

'Energy Regions' in Austria and the normative dimension of transition dynamics

Draft!

Philipp Späth

IFZ - Inter-university Research Centre for Technology, Work and Culture

Address: Schloegelgasse 2, 8010 Graz, Austria

fon: 0043-316-813 909-22

fax: 0043-316-810247

e-mail: spaeth@ifz.tugraz.at

Abstract

'Guiding visions' (e.g. related to sustainability) are considered to play an important role in attempts to influence the 'transitions' of socio-technical systems. The genesis of such potentially co-ordinating discursive elements and conditions for their maturation into socially binding norms have rarely been examined though.

The 'transitions literature' has been criticised for adopting an overly optimistic managerial approach. While governance theory can add some realism with regard to structural barriers and aspects of power, it shares a tendency to focus on macro-level structures and to pay less attention on micro-level dynamics.

I study Energy Regions in Austria, i.e. regional initiatives aiming to focus regional development strategies on the exploitation of renewable energy and to build up respective actor networks. In some of these regions sets of principles and relatively concrete targets with regard to the future development of the regional energy supply and consumption system (e.g. a certain share of heat/electricity provided from renewable sources by a certain year) have been developed and they gained – although not being binding by formal character - significant influence on various decisions concerning public and private investments.

In particular, I will analyse the development of a Leitbild in the district of Murau, Upper Styria, focusing on the participation of stakeholders as well as the intentional strategies and observed activities of network building. I document actual effects of the Leitbild which sum up to the co-ordination of decisions by planners, local authorities, enterprises and households when deciding on infrastructure projects, product portfolios, marketing strategies etc. The analysis of this initiative and its comparison with others suggests several reasons why the Leitbild in this case developed into such a binding norm. I juxtapose a close empirical look on the discourses and institutional tinkering in this rural region of some 30.000 inhabitants with questions concerning the legitimacy of hybrid forms of governance and the distribution of power in respective politics.

I conclude that 'Energy Regions' in some cases do create new arenas and elements which can significantly influence the negotiation of societal objectives and co-ordinate transformative action. By accumulating critical masses of authority for a consensus, which consequently becomes strongly institutionalised, phases of 'appraisal' and 'commitment formation' are to a certain extent separated allowing for an 'objectification', which could – even if it is only temporary and partly illusionary - form an important part of broader institutional settings for 'reflexive governance' of socio-technical transitions.

Introduction

The development of 'guiding visions' is a central element of the 'transition management' approach. Yet in the historical analyses of transition processes – on which the approach is

mainly founded – the existence of such co-ordinating visions can often not be substantiated ({Berkhout, Smith, et al. 2003 #6099}, see also {Meadowcroft 2005 #9516}:487).

It therefore seems to be fruitful, to empirically examine ongoing processes, in which ‘guiding visions’ explicitly play a central role in the strategies of actors attempting to influence socio-technical change.

We found and scrutinised such cases in so called ‘Energy Regions’ in Austria.

Some of these regional¹ initiatives combine (a) participatory processes of target setting and the formulation of a collective vision with regard to the future energy supply and consumption in their region with (b) the strategic formation of actor networks comprising local companies, organisations of the civil society, members of government and other interested individuals and which are coordinated by an organisation which links different societal spheres and provides several services as a non-partisan intermediary.

Some of these initiatives certainly just pick up current buzz words of the regional development and governance discourses, and use these terms as a currency in a game of politics, the rules of which remain rather unchanged. But some other regional initiatives experiment in a very interesting way with the creation of societal consensus, the accumulation of authority and the focusing or even co-ordination of broad portfolios of actions. Could this be part of what we are looking for – innovative techniques of governance useful for the intentional co-shaping of radical socio-technical change?

Such processes can be analysed from the perspective of ‘Transition Management’ as niche activities with a certain potential for inducing regime change. But in order to understand such subtle dynamics, we need more than what the ‘system innovations’ approach and the ‘multi-level framework’ alone have to offer: Some more micro-sociological insights and a critical consideration of the role of power in such participatory processes.

The genesis of guiding visions (Leitbilder): Can it be intentionally influenced?

Leitbilder - collective visions featuring certain qualities - are said to play an important role in socio-technical change (see e.g. Dierkes et al. 1992), in the strategic orientation of companies, in urban and regional planning and feature very prominently in local initiatives for sustainable development (LA21). Generally speaking, they are increasingly praised for all cases, where a co-ordination of different actors is necessary, but not feasible through direct control or market mechanisms.

Especially studies in urban and regional planning (c.f. Kuder 2001) have exemplified, how new Leitbilder rely on established norms and social capital of their proponents to build up legitimacy. New Leitbilder become effective in antagonising existing path dependencies when they tightly link up with well established basic norms & values of the relevant individuals and at the same time are concrete enough to allow for a classification of actions as congruent with the Leitbild or not. This of course limits the scope for a reflective support (leave alone design) of Leitbilder with regard to sustainability transitions. But since Leitbilder often do play an important role in focusing dispersed actions, the reflective monitoring of such dynamics and occasional interventions are certainly key to any intentional action regarding socio-technical transitions.

Focus on diverse sources of authority beyond formal legitimacy

If anybody starts tinkering with this crucial element of change, a major problem is that there is no licence which would authorize somebody to do so. Of course the ‘flow’ of ideas in the form of

¹ The most interesting regions – given our interest in the governance of complex socio-technical systems - are defined at a sub-provincial level, yet comprising at least (parts of) districts with more than 30.000 inhabitants.

terms, storylines and visions has always been central to politics, and not only institutions with formal democratic legitimacy are interacting in politically relevant discourse. But if any actor wants to gain significant impact on political discourses, she needs to mobilize some kind of 'authority'. Unfortunately, concepts of 'authority' are all very vague and fluffy - even if compared to the contentious notions of legitimacy. But if we want to understand the subtle dynamics at the 'breeding grounds' of visions which could potentially guide socio-technical transitions, we need to carefully analyse what sources such authority can be drawn from.

Empirical observations: Energy Regions in Austria

Since the 1990s, some regional initiatives in Germany and Austria have mobilised to call their region 'Energie-Region', sometimes adding further attributes like 'Öko-Energie-Region' or 'Solar-Region'. Connected to these labeling initiatives were attempts to focus strategies of regional development on the exploitation of renewable energy potentials and to holistically transform regional energy systems towards more sustainable patterns of production and consumption.

Towards this end, often participatory processes of target setting have been initiated, involving either selected 'stakeholders', i.e. professionals from relevant businesses and experts in administration and civic organisations or just everybody from the region who is interested in energy issues. These targets usually take on the form of more or less quantified positive scenarios (with a time-frame of 10-20 years) and relate for example to visions like 'regional energy autonomy' (meaning basically a positive balance of primary energy flows). They get more or less formally institutionalised as 'manifestos' of councils, mayors or just official statements of the groups that gathered in workshops to develop the objectives. They are then communicated to the press and generally aim to co-ordinate the actions of policy makers, companies and/or households.

In order to reach the more or less collectively identified objectives and to realise the respective 'visions', actor networks are established, and the image of a region is created which ambitiously works together for a transformation of its energy supply and consumption systems towards more sustainable patterns. For these 'path-breaking' attempts, financial resources such as funds for regional development and socio-technical experiments are mobilised and focused on the transformation of the regional energy systems.

Important points of reference for these attempts are on one hand ecological concerns – the need for climate protection most prominently. But in their public communication, all these regional initiatives put another line of argument in front: The economic benefits that a region could reap from a change in primary energy sources (local creation of value and employment) are stressed more than the issues relating to the common good of less ecologically harmful energy systems.

For whatever mix of motivations, the regional potentials of primary energy are scrutinized and plans are made to optimally exploit them - with biomass naturally playing an important but not exclusive role in many alpine or agricultural regions of Austria. In response to perceived market failures and/or inadequate political initiatives on a national level, they try to mobilize regional resources and create actor networks to reduce the transaction costs of alternative energy options.

The regional scale of these initiatives² benefits on one hand from geographical proximity and the possibility of frequent face-to-face interaction, i.e. from existing networks and regional identity, but also from the prospect of channelling funds for regional development into such 'Energy Region' activities.

Most actors consider their regional activities to be part of broader, trans-regional transformative initiatives though and relate for example to a national and global attempt of changing energy

² We speak of regions at sub-provincial level up to NUTS3-regions, comprising at least a couple of 10.000 people.

systems called 'Energiewende'. As benefits of these activities, most actors hence expect in addition to advantages for individual regional economies also contributions to societal 'sustainability' in general.

Empirical background: A comparative analysis of four Austrian 'Energy Regions'

In an empirical research project called 'Leitbilder in Energy Regions', we³ have in 2006/2007 examined HOW exactly such regional processes of Leitbild and network development are aiming to produce WHICH effects. We analysed the history and set-up of four 'Energy Regions' in Austria and gathered evidence of the impact of these Leitbilder and networks on concrete decisions. We initiated and accompanied an exemplary learning process among the initiatives which resulted in adapted communication and network strategies for the individual initiatives as well as in the identification of probably transferable elements and general preconditions. We finally drew conclusions on the potentials of such initiatives as an instrument of co-ordination and governance on the way to more sustainable energy systems⁴.

The questions guiding this endeavour were:

- (How) can 'Leitbilder' coordinate concrete decisions and impact on technical change on a regional level?
- What are crucial preconditions for the success of Energy Regions?
- Which structures of actor networks are - under what circumstances - most successful?
- Which communication strategies are - under what circumstances - most effective?
- How can provincial governments and R&D programmes support the development of 'Leitbilder' and their use for the governance of technological development (towards sustainability)?

Major representatives of the organisations co-ordinating these initiatives have been co-opted to participate in the project and exchanged their perceptions about the particular 'Energy Regions' histories, network structures, 'Leitbild' processes and their actual impacts. They were supported along this way by experts on regional development and communication strategies as well as by social scientists from a variety of fields. In total 32 Persons have further been interviewed to a) document diverging views on the four individual processes and to b) discuss the adequate setup and support of such initiatives. Final conclusions of the project address the possibilities and constraints of a transfer of experiences to other regions as well as adequate support mechanisms on the provincial and national level (e.g. with hindsight to a specifically relevant R&D-programme)⁵.

An example: The 'Energy Vision' of the Murau district

Murau is a rural, alpine district in Upper Styria. It is sparsely populated by roughly 31.000 inhabitants. The net loss of inhabitants was higher over the last decade than Styrian average (-

³ The project has been carried out by the IFZ - Inter-university Research Centre for Technology, Work and Culture together with three organizations carrying Energy Region Initiatives, plus the 'Ökologie-Institut', 'ARC Systems Research' and 'Florian Faber Communications Consulting'. We gratefully acknowledge the funding of this project by the Austrian Ministry of Transport, Innovation and Technology (BMVIT) within the Programme 'Energy Systems of Tomorrow', see: www.EdZ.at.

⁴ The final report of the project will be available as from autumn 2007 – in German – at: <http://www.nachhaltigwirtschaften.at/publikationen/schriftenreihe.html>

⁵ The project itself has been funded as accompanying research within the programme "Energy systems of tomorrow" funding "the development of new technologies and concepts for a flexible and efficient energy system based on renewable energy sources" – in which visionary terms like 'energy autonomy', 'poly-generation', 'smart grids', 'virtual power plants' etc. feature very prominently, channelling funds and R&D efforts (see www.edz.at). Hence conclusions concerning the future handling and support of 'Energy Regions' within this programme were sought after.

2,4% in total from 1991-2001). In 2003, the regional Energy Agency together with a consultant started an initiative to develop and implement the “Energy Vision Murau”. In the beginning, 30 of the invited people and institutions related to energy issues from within the region participated in workshops and jointly developed objectives and means to realise the vision of ‘energy autonomy’ including ‘100% energy from renewable sources’ by the year 2015.

The “Murau Energy Objectives for 2015”⁶

- The district of Murau is energy autonomous (‘energieautark’)⁷ with regard to heat and electricity (= 100% renewable sources).
- A high level of public awareness concerning an energetic circular flow economy (‘energetische Kreislaufwirtschaft’) has been achieved (also among pupils).
- A surplus of value is created by a net export of energy carriers.

This “energy vision” hence states, that the future energy system in about 10 years must feature certain qualities with regard to its inputs (renewable sources replacing fossil primary energy carriers) and additional outputs (local value creation), if it is to comply with societal needs and preferences – which were expressed (with a wider public in mind?) by the experts involved in the process.

Observed effects of the Leitbild

Since their publication, the Murau Energy Objectives for 2015 – though not binding by official character – played a crucial role in the negotiation of many plans, projects and concrete decisions of public authorities and private enterprises alike:

Many calls for tender concerning the replacement of old heating systems in public buildings explicitly called for renewable energy based solutions. In one case, an oil based heating system had been asked for in the call for tender, but after private and political interventions demanding compliance with the Energy Objectives, a biomass based system was finally installed – following a second call for tender. The plan of a huge development involving hundreds of new chalets was initially submitted to an environmental impact assessment procedure featuring a gas fired heating system. One of the involved officials from the provincial government rejected these plans with reference to an incompatibility with the Energy Objectives.

In the realm of private enterprises, a mayor impact was observed in the case of the ‘Natur-Installateure’. This is an association of four companies offering and installing heating systems. After co-operating in the Murau Energy Vision initiative, they merged their marketing under the brand of ‘Natur-Installateure’ and committed themselves to submit a quote featuring a bio-based system whenever they offer other heating systems. One of the four companies even committed itself to install nothing but renewable energy based options in all newly built houses, a commitment which brought the company a lot of attention and its charismatic leader the price “entrepreneur of the year 2005”.

The composition of an actor network related to the ‘energy vision’ in Murau

In the years following the official declaration of the “Murau Energy objectives for 2015” in 2003, the group of people involved in workshops and other events was enlarged to about 50 individuals. Sub-groups elaborated specific strategies to achieve these aims, focusing e.g. on wood

⁶ Besides these three main objectives, there are two more (partly overlapping ones) “A platform for energy is established by the Murau district” and “The district has created prospering regional economic circuits”. Translation: Ph.Sp.

⁷ Such a quest for ‘energy autonomy’ is in many cases *not* based on romantic ideas of partly detached ‘bioregions’, but mostly means just a positive balance of primary energy flows.

fired district heating systems, on solar heating systems for private homes, on projects for renewable electricity production and on ways to improve the energy efficiency of buildings.

These participants mostly have to do with energy issues in their professional live. The owner of a company which installs heating systems meets a former mayor, together with the secretary general of an agricultural association. Besides their competence to articulate expectations with regard to a future energy system, these people also bring in their professional knowledge and their influence to reach these aims. Politicians and officers of the regional and municipal administrations for example promise to transmit the joint vision into decision making processes on public investments and policies (such as municipal support schemes for private investments in green electricity production) as well as into public awareness campaigns. Business people jointly and individually adopt strategies that support the objectives and promote them to their customers.

The frequent meetings of energy experts has been experienced to give birth to a tight actor network, actually reducing the transaction costs of projects which bring the region closer to the realisation of the targets (like renewable electricity projects, biomass based heating systems etc.).

A central role was played by some people co-ordinating the initiative. They primarily motivated stakeholders to participate and actively communicated the results (via regional and trans-regional media) to the regional (and trans-regional) audiences. These co-ordinators of the initiative are located in the 'Energy Agency for Upper Styria' and describe themselves as inter-mediators between the spheres of government, of enterprises and of the public (i.e. citizens who – e.g. by taking certain decisions as energy consumers - also decide substantially on the realisation of the set objectives). To reach the public, they use mass media as well as various forms of direct communication.

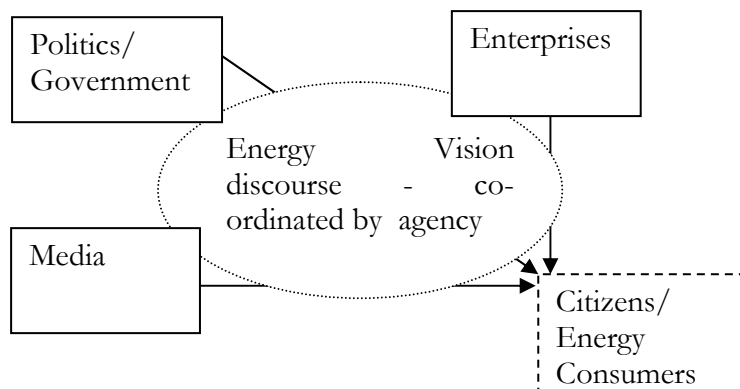


Figure 1: The Murau Energy Vision initiative co-ordinating interactions between societal spheres

The co-ordinators stress that being perceived as an impartial mediator is of paramount importance. It seems to them as important to be seen as not connected to any political party as it is important that no private enterprise or customer considers them to be favouring certain actors on the market.

Citizens of the Murau region were not only effected by the commonly developed objectives through this focusing of public investments, of policies and of strategies of private companies. Interested individuals moreover had the opportunity to participate in the workshops themselves and articulate their personal aspirations with regard to the future energy system. The initiative was hence also seen to be an instrument for citizens to articulate their aspirations and for aggregating these views into something that gets heard. Besides, the support of the 'Energy Vision' became part of the (regional) identity of many people in the region - among those who were involved in the process and among many who just observed it with sympathy.

The consideration of ways to realize the objectives furthermore led to projects, which involved the development of new artefacts like a special truck for delivering wood chips, the development

of new logistical means like a regional biomass bourse and of new services related to biomass heating in private homes. The initiative and the developed objectives hence also co-ordinated R&D efforts, leading to the enhancement of technical solutions and business strategies beyond a mere adaptation to regional circumstances.

How the Murau Energy Vision gained (moral) authority

The initiators of the Murau Energy Vision had not been given any mandate to do what they were doing by a democratically elected or somehow formally legitimized institution. Their action was still influential and gained – over time – substantial ‘political weight’. Some mayor steps of this development and reasons for it can be identified.

First of all, the initiators put high efforts into motivating *all* people and institutions - which are by anyone considered relevant for energy issues - to participate in the process⁸. They were in fact able to create the image, that the process was at least open for anyone to participate. And the core group of the initiators, comprising the director of the regional energy agency, well known for his expertise through long-standing consulting activities, a former mayor, a charismatic entrepreneur and other senior personalities are well known, well trusted and so together command huge stocks of social capital.

Right from the first proclamation of the energy objectives, they achieved a positive resonance in the local and regional press. In 2004, they participated in a competition called “Energy Regions of Tomorrow”, which was proclaimed by the Federal Ministry for Transport, Innovation and Technology, and were one of nine initiatives to win a ‘mayor price’. By way of this competition and by funding the further development of the ‘Murau Energy Vision’ as an accompanying measure within its R&D-programme ‘Energy Systems of Tomorrow’, this Ministry gave the Murau Energy Vision at least some official blessing.

What the initiators experienced as another breakthrough was the winning of the “Energy Globe Award” on both the Styrian and national level in 2004. This glamorous price, the handing over of which was broadcast on the national TV programme, drew much attention to the region and was well appreciated by the regional population since it entailed that the Murau Energy Vision was to represent Austria in the competition on the European level.

Such successes further arouse the interest of the regional and specialized press. This effect was further multiplied by the general tendency of interest in energy and climate issues raising tremendously over the last two years, which was experienced by some activists of the Energy Vision as a ‘warm shower’ of interest and consent.

But besides this general public interest, very crucial for being taken serious were certainly the improving prospects of the initiative to successfully influence (government) decisions on various levels. The initiators established good relationships with officers in the provincial government and a relevant federal ministry and these expressed their support for the initiative – although mostly not materialised in terms of funds and never by any sort of official mandate - at various occasions.

The institutionalisations of the Murau Energy Vision on various scales

Of all regional (i.e. trans-municipal) energy initiatives in Austria, the Murau Energy Vision addresses the smallest regional population – with the district of Murau comprising just over 30.000 inhabitants. But the initiative is co-ordinated with a great variety of other regional planning processes on a bigger scale. Since the Energy Agency Upper Styria is also co-ordinating the regional development planning within the EU LEADER framework, the Murau Energy

⁸ For an analogue discussion of the importance of ‘inclusiveness’ in eco-labeling initiatives, see Boström 2006

⁹ See also Footnote No. 5.

Objectives have been taken as starting point also for a LEADER+-programme, promising to channel EU funds into the region. Furthermore, the Energy Agency Upper Styria is active in a much broader region and promotes the Murau Energy Objectives also as a guideline on the scale of Upper Styria. As a result of this amalgamation of institutional competences - in fact a personal union - the activities and plans on several spatial scales and timeframes are coordinated: investment decisions and policies of many municipalities, the LEADER-programme and the development targets for the NUTS-3 Region are all brought in line with the Energy Vision for the Murau district.

Discussion

These findings are revealing with regard to several aspects of governance and socio-technical change. They make for one sense if looked at from the 'systems innovation perspective' and the related 'multi-level framework'. But such a perspective should be complemented – in my view- by some more micro-sociological terms and with hindsight to the critical questions that political economy suggests to raise en face naive attempts to 'steer' socio-technical change. For a conceptual framework which already aims to integrate some elements from these three perspectives we can refer only to 'discourse coalition s' (Hajer 1995 #1176) as a starting point.

Possible functions and necessary features of regional 'Leitbilder'

Regional processes resulting in joint 'visions' and manifest sets of targets - such as the 'Murau Energy Objectives 2015' - can be understood as an attempt to establish a discursive element around which actors can be mobilised, bringing in their resources into a somewhat joint effort. If successful, such attempts create not only a point of reference on a rhetorical level. The guiding vision or manifesto of targets can become a touchstone, around which 'ontological commitments' (Smith & Stirling 2006 #9136) are built, and these are partly producing quite material effects: alliances of enterprises change the market situation, infrastructure investments are reconsidered etc.

As it has been discussed with regard to 'Leitbilder' guiding technology development, a crucial factor for the influence of such elements on a discourse is that they are illustrative and at the same time vague - each to a certain extent (Dierkes, Hoffmann, et al. 1992 #4509). The resoluteness, with which the co-ordinators of the Murau Energy Vision initiative opposed any broadening of its thematic focus (for example when the idea has been raised to subsume climate effective projects in the transport sector to the initiative) indicates, that these actors are strongly motivated to keep the thematic broadness of the consensus at a level that they consider appropriate. The comparison of such initiatives suggests that such an institution, a 'watch-dog' keeping the discourse focused, might be one of the rather important success factors.

'Leitbilder' in planning - analogue to certain attempts of standardisation - are "opening new conceptual spaces. [...] By raising new issues and providing new 'codes' or 'frames', they enable both potential adherents and targeted actors to perceive, identify and understand important events and circumstances in novel ways." (Boström 2006 #9033):352)

An important function of these discursive elements hence is – what else can one expect from institutions - to reduce uncertainty about the behaviour of other actors. They are reference points with regard to expectations shared by a (potentially growing) set of actors, thus making these expectations more likely to become realised than others. To the extent that a 'Leitbild' has been developed in participative deliberation involving many different perspectives, this genesis can be seen as making the shared expectations robust against opposed events in the future, including the future actions of actors who participated in the development of the Leitbild.

Leitbilder represent socio-technical framings, the object of ‘discourse coalitions’

The ‘Leitbild’ integrates a plurality of storylines (such as “using fossil energy means to transfer our money to the sheiks”, “there is enough primary energy in our woods to supply us with energy”, “only the big energy holdings will loose from us using renewable energy” etc.) into one narrative, symbolised by a statement on targets or a vision. A coalition of actors tries then to jointly gain ‘discursive hegemony’. This process can be described as the formation of a discourse coalition: Using M. Hajers words: “The dynamics of this argumentative game is determined by three factors: credibility, acceptability, and trust. Credibility is required to make actors believe in the subject-positioning that a given discourse implies for them and to live by the structure positionings it implies; acceptability requires that position to appear attractive or necessary; trust refers to the fact that doubt might be suppressed and inherent uncertainties might be taken for granted if actors manage to secure confidence either in the author (whether that is an institute or a person), e.g. by referring to its impeccable record, or in the practice through which a given definition of reality was achieved, e.g. by showing what sort of deliberations were the basis of a given claim.” (Hajer 1995:59)

Such coalitions are successful, if they a) dominate a discursive space, i.e. „central actors are persuaded by, or forced to accept, the rhetorical power of a new discourse (condition of discourse structuration)“, and if b) „the actual policy process is conducted according to the ideas of a given discourse (condition of discourse institutionalization)“ (Hajer 1993:48, quote following {Saretzki 2003 #9425}). The first condition seems to be fulfilled by the Murau Energy Vision initiative to a high extent. No signs of opposition or alternative framings were observed from any part of the regional population. Unprecedented ads by an ‘initiative for the efficient use of oil fired heating systems’ in the local press have been registered by some activists with execration though. Success according to the second condition is only partly observable, which might have to do with the fact that the addressees of such an endeavour in the case of regional energy governance are so extremely scattered over many levels and organisations.

The accumulation and transformation of authority from various sources

Despite a blatant lack of formal, democratic legitimacy, the Murau Energy Objectives 2015 gathered a crucial portion of ‘authority’. Besides the argumentative qualities of the involved storylines, there are other sources that activists have intentionally drawn from. In arguing for the bindingness of the objectives, people usually at first refer to the inclusiveness of the process, and the skills and competences involved in the process of target setting¹⁰. The importance of “credibility, acceptability, and trust”(Hajer 1995, see above) can absolutely be confirmed and illustrated by the case study.

The mechanisms observed in Murau could be summarised in economic terms as follows: The initiatives quite strategically (i.e. reflectively) transform different bits of a) social capital (the ties of professionals, institutions and senior personalities plus the reputation and trust they earned in certain communities), together with b) their human capital (skills – e.g. in project management, conveying of conferences, applying for funds etc. plus various stocks of knowledge – technical, cultural, etc.), with external support (funds, prices, media attention) into another form of capital: authority, which they invest in the establishment of a guiding vision aiming to coordinate action towards a transformed socio-technical system.

¹⁰ Again, a look at analogue considerations with regard to eco-labeling initiatives is revealing: see Boström 2006.

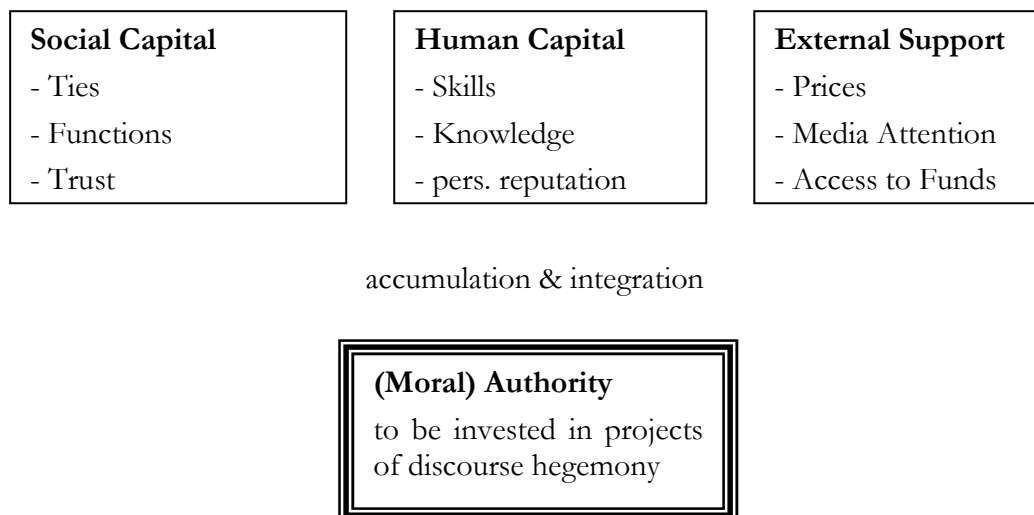


Figure 2: The 'production factors' of moral authority/ Sources of 'equity' for discourse hegemony

[Elaborate further on activists 'return on investment'...]

The maturation of guiding visions into socially binding norms

Certain discursive elements can stepwise assume an increasingly binding character. Broad orientations can transform to shared visions which become manifest in 'Leitbilder', and these can be finally turn even into socially binding norms. From stage to stage, they become increasingly effective in structuring the perceptions of many actors¹¹ and thus coordinating action. Such a process can hardly be steered in a managerial sense, but actors can try to establish the preconditions for such a process e.g. by strategically gathering authority from the various sources. Actors also strategically select certain storylines which they reckon to be attractive in the discursive spheres that they address - regionally confined audiences in our case. Such discursive elements can reach the highest level of obligingness and receive the status of a moral imperative for a larger group only under certain conditions though. A 'Leitbild' needs to be just concrete enough to allow for the qualification of actions and plans – e.g. an architects plan of a development - to be in compliance with it or not. Only then group dynamics can emerge that actually build on the Leitbild as a distinctive element delineating social groups – You can be either one of us (and comply with the Leitbild) or not. In this case, proponents of the Leitbild could even strategically amplify such dynamics by explicitly 'sanctioning' the non-compliance with the Leitbild e.g. through public accusations. Managerial aspirations are to be curtailed though by reminding of the fact that Leitbilder are only as influential, as they relate to broadly shared basic norms (see introduction to this paper) and that potential sources of authority are always constrained and transient.

The importance of actor-variety for the legitimacy of coalitions and their norms

Of paramount importance for the obligingness of regional energy visions seems to be the specific variety or portfolio of actors involved in the alliance. This has been described for attempts of 'governance by standard setting' such as eco-labelling initiatives too (see Boström 2006 relating to bio-food and forest products). Only an interaction of businesses, NGO and governmental authorities can ensure that the priorities are set in a way, that they assume enough authority. The specific quality of such novel arenas of discourse is, that conflicts can be dealt with *in between*

¹¹ See Voß 2007:23 for a general conceptualisation, adding 'three grades' to Giddens notion of 'structuration'.

theses distinct spheres, presumably reducing the tendency of actors to act in a ruminant way or just position themselves in reflection to the power games played in one of the spheres. The hope is that such newly set arenas of discourse increase the likeliness of learning to occur by shielding them somehow from some dynamics of politics and providing spaces for interaction mainly in an argumentative mode.

To what extent this is possible will be discussed further below. Interesting here is that all successful initiatives stress the importance of (an image of) being impartial in many respects. Our comparative study further indicates that it is crucial for Energy Regions that they relate to a region broad enough, that a certain number of different actors (commanding a minimum stock of resources of a minimum variety and certain kinds) can be addressed so that developments at several levels and in different spheres can reinforce each other – a result matching well with the evolutionary ‘systems innovation’ perspective.

Regional energy initiatives as niches and their potential impact on regimes

To apply the concepts related to ‘system innovation’ and the ‘multi-level framework’ on regional initiatives of course requires a prudent approach: Energy systems at the level of sub-provincial regions should for example be conceptualised as *regimes* in their own right only if they feature enough complexity, systemic dynamics and independence from the national systems they are nested in.

The application of the *niche* metaphor seems very fruitful though. It seems to happen that in some regions certain selection pressures which are present at the national regime level (and in other regions) are absent. We found for example that a crucial precondition for the success of Energy Region initiatives is that there is no incumbent energy company capturing provincial energy policy and systematically counteracting all regional initiatives in favour of renewable energy sources (e.g. by strategically investing in gas networks, lobbying, public campaigns etc.).

The benefits, that give reason to ‘ontological commitments’ (Smith/Stirling 2006) for a certain socio-technical alternative can be distributed to a decisive extent more densely in certain regions, while opposing incentives are nearly absent. Such a situation can then constitute a niche for a certain alternative to be elaborated on. The social and spatial proximity of actors on the regional level is another factor allowing for developments at this level that would not be feasible for example at a national level.

In such protected niches, the vision of socio-technological alternatives can then be fortified: If a utility would for example decide to extend its natural gas network into the Murau district, there would be a strong alliance in place to oppose this endeavour, and the marketing department of the firm would probably have a relatively big challenge ahead.

An interesting question is how the results of activities in several of these niches – each being defined by specific actor constellations and related incentives – can be aggregated to a critical mass with regard to a regime at a national level. There are several discursive reference points for such an aggregation and many of these initiatives are already linked by national campaigns like the “Energy Regions of Tomorrow” competition and through several coordination platforms and associations on the national level.

Socio-technical practices developed in such niches will only diffuse on a broader scale, though, if they can be translated into meaningful and attractive alternatives to the very different practices that pertain in the mainstream on regime level (Smith 2006). While Energy Regions still can be expected to function as important *sources* of socio-technical innovation (creating new artefacts, products and services, story lines), the attempts to strategically influence processes of ‘Leitbild’ formation observed in Energy Regions can certainly not be transferred to the national level as a *model* ({Wieczorek & Berkhout 2006 #9977}).

The inescapability of politics and dilemmas of institutionalisation

Limits to inclusiveness and the persistence of power relations

Public statements concerning the process that lead to the identification of the Murau Energy Objectives resemble strikingly the conditions that are required for an ‘ideal discourse’ as conceptualised by Habermas: All concerned stakeholders met on equal footing and in the public, listening without prejudice to every one’s arguments and aspirations. To what extent the actors can in such a setting actually blind out the power games, that they are involved in during the rest of their lives is of course questionable. Yet the results – an actually binding consensus – suggest that such arrangements can actually go a long way down this road – if all the preconditions and success-factors, that experienced activists always stress (impartiality, inclusiveness¹² etc.) are really fulfilled.

When delineating groups of stakeholders who are concerned with a change in (universal) socio-technical systems, one is of course facing an ubiquitous dilemma: Any delineation will unavoidably exclude some groups that are potentially concerned somehow, and a concern considered to be sufficiently marginal to justify an exclusion could well become relevant under changing conditions. The selection of participants is furthermore for pragmatic reasons often based on the power of actors to obstruct an envisaged process. In the case of Energy Regions, an influence on the process and outcome is highly dependent on actors being eloquent, (technically) knowledgeable and probably also biographically ‘local’. Of course the (organisational) capacities to successfully participate in the process are distributed unequally among the concerned people and organisations, and often no action gets taken to correct such inequalities. In the process itself power relations that stem from various private and professional contexts are hence necessarily reproduced.

Predispositions and accountability

Of course such a process does furthermore not start out of the blue but is predetermined by the conceptions of those designing and managing the process of deliberation and commitment formation. Their framings of ‘the relevant system’, ‘the problem’, ‘available resources’ and ‘solutions’ have an predominant influence on process and output, e.g. through the selection of certain storylines when motivating for participation or communicating the resulting ‘Leitbild’. This important role of coordinating agents is rarely acknowledged though when participative deliberations are characterised (see e.g. {Dryzek 1990 #9982} on ‘discursive designs’ and accountability).

Participants of such exercises are often surprised how different – open, appreciative, argument based – the forms of interaction are they experience in these contexts as compared to other contexts. And the consensus reached surprises often if considered against the background of apparently different interests that participants are known to be driven by. But when it comes to implementation of co-ordinated actions, and when the participants have to justify these in the various (inevitably politics-prone) contexts they play their everyday roles in – and such a transmission of a jointly developed orientation into different spheres is key to the function of a Leitbild – then these participants often have to balance their commitment to a jointly developed plan or Leitbild with opposing individual interests.

The fragility and preliminary nature of consensus

Besides the “essentially contested nature of sustainability” (Smith/Sterling 2006:9) another mayor dilemma is that any such consensus can in principle be only of a very preliminary nature,

¹² It seems to be of greatest importance for their success that they are able to link up with all the potential engagement for a change towards more sustainable energy systems which is available in the region. Any deviation from being seen as impartial would apparently cost too much of credibility and consequently access to actors and resources.

and the institutionalisations in form of manifestos will lose its obligingness when new knowledge is available that has not been considered in the process leading up to the formulation of a certain consensus. Than “Everyone must learn anew, together. ‘Governance on the outside’ will find its socio-technical object [hence] quite elusive.” (Smith/Sterling 2006:11).

No experiences have yet been made, how such discursive elements can sustain their status over longer time. It is surely important for the obligingness of a consensus that there are some consensual rules in place on how to proceed with the re-appraisal and adjustment of such institutions once external pressures suggest (in the view of some actors) that this is necessary. The blatant absence of such provisions seem e.g. to be a mayor weakness of the process in Murau.

[Elaborate on further preconditions and requirements...]

Can we extrapolate from experiments with ‘Leitbild’ development on a systematic institutionalisation of it?

Having observed something that could perhaps be transformed into an interesting ‘technique of governance’, it is tempting to simply extrapolate what effects could be achieved if such a technique would enter mainstream and replace the complex muddling through observed in practice. A general dilemma of such a consideration is, though, that we can observe only experiments which are by their experimental character relieved of much of the pressures which would come into sight only, once they were institutionalised in a politically more relevant way – with matters of redistributive importance suddenly impairing on a so long experimental and learning-oriented discourse. Findings we derive at in the protected spaces of social experiments, which at least partly contain the influence of power struggles, can hence not simply be transferred into politically relevant settings: As soon as they lose their experimental innocence, individual interests and strategic behaviour will demand their tribute.

Conclusions

The described Energy Region initiatives are promising cases if conceptualized as niche activities, which under certain conditions seem to feature the potential to add up with other such initiatives and form a relevant influence on regime dynamics.

What is even more interesting, though, is the fact, that such regional manifestations offer an opportunity to reflect on certain techniques of governance, which, by institutionalizing a consensus in a certain way, allow for a partly separation of ‘appraisal’ and the ‘building of commitments’ in two distinct phases. With regard to the conceptualisation of ‘government from the outside’ (Smith/Sterling 2006) they might be able to contain and concentrate ‘politics’ to a delineated phase of appraisal, then ‘freeze’ the dynamics and complexity, partly ‘objectifying’ a certain vision of an alternative socio-technical system, and therewith ease the formation of substantial commitments in the following period. The possibility of ‘governance from the outside’ might be illusionary and can at most last for a short period of time. Yet such an ‘illusion of power’ could still be a very productive one.

The recommendation entailed in the Transition Management approach ‘to develop scenarios and visions’ should from this perspective be accompanied by an understanding of how such discursive elements develop into Leitbilder, concrete objectives and binding social norms and whether such a process can be influenced strategically.

Acknowledgement

The empirical research project on which these considerations are based has been supported by the Austrian research programme ‘Energy Systems of Tomorrow’ (an initiative of the Austrian Federal Ministry of Transport, Innovation and Technology – BMVIT), which is gratefully

acknowledged. I thank my colleagues Manfred Koblmüller, Klaus Kubeczko, Joseph Bärnthaler, Christian Luttenberger, Florian Faber, Harald Rohracher, Harald Bergman und Andrea Breisler as well as all persons we interviewed for their valuable contributions to this project.

References

- Berkhout, Frans; Smith, Adrian, and Stirling, Andy (2003): Socio-technological Regimes and Transition Contexts. Brighton: SPRU - Science & Technology Policy Research; 2003 SPRU Electronic Working Paper Series, Paper No. 106.
- Boström, Magnus (2006): Regulatory credibility and authority through inclusiveness: Standardization organizations in cases of eco-labelling. *Organization Articles*. 2006; 13(3):345-467.
- Dierkes, Meinolf; Hoffmann, Ute, and Marz, Lutz (1992): *Leitbild und Technik: zur Entstehung und Steuerung technischer Innovationen*. Berlin: edition sigma; 1992.
- Hajer, Maarten A. (1995): *The Politics of Environmental Discourse. Ecological Modernization and the Policy Process*. Oxford: Clarendon Press; 1995.
- Kuder, Thomas (2001): *Städtebauliche Leitbilder - Begriff, Inhalt, Funktion und Entwicklung, gezeigt am Beispiel der Funktionstrennung und -mischung*. Berlin: Technische Universität Berlin; 2001.
- Meadowcroft, James (2005): Environmental political economy, technological transitions and the state. *New Political Economy*. 2005 Dec; 10(4):479-498;
- Rip, Arie (2006): A co-evolutionary approach to reflexive governance - and its ironies . Voß, Jan-Peter; Bauknecht, Dierk, and Kemp, René. *Reflexive Governance for Sustainable Development*. Cheltenham, UK: Edward Elgar Publishing; 2006; pp. 82-102.
- Shove, Elizabeth and Walker, Gordon (2007): Comment: CAUTION! Transitions ahead: politics, practice, and sustainable transition management. *Environment and Planning A*. 2007; 763-770
- Saretzki, Thomas (2003): Aufklärung, Beteiligung und Kritik: Die „argumentative Wende“ in der Policy-Analyse . Klaus Schubert/Nils C. Bandelow . *Lehrbuch der Politikfeldanalyse* . München: Oldenbourg Wissenschaftsverlag GmbH; 2003; pp. 391-418.
- Smith, Adrian (2006): Niche-based approaches to sustainable development: radical activists versus strategie managers. Voß, J; Bauknecht, D., and Kemp, R. *Reflexive Governance for Sustainable Development*. Cheltenham: Edward Elgar; 2006.
- Smith, Adrian and Stirling, Andy (2006): Moving inside or outside? Positioning the governance of sociotechnical systems - SEWPS Paper No. 148. Brighton: SPRU;
- Wieczorek, Anna and Berkhout, Frans (2006): Progress in Industrial Transformation - The Bonn 2005 IT Sessions. *IHDP Update*. 2006 Jan; 1(Open Meeting 2005 Special):15-17.