

<sub>l</sub>ireus

Institute of Spatial and Regional Planning



SPONSORED BY THE



IER

Germany

Institute of Energy Economics and Rational Energy Use

University of Stuttgart



ACADEMY FOR TERRITORIAL DEVELOPMENT IN THE LEIBNIZ ASSOCIATION





## Workshop II

# Cross-National Applied Research to Support Local and Regional Climate Resilient Planning in Stuttgart and Northern Virginia

## March 9-12, 2024

Location: Verband Region Stuttgart Kronenstraße 25, Stuttgart, Germany 11 March: Room 540 / 542, level 5 12 March: Room 540, level 5



# Workshop II Cross-National Applied Research to Support Local and Regional Climate Resilient Planning in Stuttgart and Northern Virginia

March 9-12, 2024 University of Stuttgart Verband Region Stuttgart Germany

#### Funding:

Organized and Sponsored by the University of Stuttgart - Institute of Spatial and Regional Planning (IREUS) and Institute of Energy Economics and Rational Energy Use (IER), the Northern Virginia Regional Commission (NVRC), the Verband Region Stuttgart (VRS) and George Mason University Virginia Climate Center (GMU/VCC).

Funded partially as part of the ISAP-Project by The Federal Ministry of Education and Research (BMBF) within the framework of the strategy "Climate Research" (FONA) www.fona.de/en.

#### Goal of Workshop and Research Visit:

To strengthen the growth and development of collaborative applied science and research programs between the Stuttgart and Northern Virginia regions through their respective science, research, academic and regional governmental organizations to support the mutually beneficial transfer and applications of place-based climate resiliency and sustainability innovations.

#### Contact:

Ms. Joanna McMillan, <u>joanna.mcmillan@ireus.uni-stuttgart.de</u>, Institute of Spatial and Regional Planning, University of Stuttgart, Phone +49-711-685 66328

### Saturday, March 9

Time	Agenda Item	Responsibility
15:00	NVRC/GMU VCC Teams Arrive	
	Check into Hotel (Stuttgart, Germany)	
18:30	Dinner	No host
	Brauhaus Schoenbuch, Bolzstrasse 10, 70173 Stuttgart	

## Sunday, March 10

Time	Agenda Item	Responsibility
12:00	<ul> <li>Joint-Team Climate Resiliency Site Visits in the Stuttgart Region</li> <li>*Meeting point: Motel One Stuttgart-Mitte, Lautenschlagerstraße 14</li> <li>→ Walk within Stuttgart (Thomas Kiwitt)</li> <li>→ Scharnhauser Park (Ludger Eltrop)</li> <li>→ Walk within Esslingen</li> </ul>	IREUS, VRS and IER
18:00	<b>Dinner in Esslingen</b> L'Osteria Esslingen, Abt-Fulrad-Straße 2, 73728 Esslingen am Neckar	IREUS

### Monday, March 11

Venue: Room 540 (until noon) + Room 542 (after noon), level 5, Verband Region Stuttgart, Kronenstraße 25, 70174 Stuttgart

Time	Agenda Item	Responsibility
08:30	Coffee and Networking	VRS
09:00	<ul> <li>Welcome notes</li> <li>Thomas Kiwitt (VRS /Verband Region Stuttgart)</li> <li>Andrea Lindlohr MdL (State Secretary, Ministry of Regional Development and Housing Baden-Wuerttemberg)</li> <li>Prof. Jan Hofmann (Dean of Faculty II, University of Stuttgart)</li> <li>Overview of the workshop</li> <li>Prof. Joern Birkmann (IREUS, University of Stuttgart)</li> <li>Prof. James Kinter (George Mason University, VCC)</li> <li>Dr. Dale Medearis (Northern Virginia Regional Commission/NVRC)</li> </ul>	
09:30	<ul> <li>New approaches in climate risk assessment &amp; the application of GIS</li> <li>Joanna McMillan (IREUS / project: ISAP) – Mapping of vulnerable settlement areas and critical infrastructure - Stuttgart Region</li> <li>Rebecca Murphy (NVRC) – GIS Ties to Critical Infrastructure</li> <li>Tobias Möllney (IÖW / project: ISAP) – Quantifying ecosystem services of green infrastructure for climate adaptation</li> <li>Short Discussion (Moderation: Thomas Kiwitt)</li> </ul>	Note: 10 min presentation, 15 min short discussion

10:20	<ul> <li>Renewable energy</li> <li>Ludger Eltrop (IER /University of Stuttgart) – Agri-PV / Communal heat planning / Ludwigsburg</li> <li>Jill Kaneff &amp; Nora Jackson (NVRC) – NVRC Solar map and greenroof map and GMU solar mapping project for impervious surface parking lots</li> <li>Short Discussion (Moderation: Thomas Kiwitt)</li> </ul>	Note: 10 min presentation, 15 min short discussion
11:00	Coffee Break	VRS
11:15	<ul> <li>Flooding and Adaptation – The challenges of flooding for local and regional governments and the support from the scientific/research community</li> <li>Nora Jackson (NVRC) &amp; Dr. Celso Ferreira (GMU) – Flooded roads mapping exercise/FEMA (GMU and NVRC partnership)</li> <li>Alessa Truedinger &amp; Prof. Joern Birkmann (IREUS / project: KAHR) – Excursus: Ahr Valley – Building Back Better</li> <li>Dr. Christoph Hemberger &amp; Thomas Kiwitt (VRS) – Local strategies for climate adaptation</li> <li>Hannes Lauer (IREUS / project: LIRLAP) – Planned retreat as a major future climate change adaptation strategy?</li> <li>Short Discussion (Moderation: Ludger Eltrop)</li> </ul>	
12:45	Lunch (catered)	VRS, IREUS
13:30	<ul><li>Lunch Keynote Talk</li><li>Jamie Chan (The Nature Conservancy)</li></ul>	
14:00	<ul> <li>International comparisons</li> <li>Dr. Dale Medearis (NVRC) – The case study of climate resilient strategies in Fairfax County and Boeblingen</li> <li>Short Discussion (Moderation: Ludger Eltrop)</li> </ul>	Note: 10 min presentation, 5 min short discussion
14:15	<ul> <li>Short introductions into working groups by working group moderators</li> <li><u>Working Group #1: Joint Papers (5min)</u></li> <li>Analyze case study → What improvements can be made to the draft publication on the Fairfax Resilience Plan, KlimaBB and ISAP? What was useful/not useful? Who can benefit from such representations?</li> <li>What are the shared topics for writing (more) joint papers and how might they be structured to realize outcomes?</li> <li>How could the contents/structure look like?</li> <li>What potential funding mechanisms could support this work?</li> </ul>	<ul> <li>#1: Dr. Dale</li> <li>Medearis,</li> <li>Alessa</li> <li>Truedinger,</li> <li>Dr. Christoph</li> <li>Hemberger</li> <li>#2: Prof. Joern</li> </ul>
	<ul> <li>Working Group #2: Development of research proposal for Drog/NSP grant, topic finalization and distribution of responsibilities (10min)</li> <li>Which linkages between our (different) research topics could be developed?</li> <li>What are the shared opportunities for applied research with easy- to-access funding and with mutually beneficial outcomes?</li> </ul>	Birkmann, Dr. Ludger Eltrop, Prof. James Kinter, Thomas Kiwitt

	<ul> <li>What potential funding mechanisms will support this work?</li> <li>For which overarching topic is an application (DFG-NSF) possible?</li> <li>What could a rough structure for an application look like and who is responsible for what until finalization?</li> <li>How can we link science and practice?</li> </ul>	
15:30	Coffee Break and short walk	VRS
16:10	Sustainable spatial development and UMLANDSTADT	
	Alice Schröder (Germany's central environmental authority (UBA))	
16:20	Continuation of Working Groups #1 and #2	see above
17:20	Wrap up	Dr. Dale
		Medearis &
		Prof. Joern
		Birkmann
19:00	Dinner	VRS
	Tauberquelle, Torstraße 19, 70173 Stuttgart	

### Tuesday, March 12

### Venue: Room 540, level 5, Verband Region Stuttgart, Kronenstraße 25, 70174 Stuttgart

Time	Agenda Item	Responsibility
08:00	Coffee and Networking	VRS
09:00	<ul> <li>Welcome notes - The role of international cooperation in the science-practice interface</li> <li>Prof. Manfred Bischoff (Vice Rector for Research and Early Career Researchers, University of Stuttgart)</li> <li>Dr. Michael Muenter (Director General, Ministry of the Environment, Climate Protection and Energy Sector Baden-Wuerttemberg)</li> <li>NN / BMBF Federal Ministry of Education and Research or DLR Projektträger - TBC</li> </ul>	5-10 min each
09:20	Review of Day #1 and Overview of Day #2 Q&A	<ul> <li>Prof. Joern</li> <li>Birkmann</li> <li>Prof. James</li> <li>Kinter</li> <li>Dr. Dale</li> <li>Medearis</li> <li>Thomas</li> <li>Kiwitt</li> </ul>
09:30	<ul> <li>Mapping the Energy Transition in Baden-Wuerttemberg</li> <li>Dr. Ludger Eltrop (IER) – Energy Transitions (title TBD)</li> </ul>	10min presentations

	<ul> <li>Extreme Heat and Adaptation</li> <li>Dr. Dan Vecellio (GMU): Extreme Heat</li> <li>Nimra Iqbal &amp; Dr. Marvin Ravan (IREUS / project: urbisphere) – Perceived heat and adaptation options in the city of Stuttgart</li> <li>Short Discussion (Moderation: Joern Birkmann)</li> </ul>	
10:10	<ul> <li>Accelerating Research Translation &amp; Generating Research Material</li> <li>Leah Nichols (GMU) – NSF-Grant Sustainable Earth</li> <li>Short Discussion (Moderation: Joern Birkmann)</li> </ul>	Note: 10 min presentation + 10 min short discussion
10:30	Coffee Break	VRS
10:45	<ul> <li>Working Groups #2 and #3</li> <li>Continuation of <u>Working Group #2</u></li> <li>And start of <ul> <li><u>Working Group #3 "Research Translation and the Science-Practice</u></li> <li><u>Interface"</u></li> </ul> </li> <li>What are the formats for building capacities? What tools are we using? How do we get into a routine?</li> <li>What are shared experiences between the two countries/regions in terms of providing information and analysis results about climate risks that are usable in practice? What are shared experiences in terms of using such information for planning?</li> <li>What are lessons learned from the ISAP tool that are relevant to other regions?</li> <li>How do we address communities? What factors are relevant for success?</li> </ul>	<ul> <li>#2: Prof. Joern Birkmann, Dr. Ludger Eltrop (TBC), Prof. James Kinter, Thomas Kiwitt (TBC)</li> <li>#3: Leah Nichols, Joanna McMillan</li> </ul>
12:45 13:30	Lunch Continuation of Working Groups #2 and #3	IREUS see above
14:30	Coffee Break and short walk	VRS
15:00	Overview of the results of Working Groups #1, #2 and #3 & Distribution of further work	Reporters of the breakout groups
15:45	Discussion: Joint teaching modules and materials/ Case studies for students/ Seminars	Moderation: Prof. Joern Birkmann + Prof. James Kinter
16:30	<ul> <li>Green infrastructure: Watercourse restoration</li> <li>Allie Wagner (NVRC) – NFWF grant award funding freshwater mussel reintroduction into successful stream corridor restoration project streams in Prince William County to improve water quality and biodiversity</li> <li>Christine von Raven &amp; Yannik Plachtzik (VRS) - Neckar-Island Short Discussion (Moderation: Thomas Kiwitt)</li> </ul>	

17:00	Wrap up & Follow up Activities	- Prof. Joern
	a) Visit Delegation October 2024	Birkmann
	b) Visit US 2025	- Prof. James
	c) Proposal	Kinter
	d) Paper	- Dr. Dale
	e) Joint teaching activities	Medearis
		- Dr. Ludger
		Eltrop
		- Thomas
		Kiwitt
18:30	Dinner	IER, IREUS
	Taverna Sultan Saray, Lautenschlagerstraße 20, 70173 Stuttgart	

#### Workshop Location (11-12 March 2024)

