Edmar Luiz de Almeida, *Presiding*
Professor, Federal University of Rio de Janeiro

OPEC's Market Power: an Empirical Dominant Firm Model for the Oil Market

Lin Ma
Norwegian University of Life Sciences
Alfonso A Irarrazabal
BI Norwegian Business School
Rolf Golombek
Frisch Centre

Volatility Spillovers in North American Energy Markets

Neil A Wilmot
Assistant Professor, University of Minnesota Duluth

Studying Volatility Regime Shifts in Energy Prices

Knut Anders Kjelaas Johansen
Roy Endre Dahl
University of Stavanger

Empirical Performance of Commodity Derivative Models

Gonzalo Cortazar
Hector Ortega
Simon Gutierrez
Pontificia Universidad Católica de Chile

Did the Financial Crisis of 2008 Affect the Price Linkages Among the Crude Oil and Precious Metal Markets?

Kentaka Aruga
Ishikawa Prefectural University

How Flexible is U.S. Shale Oil? Evidence from North Dakota

Frode M Nordvik
Maximilian Rohrer
Hilde C. Bjørnland
BI Norwegian Business School

63. Wind and Solar Power - Country Studies (Aud. C)

H. Alan Love, *Presiding*
Professor and Director, Washington State University

Renewables for Electricity - Economic and Engineers Experiences in Germany

Hermann-Josef Wagner
Ruhr-Universität Bochum

The Effects of Policy Uncertainty on Technology Diffusion: Wind Power in Italy

Teresa Romano
Elena Fumagalli
Politecnico di Milano
Toby Dalgligh
Victoria University of Wellington

Concurrent S. 61 - 71 Wed. 10:45 a.m. - 12:30 p.m.

Concurrent S. 49 - 60 Wed. 8:30 a.m. - 10:15 p.m.

Concurrent Sessions

Concurrent S. 61 - 71 Wed. 10:45 a.m. - 12:30 p.m.

The Study of Impact Factors on the Development of Wind Power

Huei-chu R Liao
TamKang University
Yao-Hua Chen
Ya-Wen Chen

Department of Economics, TamKang University

Allocation of Connection Capacity for Renewable Power Projects: The Turkish Experience

Gozen Mustafa
Mustafa Gozen
Deniz Dastan

Energy Market Regulatory Authority

Willingness to Accept Local Wind Energy Development: Does the Compensation Mechanism Matter?

Jorge H. Garcia
Asbjørn Torvanger
Steffen Kallbekken

CICERO
Todd L. Cherry
CICERO and Appalacian State University

64. Costs of Abatement (Aud. 14)

Christoph Boehringer, *Presiding*
Professor, Carl von Ossietzky University
Oldenburg

Empirical Evidence on The Environmental Kuznets Curve in Bulgaria

Georgi D Kalchev
American University in Bulgaria

A Generalized Equilibrium Approach to Balance the Residual Abatements Resulting from COP-21 Agreement

Frédéric Babonneau
Alain Haurie
ORDECSYS
Marc Vielle
EPFL

Complementing Weaknesses in Marginal Abatement Cost Curves

Emile J. L. Chappin
Delft University of Technology

Formulation of a Nationally Determined Contribution to the Mitigation of Climate Change: A Colombian Case

Ricardo Delgado
Universidad de los Andes (Colombia)
Jose Manuel Sandoval
Colombian Ministry of Environment
Camilo Alvarez
Colombian National Planning Department
Angela Cadena
Monica Espinosa
Universidad de los Andes

Assessing Costs of Delay in Climate Policy

Sturla F. Kvamsdal
SNF - Centre for Applied Research at NHH
Leif K. Sandal
NHH - Norwegian School of Economics

65. Cross-Border Electricity Issues (Aud. Finn Kydland)

Linda Rud, *Presiding*
NHH Norwegian School of Economics

The Effects of Market Coupling on Day-ahead Electricity Prices in Central-Western Europe

Friederike Knust

Flensburg University

Coordinating Cross-Country Congestion Management

Friedrich Kunz
Alexander Zerrahn
DIW Berlin

Cross-Border Exchange and Sharing of Generation Reserve Capacity

Marten Ovaere

Stef Proost

KU Leuven

Ewa Lazarczyk

Fridrik M. Baldursson

Reykjavik University

The Impact of Conventional Capacity Phase Outs on Future Wholesale Prices in CWE

Johan Albrecht
Lennert Thomas
Sam Hamels
Ghent University

Expanding Cross-Border Electricity Cooperation and Trade in South Asia

Michael A Toman
Govinda Timilsina
World Bank Development Research Group

66. Oil Prices (Aud. Jan Mossin)

Berit Tennbakk, *Presiding*,
Partner, THEMA Consulting Group

The Relationship Between Oil Prices and the Rig Counts: A One-way Street with a Lag

Ahmed A.A. Khalifa
Qatar University
Shawkat Hammoudeh
Drexel University, PA, USA
Massimiliano Caporin
University of Padova, Italy

Long Memory in the Pass-through of Oil to Natural Gas Price

Dayong Zhang
Professor, Southwestern University of Finance and Economics

The Role of Saudi Arabia, in the Oil Market During the Period of Declining Prices

Nourah A Alyousef
King Saud University

Understanding Cyclical Behavior of Crude Oil Production and Consumption and their Effect on Crude Oil Prices

Marc Gronwald
University of Aberdeen
Xin Jin
University of Aberdeen Business School

Factors of the Risk Premia in the Crude Oil Futures Prices

Xin Jin
University of Aberdeen
Stefan Trück
Macquarie University

67. Energy Projects: Finance and Barriers (Aud. Agnar Sandmo)

Adeola Adenikinju, *Presiding*
Professor, University of Ibadan

Moving Beyond Levelized Cost of Electricity: Impact of Various Financing Methods on PV Profitability for Singapore

Yujia T Tao
Anton Finenko
Energy Studies Institute, National University of Singapore

Pathways of Renewable Generation in the MENA Region: Opportunities for Scaling up Green Finance

Isabella Dr Alloisio
Francesco Mr Colelli
FEEM

Oil Project Selection by Metrics

Magne Embjellen
Petoro AS
Petter Osmundsen
Universitetet i Stavanger

Techno Economic Effects of Decentralised Battery Supported Photovoltaic Systems Considering Different Types of Tariffs

Albert Hiesl
Reinhard Haas
Michael Hartner
TU Wien / Energy Economics Group

The Role of Firm Level Motivations, Barriers and Managerial Capabilities for Diversification in Energy System Transitions

Tyson J Weaver
NTNU- Industrial Economics & Technology Management
Arild Aspelund
NTNU
Markus Steen
Sintef

68. Climate Change and Uncertainty (Aud.. Terje Hansen)

Mads Greaker, *Presiding*
Statistics Norway

Investment in Zero Carbon Technologies Under Uncertainty About Future Climate Policy: Should Governments Target CCS Instead of Renewables?

Mads Greaker
Statistics Norway
Rolf Golombek
Frisch Centre
Knut Einar Rosendahl
Norwegian Univ. of Life Science (HH)

The Impact of Natural Disasters on Willingness to Sacrifice Economic Growth for Environmental Protection

Vladimir Udalov
Research Associate, University of Wuppertal

Assessing Hydropower Vulnerability Under Uncertain Climate Change in Developing Countries: Case of Ecuador

Pablo E. Carvajal
University College London - Energy Institute

Unilateral Climate Policy -- Incidence on African Countries

Emmanuel Asane-Otoo
Jan Schneider
Department of Economics, University of Oldenburg

Positive Uncertainty Effects of Near-Term Climate Policy Recommendations

Wonjun Chang
University of Wisconsin-Madison

69. Energy Efficiency in Sectors (Aud. 24)

Atit Tippichai, *Presiding*
Asia Pacific Research Centre

Transportation Energy Efficiency Potentials in APEC Region

Atit Tippichai
Asia Pacific Energy Research Centre

Transition Towards a Zero-carbon Building Sector: Energy Service Companies in the Construction Business Ecosystem

Hanna-Liisa Kangas
David Lazarevic
Finnish Environment Institute
Paula Kivimaa
Science Policy Research Unit SPRU

How Do Companies Differ in their Investment Behaviour for Energy Efficiency? Analysing Energy Intensive Industries With Survey Results and Cluster Analysis

Thomas J Ketelaer
Wilhelm Kuckshinrichs
Forschungszentrum Jülich GmbH
Wolf Fichtner
Russell McKenna
Karlsruhe Institute of Technology

Behaviour, Context and Electricity Use: Exploring the Effects of Real-time Feedback in the Swedish Residential Sector

Luis Mundaca
Mats Tedenvall
IIIEE at Lund University

Cost-optimal Integration of Zero Energy Buildings in the Scandinavian Energy System

Karen B Lindberg
Gerard L Doorman
Asgeir Tomasgard
Norwegian University of Science and Technology
Pernille S Seljom
Institute for Energy Technology
Igor Sartori
SINTEF Building and Infrastructure

70. Future Markets & Balancing Markets (Aud. 23)

Toril Christensen, *Presiding*
BKK Produksjon as

The Effect of Wind and Solar Power on the Forward Premium in German Electricity Markets

Marius Paschen
Department of Economics and Laws, Carl von Ossietzky University Oldenburg

The Impact of Forward Commitments on Strategic Underinvestment

Thomas-Olivier Leautier
Toulouse School of Economics
Bert Willems
Tilburg University

Tender Frequency and Market Concentration in the Balancing Power Market - The Case of Germany

Florian Weiser
Andreas Knaut
Frank Obermueller
ewi Energy Research & Scenarios gGmbH

Electricity Markets, Renewables Competition and Forward Contracting

Robert A. Ritz
Assistant Director of EPRG, Cambridge University

Renewable Energy and the Pricing of Electricity Futures

Sebastian Schwenen
Technical University of Munich

71. European Energy Research Alliance: Discussion on European Energy Policy Towards 2030 and 2050 (Aud. 22)

Asgeir Tomasgard, *Presiding*
Professor, NTNU, Centre for Sustainable Energy Studies

The Role of Transmission and Storage in the European Energy System Towards 2030 and 2050

Asgeir Tomasgard
NTNU

Role of the Cooperation Mechanisms in the RES Target Achievement. A Sad Ending Story?

Natalia Caldés
CIEMAT

Social Acceptance: A Roadblock or a Chance for the EU Energy Targets?

Johannes Reichl
Energy Institute at the Johannes Kepler University

Nordic Energy Technology Perspectives

Arne Lind
IFE

Expectations About Cost Developments of Technologies

Valeria Jana Schwanitz
Sogn og Fjordane University College

Open Discussion: Research challenges: How can researchers best support European energy policy processes

Poster Sessions

Poster S. M. Ulriken Mon. 12:15 p.m. - 1:15 p.m.

Mount Ulriken 643 m
Monday 20 June, 12:15 p.m. - 1:15 p.m.

Evolution of New Freight Structure Over Long Run: A Policy Assessment

Siddhartha Bhasker
IIM Ahmedabad

Analysis of (in)Complete Risk Markets for Power Sectors with High Shares of Renewable Energies

Oliver Tietjen
Michael Pahle
Potsdam Institute for Climate Impact Research

Profitability Expectations and Uncertainty in the Photovoltaics Diffusion Process in Germany and Spain, 2004-2013

Javier López Prol
Wegener Center for Climate and Global Change

Between Cooperation and Competition: Assessing The Baltic States Energy Security Complex

Migle Vakarinaite
Institute of International Relations and Political Science, Vilnius University

Modelling Impacts Of Climate Change On Energy Systems: A Critical Review

Jennifer Cronin
University College London

Energy Efficiency and the Rebound Effect: A Study of Indian Manufacturing Sector

Raisa Sherif
Max Planck Institute for Tax Law and Public Finance
Sabuj Kumar Mandal
Indian Institute of Technology

A Whole New World: A Model of European-Russian Natural Gas Pricing

Nathalie Hinchey
Rice University

Impacts of Renewable Energy Sources on Well-Interconnected Electricity Markets: A Regional Case Study

Sára Tomasics
Péter Bihari
Budapest University of Technology and Economics
Ágnes Gerse
MAVIR ZRt.

Demand Response: Smart Market Designs for Smart Consumers

Nicolas Astier
Thomas-Olivier Léautier
Toulouse School of Economics

Distributional Employment Impacts of China's Low-Carbon Targets by 2030: An CGE Based Analysis

Yaqian Mu
Can Wang
Wenjia Cai
Tsinghua University

Residential PV Market Prospects in Hungary - Market Size Estimation and Evaluation Framework

Barnabás Máté Derekas
Budapest University of Technology and Economics

Is the European Building Sector on the Way to Decarbonisation?

Agne Toleikyte
Lukas Kranz
Andreas Müller
Raphael Bointner
Energy Economics Group, TU-Wien

Modelling the Variability of the Wind Energy Resource on Monthly and Seasonal Timescales

Hans-Kristian Ringkjøb
Laboratoire de Météorologie Dynamique & Laboratoire de Probabilités et Modèles Aléatoires
Philippe Drobinski
Bastien Alonzo
Bénédicte Jourdier
Riwal Plougonven
Laboratoire de Météorologie Dynamique
Peter Tankov
Laboratoire de Probabilités et Modèles Aléatoires

Hybrid Grid Expansion Planning with a High Share of Renewables: An Austrian Case Study in the City of Salzburg

Andreas Fleischhacker
Felix Hembach
Daniel Schwabeneder
Hans Auer
TU Wien

The System Value of Arbitrage and Balancing Services with Residential Demand Response

Kenneth Bruninx
William D'haeseleer
Delarue D Erik
KU Leuven
Daniel S Kirschen
Yury Dvorkin
University of Washington

Challenges of Coal Logistics in Indian Ports

GV Radhakrishnan
IIMA

Modelling of Energy Efficiency in Copper Mining Industry

Bernard Tembo
University College London (UCL)

Calculating the Levelized Cost of Electricity Storage

Andreas Belderbos
KU Leuven
William D'haeseleer
Erik Delarue
University of Leuven

Energy Perspectives - The ASEAN Energy Outlook 2015

Jose Antonio Ordonez
Martin Pudlik
Fraunhofer Institute for Systems and Innovation Research

Leveraging Home-Purchase Behavior for Buildings Energy Savings: The Case of Apartment Buildings in Seoul

Jaeyoung Jang
Jiyong Eom
Jaewoong Lee
KAIST College of Business

Mount Løvstakken 477 m
Tuesday 21 June, 12:15 p.m. - 1:15 p.m.

Experience Learning in Lead-acid Batteries

Ding Hao
Zhou Peng
Zhou Dequn
Nanjing University of Aeronautics and Astronautics

Towards a Long-term Economic Welfare in Deregulated Electricity Markets: Testing Capacity Mechanisms in an Experimental Setting

David Lara Arango
University of Bergen
Santiago Arango Aramburo
Universidad Nacional de Colombia, Colombia
Erik R Larsen
Universita della Svizzera italiana (Lugano) Switzerland

Norwegian Oil Production: a Spatial Analysis

Giacomo Benini
University of Geneva

Exploring the Value of Tenant Engagement for Energy Conservation and Understanding Owner and Manager Perspective for Implementation of Tenant Engagement Programs in Multi-use Residential Buildings in Toronto

Pallavi Roy
Jessie Ma
Philip R Walsh
Ryerson University
Ramtin Attar
Imagine My City

Near Shore Wind Turbines and Their Cost Advantages: Does Their Cost Advantage Outweigh the Preferences for Visual Disamenities Reduction They Elicit?

Pablo Alejandro Hevia-Koch
Henrik K. Jacobsen
Technical University of Denmark
Jacob Ladenburg
KORA

The Prospect of Wave Energy using Oscillating Water Column System in Bawean Island Seas Indonesia

Afrizal Faisal Ali
Syamsul Hadi
Sebelas Maret University

Asymmetric Energy Rebound Effect Across Different Household Income Groups

Gioele Figus
Peter McGregor
Karen Turner
University of Strathclyde

Financialization in the U.S. Gas Market and its Influence on the Price Dynamics

Maria Polikarpova
NHH - Norwegian School of Economics

Beyond Average Energy Consumption in the French Residential Housing Market: A Household Classification Approach

Déborah DL Leboulenger
IFPEN, EconomiX-CNRS, BPCE-SA
Valerie VM Mignon
EconomiX-CNRS
Emmanuel EH Hache
IFPEN

Supply-function Equilibrium and Transmission Pricing

Keith Ruddell
Tony Downward
Andy Philpott
University of Auckland

Poster S. M. Løvstakken Tue. 12:15 p.m. - 1:15 p.m.

Poster S. M. Ulriken Mon. 12:15 p.m. - 1:15 p.m.

Poster Sessions

Poster S. M. Løystakken Tue. 12:15 p.m. - 1:15 p.m.

Cutting through Competition - A Strategic Group Analysis for Business Models in the Energy Sector

Jonas Böhm
Jonas Kahlert
Maximilian Palmie
Oliver Gassmann
University of St. Gallen

Uncertainties in Brazilian Energy System Looking for a Consolidation of the National Natural Gas Market

Miguel E. M. Udaeta
Eduardo M. Viana
GEPEA/EPUSP
Andre L. V. Gimenes
Jose A. B. Grimoni
PEA/EPUSP

Understanding Global Energy Transitions Through Agent-based Modelling of Investor Behaviour

Oscar Kraan
Gert Jan Kramer
Leiden University
Igor Nikolic
Technical University Delft

Environmental Taxes, Energy Dependence and the Current Account

Iskra Sokolovska
Aleksandar Kešeljevic
University of Ljubljana

R&D Strategies of CO2 Intensive Industries in an Uncertain World - The Case of the European Iron and Steel Industry

Marlene Arens
Michael Meister
Fraunhofer Institute for Systems and Innovation Research

A Methodological Framework for the Estimation of Unconventional Gas Development Costs; Accounting for the Impact of Petroleum Price Uncertainty

Ukadike V Nwaobi
University College London, Energy Institute
Anandarjah Gabrial
UCL Energy Institute

Power-to-Gas: A Framework for Companies to Support Investment Decisions

Roland M Happach
University of Stuttgart
Meike Tilebein
Institute for Diversity Studies in Engineering/University of Stuttgart

How Pricing Mechanism for District Heating Can Influence an Urban Heat Energy System

Sara Fritz
Manuel Ziegler
Nikolaus Rab
TU Wien

Real-Time Electricity Pricing with Heterogeneous Consumers: Welfare and Distributional Effects under Variable Renewable Energy Supply

Christian Gambardella
Potsdam Institute for Climate Impact Research (PIK)/TU Berlin
Michael Pahle
Potsdam Institute for Climate Impact Research (PIK)

Making Sense of Residential Energy Behavior: an Empirical Analysis of Home Cooling Decision in California

Gloria JinaKim
Jiyong Eom
KAIST College of Business

If You Do What You Always Did, Do You Get What You Always Got? Performance Implications of Status Quo Bias in Swiss Energy Investments

Yuliya Karneyeva
Chair for Management of Renewable Energies, University of St. Gallen