

The logo for the SET PLAN Conference 2015 is contained within a white right-angled triangle. The text is stacked vertically: 'SET' and 'PLAN' are in a large, bold, black sans-serif font, 'Conference' is in a smaller black font, and '2015' is in a medium-sized black font. Below the year, the tagline 'Research, innovation and competitiveness for the Energy Union' is written in a smaller black font. The triangle is outlined in a thin blue line.

**SET  
PLAN**  
Conference  
2015

Research, innovation  
and competitiveness  
for the Energy Union

## SMART GRIDS, STORAGE AND DEMAND RESPONSE

Franziska Mohaupt

---

### SESSION 3

Participation of the consumer in the energy transition

Tuesday 22 September 2015

## Content

- Project background and approach
- Market perspective
- Social perspective
- How can smart-grid innovations successfully be implemented?
- Need for innovation

# The InnoSmart project

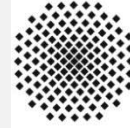
**SET PLAN**  
Conference  
2015

DIALOGIK



| i | ö | w

INSTITUT FÜR ÖKOLOGISCHE  
WIRTSCHAFTSFORSCHUNG



**Universität Stuttgart**

Institut für Arbeitswissenschaft und  
Technologiemanagement IAT



**InnoSmart**

Partizipative Gestaltung von verbrauchernahen  
Innovationen für Smart Grids

— EnBW



 **MVV** · Energie

## Challenges of the energy transition

Technical, e.g. volatile  
power supply

Social, e.g. participation,  
fair access

Entrepreneurial, e.g.  
development of new  
business models

How can these challenges  
successfully be implemented?

Smart Grid → key  
component

Consumer → Prosumer

Energy supplier → key  
actors

## Challenges of the energy transition

Technical, e.g. volatile  
power supply

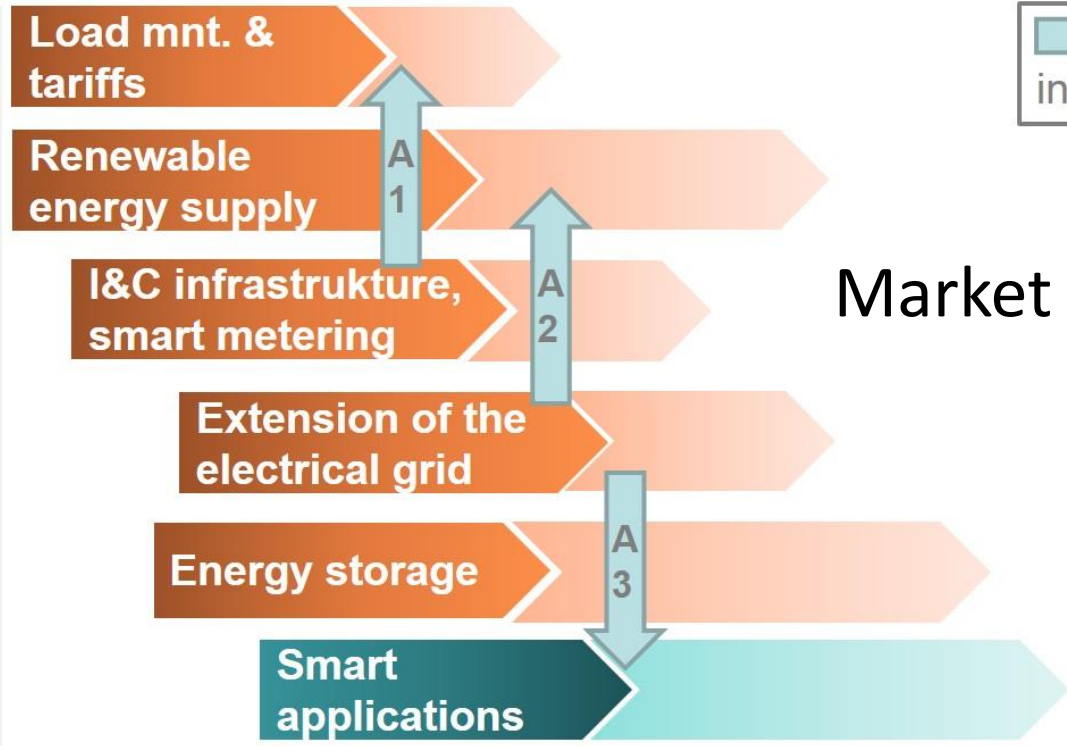
Social, e.g. participation

Entrepreneurial, e.g.  
development of new  
business models

Smart Grid →  
component

How can smart-grid innovations  
successfully be implemented?

Energy supplier → key  
actors

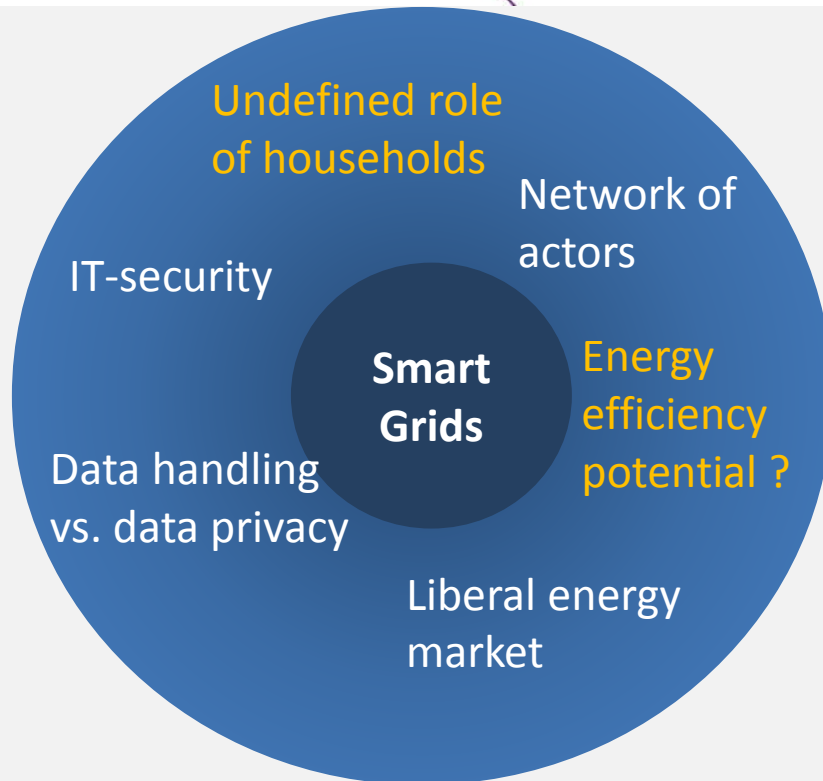


A → dependence of innovation fields

## Market perspective

# Social-ecological perspective





# User integration in innovation processes

Innovations  
for the energy  
transition

**User**

Daily routines

Barriers

Requirements

Ideas for new  
products & services

Dialogue, feedback

**Corporations**

Complexity

Future  
requirements

New business  
models

How can smart-grid innovations  
successfully be implemented?

User integration

Innovation processes

Integration of relevant  
stakeholders

**Innovation processes in  
society as a whole**

# Concluding remarks

## Need for innovation

technological	Energy saving technologies	IT-Security & data management	Integration of smart innovations in an overall system
social	Integration of user perspective	Energy saving behaviour	„energy fairness“
institutional	Cooperation within and between countries	Business models <> legal framework	Models for grid maintenance

# SMART GRIDS, STORAGE AND DEMAND RESPONSE

Franziska Mohaupt  
Institute for ecological  
economy research

[Franziska.Mohaupt@ioew.de](mailto:Franziska.Mohaupt@ioew.de)

**SET  
PLAN**  
Conference  
2015

**myenergy**  
Luxembourg



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère de l'Économie



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère du Développement durable  
et des Infrastructures

Département de l'énergie



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère du Logement

With the  
support of



Co-funded by  
the European Union



Presidency of  
the Council of the  
European Union

GRAND DUCHÉ DE  
**luxembourg**

This conference has received funding from the European Union Horizon 2020 research and innovation programme under the grant agreement No 681163