

11th Mannheim Conference on Energy and the Environment

8 – 9 May 2023, Mannheim · Conference venue: ZEW

PROGRAMME		MONDAY, 8 MAY 2023			
08:30 – 09:00	ARRIVAL AND REGISTRATION				
09:00 – 09:15	WELCOME ADDRESS: SEBASTIAN RAUSCH (ZEW MANNHEIM AND UNIVERSITY OF HEIDELBERG)				
09:15 – 10:15	KEYNOTE I: WOLFRAM SCHLENKER (COLUMBIA UNIVERSITY) ROOM EUROPE				
10:15– 10:45	COFFEE BREAK				
10:45 – 12:15	PARALLEL SESSIONS I				
	I-A: AIR POLLUTION I	I-B: FIRM-LEVEL DECARBONIZATION	I-C: HOUSEHOLD ENERGY CONSERVATION	I-D: INTERNATIONAL ECONOMICS OF EMISSIONS TRADING	
12:15 – 13:30	LUNCH BREAK				
13:30 – 15:00	PARALLEL SESSIONS II				
	II-A: CLIMATE FINANCE	II-B: CLIMATE POLICY AND FIRMS	II-C: PRIVATE PROVISION OF PUBLIC GOODS	II-D: ELECTRICITY MARKETS	
15:00– 15:30	COFFEE BREAK				
15:30 – 17:00	PARALLEL SESSIONS III				
	III-A: CRISES AND THE ENVIRONMENT	III-B: POLICY INCIDENCE AND INEQUALITY	III-C: CARBON PRICING ACCEPTANCE	III-D: OPTIMAL TAXATION	
17:00 – 17:15	TRANSITION BREAK				
17:15 – 18:15	KEYNOTE II: SHUANG ZHANG (IMPERIAL COLLEGE LONDON) ROOM EUROPE				
19:30	CONFERENCE DINNER				

PROGRAMME		TUESDAY, 9 MAY 2023			
09:00 – 10:30	PARALLEL SESSIONS IV				
	IV-A: HEALTH AND THE ENVIRONMENT	IV-B: ADAPTATION TO EMISSIONS TRADING	IV-C: SOCIAL NORMS	IV-D: WEATHER AND THE HOUSING MARKET	
10:30– 11:00	COFFEE BREAK				
11:00 – 12:00	KEYNOTE III: ROBERT METCALFE (UNIVERSITY OF SOUTHERN CALIFORNIA) ROOM EUROPE				
12:00 – 12:30	HEINZ-KÖNIG AWARD FUNDED BY MVV ENERGIE AG AWARD CEREMONY WITH CHAMPAIGN RECEPTION WITH LAUDATOR GEORG MÜLLER, MVV				
12:30 – 13:30	LUNCH BREAK				
13:30 – 15:00	PARALLEL SESSIONS V				
	V-A: AIR POLLUTION II	V-B: ETS AND INNOVATION	V-C: NUDGING SUSTAINABLE BEHAVIOUR	V-D: ELECTRIFYING TRANSPORTATION	

15:00 – 15:45 COFFEE BREAK

15:45 – 16:45 **KEYNOTE IV: LINT BARRAGE (ETH ZURICH) ROOM EUROPE**

17:00 FAREWELL

PROGRAMME MONDAY, 8 MAY 2023

08:30 – 09:00 **ARRIVAL AND REGISTRATION**

09:00 – 09:15 **WELCOME ADDRESS (ROOM EUROPE)**

Sebastian Rausch (ZEW Mannheim and University of Heidelberg)

09:15 – 10:15 **KEYNOTE I: DIFFERENCES IN OBSERVED WARMING TRENDS WITHIN US CITIES AND IMPLICATIONS FOR INEQUALITY (ROOM EUROPE)**

Wolfram Schlenker (Columbia University)

Chair: Ulrich Wagner (Mannheim University)

10:15 – 10:45 **COFFEE BREAK**

10:45 – 12:15 **PARALLEL SESSION I-A: AIR POLLUTION I (ROOM EUROPE)**

Chair: Angelika Budjan

DUST IN THE WIND: AIR POLLUTION AND INFANT MORTALITY IN INDIA

Geoffrey Barrows, H el ene Ollivier and [Lucas Perez](#)

Discussant: Angelika Budjan

THE CAUSAL EFFECTS OF LONG-TERM EXPOSURE TO AIR POLLUTION: EVIDENCE FROM SOCIALIST EAST GERMANY
[Moritz Lubczyk](#) and Maria Waldinger

Discussant: Lucas Perez

PARALLEL SESSION I-B: FIRM-LEVEL DECARBONIZATION (MEDIA ROOM)

Chair: Elisa Rottner

REVEALING FUTURE COMPLIANCE COSTS FROM PERMIT BANKING BEHAVIOR
[Sylwia Bialek](#) and Jeffrey G. Shrader

Discussant: Elisa Rottner

THE COST OF DECARBONIZING PORTLAND CEMENT
[Gunther Glenk](#), Anton Kelnhofer, Rebecca Meier and Stefan Reichelstein

Discussant: Sylwia Bialek

PARALLEL SESSION I-C: HOUSEHOLD ENERGY CONSERVATION (ROOM 1)

Chair: Madeline Werthschulte

MY COMMUNITY AND I: STIMULATING CONSERVATION AND LOAD SHIFTING THROUGH VIRTUAL ENERGY COMMUNITIES
[Mark A. Andor](#), Julia Blasch, Lorenz G tte, Delia Niehues, Stephan Sommer and Lukas Tomberg

Discussant: Madeline Werthschulte

PREMIUM PROGRAMS AND ENERGY-SAVING INTENTIONS

Manuel Frondel, [Andreas Gerster](#), Kathrin Kaestner, Michael Pahle and Puja Singhal

Discussant: Mark A. Andor

PARALLEL SESSION I-D: INTERNATIONAL ECONOMICS OF EMISSIONS TRADING (ROOM 2)

Chair: Ulrich Wagner

EU CARBON PRICING AND CARBON BORDER ADJUSTMENT WHEN FIRMS ARE HETEROGENEOUS
[Robin Sogalla](#)

Discussant: Ulrich Wagner

GENERAL EQUILIBRIUM ASSESSMENT OF CHINA'S NATIONWIDE CO2 EMISSIONS TRADING SYSTEM

Lawrence Goulder, Xianling Long, [Chenfei Qu](#) and Da Zhang

Discussant: Robin Sogalla

	<p>PERCEIVED CONTROL AND ATTENDANCE TO INFORMATION: EVIDENCE ON THE HEALTH RISKS OF AIR POLLUTION</p> <p>Anca Balietti, <u>Angelika Budjan</u>, Tillmann Eymess and Alice Soldá</p> <p>Discussant: Moritz Lubcyk</p>	<p>WHY HAVEN'T CO2 EMISSIONS FROM GERMAN MANUFACTURING DECLINED? THE ROLES OF PREFERENCES, COMPETITIVENESS AND REGULATION</p> <p>Kathrine von Graevenitz, Philipp Richter and <u>Elisa Rottner</u></p> <p>Discussant: Gunther Glenk</p>	<p>AGENTS OF CHANGE? – ENERGY ADVISORS AS KEY SUCCESS FACTOR FOR THE IMPLEMENTATION OF AN ENERGY EFFICIENCY ASSISTANCE PROGRAM</p> <p>Bettina Chlond, Timo Goeschl, Martin Kesternich and <u>Madeline Werthschulte</u></p> <p>Discussant: Andreas Gerster</p>	<p>DESIGNING CREDIBLE CARBON BORDER ADJUSTMENTS TO PROMOTE COMPLIANCE. THEORY AND EMPIRICS</p> <p>Alessia Campolmi, Harald Fadinger, Chiara Forlati, Sabine Stillger and <u>Ulrich Wagner</u></p> <p>Discussant: Chenfei Qu</p>
12:15 – 13:30	LUNCH BREAK			
13:30 – 15:00	<p>PARALLEL SESSION II-A: CLIMATE FINANCE (ROOM EUROPE)</p> <p>Chair: Paul Waidelich</p> <p>FUNDING MECHANISMS IN GREEN FINANCE</p> <p><u>Philip Zilke</u></p> <p>Discussant: Paul Waidelich</p>	<p>PARALLEL SESSION II-B: CLIMATE POLICY AND FIRMS (MEDIA ROOM)</p> <p>Chair: Ara Jo</p> <p>THE IMPACT OF CLIMATE POLICY ON MANUFACTURING EMPLOYMENT: FIRM-LEVEL EVIDENCE FROM GERMANY</p> <p>Markus Janser, Stephen Jarvis, Robert Germeshausen, <u>Kathrine von Graevenitz</u> and Ulrich Wagner</p> <p>Discussant: Ara Jo</p>	<p>PARALLEL SESSION II-C: PRIVATE PROVISION OF PUBLIC GOODS (ROOM 1)</p> <p>Chair: David Schulze</p> <p>PERCEIVED RELATIVE INCOME AND REVEALED PREFERENCES FOR PUBLIC GOODS</p> <p><u>Anca Balietti</u></p> <p>Discussant: David Schulze</p>	<p>PARALLEL SESSION II-D: ELECTRICITY MARKETS (ROOM 2)</p> <p>Chair: Jonas Savelsberg</p> <p>DISTRIBUTIONAL AND EFFICIENCY EFFECTS OF RENEWABLE ENERGY TRADING UNDER A CLIMATE TARGET: THE CASE OF THE EU</p> <p>Jan Abrell, Sebastian Rausch and <u>Jonas Savelsberg</u></p> <p>Discussant: Clément Leblanc</p>

RATE OF RETURN REGULATION REVISITED

Karl Dunkle Werner and Stephen Jarvis

Discussant: Philip Zilke

WORKER FLOWS IN THE LOW CARBON TRANSITION

Ronald Bachmann, Markus Janser, Florian Lehmer , Christina Vonnahme

Discussant: Kathrine von Graevenitz

COMPLEXITY AND LEARNING EFFECTS IN VOLUNTARY CLIMATE ACTION: EVIDENCE FROM A FIELD EXPERIMENT

Daniela Flörchinger

Discussant: Anca Balietti

COMPARING THE SOCIAL BENEFITS OF VARIABLE RENEWABLE ENERGY PROJECTS

Clément Leblanc

Discussant: Jonas Savelsberg

THE ROLE OF STATE INVESTMENT BANKS FOR RENEWABLE ENERGY TECHNOLOGIES IN OECD COUNTRIES

Paul Waidelich and Bjarne Steffen

Discussant: Stephen Jarvis

FIRM HETEROGENEITY, INDUSTRY DYNAMICS, AND CLIMATE POLICY

Ara Jo and Christos Karydas

Discussant: Markus Janser

WHO WILL PROVIDE EFFORT TO PROTECT THE CLIMATE?

David Schulze

Discussant: Daniela Flörchinger

15:00– 15:30

COFFEE BREAK

15:30 – 17:00

PARALLEL SESSION III-A: CRISES AND THE ENVIRONMENT (ROOM EUROPE)

Chair: Guglielmo Zappalà

TURNING DOWN THE HEAT? RESPONSE TO THE ENERGY PRICE SHOCK IN GERMAN HOUSEHOLD DATA

Puja Singhal, Michael Pahle, Kathrin Kaestner, Andreas Gerster and Antonia Schwarz

Discussant: Guglielmo Zappalà

PARALLEL SESSION III-B: POLICY INCIDENCE AND INEQUALITY (MEDIA ROOM)

Chair: José M. Labeaga

DISTRIBUTIONAL IMPACTS OF RENEWABLE ENERGY TRANSITION ON THE LOCAL LABOR MARKET

Ron Chan and Yichen Christy Zhou

Discussant: José M. Labeaga

PARALLEL SESSION III-C: CARBON PRICING ACCEPTANCE (ROOM 1)

Chair: Gustav Fredriksson

CARBON PRICE SUPPORT WITH MIXED REVENUE USE AND REVEALED PREFERENCES

Kathrin Kaestner, Michael Pahle, Antonia Schwarz, Stephan Sommer and Anna Stünzi

Discussant: Gustav Fredriksson

PARALLEL SESSION III-D: OPTIMAL TAXATION (ROOM 2)

Chair: Anna Sahari

CAN THEY SORT IT OUT THEMSELVES? REGULATING EXTERNALITIES BETWEEN COASE AND PIGOU

Daniel Heyen and Philipp Weinschenk

Discussant: Anna Sahari

FIRM DIGITALISATION AND MOBILITY -- DO COVID-19-RELATED CHANGES PERSIST?

Janna Axenbeck, Irene Bertscheka, Patrick Breithaupt and Daniel Erdsiek

Discussant: Puja Singhal

THE EFFICIENCY OF ENVIRONMENTAL AUDITS AND THEIR ROLE IN REDUCING AIR POLLUTION INEQUALITY IN THE US

Anca Balietti, Zain Chaudhry, and Tom Zeising

Discussant: Ron Chan

IN THE HEAT OF THE MOMENT: CARBON PRICING SUPPORT IN A NATIONAL REFERENDUM

Lint Barrage and Gustav Fredriksson

Discussant: Kathrin Kaestner

TARGETING OF CORRECTIVE SUBSIDIES

Takahiko Kiso

Discussant: Daniel Heyen

SECTORAL IMPACT AND PROPAGATION OF WEATHER SHOCKS

Guglielmo Zappalà

Discussant: Janna Axenbeck

INCIDENCE AND AVOIDANCE EFFECTS OF SPATIAL FUEL TAX DIFFERENTIALS: EVIDENCE USING REGIONAL TAX VARIATION IN SPAIN

Ander Iraizoz and José M. Labeaga

Discussant: Tom Zeising

VEHICLE SCRAPPAGE SUBSIDIES AS A CLIMATE POLICY TOOL: PROGRAM EFFECTS ON NEW CAR EMISSION INTENSITY

Marita Laukkanen and Anna Sahari

Discussant: Takahiko Kiso

17:15 – 18:15

KEYNOTE II: CAN THE MARKET TAME CO2 EMISSIONS OF THE NO.1 EMITTER? (ROOM EUROPE)

Shuang Zhang (Imperial College London)

Chair: Kathrine von Graevenitz (ZEW Mannheim and Mannheim University)

19:30

CONFERENCE DINNER

PROGRAMME TUESDAY, 9 MAY 2023

09:00 – 10:30	<p>PARALLEL SESSION IV-A: HEALTH AND THE ENVIRONMENT (ROOM EUROPE)</p> <p>Chair: Julian Wichert</p> <p>BURYING THE LEAD: EFFECTS OF PUBLIC LEAD SERVICE LINE REPLACEMENTS ON BLOOD LEAD LEVELS AND PROPERTY VALUES</p> <p><u>Michelle Marcus</u></p> <p>Discussant: Julian Wichert</p>	<p>PARALLEL SESSION IV-B: ADAPTATION TO EMISSIONS TRADING (MEDIA ROOM)</p> <p>Chair: Michael Pahle</p> <p>CARBON COST PASS-THROUGH IN EUROPEAN AVIATION</p> <p><u>Adrián Santonja</u>, Jordi J. Teixido and Aleksandar Zaklan</p> <p>Discussant: Michael Pahle</p>	<p>PARALLEL SESSION IV-C: SOCIAL NORMS (ROOM 1)</p> <p>Chair: Julien Picard</p> <p>CORRECTING MISPERCEPTIONS ABOUT TRENDS AND NORMS TO ADDRESS WEAK COLLECTIVE ACTION</p> <p><u>Hanna Fuhrmann-Riebel</u>, Ben D'Exelle, Kristian López Vargas, Sebastian Tonke and Arjan Verschoor</p> <p>Discussant: Julien Picard</p>	<p>PARALLEL SESSION IV-D: WEATHER AND THE HOUSING MARKET (ROOM 2)</p> <p>Chair: Lennart Vogelsang</p> <p>URBAN POLICY AND SPATIAL EXPOSURE TO ENVIRONMENTAL RISK</p> <p><u>Augusto Ospital</u></p> <p>Discussant: Lennart Vogelsang</p>
	<p>EXTREME WEATHER EVENTS AND HUMAN CAPITAL: EVIDENCE ACROSS DEVELOPING COUNTRIES</p> <p>Uwe Sunde and <u>Julian Wichert</u></p> <p>Discussant: Michelle Marcus</p>	<p>THE EFFECT OF CARBON PRICING ON LOW-CARBON TECHNOLOGY DIFFUSION</p> <p>Xavier Fageda and <u>Jordi Teixido</u></p> <p>Discussant: Adrián Santonja</p>	<p>COMPARING AND COMBINING TWO POPULAR BEHAVIORAL INTERVENTIONS: IMPACTS ON BEHAVIOR AND WELFARE</p> <p>Mark A. Andor, Lorenz Gotte, Michael K. Price, Anna Schulze Tilling and <u>Lukas Tomberg</u></p> <p>Discussant: Hanna Fuhrmann-Riebel</p>	<p>INLAND FLOODING: ESTIMATING DAMAGES AND PROTECTION FROM INSURANCE</p> <p><u>Timothy Foreman</u>, Ana Varela Varelab and Jason Wong</p> <p>Discussant: Augusto Ospital</p>

THE EMERGING ENDGAME: THE EU ETS ON THE ROAD TOWARDS CLIMATE NEUTRALITY

Michael Pahle, Claudia Günther, Sebastian Osorio and Simon Quemin

Discussant: Jordi Teixido

WHEN NUDGES RICOCHET, BEHAVIOURAL SPILLOVERS OF SOCIAL NORM NUDGES PROMOTING VEGETARIANISM

Julien Picard and Sanchayan Banerjee

Discussant: Lukas Tomberg

URBAN HEAT AND RESIDENTIAL SORTING IN NEW YORK CITY

Stefan Borsky, Eric Fesselmeyer and Lennart Vogelsang

Discussant: Timothy Foreman

10:30 – 11:00

COFFEE BREAK

11:00 – 12:00

KEYNOTE III: WHAT HAS THE CREDIBILITY REVOLUTION DONE FOR CLIMATE CHANGE POLICY? (ROOM EUROPE)

Robert Metcalfe (University of Southern California)

Chair: Martin Kesternich (University Paderborn and ZEW Mannheim)

12:00 – 12:30

HEINZ-KÖNIG AWARD CEREMONY WITH CHAMPAIGN RECEPTION

Laudatio: Georg Müller (MVV) and Sebastian Rausch (ZEW and University of Heidelberg)

12:30 – 13:30

LUNCH BREAK

13:30 – 15:00

PARALLEL SESSION V-A: AIR POLLUTION II (ROOM EUROPE)

Chair: Marion Leroutier

BAD FOR BUSINESS? THE IMPACT OF AIR QUALITY ON FIRM OUTCOMES IN GERMANY

Roman Eric Sieler, Beat Hintermann and Corrado Di Maria

Discussant: Marion Leroutier

PARALLEL SESSION V-B: ETS AND INNOVATION (MEDIA ROOM)

Chair: Armin Schmutzler

CARBON PRICING AND INNOVATION: THE IMPACT OF THE EUROPEAN CARBON TRADING SYSTEM

Markus Trunschke

Discussant: Armin Schmutzler

PARALLEL SESSION V-C: NUDGING SUSTAINABLE BEHAVIOUR (ROOM 1)

Chair: Laura Schwab

ON THE PREFERENCES OF TENANTS FOR ENERGETIC MODERNIZATION: EVIDENCE FROM A STATED CHOICE EXPERIMENT

Thilo K.G. Haverkamp and Andreas Ziegler

Discussant: Laura Schwab

PARALLEL SESSION V-D: ELECTRIFYING TRANSPORTATION (ROOM 2)

Chair: Alberto Salvo

WOULD YOU LIKE TO SUPER-SIZE YOUR CAR? THE EFFECT OF ENVIRONMENTAL SUBSIDIES ON EMISSIONS

Ilona Tsanko

Discussant: Alberto Salvo

**THE EFFECT OF AIR POLLUTION ON
US AGGREGATE PRODUCTION**

Antonio Avila-Uribe

Discussant: Roman Eric Sieler

**THE EU ETS IMPACT ON FIRMS
GREEN INVESTMENT**

Xavier Koch

Discussant: Markus Trunschke

**CHANGING CONSUMPTION
BEHAVIOR WITH CARBON LABELS:
CAUSAL EVIDENCE ON
BEHAVIORAL CHANNELS AND
EFFECTIVENESS**

Anna Schulze Tilling

Discussant: Thilo K.G. Haverkamp

**ADOPTION OF PLUG-IN ELECTRIC
VEHICLES: THE ROLE OF SOLAR PV
AND GOVERNMENT INCENTIVES**

Davide Cerruti, Massimo Filippini
and Jonas Savelsberg

Discussant: Ilona Tsanko

**THE COST OF AIR POLLUTION FOR
WORKERS AND FIRMS**

Marion Leroutier and H el ene
Ollivier

Discussant: Antonio Avila-Uribe

**PROVIDING INNOVATION
INCENTIVES FOR THE GREEN
TRANSITION**

Armin Schmutzler

Discussant: Xavier Koch

**REDUCING TRANSPORTATION
EXTERNALITIES THROUGH
NUDGING: RESULTS FROM A GPS-
TRACKED EXPERIMENT**

Laura Schwab

Discussant: Anna Schulze Tilling

**TRANSIT BUS ELECTRIFICATION
RAISES COMMUTER DEMAND:
EVIDENCE FROM SINGAPORE**

Alberto Salvo and Timothy Wong

Discussant: Davide Cerruti

15:00 – 15:45

COFFEE BREAK

15:45 – 16:45

KEYNOTE IV: ENERGY TAX INTERACTIONS WITH THE BROADER ECONOMY: (SOME) NEW FINDINGS AND FRONTIERS (ROOM EUROPE)

Lint Barrage (ETH Zurich)

Chair: Sebastian Rausch (ZEW Mannheim and University of Heidelberg)

16:45

FAREWELL
