

Summer Academy 'Energy and the Environment' 2016

## Sustainable Cities:

# Low-Carbon Policy for the Urban Energy Transition

*17- 22 July 2016 | Greifswald and Berlin | Germany*

Cities are home to more than half of the world's population, projected to increase to 70% by 2050. As main energy consumption centers, cities are major contributors to the greenhouse gas emissions that cause global climate change. On a local level, these emissions have a devastating effect on human health and quality of life, at great social, economic and environmental costs. Moreover, many of the world's largest cities are located in coastal areas, rendering them vulnerable to rising sea levels associated with climate change.

Moving towards sustainable cities is a great international and interdisciplinary challenge: International due to the global impact of climate change on cities worldwide, and interdisciplinary in the close cooperation between academic disciplines and economic sectors it requires.

The 13th annual international Summer Academy 'Energy and the Environment' will focus on the policy, social, health, economic and mobility challenges that climate change presents to today's cities, evaluating the impact of climate change on a global and then urban level, offering in-depth insights into low-carbon policy solutions for major urban sectors like transport and buildings, case studies on sustainability strategies from major cities around the world, and visits to a wind energy farm and a renewable electricity storage plant.

# Sustainable Cities: Low-Carbon Policy for the Urban Energy Transition

Summer Academy 'Energy and the Environment' 2016

## Program part I: Greifswald

The Summer Academy 'Energy and the Environment' opens with a meet and greet, followed by a welcome reception in Greifswald on Sunday 17 July.

On **Monday** morning the Academy will offer an interdisciplinary perspective on the concept and opportunities of sustainable cities. A workshop including all international delegates will build on this perspective, elaborating on the concept of sustainable cities with stakes and insights from around the world. Clean energy to keep tomorrow's cities running is a key ingredient for urban sustainability, and is the focus point of the afternoon activity which includes a visit to a major wind farm in Mecklenburg-Vorpommern in the afternoon, followed by a walk on the beach at the Baltic Sea.

On **Tuesday**, the Academy narrows its focus on Germany, addressing the role

of cities in Germany's ambitious policy commitment to the energy transition. The state of Mecklenburg-Vorpommern is one of the renewable energy leaders in Germany, and is well on its way to reach its 4100 MW target in 2020. Regional empowerment and economic development is therefore next on the agenda.

One of the challenges of an energy system powered by renewables is the fluctuating nature of renewable energy supply and demand. Storage and conversion as stabilizing technologies will play a major role in tomorrow's sustainable energy system. The group will learn more on this topic during a visit of one of the first hybrid power plants, that converts excess renewable electricity into gas. After the visit, the Academy will travel on to Berlin for an intensive three-day conference program.



## Program part II: Berlin

The decisions that policy-makers, urban authorities, developers, and planners make today will determine how billions of urban citizens will live over the next century.

In Berlin, the Summer Academy 'Energy and the Environment' offers a three-day intensive conference program from Wednesday to Friday.

In these three days, key aspects of sustainable cities will be presented and analysed, and put into practice during international case studies on urban sustainability efforts in the EU, the US, Latin America, Asia and Africa.

On Wednesday, the conference opens with an insight into the state and ambition of today's international climate policy. The achievements of the Paris agreement and the impacts on cities will be discussed, followed by the EU's strategy and policy outlook for sustainable cities. The challenging process of effective urban climate policy, from mitigation to adaptation, will be inves-

tigated through examples from Germany, and a close-up on post-Sandy policy in New York. The afternoon will focus on the diverse policy efforts in major African cities, and will close with policy insights into the environmental challenge facing Beijing.

Thursday will address sustainable energy options for cities, looking into renewable energy, energy efficiency, zero energy buildings and smart grid infrastructure. The afternoon is dedicated to renewable energy integration in Nordic cities, a case-study on Saudi Arabia and on the role of renewables in Latin American cities.

Friday will address the complexity of the transport sector, where decarbonisation has proved to be the most challenging. Policy failures and accomplishments in emissions control will be analysed, the case for electric vehicles, car-sharing systems and driverless cars presented, and finally, the importance of integrated mobility solutions including bikes and public transit.



## Greifswald agenda | 17 - 19 July

### Opening of the Summer Academy 2016: Reception and dinner

Sunday 17 July | Greifswald

- 16:00 Meeting at the University of Greifswald | Rubenowplatz  
[Tour of the University and Welcome | Prof. Michael Rodi](#)
- 18:00 Reception and dinner | Pomeria | Salinenstraße | Greifswald

### Sustainable Cities: An International Perspective

Monday 18 July | Alten Augenklinik, Rubenowstr. 2b, room 2 | Greifswald

- 10:00 Introduction to Sustainable Cities  
*Focus: Sustainable Policy and Transport in Amsterdam*  
[Anika Nicolaas Ponder | Research coordinator | IKEM](#)
- 10:45 Interdisciplinary Workshop: Elements and Drivers of a Sustainable City  
Moderated by:
  - [Sam Holleran | Design Fellow | Design Trust for Public Space](#)
  - [Bernd Riedel | Co-Founder | Ellery Studio for Creative Strategy](#)
- 12:30 Lunch | Brasserie Hermann | Gützkower Str. 1 | Greifswald
- 14:30 [Visit of wind energy park in Mecklenburg-Vorpommern](#)
- 16:00 Beach walk at the Baltic Sea (Lubmin)

### The Energy Transition: Urban Empowerment and Renewable Energy

Tuesday 19 July | Alten Augenklinik, Rubenowstr. 2b, room 2 | Greifswald

- 10:00 The German Energiewende: Impact and Role of Cities  
[Johannes Schmitz](#)  
*Researcher Associate | IKEM*
- 10:45 From Plan to Action: Addressing Climate Change on the Municipal Level  
[Eva Rechsteiner](#)  
*Researcher | Institute for Environmental and Energy Research (IFEU)*
- 12:00 Lunch | Travel to Berlin
- 15:00 [Technical visit of the ENERTRAG power-to-gas hybrid power plant in Prenzlau](#)
- 18:00 Arrival in Berlin



## Berlin conferences | 20 - 22 July



### Climate Change and the Rise of Sustainable Cities

Wednesday 20 July | IKEM | Magazinstraße 15 -16 | 10179 | Berlin

- 9:30 - 10:15 Climate Impact and the Vulnerability of Cities  
[Dr. Andrzej Ancygier](#)  
*Climate Policy Analyst | Climate Analytics*
- 10:15 - 11:00 International Climate Policy: The Paris Agreement and the Impacts on Cities  
[Outi Leskelä](#)  
*Senior Officer | Nordic Council of Ministers*
- 11:00 - 11:30 Coffee break
- 11:30 - 12:15 Mitigation and Adaptation in Post- Sandy New York City  
[Sam Holleran](#)  
*Design Fellow | Design Trust for Public Space*
- 12:15 - 13:15 Lunch break
- 13:15 - 14:00 Financing Frameworks for Sustainable Cities  
[Neil Walmsley](#)  
*Creditworthiness Network Manager | C40*
- 14:00 - 15:00 Urban Sustainability in Africa: Case Studies  
[Ivo Kashimana](#)  
*Conservation Officer | Nigerian Conservation Foundation*  
Transit Scenarios for the Future Energy Supply in Africa  
[Silvia Escudero Santos Ascarza](#)  
*Energy Advisor | GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit*
- 15:00 - 15:30 Coffee break
- 15:30 - 16:15 Megacities in China: Moving from Grey Skies to Green Cities  
[Dongping Wang](#)  
*Free University of Berlin*

Focus:  
Africa





# Low-Carbon Pathways for an Urban Energy Transition

Thursday 21 July | IKEM | Magazinstraße 15 -16 | 10179 | Berlin

9:30 - 10:15	The True Costs of Urban Pollution <b>Dorothee Saar</b> <i>DUH (Deutsche Umwelthilfe)</i>
10:15 - 11:00	Circular Economy and Resource Efficiency <b>Prof. Dr. Helga Weisz</b> <i>PIK - Potsdam Institute for Climate Impact Research</i>
11:00 - 11:30	Coffee break
11:30 - 12:30	Urban Energy Efficiency: Status Quo and Future Perspectives <b>Dr. Aleksandra Novikova</b> <i>Institute for Climate Protection, Energy and Mobility (IKEM)</i> Discussion round: Energy Efficiency in Cities Around the World <b>Summer Academy Participants and Faculty</b> <i>Moderated by Prof. Michael Rodi</i>
12:30 - 13:30	Lunch break
13:30 - 14:15	The Sustainable Urban Energy Mix: From Policy to Practice <b>David Uong</b> <i>Berlin Energieagentur GmbH</i>
14:15 - 15:15	Food Production: Resource Efficiency and Carbon Mitigation Potential <b>Dr. Aleksandra Novikova</b> <i>Institute for Climate Protection, Energy and Mobility (IKEM)</i> Sustainable Food Consumption: Changing Behaviours <b>Prof. Dr. Nina Langen</b> <i>Technical University of Berlin - Division of Food Consumption and Science</i>
15:15 - 15:45	Coffee break
15:45 - 16:30	Towards a Carbon-Neutral Energy System: Perspectives from Nordic Cities <b>Outi Leskelä</b> <i>Senior Officer   Nordic Council of Ministers</i>

Focus:  
Energy  
Efficiency

Focus:  
The food  
sector



# In Transit: Green Policy and Innovation in Urban Mobility

Friday 22 July | IKEM | Magazinstraße 15 -16 | 10179 | Berlin

9:30 - 10:15	Global Challenges and Trends for Urban Transportation <b>Dr. Felix Creutzig</b> <i>Mercator Research Institute on Global Commons and Climate Change</i>		
10:15 - 11:00	Sustainable Urban Planning and Transport Policies: Best Practices <b>Jakob Baum</b> <i>Transport Policy Advisor   GIZ</i>		
11:00 - 11:30	Coffee break		
11:30 - 12:15	Electric Vehicles and the Urban Energy System <b>Frank Christian Hinrichs</b> <i>Inno2Grid</i>		
12:15 - 13:15	Lunch break		
13:15 - 14:00	Seemingly Simple: The Role of the Bicycle in Urban Sustainability <b>Matthias Heskamp</b> <i>Radbahn Berlin</i>		
14:00 - 14:45	The Sustainable Business Case: Carsharing in Cities <b>Gunnar Nehrke</b> <i>Bundesverband CarSharing e.V.</i>		
14:45 - 15:15	Coffee break		
15:15 - 16:00	The Future is Here! Driverless Cars and the Urban Transport System		
	<table border="0"> <tr> <td>Technology and Innovation <b>Christian Löper</b> <i>Deutsches Zentrum für Luft- und Raumfahrt</i></td> <td>Policy and Practice <b>Jana Rischka</b> <i>IKEM</i></td> </tr> </table>	Technology and Innovation <b>Christian Löper</b> <i>Deutsches Zentrum für Luft- und Raumfahrt</i>	Policy and Practice <b>Jana Rischka</b> <i>IKEM</i>
Technology and Innovation <b>Christian Löper</b> <i>Deutsches Zentrum für Luft- und Raumfahrt</i>	Policy and Practice <b>Jana Rischka</b> <i>IKEM</i>		
16:00 - 16:15	Conclusions of the Summer Academy 2016		
19:00 - 23:00	<b>Goodbye barbecue with participants and speakers</b> <i>Neukölln, Berlin</i>		

Focus:  
Driverless  
vehicles



## Registration

The Summer Academy 2016 *'Sustainable Cities: Low-Carbon Policy for the Urban Energy Transformation'* will welcome 25-30 interdisciplinary participants working in the field of sustainability. Applicants must have relevant experience in the field, and are selected based on their interest in the program, as well as academic/professional achievements. The Academy aims to find a representative mix of disciplines, nationalities, as well as gender.

The fees cover all workshops and conferences, lunch throughout the event, as well as transport from Greifswald to Berlin. Last but not least, the fee includes the festive barbecue on the last day of the Summer Academy in Berlin.

Registration forms are available on our site:  
[www.ikemsummeracademy.de/applications](http://www.ikemsummeracademy.de/applications)

You can also write to us for an application form, comments or questions:  
[summeracademy2016@ikem-online.de](mailto:summeracademy2016@ikem-online.de)

	 Business	 Governments	 NGO/University	 PhD	 Students
Full program	€ 800	€ 650	€ 520	€ 410	€ 350
Greifswald program	€ 320	€ 290	€ 260	€ 240	€ 220
Berlin program	€ 730	€ 560	€ 430	€ 330	€ 250
1-Day participation		€ 260			€ 140



## Summer Academy 'Energy and the Environment' 13 years of international cooperation

- 2004  Transition from Nuclear Energy to Renewable Energy Sources  
Greifswald, Germany
- 2005  Implementing Kyoto - Chances and Challenges for Transition Countries  
Irkutsk, Russia
- 2006  Emissions Trading in Europe – Review and Preview  
Greifswald, Germany
- 2007  Bridging the Divide in Global Climate Policy: Strategies for Enhanced Participation and Integration  
Budapest, Hungary
- 2008  Realizing the Paradigm Shift towards Energy Sustainability: Climate Change, Technological Innovation, and the Challenge of an Optimal Instrument Mix  
Greifswald, Germany
- 2009  Bridging the Divide in Global Climate Policy 2.0: From Bali to Copenhagen  
Amsterdam, the Netherlands
- 2010  Transnational Energy Grids: Challenges on the Way to Sustainable Energy Transmission  
Greifswald, Germany
- 2011  Socio-Economic Opportunities and Drivers on the Way to a Low-Carbon Society  
Guildford and London, the United Kingdom
- 2012  Energy Transition: Expansion and Integration of RES  
Berlin, Germany
- 2013  Climate Change and the Energy Challenge: Energy Efficiency and Renewable Resources  
Brussels, Belgium
- 2014  Energy Transition 2.0: Further Deployment and Market Integration of Renewable Energy  
Berlin, Germany
- 2015  Governing Climate Change: A Multi-Level Approach to Energy System Transformation  
Greifswald and Berlin, Germany
- 2016  Sustainable Cities: Low-Carbon Policy for the Urban Energy Transition  
Greifswald and Berlin, Germany





Prof. Michael Rodi  
Founder of the Summer Academy  
IKEM | Institute for Climate Protection, Energy and Mobility

Organization:  
Anika Nicolaas Ponder | Research fellow  
Julia Sandén | Research fellow

[summeracademy2016@ikem-online.de](mailto:summeracademy2016@ikem-online.de)  
[www.ikemsummeracademy.de](http://www.ikemsummeracademy.de)  
Impressions of the Summer Academy:  
[gallery.ikemsummeracademy.de](http://gallery.ikemsummeracademy.de)

IKEM | Berlin  
Magazinstraße 15-16  
10179 Berlin | Germany  
Tel. + 49 (0) 30 408 187 015  
[www.ikem-online.de](http://www.ikem-online.de)

IKEM | Greifswald  
Domstraße 20a  
17487 Greifswald | Germany

ERNST MORITZ ARNDT  
UNIVERSITÄT GREIFSWALD

