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**IRS AKTUELL**

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## Research on the Energy Transition

**Centralised or Decentralised** – Governing the Energy Transition

**Actors, Institutions, Space** – IRS Perspectives on the Energy Transition

**Berlin and Brandenburg** – Findings from the Region

# Actors, Institutions, Space – IRS Research on the Energy Transition

In the research programme 2012-2014, the IRS department “Institutional Change and Regional Public Goods” has tackled one of the biggest socio-political challenges facing Germany: the transition from fossil and nuclear energy production systems to renewable energy sources. The spatial reconfiguration of energy production, supply and use also implies changes to the actors and institutions involved. In light of these transformations, municipalities and regions are confronted with the task of integrating energy as well as other public goods into a common local and regional strategy.

Experiences in Schlalach and Feldheim have been encouraging. In both of these Brandenburg villages, the energy transition has opened up new arenas for action that have been seized upon by citizens as well as local politicians. Apart from local network operators and a biogas plant that cushions fluctuations in production, citizen-owned wind farms have been found-

tably, they have found tendencies to disregard structurally weak municipalities. Such municipalities struggle to stand up to the “big players” in the energy business, which have recently become an ever more active force in the field of renewable energies. In this case, the integration of goals such as climate protection, energy supply, landscape protection, tourism, region-

**Technical transformations in the field of energy production have altered the landscape of actors and institutions and, as a consequence, have allowed for new forms of participation and co-determination.**

ed, and whose production of electricity far exceeds local consumption. Technical transformations in the field of energy production have altered the landscape of actors and institutions and, as a consequence, have allowed for new forms of participation and co-determination. “This change constitutes one of the foci of research on the energy transition conducted at the IRS”, says Dr. Timothy Moss, head of the department “Institutional Change and Regional Public Goods”.

The more researchers of this department have devoted themselves to the analysis of these processes, the more they have called into question the attractive image of a “creative region” (Gestaltungsregion) that is characterised by increasing opportunities for participation, ever more small-scale patterns of production and a diversity of providers. Apart from detecting substantial local political conflicts on energy issues, IRS researchers have observed implementation problems related to the energy transition. Most no-

al economy and regional identity must be considered a Herculean task. “By no means do the major instruments of the energy transition – for instance the fixed feed-in compensation – lead to a comparable nationwide implementation at the local scale”, concludes Moss. “Instead of a clear pattern, we can detect enormous disparities once we take a look at how municipalities and regions react to these circumstances.” For this reason research conducted within Moss’ department focuses on spatial contextual conditions, on the particular interplay of local actors and institutions, as well as on the integration of local and regional public interest objectives. In this manner, researchers gain an insight into how the German “Energiewende” project has become differentiated into hundreds of individual projects: Local energy transitions – be it in Schlalach or Feldheim, in rural areas or medium-sized towns, in Brandenburg or Baden-Württemberg – follow their own logics, have their own success stories, and entail specific conflicts.

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## Centralisation and Decentralisation in the Energy Transition

According to the most recent technical knowledge, a growth in the number of electricity generating plants will be required if the traditional energy producers (coal and nuclear power) are to be substituted by wind turbines, photovoltaic power plants and biogas plants. At first glance, this is reason enough to interpret the energy transition as a move away from centralised energy production. Indeed, the energy transition is often hastily interpreted as a catalyst for citizen participation as well as an opportunity for influence to be exerted at a local and regional scale. It would, however, be a little short-sighted to understand the project simply in terms of decentralisation through new technologies of energy production. Instead, the principles of both centralisation and decentralisation in politics, energy industry, technology and civil society are apparent. IRS research on the energy transition focuses on the structure and dynamics of this context, probing the concomitant opportunities and conflicts which emerge.

“There are two key features of the energy transition: the mainstreaming of decentralised technologies of energy production and the efficacy of centralised political provisions”, says Dr. Timothy Moss, head of the IRS research department “Institutional Change and Regional Public Goods”. The department’s research is thus conducted via a perspective that conceives centralisation and decentralisation in the energy transition as different determinants of one and the same process rather than as opposites. Ever since the Fukushima disaster, national political provisions have largely steered the project – and in some

cases, they have even been further tightened by the German “Länder”, whose aim has been to combine regulative planning and market incentives. While the regulative standards are mostly meant to support grid extensions, incentives like the feed-in remuneration pursue the goal of promoting the expansion of renewable energy production. “In recent years, this package of measures has led to a situation where the installation of new renewable production plants has become highly profitable and come to attract the attention of both the industry’s big players and new large-scale investors”, Moss concludes.

**“Due to their large number and their interconnectedness, decentralised technologies are on their way to becoming the new Large Technical Systems of energy industry.”**

On this context, municipalities and regions are required to implement the energy transition on-site. “Local actors need to integrate goals related to fields like ecology, energy supply, landscape protection, tourism, regional economy, and regional identity”, explains Ludger Gailing, who is in charge of the

department's institute-funded project "Public Goods and the Spatial Dimensions of Energy Transitions: Between Materiality and Power".

According to Gailing, an integration of these goals poses severe challenges for municipalities and, moreover, provides good cause for the centre to take account of the necessity of integrating local action plans. Hence, there is a considerable discrepancy between the regional scope for action enabled by the energy transition and the actual situation on the ground. It usually takes a high level of eco-

nomic resources, good networking and civic involvement to effectively exercise political power and to seize development potentials. "The appealing image of "creative regions" is very fragile – and in Germany, it exists in a spatially highly uneven pattern", Gailing states. He points out that many regional actors in, for example Baden-Württemberg, Rhineland-Palatinate, or parts of Schleswig-Holstein, have profited from the energy transition and have become active stakeholders themselves. By contrast, perceptions of colonisation and the emergence of related con-

flicts have sometimes been apparent in a number of peripheral parts of Brandenburg or Mecklenburg-Hither Pomerania.

At the heart of the conflicts, we can find the problem that the allegedly decentralised spatial character of renewables cannot always be detected at the level of institutions and actors. Regionally/locally-based owners are increasingly in competition with actors from outside. Well-financed groups of investors sometimes perform an aggressive search for sites that appear suitable for the installation of plants.

#### EXCURSUS ON THE LEAD PROJECT



### Public Goods and the Spatial Dimensions of Energy Transitions: Between Materiality and Power

Throughout recent research programmes, the department "Institutional Change and Regional Public Goods" has focused on exploring landscapes and infrastructures as public goods. With the research programme 2012 – 2014, and the three-year institute-financed lead project contained therein, researchers have focused on the energy transition as a new research field and have, at the same time, broadened the theoretical and conceptual basis of their research. "The transformation of energy systems has been a rewarding subject for us. Here at the IRS, we have the particular capacity to analyse energy as a public good, including its institutional set of rules. Our spatial research perspective helps us better grasp the reconfiguration of urban, rural and regional infrastructures and landscapes", says project leader Ludger Gailing.

Researchers have followed a three-step process. First, they translated their previous knowledge on regional public goods into the research field of energy and then proceeded by analysing the spatial configuration of the energy transition between the poles of centralisation and decentralisation. Both of these steps have been documented in IRS working papers (see page 11 in this issue). Presently, the department is concerned with questions related to "power" and "materiality" and their role in research on institutions and governance. Thus far, both aspects have often been deliberately ignored by these research strands. "We will, however, be unable to fully grasp the energy transition as a process as long as we keep disregarding questions of power or materiality such as technical infrastructures or cultural landscapes", Gailing explains. The project team analyses theories related to the socio-materiality of spatial configurations (e.g. "assemblage"-concepts, political ecology, discourse theories, human-nature theories). Moreover, the team is aiming to develop the institutional and analytical aspects of transition research by drawing on path dependency, context-shaping and spatial production literatures. The team also explores the extent to which concepts like de- and repoliticisation and governmentality can make a contribution to a better understanding the energy transition. In this attempt, the department cooperates with the IRS Department for Historical Research so as to profit from its expertise in theories of power. Subsequently, the different strands of theory will be compared. This theoretical work does not, however, take place in a vacuum: five case discussions and focus group meetings will be held in 2014 to test the theories' significance for understanding the energy transition.

"At the end of the project, we aim to provide an answer to the question of which theoretical approach appears most apt to help us understand the energy transition", Gailing concludes. "Future projects will also profit from our work, as they can utilize our findings as building blocks for their own research."

www.irs-net.de/forschung/forschungsabteilung-2/leitprojekt.php



Decentralised energy generation plants are therefore not always matched by a decentralisation of the landscape of actors and institutions.

As soon as wind turbines, solar collectors, and biomass power plants are turned into instruments for external investors, any positive local effects attributable to decentralised energy production can disappear. “What money can be retained within the municipality? Who are the local actors to profit from an installation? Where are the production plants manufactured? For the municipalities, these are essential questions”, says Gailing. “We have seen extreme cases, where inves-

to a profound spatial reconfiguration of energy production, supply and use. As the concomitant emergence of conflicts indicates, this process also entails a redefinition of power relations. Thus the question of power (in terms of decision-making authority, discursive authority and profit sharing) represents another important focus of the department’s lead project on the energy transition.

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**“We can clearly observe that power relations in the energy sector are currently undergoing considerable change – for instance if we consider the power balance between the push for centralised leadership from the federal government and the Federal Network Agency on the one hand, and the sensitivity to differences in context shown by spatial planning at a municipal and “Länder”-scale on the other hand.”**

tors leased agricultural land on a large scale so as to grow maize for the production of biogas, or where the local population did not profit from the booming onshore-wind farms. This is bound to stir up local conflicts. Hence, responsible energy transition policies need to deal with these realities of implementation.” The technical reorganisation of energy systems leads

Network Agency on the one hand, and the sensitivity to differences in context shown by spatial planning at a municipal and “Länder”-scale on the other hand”, Moss explains. Moreover, power relations are currently being rearranged between bigger and smaller electricity producers, cities and their respective surroundings, or even within municipalities.

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## The Energy Transition and Climate Change – Practical Experiences of Designing Cultural Landscapes from Berlin and Brandenburg

As a result of the energy transition, the cultural landscapes of many German regions have been subject to profound changes. Owing to the economic incentives provided by the Renewable Energies Law (EEG), these changes have gained a considerable momentum of their own. Brandenburg has been affected particularly by these changes, due to its comprehensive expansion of renewables. In cooperation with the Office for Landscape Communication (“Büro für Landschaftskommunikation”) Bad Freienwalde, IRS researchers have embarked on a project on behalf of the Joint Spatial Planning Department Berlin-Brandenburg. From the perspective of cultural landscape-related arenas of action, they deal with the question of how local actors can influence and structure the often conflict-laden processes of developing renewable energies and transforming cultural landscapes. To this end, they have initiated dialogue processes on challenges and opportunities for action with stakeholders in the regions of Prignitz and Barnim who aim to make a contribution to developing cultural landscapes against the backdrop of the energy transition and climate change.

The energy transition predominantly affects rural areas. The installation of wind turbines, solar parks of biogas plants and the cultivation of renewable resources do not merely require space, they also have a visible impact on the landscape. However, the groups of persons affected by and those who actively involved in the development of renewable energies are not always identical. For this reason, formal planning processes need to be supplemented by informal approaches and cooperation processes to open up new opportunities for action.

The Joint Spatial Planning Department Berlin-Brandenburg has recog-

nised the need for action arising from climate change and the energy transition and has thus decided to develop a “Joint Land Use Planning Concept for Energy and Climate in Berlin and Brandenburg” (GRK) as an informal planning instrument. The IRS deals with the third part of the GRK and, in doing so, provides expertise drawn from its longstanding research on cultural landscapes as well as current projects on the energy transition and adaptation to climate change. Two members of the IRS department “Institutional Change and Regional Public Goods”, Andreas Röhring and Frank Sondershaus, have examined specificities of cultural landscapes,

constellations of spatial problems, and existing networks as well as collaborative structures in relation to two illustrative regions, Barnim and Prignitz.

In cooperation with the Office for Landscape Communication, Röhring and Sondershaus organised workshops, the aim of which was to initiate regional dialogues on specific opportunities for action in the face of challenges induced by climate change and the energy transition. Thinking of collaborative cooperation within cultural landscapes as arenas of action, they aim to achieve modes of development that are well adapted to the specificities of these landscapes

and conducive to improving regional participation.

The opportunities provided by such a course of action consist in the integrative potential of cultural landscapes. In the case of the highly diverse cultural landscape of the region of Barnim (which stretches from the urban spaces of Berlin to rural areas in Brandenburg), the potential for integration remains under-developed. "The example of Barnim clearly illustrates that the balancing of burdens between spaces with a high and a low density of regenerative power generation plants is an issue of great importance", reports Frank Sondershaus. Accordingly, compensation measures may e.g. occur in the form of investments in landscape architecture and, by this means, create a positive impact on the fields of tourism and recreation, environmental protection and agriculture. Dialogue processes in cultural landscapes as arenas of action have been shown to be an appropriate instrument to negotiate such cross-sector measures.

In fact, cooperation between existing organisations (e.g. "Regionalpark Barnimer Feldmark", "Naturpark Barnim", and key actors like the Barnim Energy Society) can help to open up new opportunities for exerting influence. "Conditions in the region of Barnim are not that bad at all. There are already functioning cultural landscapes as arenas of action as well as key actors who also deal with projects related to climate and energy", Sondershaus sums up. "Still missing, however, is cooperation beyond administrative boundaries and the development of a comprehensive Barnim-based consciousness." According to Sondershaus, the latter issue is of particular importance – especially since the region of Barnim is a transitional landscape located between Berlin and Brandenburg and is therefore perceived in very heterogeneous ways.

According to Andreas Röhring, experiences in the region of Prignitz differ

clearly from those in Barnim. In the case of Prignitz, the open agricultural landscape has been transformed into an "energy region" characterised by wind power plants, yet also by large biogas and photovoltaic power plants, whose energy production far exceeds its energy consumption. In the light of an insufficient degree of economic participation, Prignitz' stakeholders have, however, thus far experienced their region mainly as an "installation landscape" for external investors, and tend to highlight the resulting conflicts and problems with acceptance. "Unlike in Barnim, we came upon a pronounced and historically rooted regional identity in Prignitz. In fact, arenas of action for regional economic and rural development, environmental protection, and tourism all build on this long-established identity in different ways. Within these existing arenas of action, renewables have, however, only been rudimentarily addressed so far", Röhring points out. This leads to the question as to how a cross-linkage of existing arenas of action and an inclusion of additional stakeholders within this cultural landscape can help to develop a joint articulation of interests and contribute to turn this energy landscape into an "configuring landscape", which at the same time succeeds in improving regional participation.

The examples of Prignitz and Barnim have demonstrated that – owing to the differing ties of spatial identity – cultural landscapes constitute a very fitting context for analysing the regionally specific challenges associated with climate change and the development of renewable energy. Cultural landscapes can thus also help us raise awareness of these problems. The future will offer opportunities to facilitate regional participation, but also chances to create a better understanding of energy landscapes. Furthermore there will be new options for designing and actively shaping cultural landscapes so as to purposefully exert influence on (and improve the acceptance of) the transformation of cultural landscapes.

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According to Röhring and Sondershaus, regional actors will, however, depend on political and institutional support if they are to seize these opportunities. Preliminary attempts at cooperation already exist at the level of regional planning, particularly with their regional energy concepts, which could be invigorated in the implementation phase by means of spatial- and agency-oriented cooperation processes.

Further information on the project:  
[gl.berlin-brandenburg.de/energie/grk-teil3.html](http://gl.berlin-brandenburg.de/energie/grk-teil3.html)





## IRS Research on the Energy Transition

As part of the research programme 2012 – 2014, the IRS department “Institutional Change and Regional Public Goods” realigned its research profile by placing more emphasis on “energy”. Since then, its researchers have begun to attract third party funded projects so as to complement their department’s profile in terms of both method and content. Within a short space of time, a portfolio of projects has emerged, all of which focus on different aspects of the energy transition (e.g. the question of how to solve energy-related political conflicts) or plan to conduct place-specific studies, especially in Berlin and Brandenburg.

### Basic Research

At the heart of the lead project “Public Goods and the Spatial Dimensions of Energy Transitions: Between Materiality and Power”, we can find theoretical and conceptual aspects of research on institutions, public goods, landscapes, and changing infrastructures within the overarching field of “energy”. Over the course of three years, IRS researchers concentrate on advancing both the social and spatial science perspectives on the energy transition through the “lenses” of power and materiality.

Further information on the lead project can be found on page 4 within this issue.

### Conflicts and Energy Democracy



The transformation of energy production has also altered the organisational structures of energy industries. More and more frequently, energy cooperatives and bioenergy villages have been remunicipalised or newly established. With their project “EnerLOG”, IRS researchers are searching for solutions to local energy-related political conflicts and aim to achieve public interest objectives with the aid

of such new organisational forms in the energy sector. A closely related aspect is citizens’ participation and active contribution to energy systems. This is where the study “energy democracy” comes into play, which aims to provide a theoretical foundation for key concepts and goals closely related to active participation in the energy transition.

To this end, selected approaches from social-scientific energy research are critically discussed. To define the term of “energy democracy” and as a means to enshrine public interest objectives in the energy sector, the researchers aim to develop a set of criteria.



... [www.irs-net.de/forschung/forschungsabteilung-2/EnerLOG](http://www.irs-net.de/forschung/forschungsabteilung-2/EnerLOG)

... [www.irs-net.de/forschung/forschungsabteilung-2/EnerLOG/index.php?sprache=en](http://www.irs-net.de/forschung/forschungsabteilung-2/EnerLOG/index.php?sprache=en)

## Energy Transition in Berlin and Brandenburg

There are several projects that reflect critically on the findings made from IRS basic research on the energy sector and, in turn, help to further substantiate these results empirically. In doing so, Brandenburg was chosen as the region of reference, particularly since it serves as a persuasive example for changing landscapes of institutions and stakeholders in the course of the energy transi-



tion. An evaluation of the situation in Brandenburg was the main concern of the project “New Landscapes of Energy – New Landscapes of Actors”. It provided an analysis of economic, political and planning sectors, and the civic initiatives launched by the Brandenburg energy industry. It also offered an overview of key institutions, introduced a typology of actors and conflicts, and analysed the spatial patterns of these changes. The project “Joint Land Use Planning Concept Energy and Climate” (conducted on behalf of the Joint State Planning Department of the States of Berlin and Brandenburg) moves from analysing the situation to carrying out practical action. The IRS contributes its expertise in the fields

‘development of cultural landscapes’ and ‘research on the energy transition’ so as to support the progress of cultural landscapes as arenas of action in the regions of Barnim and Prignitz.

Further information on this project can be found on page 6 within this issue.

... [www.irs-net.de/forschung/forschungsabteilung-2/energieland-schaften](http://www.irs-net.de/forschung/forschungsabteilung-2/energieland-schaften)

... [gl.berlin-brandenburg.de/energie/grk-teil3.html](http://gl.berlin-brandenburg.de/energie/grk-teil3.html)

## Synergies with Water and Sewage

Within two project consortiums, the IRS conducts research on the integration of energy systems with sewage disposal. The main aim of the project “Developing Integrated Land Management through Sustainable Water and Substance Use in North-Eastern Germany” (ELaN) is to analyse sewage disposal and power supply companies to determine their potential for implementing novel solutions. On this basis – and in close cooperation with partners from the field of practice, regional stakeholders, and researchers of the consortium – ELaN hopes to come up with an integrated regional infrastructure concept. In doing so, it pays particular attention to the changing framework conditions resulting from climate change, socio-economic and demographic transition.



In a similar manner, the recent project consortium “Sewage Works as Building Blocks in Smart Distribution Grids with Renewable Energy Production” (ARRIVEE) searches for ways and means to integrate pervasive infrastructures of purification plants into a system within which renewable

energies will be generated, stored and utilised. This is meant to contribute to both the maintenance of wastewater infrastructures and an advancement of renewable energies. The IRS provides expertise on the political, spatial, and organisational foundations relevant for integrating sewage works into distribution grids of regional energy supply.

... [www.irs-net.de/forschung/forschungsabteilung-2/ELaN/index.php?sprache=en](http://www.irs-net.de/forschung/forschungsabteilung-2/ELaN/index.php?sprache=en)

## Collaborations

On two accounts, the IRS breaks new ground with its study project “The Local Energy Transition in Germany: Practices, Projects, Policies”, which is offered by Dr. Timothy Moss and Ludger Gailing at the Humboldt-Universität zu Berlin during the winter semester 2013/2014.

This course translates the department’s research priorities into academic teaching and places the thematic focus on the role of cities within the broader context of energy transitions. With reference to case studies in Berlin, the students examine the opportunities and challenges for cities.

The newly created Leibniz research group “Energy Transition” is characterised by a broader thematic approach. On the basis of the combined expertise of 21 Leibniz institutions, this consortium’s research ranges from an exploration of technological and scientific foundations, new forms of governance and business models, the adaptation of legal provisions, through to an analysis of social innovations. The IRS provides its expertise in the fields of socio-spatial research on energy transitions.

... [www.leibniz-gemeinschaft.de/forschung/leibniz-forschungs-verbuende/energiewende](http://www.leibniz-gemeinschaft.de/forschung/leibniz-forschungs-verbuende/energiewende)



## Work in Progress: IRS Publications on the Energy Transition

Research on the energy transition is currently the subject of much public and scholarly attention. This applies in particular to researchers in the fields of social and spatial sciences. The IRS publishes its research findings in a number of different media so as to promote both specialist exchange within the scientific community and the transfer of knowledge to the broader public. For the IRS researchers involved, research on the energy transition is a work in progress, and for this reason, recent publications will provide the basis for impending work.

### New Energy Landscapes – New Perspectives on Landscape Research

This book explores the energy transition in terms of its impact on the aesthetic appeal of landscapes. Moreover, it examines the novel constellations of actors that have emerged, while exploring the conflicts over landscape images, landscape use and the distribution of power. Shedding light on the ongoing changes towards “new energy landscapes”, this publication outlines the consequences for landscape research, spatial planning and governance.

For more detailed information see:  
IRS Aktuell No 76, S. 25, September 2013.

GAILING, Ludger; LEIBENATH, Markus (Hrsg.): *Neue Energielandschaften – Neue Perspektiven der Landschaftsforschung*. Wiesbaden: Springer VS, 2013, 219 S.  
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ISBN 978-3-531-19795-1 (eBook)

www.springer.com/springer+vs/  
soziologie/book/978-3-531-19794-4

### Working Paper Energy as a Public Good?

In the course of the energy transition, public debates have emerged in Germany on the question of whether energy should be regarded as a public good. A revealing and novel approach to key questions related to the design of modern energy systems is becoming apparent. At the same time, we witness a consistent propagation of commercial logics and their approach towards guaranteeing functional and efficient forms of energy supply. Within this area of tension, there is a need for more social and spatial science research on the connection between energy, public goods and space.

This is the focus of the working paper, which provides an overview of the state of both national and inter-

national research on public goods as well as spatial research debates on energy issues. What is already clear is that research on changing energy systems has hardly dealt with the notion of public goods.

However, this concept must be considered very productive for research on the energy transition, not least because of the complex composition of energy systems. Energy source, infrastructures, and energy landscapes all constitute particular public goods with specific access opportunities, conflicts concerning their utilisation and external effects. Another distinctive feature is the coexistence and interplay of private and public assets. Likewise, a spatial perspective can lead to a deeper understanding of problems related to the energy system and its transformation. The evaluation and interpretation of spatial sciences research on energy has revealed multifaceted spatial dimensions. These include, inter alia, the diverse functional spaces of energy

production, transmission and distribution networks, energy use and the emergence of novel spaces of action related to renewable energies.

MOSS, Timothy; GAILING, Ludger; KERN, Kristine, NAUMANN, Matthias; RÖHRING, Andreas: *Energie als Gemeinschaftsgut? – Anregungen für die raumwissenschaftliche Energieforschung*. Erkner: IRS, Oktober 2013

::: [www.irs-net.de/download/wp\\_gemeinschaftsgut\\_energie.pdf](http://www.irs-net.de/download/wp_gemeinschaftsgut_energie.pdf)

## Working Paper

### The Spatial Design of the Energy Transition

The energy transition has diverse spatial implications. In the first instance, physical-material factors are closely tied to the transformation of the energy system – be it through the land-intensive expansion of wind-, solar- and bio-energy within landscapes, or natural landscape conditions and their impact on local and regional scopes for action. Beyond that, the energy transition poses spatial challenges to institutions and governance, e.g. in the form of overlapping policy competences and multilevel governance.

This working paper addresses these spatial dimensions from a social-scientific spatial research perspective. To that end, it is the first work to apply a newly developed research heuristic on the inter-connection of energy, public goods and space to the empirical field “spatial design of the energy transition”. The value of this heuristic is to be examined by addressing centralised and decentralised action strategies of the energy transition as two currently emblematic problem areas. Within their working paper, the IRS researchers formulate hypotheses on the research heuristic and its four analytical features “plurality of types of goods and forms of regulation”, “spatio-temporal contextual conditions and dynamics”,

“social and political constructions” and “overlapping and diverging spatial dimensions”. These hypotheses demonstrate both the relevance and limitations of this heuristic approach and finally point to the gaps during the research process. Future working steps will focus on the role of power and materiality in the context of the energy transition, while empirically testing the spatial dimensions of public assets.

GAILING, Ludger; HÜESKER, Frank; KERN, Kristine; RÖHRING, Andreas: *Die räumliche Gestaltung der Energiewende zwischen Zentralität und Dezentralität. Explorative Anwendung einer Forschungsheuristik*.

Erkner: IRS, Dezember 2013

::: [www.irs-net.de/download/wp\\_energiewende\\_raum\\_zentral\\_dezentral.pdf](http://www.irs-net.de/download/wp_energiewende_raum_zentral_dezentral.pdf)

### New Landscapes of Energies – New Landscapes of Actors

This study was prepared on behalf of the Rosa Luxemburg Foundation in 2012 and presents a comprehensive review of recent transitions in the Brandenburg energy industry. First, it examines new supply-oriented types of enterprises, which can be regarded as both active drivers of and parties concerned by the energy transition. Subsequently, the study introduces plans and arrangements with the aid of which municipalities and districts aim to exert a greater influence on designing the energy transition. Finally, it presents several political conflicts on energy issues to exemplify new forms of civic participation.

For more detailed information see: IRS Aktuell No 71, S. 26, Juni 2012.

BECKER, Sören; GAILING, Ludger; NAUMANN, Matthias: *Neue Energielandschaften – Neue Akteurslandschaften. Eine Bestandsaufnahme im Land Brandenburg*. Berlin: Rosa-Luxemburg-Stiftung, 2012.

::: [www.rosalux.de/fileadmin/rls\\_uploads/pdfs/Studien/Studien\\_Energielandschaften\\_150dpi.pdf](http://www.rosalux.de/fileadmin/rls_uploads/pdfs/Studien/Studien_Energielandschaften_150dpi.pdf)

## Further Publications

– BEVERIDGE, Ross; KERN, Kristine (2013): *The Energiewende in Germany: Background, Developments and Future Challenges*. In: *Journal of Renewable Energy Law and Policy* 1, S. 3 – 12

::: [www.lexxion.de/en/verlagsprogramm-shop/details/3293/241/relp-relp-1/2013/the-energiewende-in-germany--background,-developments-and-future-challenges.html](http://www.lexxion.de/en/verlagsprogramm-shop/details/3293/241/relp-relp-1/2013/the-energiewende-in-germany--background,-developments-and-future-challenges.html)

– MOSS, Timothy (2013): *Socio-technical Change and the Politics of Urban Infrastructure: Managing Energy in Berlin between Dictatorship and Democracy*. In: *Urban Studies Online First*: doi: 10.1177/0042098013500086

::: [usj.sagepub.com/content/early/2013/08/21/0042098013500086.abstract](http://usj.sagepub.com/content/early/2013/08/21/0042098013500086.abstract)



## Light and Shadow in the Creative Industries



Fashion, media, marketing – in Berlin as in other European cities, economic activities have come to play an increasingly important role within cultural and creative contexts. Against this background, funding cultural and creative industries has become a popular development strategy. In academia, the connection between creativity and economic activities has prompted numerous research questions. Together with the Humboldt-Universität zu Berlin, the University of Uppsala (Sweden) and several renowned researchers from all over Europe and Canada, the IRS discussed some of these questions at the “2nd European Colloquium on Culture, Creativity and Economy” (11-12 October, 2013, Berlin).

According to the head of the IRS research department “Dynamics of Economic Spaces”, Prof. Dr. Oliver Ibert, the colloquium was proof that the current academic debate has gone beyond a perception of the creative industries as being only a group of small and specific branches. Instead, it is now clear that creative issues have become a relevant level for all kinds of branches and sectors. “One key idea is that cultural added value is conceived as an economic factor, and thus an important component of many production and marketing chains”, Ibert points out. “It is not only within individual branches where creative production steps like design or composition are taken. They also occur in the form of company-related services. For this reason, they can now be found at the very heart of branding and marketing strategies in almost all branches of trade.”

Apart from the opportunities emerging, the event also, however, addressed the formerly oft neglected dark side of creative industries. In academia, the once optimistic scenarios have given way to a certain disillusionment. While creativity has shown itself to be valuable in economic terms, it is now obvious that it has also produced much precarious employment without any form of social security. As Prof. Angela McRobbie critically remarked in her keynote, the artist has become a role model for political thinking about the modern worker, for instance under “New

Labour” in Great Britain. Personal failure and managing labour market risks with an entrepreneurial attitude, but also the notion of work as a means to individual fulfilment are now considered general requirements for all employees, according to McRobbie. As Ibert notes, it has become common practice in such circumstances to regard immaterial rewards as compensation for underpaid employment. Moreover, he points out that self-exploitation is now temporarily accepted, as it is often conceived as a necessary sacrifice for a later career in the creative sector. The persons concerned thus develop a kind of “telescopic identity”, which justifies current predicaments with hopes for a better future. “While this strategy might even pay off in individual cases, it now seems clear that this game has produced a huge number of losers, but only few winners”, says Ibert.

Another important topic concerned the spatial character of economic practices and the policies targeted towards them. There are certainly concentrations in knowledge production, which lead to a place bound creativity potential, as for instance in “creative” districts of large metropolises with a high density of cultural facilities, colourful cultural scenes and mixed patterns of use. “However, in light of highly mobile labour markets, virtual distribution channels and multifarious customer relations, the idea that a local nucleus where creative activities originate then spreads out and becomes exploited in economic terms has often been shown to be deceptive.” According to Ibert, we should thus distance ourselves from understanding creativity as a predominantly local phenomenon.

For urban policy, these thoughts imply an increasingly complex challenge. In one case, measures taken by territorially organised political and administrative actors are far too broad, diffuse and unspecific to do justice to the spatially fragmented and highly mobile creative knowledge practices. In the other case, these measures are too narrow and restrictive (both in spatial and sectoral terms) and thus run the risk of “cutting off” relationships of crucial importance.

Further information:

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veranstaltungen/detail.php?id=201

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## Innovations in Time and Space

The IRS research department “Dynamics of Economic Spaces” uses “innovation biography” as a method to analyse the generation and exploitation of knowledge. In doing so, it first and foremost concentrates on the gradual development of an idea into an economically viable innovation i.e. a process that is flexible in terms of space and as such poses challenges to institutionalised innovation funding caught up within rigid territorial boundaries. With the aid of innovation biographies, the researchers argue that in the majority of cases the “journey” of an idea is an important prerequisite for its eventual implementation.

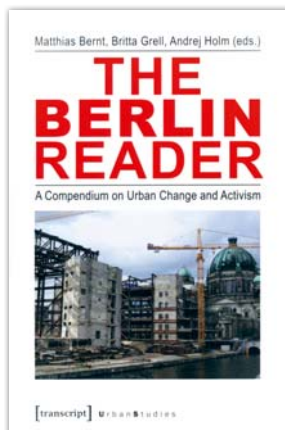
Together with the Institute for Work and Technology (IAT) in Gelsenkirchen, the department conducted a workshop on 10 September, 2013 at the IRS to discuss the “innovation biography” method in conjunction with spatial knowledge and innovation models. “We were looking for the areas of complementarity between the terri-

torial- and process-oriented perspectives on innovations and, on that basis, we hoped to be able to construct space-time-paths” says head of department Prof. Dr. Oliver Ibert. “It still needs to be empirically tested whether both approaches are in competition or if they actually complement one another in a constructive way. In fact, analyses of individual innovations have underlined their highly unique character.” Accordingly, the step towards generalisation in the sense of spatio-temporal types of innovations thus turned out to be highly complex. During the workshop, experts discussed several approaches, which were then illustrated by examples such as tile-effect wallpaper and fingerboarding. Analysing the journey of such ideas through brains, places, and institutions is highly innovative within the field of spatial sciences. It is thus similar to a journey through virtually uncharted waters.

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## Just published: The Berlin Reader



Berlin's development after the fall of the wall has evoked strong interest in both national and international research. In fact, the city has changed – and is still changing – at high speed in social, economic, cultural and structural terms. With their “Berlin Reader”, the editors Dr. Matthias Bernt (IRS), Dr. Britta Grell (WZB Berlin Social Science Center) and Dr. Andrej Holm (Humboldt-Universität zu Berlin) compiled essential articles on the transformation of Berlin (e.g. by Hartmut Häußermann, Walter Siebel, Simone Hain and Wolfgang Kil) and had them translated into English.

Together with new papers written by Bernt, Grell and Holm, these texts provide a direct insight into the controversial debate on this city's future and the ambivalent consequences of recent changes. “The book adopts a

perspective which allows us to recapitulate the development stages with the aid of contemporary texts and thus also reflects on the development of academic debates”, says Bernt. “Our goal was to pick articles that we consider indispensable for an understanding of post-1990 Berlin and, moreover, to complement these essential publications with new texts on current processes.” In their introductory articles, the authors put these texts and the topics discussed into the appropriate context.

*BERNT, Matthias; GRELL, Britta; HOLM, Andrej (Hrsg.): The Berlin Reader – A Compendium on Urban Change and Activism. Bielefeld: Transcript, 2013, 280 S., ISBN 978-3-8376-2478-6.*

## New EU Project Post-Carbon Cities of Tomorrow

By 2050, climate change and the energy transition will have profoundly changed the face of big cities in the EU. Cities are responsible for the lion's

supply, traffic, waste management, regional economic cycles, housing, environmental protection, political governance and education.



share of greenhouse gas emissions, yet with regard to sustainable development of the environment, economy and society, they also offer the greatest potential for innovation and efficiency.

The IRS participates in the EU research consortium "Post-Carbon Cities of Tomorrow – foresight for sustainable pathways towards liveable, affordable and prospering cities in a world context (POCACITO)". This project will develop a roadmap for the transition to a sustainable, post-fossil fuel economic model within the next three years. This concept includes changes to energy systems, water

At the IRS, Prof. Dr. Kristine Kern and Dr. Ross Beveridge (research department "Institutional Change and Regional Public Goods") will lead work package 2, which develops an inventory of urban sustainability initiatives. Together with the project partners, Kern and Beveridge will identify and evaluate innovative approaches for the "post-carbon transition" in 100 EU cities. Within three thematic fields (citywide initiatives, pilot projects at a neighbourhood level and sectoral political initiatives) they will compile good practices. As a next step, they will develop an typology that helps cities to make informed choices about particular measures. Moreover, they will analyse both national and EU-wide measures. This preparatory work paves the way for subsequent work packages, which will a) implement case studies in a number of EU cities, b) develop theoretically and empirically well-founded scenarios and their quantitative analysis and c) support the implementation of measures within a "marketplace of ideas". The POCACITO-project is scheduled to run from 2014 – 2016.

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