

9th Mannheim Conference on Energy and the Environment

20 – 21 May 2021, Mannheim · Conference venue: online · Time zone: CET (Germany)

Conference link: <https://bit.ly/3dWk7MQ>

PROGRAMME		THURSDAY, 20 MAY 2021	
10:15 – 10:30	OPENING REMARKS		
10:30 – 12:00	IA: ELECTRICITY MARKETS I	IB: CARBON PRICING I	IC: RESIDENTIAL ENERGY EFFICIENCY I
12:00– 13:30	LUNCH BREAK		
13:30 – 14:30	KEYNOTE I: ERIK VERHOEF (VRIJE UNIVERSITEIT AMSTERDAM)		
14:30 – 16:00	IIA: FIRMS AND THE ENVIRONMENT	IIB: TRANSPORTATION AND POLICIES I	IIC: INNOVATION
16:00 – 17:30	IIIA: ELECTRICITY MARKETS II	IIIB: CARBON PRICING II	IIIC: INDUSTRIAL ENERGY EFFICIENCY
17:30 – 18:30	KEYNOTE II: ASHLEY LANGER (UNIVERSITY OF ARIZONA)		

PROGRAMME		FRIDAY, 21 MAY 2021	
10:30 – 12:00	IVA: RENEWABLES AND REGIONAL ELECTRICITY	IVB: TRANSPORTATION AND POLICIES II	IVC: RESIDENTIAL ENERGY EFFICIENCY II
12:00 – 13:30	LUNCH BREAK		
13:30 – 14:30	KEYNOTE III: CHRISTIANE BAUMEISTER (UNIVERSITY OF NOTRE DAME)		
14:30 – 16:00	VA: GREEN FINANCE	VB: TRANSPORTATION AND POLLUTION	VC: RESIDENTIAL ENERGY EFFICIENCY III
16:00 – 17:30	VIA: ELECTRICITY MARKETS III	VIB: CLIMATE POLICY	VIC: CARBON LEAKAGE
17:30 – 18:30	KEYNOTE IV: KENNETH GILLINGHAM (YALE UNIVERSITY)		

10:15 – 10:30 **OPENING REMARKS**

10:30 – 12:00 **SESSION IA: ELECTRICITY MARKETS I**

Chair: Anette Boom

STORING POWER: MARKET STRUCTURE MATTERS
David Andrés-Cerezo and Natalia Fabra

Discussant: Anette Boom

COMPETITION FOR FLEXIBLE DISTRIBUTION RESOURCES IN A 'SMART' ELECTRICITY DISTRIBUTION NETWORK
Thomas Tangeras

Discussant: David Andrés-Cerezo

IS REAL-TIME PRICING SMART FOR CONSUMERS?
Anette Boom and Sebastian Schwenen

Discussant: Thomas Tangeras

SESSION IB: CARBON PRICING I

Chair: Jan Abrell

CARBON PRICING AND EMISSIONS: CAUSAL EFFECTS OF BRITAIN'S CARBON TAX

Klaus Gugler, Adhurim Haxhimusa and Mario Liebensteiner

Discussant: Jan Abrell

THE JOINT IMPACTS OF CARBON PRICING AND RENEWABLE GENERATION ON FOSSIL GENERATION PROFITS IN GERMANY

James B. Bushnell, Christian Gambardella,

Kevin Novan and Michael Pahle

Discussant: Mario Liebensteiner

THE IMPACT OF CARBON PRICES ON RENEWABLE ENERGY SUPPORT
Jan Abrell and Mirjam Kosch

Discussant: Christian Gambardella

SESSION IC: RESIDENTIAL ENERGY EFFICIENCY I

Chair: Kathrin Kaestner

ESTIMATING THE IMPACT OF ENERGY EFFICIENCY ON HOUSING PRICES IN GERMANY: DOES REGIONAL DISPARITY MATTER?
Lisa Taruttis and Christoph Weber

Discussant: Kathrin Kaestner

SUPPORTING RESIDENTIAL ENERGY CONSERVATION UNDER CONSTRAINED PUBLIC BUDGET: COST-EFFECTIVENESS AND REDISTRIBUTION ANALYSIS

Bettina Chlond, Claire Gavard and Lisa Jeuck

Discussant: Lisa Taruttis

PHOTOVOLTAICS AND THE SOLAR REBOUND: EVIDENCE FROM GERMANY

Manuel Frondel, Kathrin Kaestner, Stephan

Sommer and Colin Vance

Discussant: Claire Gavard

12:00 – 13:30 **LUNCH BREAK**

13:30 – 14:30 **KEYNOTE I: TRADABLE MOBILITY PERMITS**
 Erik Verhoef (Vrije Universiteit Amsterdam)
 Chair: Martin Kesternich

14:30 – 16:00 **SESSION IIA: FIRMS AND THE ENVIRONMENT**
 Chair: Jakob Lehr

**MANAGEMENT PRACTICES AND CLIMATE
POLICY IN CHINA**

Soo Keong Yong, Ulrich Wagner, Peiyao Shen,
 Laure de Preux, Mirabelle Muuls, Ralf Martin
 and Jing Cao
 Discussant: Jakob Lehr

**CLIMATE PROTECTION POTENTIALS OF
DIGITALIZED PRODUCTION PROCESSES:
MICROECONOMETRIC EVIDENCE?**

Janna Axenbeck and Thomas Niebel
 Discussant: Ulrich Wagner

**ENERGY TAX EXEMPTIONS AND FIRMS'
MARKUPS**

Jakob Lehr
 Discussant: Janna Axenbeck

**SESSION IIB: TRANSPORTATION AND POLICIES
I**
 Chair: Doina Radulescu

**HOW TO BE A GOOD FORERUNNER IN
CARBON NEUTRAL TRUCKING**

Christina Littlejohn and Stef Proost
 Discussant: Doina Radulescu

**COLLUDING AGAINST ENVIRONMENTAL
REGULATION**

Jorge Ale-Chilet, Cuicui Chen, Jing Li and
Mathias Reynaert
 Discussant: Stef Proost

**WELFARE, REDISTRIBUTIVE AND REVENUE
EFFECTS OF POLICIES PROMOTING FUEL
EFFICIENT AND ELECTRIC VEHICLES**

Patrick Bigler and Doina Radulescu
 Discussant: Mathias Reynaert

SESSION IIC: INNOVATION
 Chair: Johannes Rode

**HOW DO CONSUMERS APPROACH A NEW
PRODUCT? THE CASE OF REAL-TIME
ELECTRICITY PRICING IN NEW ZEALAND**

Charles Pébureau and Kevin Remmy
 Discussant: Johannes Rode

**PATENTS AS OPTIONS: ESTIMATING
TECHNOLOGICAL GAINS AND LOSSES FROM
INTERNATIONAL ENVIRONMENTAL
AGREEMENTS**

Albert Roger
 Discussant: Charles Pébureau

**I SPOT, I ADOPT! PEER EFFECTS AND
VISIBILITY IN SOLAR PHOTOVOLTAIC SYSTEM**

Johannes Rode and Sven Müller
 Discussant: Albert Roger

16:00 – 17:30

SESSION IIIA: ELECTRICITY MARKETS II

Chair: Peter Cramton

BIDDING AND INVESTMENT IN WHOLESALE ELECTRICITY MARKETS: PAY-AS-BID VERSUS UNIFORM-PRICE AUCTIONS

Bert Willems and Yueting Yu

Discussant: Peter Cramton

RENEWABLE VERSUS TRADITIONAL POWER GENERATION: THE STATE OF THE RACE

Gunther Glen and Stefan Reichelstein

Discussant: Yueting Yu

ELECTRICITY MARKETS IN TRANSITION – A MULTI-DECADE MICRO-MODEL OF ENTRY AND EXIT IN ADVANCED WHOLESALE MARKETS

Peter Cramton, Emmanuele Bobbio, David

Malec and Pacharasut Sujarittanonta

Discussant: Gunther Glen

SESSION IIIB: CARBON PRICING II

Chair: Yuting Yang

OVERLAPPING CLIMATE POLICIES

Grischa Perino, Robert A. Ritz and Arthur A. van Benthem

Discussant: Yuting Yang

CARBON PRICE FLOORS AND LOW-CARBON INVESTMENT: A SURVEY OF GERMAN FIRMS

Nils Ohlendorf, Christian Flachsland, Gregory F.

Nemet and Jan Christoph Steckel

Discussant: Robert A. Ritz

UNILATERAL CARBON POLICIES AND ELECTRICITY TRADE

Stefan Ambec and Yuting Yang

Discussant: Nils Ohlendorf

SESSION IIIC: INDUSTRIAL ENERGY EFFICIENCY

Chair: Elisa Rottner

ENERGY TAX EXEMPTIONS AND INDUSTRIAL PRODUCTION

Andreas Gerster and Stefan Lamp

Discussant: Elisa Rottner

REGULATING CONGLOMERATES: EVIDENCE FROM AN ENERGY CONSERVATION PROGRAM IN CHINA

Qiaoyi Chen, Zhao Chen, Zhikuo Liu, Juan

Carlos Suárez Serrato and Daniel Yi Xu

Discussant: Stefan Lamp

WHAT DRIVES CARBON EMISSIONS IN GERMAN MANUFACTURING: SCALE, TECHNIQUE OR COMPOSITION?

Elisa Rottner and Kathrine von Graevenitz

Discussant: Juan Carlos Suárez Serrato

17:30 – 18:30

KEYNOTE II: WHAT WERE THE ODDS? ESTIMATING THE MARKET'S PROBABILITY OF UNCERTAIN EVENTS

Ashley Langer (University of Arizona)

Chair: Ulrich Wagner

PROGRAMME

FRIDAY, 21 MAY 2021

10:30 – 12:00

SESSION IVA: RENEWABLES AND REGIONAL ELECTRICITY

Chair: Sven Heim

WIND OF CHANGE IN THE REGION: IS REGIONAL IDENTITY, REGIONAL BENEFITS, OR REGIONAL ENERGY INFRASTRUCTURE BOOSTING PREFERENCES FOR REGIONAL ELECTRICITY PRODUCTS?

Elke Groh

Discussant: Sven Heim

THE ECONOMIC COSTS OF NYMBYISM – EVIDENCE FROM RENEWABLE ENERGY PROJECTS

Stephen Jarvis

Discussant: Elke Groh

POLICY SUPPORT FOR RENEWABLE ENERGY: THE CASE OF WIND POWER

Robert Germeshausen, Sven Heim and Ulrich Wagner

Discussant: Stephen Jarvis

SESSION IVB: TRANSPORTATION AND POLICIES II

Chair: Marita Laukkanen

INDIVIDUAL MOBILITY, MODE CHOICE AND THE EFFECTS OF PUBLIC TRANSPORT SUBSIDIES: EVIDENCE FROM A RANDOMIZED CONTROLLED TRIAL

Mark A. Andor, Andreas Gerster and Marco Horvath

Discussant: Marita Laukkanen

CASH-FOR-CLUNKERS FINLAND: EVALUATING EFFECTS ON VEHICLE FLEET CO₂ INTENSITY WITH HOUSEHOLD-LEVEL DATA

Marita Laukkanen and Anna Sahari

Discussant: Marco Horvath

SESSION IVC: RESIDENTIAL ENERGY EFFICIENCY II

Chair: Anne Kesselring

SUBSIDIZING APPLIANCE REPLACEMENT IN LOW-INCOME HOUSEHOLDS

Bettina Chlond, Timo Goeschl and Martin Kesternich

Discussant: Anne Kesselring

RAISING ENERGY EFFICIENCY OR DISTORTING CONSUMER CHOICE? MINIMUM STANDARDS IN THE MARKET FOR HOUSEHOLD APPLIANCES

Thiess Buettner and Anne Kesselring

Discussant: Bettina Chlond

12:00 – 13:30

LUNCH BREAK

13:30 – 14:30 **KEYNOTE III: ENERGY MARKETS AND THE COVID-19 PANDEMIC**

Christiane Baumeister (University of Notre Dame)

Chair: Kathrine von Graevenitz

14:30 – 16:00 **SESSION VA: GREEN FINANCE**

Chair: Angelika Vogt

INSTITUTIONAL INVESTORS, CLIMATE POLICY RISK, AND DIRECTED INNOVATION

Marie-Theres von Schickfus

Discussant: Angelika Vogt

BANKING ON THE ENVIRONMENT? FINANCIAL FRICTIONS, FIRM MANAGEMENT, AND GREEN INVESTMENTS

Ralph De Haas, Ralf Martin, Mirabelle Muuls and Helena Schweiger

Discussant: Marie-Theres von Schickfus

ENDOGENOUS CLIMATE POLICY, SYSTEMIC RISK AND ASSET STRANDING

Achim Hagen, Niko Jaakkola and Angelika Vogt

Discussant: Mirabelle Muuls

SESSION VB: TRANSPORTATION AND POLLUTION

Chair: Mariza Montes de Oca

LOW EMISSION ZONES AND TRAFFIC CONGESTION: EVIDENCE FROM MADRID CENTRAL

Filippo Tassinari

Discussant: Mariza Montes de Oca

TACKLING TRANSPORT-INDUCED POLLUTION IN CITIES: A CASE STUDY IN PARIS

Marion Leroutier and Philippe Quirion

Discussant: Filippo Tassinari

THE EFFECTS OF AIR QUALITY ALERTS ON AVOIDANCE BEHAVIOR: EVIDENCE FROM NEW YORK CITY TRANSPORTATION NETWORK

Mariza Montes de Oca and Luis Sarmiento

Discussant: Marion Leroutier

SESSION VC: RESIDENTIAL ENERGY EFFICIENCY III

Chair: Madeline Werthschulte

INFORM ME WHEN IT MATTERS: COST SALIENCE, ENERGY CONSUMPTION AND EFFICIENCY INVESTMENTS

Puja Singhal

Discussant: Madeline Werthschulte

WHEN NUDGES FAIL TO SCALE: FIELD EXPERIMENTAL EVIDENCE FROM GOAL SETTING ON MOBILE PHONES

Andreas Löschel, Matthias Rodemeier and

Madeline Werthschulte

Discussant: Puja Singhal

16:00 – 17:30

SESSION VIA: ELECTRICITY MARKETS III

Chair: Mirjam Kosch

THE ZONAL AND SEASONAL CO₂ MARGINAL EMISSIONS FACTORS FOR THE ITALIAN POWER MARKET

Filippo Beltrami, Fulvio Fontini, Monica Giulietti and Luigi Grossi
Discussant: Mirjam Kosch

SIMPLIFIED MARKET MECHANISMS FOR NON-CONVEX MARKETS: EVIDENCE FROM ITALIAN ELECTRICITY MARKETS

Christoph Graf, Federico Quaglia and Frank A. Wolak
Discussant: Filippo Beltrami

THE CROSS-BORDER MERIT-ORDER EFFECT: IMPACT OF GERMAN RENEWABLE PROMOTION ON NEIGHBOURING COUNTRIES

Jan Abrell and Mirjam Kosch
Discussant: Christoph Graf

SESSION VIB: CLIMATE POLICY

Chair: Edson Severini

GREEN GOVERNMENTS

Niklas Potrafke and Kaspar Wütherich
Discussant: Edson Severini

A UNIFYING APPROACH TO MEASURING CLIMATE CHANGE IMPACTS AND ADAPTATION

Antonio M. Bento, Noah Miller, Mehreen Mookerjee and Edson Severini
Discussant: Niklas Potrafke

SESSION VIC: CARBON LEAKAGE

Chair: Vincent Thiverge

COURNOT, PIGOU, AND RICARDO WALK IN A BAR – UNILATERAL ENVIRONMENTAL POLICY, LEAKAGE, MARKET POWER AND FIRM HETEROGENEITY

Claudio Baccianti and Oliver Schenker
Discussant: Vincent Thiverge

INTRAFIRM LEAKAGE

Felix Samy Soliman
Discussant: Oliver Schenker

DO CARBON TARIFFS REDUCE GREENHOUSE GAS EMISSIONS? EVIDENCE FROM TRADE TARIFFS

Vincent Thiverge
Discussant: Felix Samy Soliman

17:30 – 18:30

KEYNOTE V: THE ECONOMICS OF ELECTRIC VEHICLE POLICIES: THE PROMISE AND POTENTIAL PITFALLS

Kenneth Gillingham (Yale University)
Chair: Sebastian Rausch
