



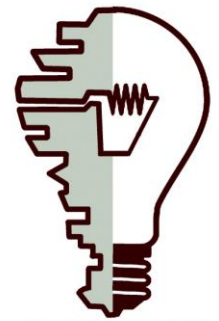
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EVALUATE

Energy Vulnerability and Urban Transitions in Europe (EValUaTE)

Professor Stefan Bouzarovski, Centre for Urban Energy and Resilience, University of Manchester



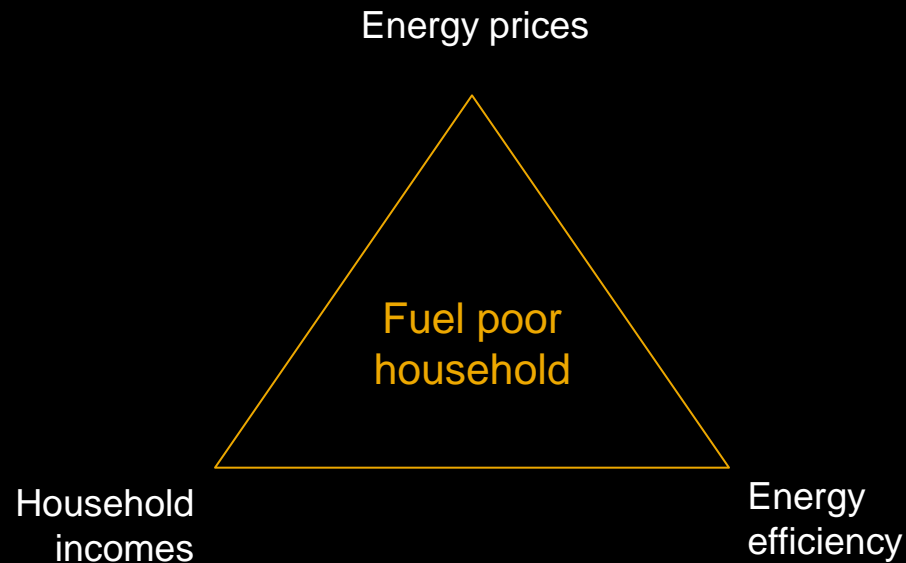
Starting points



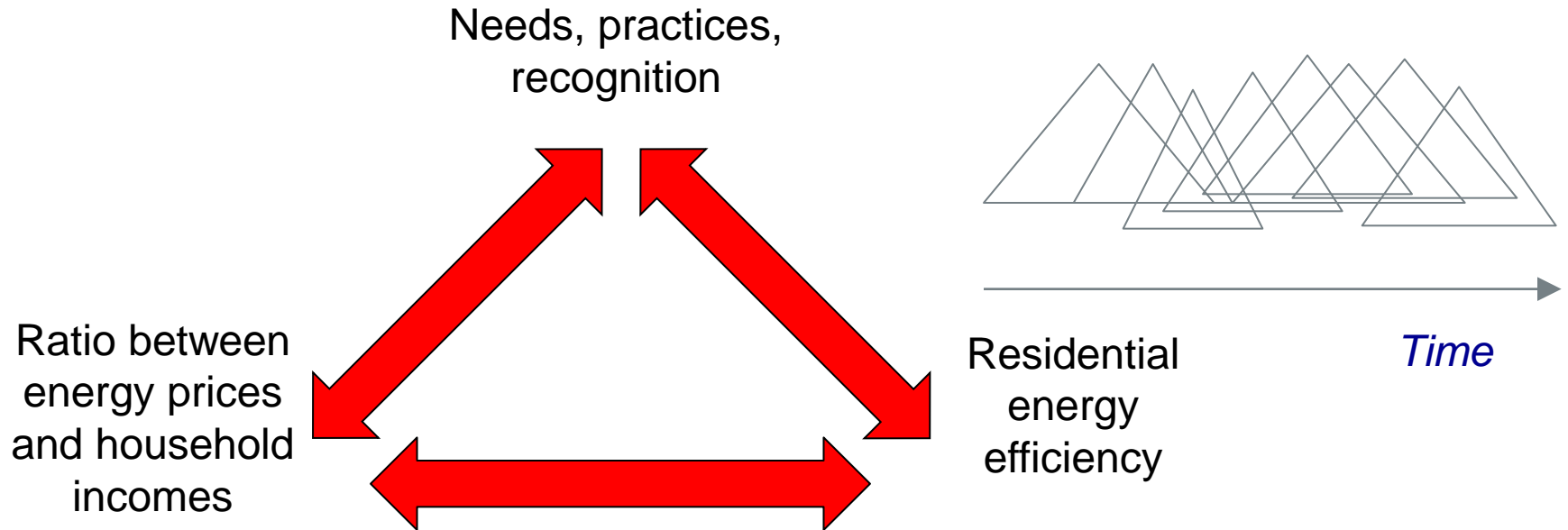
- PROJECT AIM: To **establish the driving forces of urban energy poverty** in the post-socialist states of Eastern and Central Europe, and to determine **which types of households are vulnerable to the condition**
- Energy (or fuel) poverty is the **inability to achieve energy services in the home** up to a 'socially- and materially-necessitated level' (Bouzarovski et al. 2011)
- May affect more than **100 million people** in Europe (Bouzarovski 2013)
- Particularly pronounced and **on the rise** in Eastern and Central Europe
- **Extremely under-researched as a whole**; urban context is particularly unknown

Energy/fuel poverty

A lack of affordable warmth in the home (based on Boardman 2001)



From poverty to vulnerability



'Trapped in the heat' (Tirado-Herrero et al. 2012)

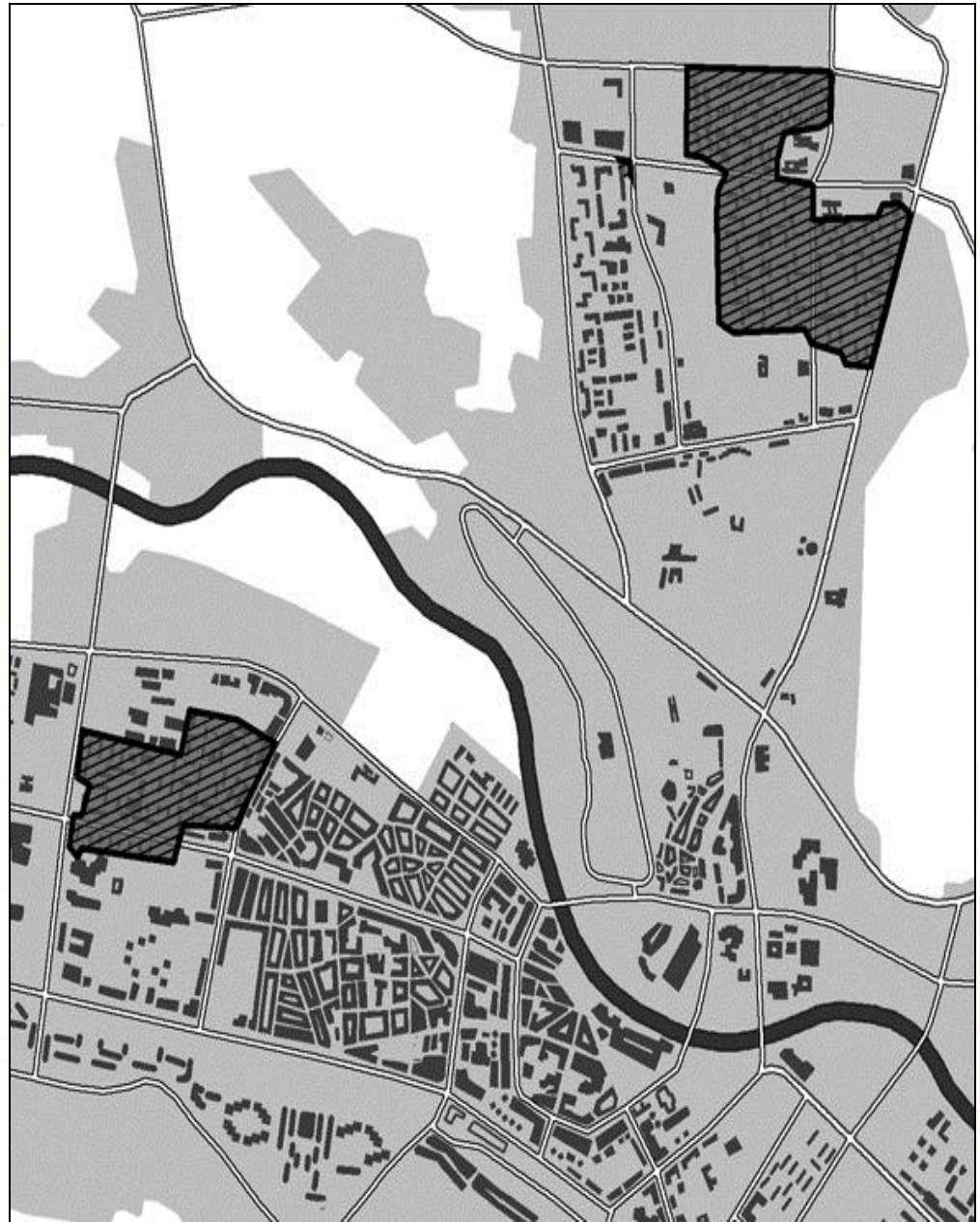
Everyday life – images, artifacts, norms (Shove 2006)

Networked assemblages (Harrisson and Popke 2011)

Recognition, procedure and distribution (Walker and Day 2012)

An urban and neighbourhood level approach

- Focusing on dynamics within two inner-city neighbourhoods, while ...
- Exploring national and city-level processes
- Local support (Gdansk University, Charles University, CEU, Ss. Cyril and Methodius University)



Institutions

What is the role of state policy and energy regulation in creating vulnerability to energy poverty?

- Survey of **secondary written evidence**
Two sets of interviews with at least 50 policy-makers, business representatives and NGO activists in each country
- Strategic-relational approach, Governance mapping

Households

What are the socio-demographic features of urban households vulnerable to energy poverty?

- Collection of **dedicated state statistical data on household expenditure** and well-being
- Local surveys** with a target of 600 households per city
- Energy diaries, semi-structured interviews and audits** with at least 60 households per city
- Statistical modelling** (Multiple regressions and cluster analyses)
- Qualitative coding**, compensating variation, social network mapping, space syntax

Buildings

How do residential energy efficiency and the built structure of the home cause energy poverty?

Six separate datasets to be created

Time

Y1

Y2

Y3

Y4

Y5

Data gathering

Literature review, gathering
of secondary written
evidence and national
statistical data
Expert interviews
Identification of study areas

Questionnaire surveys

In-depth household
interviews, energy diaries
and efficiency audits

Gathering of secondary written evidence
and national statistical data
Expert interviews

Analysis/outputs

Analysis of data;
Papers on energy
vulnerability trends
and governance;
policy briefs.

Analysis of data;
Papers, briefs on
patterns/experiences
of poverty.

Cumulative
analyses; Papers,
reports, monograph,
edited volume; policy
briefs.

Events

Workshop
, Brussels

Stake-
holder
workshops
in study
cities

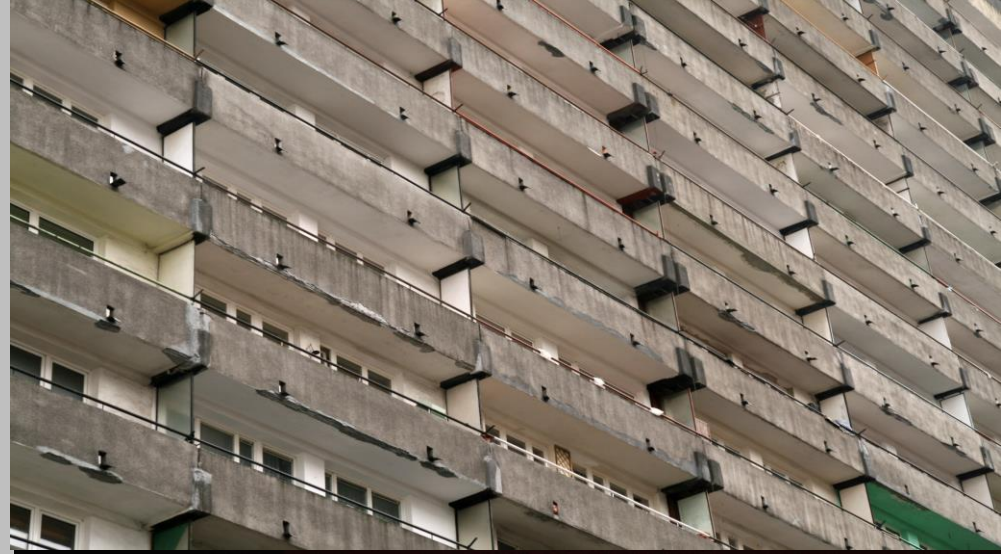
Final
project
conference

The team



- PI: Professor Stefan Bouzarovski (80%)
- RFs: Dr Sergio Tirado-Herrero (100%), Dr Saska Petrova (20%)
- ***International scientific advisory board*** (Professor Michael Bradshaw, Dr Matthias Braubach, Professor Mark Gaterell, Professor Richard Green, Professor Karen Rowlingson, Professor Iwona Sagan, Professor Luděk Sýkora, Professor Diana Ürge-Vorsatz, Professor Iwona Sagan)
- ***Energy vulnerability action group*** (IUT, EU Fuel poverty network, CECODHAS)

Impacts and dissemination



- Blog/ policy briefs/ stakeholder workshops/ conferences
- Creating a model of urban energy vulnerability in Eastern and Central Europe
- Input into EU/national/local level policies: Improved indicator frameworks and support mechanisms at the urban scale



THANK YOU AND WELCOME

urban-energy.org

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#energyvulnerability