

ISGAN Annex 7

Smart Grids Transitions

On institutional Change

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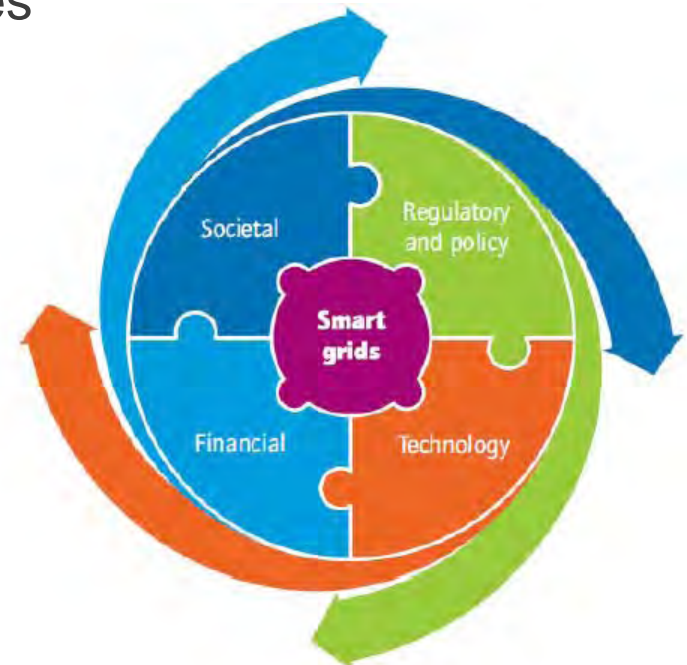
IEA Networking Event, Vienna, 15 October 2014

Aims of Annex 7

- Support policymakers in research, technology and innovation (RTI) engaged in the build-up of smart electricity grids
- Build-up and maintain an inter- und transdisciplinary network of researchers and practitioners
- Provide expertise from the social sciences for guiding societal and institutional transition processes

Focus of Annex 7

- Socio-economic complexity of the energy system
- Institutional change and orchestration of RTI policy measures



Q: IEA Smart Grid Roadmap 2011

Conceptual framework

“Hardware“

Smart Grid Technologies

generation, transmission, distribution, storage, supply, load

Institutional Structures

sectoral, corporate, public, civil

Smart Grids Transitions

“Software“

Use Practices, Service Provision

producing, consuming, moving,

Governance Processes

anticipating, adapting, agile acting

(socio-) technical

(socio-) economic, political

Program of Work

- Task 1: Transition Processes and Pathways
 - Sub-Task 1.1: Learn from past transitions
 - Sub-Task 1.2: Design and evaluate transition pathways towards alternative socio-technical energy systems built on smart grids
 - Sub-Task 1.3: Understand and model the changing roles, influences and opportunities of large and small stakeholders, including civil society

- Task 2: Smart Reflexive Governance
 - Sub-task 2.1: Develop a design for a Smart Grid Foresight pilot
 - Sub-task 2.2: Develop a Strategic Research Agenda for Smart Governance - Investigate the evidence base for a Smart Grid Foresight
 - Sub-task 2.3: Systematically collect information and analyze policies supporting socio-technical transitions

Activities, output and status (1)

- Sub-Task 1.1 (Learn from past transitions)
 - Policy brief planned (nomination missing)
 - Systematics of Smart Grids Transition Pathways (Geert Verbong, Eindhoven University of Technology, NL)
- Sub-Task 1.2 (Design and evaluate transition pathways ...)
 - Two policy briefs in progress (Erik Laes, VITO, BE)
 - Barriers and enablers of ‘smart’ energy behavior (i.e. active demand) for residential end users
 - Empirical evidence from 32 cases all over Europe on the “Dos and Don’ts” of end user engagement in smart grid projects
 - Three policy briefs planned (nomination missing)
 - Energy Transition Scenarios (Andrea Ricci, ISIS, IT)
 - Socio-technical key issues for a sustainable energy-transitions (Harald Rohracher, Linköping University, SE)
 - Main findings of the German E-Energy Program (Ludwig Karg, B.A.U.M. Consult, DE)

Activities, output and status (2)

- Sub-Task 1.3 (Understand and model the changing roles, influences and opportunities ...)
 - AIT-project INFRASET (2012-14)
 - Transition based on investment in distributed electricity production, using agent-based modelling techniques. Focus on effect of policy interventions
 - PhD study (R. Seidl, University of Graz / AIT)
 - Energy system transitions: modelling adoption & diffusion towards a smarter electricity system (2013-15)
 - Conference contributions
 - IST 2014 (August 2014, Utrecht, NL), EMCSR 2014 (April 2014, Vienna, AT)
 - IAS-STS Graz 2014 (May 2014, Graz, AT)
 - AIT Contribution to the “Transition Modelling Network”
 - Universities and research institutes from Australia, Austria, Finland, Germany, The Netherlands, Norway, Switzerland, Turkey, UK
 - Two position papers: prospects of modelling for better understanding the transition of large socio-technical systems and for actively supporting the energy transition towards sustainability (upcoming autumn 2014)

Activities, output and status (3)

- Sub-task 2.1: Developing a design for a Smart Grid Foresight pilot
 - AIT is conducting a Smart Grid Foresight in Austria for developing a SRA including societal and institutional issues (end of 2014)
 - Policy brief is being prepared for the next ISGAN ExCo meeting in 2015
- Sub-task 2.2: Developing a Strategic Research Agenda for Smart Governance ...
 - AIT organized a round table discussion on a Strategic Research Agenda for Smart Grids Transition (ISGAN ExCo Meeting Shanghai in 2014)
- Sub-task 2.3: Systematic information collection and analysis of policies supporting socio-technical transitions
 - AIT conducted a survey with ExCo-members on present policy initiatives
 - Preliminary results were discussed at the Shanghai ExCo Meeting)
 - Final results due at next ExCo meeting in 2015

Participants to the Annex 7

Country	Name	Organization
Austria	Klaus Kubeczko Manfred Paier et al.	AIT Austrian Institute of Technology GmbH, Innovation Systems Department (Vienna)
France	Regine Belhomme	EDF R&D, Economic and Technical Analysis of Energy Systems Department (Paris)
Belgium	Erik Laes	VITO, S3C Project
Italy*	Andrea Ricci	ISIS Institute of Studies for the Integration of Systems (Rome)
The Netherlands*	Geert Verbong	Eindhoven University of Technology, Department of Technology Management, Technology and Sustainability Studies (Eindhoven)
Sweden*	Harald Rohrer Björn Sanden	Linköping University (Linköping) Chalmers University (Gothenburg)
Germany*	Ludwig Karg	B.A.U.M. Consult AG (Munich)
Canada*	Ian Rowlands	University of Waterloo, Waterloo Institute for Sustainable Energy (Waterloo)
Australia**	Mark Paterson	Future Electricity Partnerships , CSIRO Energy Flagship
United States*	Tbd.	U.S. Department of Energy

* Notice of Participation pending

** Expressed interest

LinkedIn Discussion Group – SMART GRID TRANSITION

- Forum dealing with smart grid deployment (launched Sep 2014)
 - in the wider context of a long-term socio-technical transition towards a low-carbon economy
- Open to:
 - smart grid policymakers, decision-makers, researchers, economists, analysts, students, journalists
 - fellows at professional, technical & scientific societies; national academies, government, foundations & university programs
- Current issues
 - socio-technical transition of energy systems based on Smart Grid solutions, policies, institutions, law, regulation, strategy, models, research, reflexive governance and orchestration processes
 - Not covered: technological issues without explicit socio-economic and institutional context

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SMART GRID TRANSITION

15 members

Me

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ANNEX 7

SMART GRID TRANSITION - ON INSTITUTIONAL CHANGE

Members of this Group



Kubeczko Klaus
Senior Researcher and Expert A
[Unfollow Kubeczko](#)



Your Activity

Start a discussion or share something with the group...

- Popular
- Recent



We aim to establish and maintain a network of researchers and practitioners dealing with smart grid deployment in the wider context of a

Your group contribution

Start by commenting in a disc
participants get 4x the number



Finding a

Contact

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