

Article

## Understanding the Social Dynamics of Energy Regions—The Importance of Discourse Analysis

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**Abstract:** Regional initiatives pursuing self-sufficiency through the use of renewable energy sources (RESS-initiatives) aim at contributing to broader transitions towards more sustainable energy systems. As such, they have raised high expectations among local activists and are increasingly supported by diverse funding schemes such as national programs. How can the social dynamics entangled in these initiatives be understood and assessed? A discourse analytical perspective, such as the Argumentative Discourse Analysis developed by Hajer, can bring valuable insights in this regard. This approach highlights the formation of discourse coalitions and processes of discourse structuration and institutionalization. In order to illustrate my conceptual and methodological considerations, I present an analysis of discursive dynamics observed in the alpine district of Murau, Austria, where the vision of reaching ‘energy autarky’ by the year 2015 has influenced regional development plans since 2003. The chosen discourse analytical approach has been very helpful in guiding the analysis of this case. Specific local conditions can explain why certain visions gained discursive hegemony.

**Keywords:** energy regions; energy autarky; analytical framework; discourse analysis; discourse coalitions; geography of energy transitions

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### 1. Introduction

Regional initiatives pursuing self-sufficiency through the use of renewable energy sources—often referred to as Energy Regions—are a fascinating and complex object of study. Appeals to focus regional development on the deployment of local and renewable energy sources have been voiced in

many European regions (e.g., [1]). Various collections of ‘best practice examples’ have been compiled such as [2] (international), [3] (Austria) or [4] (Germany). Even more publications provide guidelines for the management of such processes in German [5–8] or in English [9]. In contrast, rigid analyses from any social-scientific perspective have been few [10]. While descriptive and programmatic literatures (in line with practitioners’ perceptions) usually put a very strong emphasis on communication strategies, the few more analytical endeavors mostly place less importance on discursive dynamics. This might be due to the fact that analysts tend to focus on more tangible aspects, such as organizational innovations and actor networks rather than relatively fuzzy discursive dynamics.

It is surely honorable—from a pragmatic point of view—to just assess the economic feasibility of individual initiatives and to consider mainly technical options and preconditions for a given region to reach a certain level of self-sufficiency—for example in the context of the various national funding schemes which have been established during the last couple of years [11]. But if we want to understand whether and how transformative momentum can be built, which eventually might result in fundamental changes e.g., towards a more sustainable energy system, the literature on socio-technical transitions tells us to watch out for ‘guiding visions’ that can coordinate the action of various private and governmental actors [12–15]. To analyze and understand such social dynamics certainly is challenging in conceptual and methodological terms. But, at the same time it is extremely important.

A first approach for empirically examining such initiatives usually involves mapping relevant actors and scrutinizing the more or less formal structures that are strategically created to manage these processes. These are certainly important steps towards an understanding of the phenomenon of Energy Regions and RESS-initiatives. However, as I argue here, such an actor- and institution-oriented analysis will fail to comprehend a very important aspect of these processes: The specific discursive and normative dynamics that are highly relevant for the potential of such local initiatives to contribute to a transformation of socio-technical systems.

While a fast growing number of RESS-initiatives are well described and analyzed with regard to organizational and institutional aspects, the importance of a discourse analytical perspective in my view is significantly underrated. Also spatial aspects of such initiatives, such as the importance of local particularities in the physical, technical, economic and cultural space and their interplay with trans-local and global processes have also not been sufficiently addressed yet [16–18]. Together with Harald Rohrer, I have analyzed social dynamics of energy regions and particularly their spatial aspects in a number of articles. In these studies we have drawn on various schools of thought that originate in innovation studies and sustainability transitions research [15,19–21].

Both a discourse analytical perspective and attention to spatial aspects of these processes have always been present in our analytical frameworks. It has, however, never been explicitly argued how important a discourse analytical perspective is for a better understanding of these processes and the framework for such an analysis. The central aim of this contribution is to address this gap. In the following section, I argue why it is important to study discourses if we want to understand the transformative potential of RESS initiatives. In the third section, I explore a particular way to study such discourses, closely following Maarten Hajer’s approach to ‘Argumentative Discourse Analysis’. In the fourth section, I illustrate my conceptual and methodological considerations with a case study analysis of the “Energy Vision” for Murau, an alpine district in Austria. This case study builds on empirical work that was conducted in the context of two subsequent projects, which involved the

organization of a mutual learning process among four Austrian energy regions [11,22]. Methodologically, it relies mostly on in-depth interviews with key actors of the initiative, on a few instances of participant observation in Murau, and on the results of a series of workshops with key players from four Austrian Energy Regions, all conducted in Graz between 2005 and 2009.

## 2. Why Analyze These Discourses?

In order to understand RESS-initiatives, it is certainly helpful at some stage to study how networks of actors develop and are, to a large extent, strategically shaped [23]. These networks are often also given a formal institutional base. Agreed upon objectives and strategies with regards to the regional development and the evolution of the energy system furthermore get institutionalized in official plans and various policies. These actor constellations and institutional changes can be revealed relatively easily by means of straight-forward interviews with people involved and an analysis of the respective documents.

However, the experience of four Austrian cases that I have worked with in the past, reveals that these formal institutional factors alone cannot explain the social dynamics and transitional power of such initiatives. It is remarkable that many prominent show cases of such initiatives have two things in common: if we look at their very early beginnings, even before networks were formalized and plans discussed, we can, firstly, discern a discursive shift in what was thinkable with regard to development strategies, and, secondly, a merging or linking of various discourses that have previously been separate. Such discursive dynamics are of course much more subtle and difficult to analyze than the more or less tangible organizational features. Nevertheless, I argue that it is worthwhile and even necessary to trace these fuzzy dynamics at the source of RESS-initiatives if we want to gain a comprehensive understanding of their potential.

My suggestion is twofold: Firstly, our analytical framework for the study of RESS initiatives should be amended using instruments that particularly enable us to study the discursive dynamics of these initiatives. Secondly, the analysis should be extended further up-stream than usually is done, more towards the source or origin of these processes, when the very first pre-selection of ideas and priorities takes place.

This seems particularly important where research is intended to assist policy-makers and funding agencies with the development of strategies for the selection and strategic support of the most promising initiatives [11].

### 2.1. Words and Power

My emphasis on the importance of discursive dynamics builds on a conviction that I share probably with most contemporary political analysts: Words do matter in politics. Bourdieu, for example, noted that:

*“The social world is the locus of struggles over words which owe their seriousness—and sometimes their violence—to the fact that words to a great extent make things, and that changing words [...] is already a way of changing things. Politics is, essentially, a matter of words.”* ([24], p. 54) Such thinking prepared the ground for what has later been called the ‘argumentative turn’ in policy analysis [25]. Particularly in the field of environmental governance, the assumption of ‘rational choice’

approaches were increasingly questioned and environmental problems no longer seen as *a priori*, but rather as being amenable to, or even entirely dependent upon, discursive processes [26]. The discursive approach of Hajer has been also used for the study of politics about the (sustainable) development of technical infrastructure such as electricity systems [27].

In general, discourse-analytical approaches have become increasingly important in political science since the late 1980s and the key role of language in public policy has been taken more seriously. This is not surprising considering that “*Politicians know only too well, but social scientists too often forget, public policy is made of language.*” ([28], p. 1). Moving away from a ‘positivistic’ view, according to which language is a neutral system of signs used to describe the world (as it is), researchers applying this approach have adhered to the ‘interpretative’ tradition of policy analysis, according to which actors use language not only to neutrally describe the world but rather to ‘create’ and shape it.

## 2.2. What Is a Discourse?

There are many different notions of discourse used in the social sciences. An important example of an environmental discourse is how people over time have made sense of the phenomenon of dying trees. Whether we interpret such occurrences as the consequence of air pollution, of climate change or of mismanagement is dependent on the societal context and habits of framing in which such debates are embedded [29]. While dead trees can be considered ‘a reality’, how we make sense of what we see (who is to blame? what can/should be done?), depends largely on what we generally know and believe, and hence on the time and social milieu in which we are living. What enables and constrains us in our interpretations and what limits the range of possibilities for making sense can be called a discourse.

Maarten Hajer defines discourse as

“a specific ensemble of ideas, concepts, and categorizations that is produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities” ([29], pp. 44, 263–264).

The second half of this definition will become particularly important later when we discuss ways of fruitfully analyzing discourses: We not only have to consider *ideas, concepts and categorizations* that are used in a given political struggle, but—to the extent that we want to unveil the *social structures* determining such discursive dynamics—we also have to analyze the particular sets of *practices* through which meaning is given to realities.

Coming back to our object of study, the RESS-initiatives, experience has shown that there are many ways in which these may fail in practice or not even gain relevance in the first place. Some of these failures clearly have little to do with words or framings. In many cases, influential actors have obvious interests in maintaining a conventional energy path as it allegedly allows them to follow their entrenched business models and to obtain a return on past investments. In other cases, however, besides material and institutional changes with regard to the energy system also quite fundamental shifts in what people perceive to be an adequate energy system and/or an adequate strategy for regional development have been observed, obviously changing ‘the rules of the game’. In the case study below (Section 4), we will highlight some early and largely place-bound discursive dynamics which can

explain why a particular vision of a regions' energy and economic future has built up authority and even gained discursive hegemony in Murau, Austria.

### 3. How to Study Such Discourses?

As we have seen from the definition above, discourse analysis does not only focus on *what* is said, but also *who* is saying something, *where*, in which *context*, and what *practices* and *expectations* structure these utterances. An analysis might be referred to as *discourse* analysis, as opposed to an analysis of *discussions*, in so far as we examine not only the individual utterances themselves but also the relatively durable background of individual speech-acts within the context of the longer-term development of the language that actors share.

Most discourse analytical approaches stress the need to investigate the socio-historical conditions under which statements are produced and received. The approaches differ, however, with regard to how much leeway they see for individual agency. While some more structuralist approaches closely follow Foucault's idea that discourses durably entrench and reiterate power relations, other approaches place more emphasis on the leeway that exists for individual actors to adapt and strategically use a spectrum of possibilities that a discourse provides—in one word: agency. One of these approaches—referred to here as *structurationalist* (in reference to Giddens) as opposed to the *structuralist* approach of Foucault—is that developed by Maarten Hajer in his 1995 book on environmental discourse. He built his approach—called Argumentative Discourse Analysis (ADA)—around three key concepts: (a) discourses; (b) story-lines and (c) discourse coalitions.

Story-lines are narrative constructs which are reproduced on a frequent basis and through which the elements of different discourses are bound together. They are condensed statements which summarize a narrative used by actors as a 'short hand' in discussions. Usually they are not strictly examined for their semantic core but used rather vaguely with different actors attaching different meanings to them.

Actors engaged in a certain political struggle (e.g., about environmental policy) try to achieve dominance or hegemony in that discursive space. In doing so, they form discourse coalitions, *i.e.*, groups of actors that—for various reasons—are attracted to a specific (set of) story-lines.

*"Story-lines are here seen as the discursive cement that keeps a discourse-coalition together."* ([29], p. 65).

In addition to (1) a set of story-lines and (2) the actors who utter these story-lines; discourse coalitions also comprise (3) the practices in which this discursive activity is based [29].

#### 3.1. Discourse, Domination and Power

The political struggle is modeled here as an "argumentative game" in which everybody aims at domination. Hajer distinguishes two processes through which a discourse may become dominant:

- (1) A discourse can begin to dominate the way in which a social entity (e.g., policy area, enterprise, society as a whole) conceptualizes the world e.g., by making things appear "traditional", "natural" or "normal". He calls this the condition of "discourse structuration".

- (2) A discourse may also become manifest in specific institutional arrangements and organizational practices such as monitoring arrangements, planning procedures, *etc.* This is what he calls the condition of “discourse institutionalization”.

### 3.2. Methodological Guidelines

The conceptual foundations of the discourse analytical perspective outlined above were laid by Maarten Hajer in his book on *The politics of environmental discourse* [26]. In this frequently cited work, Hajer develops his approach based on the theoretical propositions of Michel Foucault and Anthony Giddens and illustrates its applicability with the analysis of the discourse on *acid rain* in the UK and the Netherlands. Of particular relevance is Chapter 2, pages 42–72. In a more recent book chapter entitled *Doing discourse analysis* [30], the same author compiles short definitions and a 10-step checklist, illustrated by an analysis of competing visions for the development of *ground zero* after 9/11. John Dryzek contributed to this literature with his book *Making Sense of Earth Politics* [31]. Laying out a framework for his analysis of the *politics of sustainability*, he also provides compact checklists regarding important elements and effects of discourses (pages 17–23).

My approach largely followed the conceptual approach of Maarten Hajer [26] and roughly also his methodological guidelines [30]:

Box 1: . Ten steps of Argumentative Discourse Analysis [30], pp. 73–74.

- “1. *Desk research*: general survey of the documents and positions in a given field; newspaper analysis, analysis of news sections in relevant journals. This all to make a first chronology and come up with a first reading of events;
2. *‘Helicopter interviews’*: interviews with three or four actors (‘helicopters’) that are chosen because they have the overview of the field be it from different positions. They might comprise a well informed journalist, a key advisor to the government, an expert-policy maker;
3. *Document analysis*: analysing documents for structuring concepts, ideas and categorizations; employment of story lines, metaphors, *etc.* This should result in a first attempt at defining structuring discourses in the discussion. At this stage one would get a basic notion of the process of events as well as the sites of discursive production;
4. *Interviews with key players*: on the basis of the proceeding steps interviews can be conducted with central actors in the political process. The interviews can be used to generate more information on causal chains (‘which led to what’) that will always be the assumed core of the meeting on part of the interviewees, but the interviews might also be used to get a better understanding of the meaning of particular events for the interviewees. [...]
5. *Sites of argumentation*: searching for data not simply to reconstruct the arguments used but to account for the argumentative exchange. Examples might be parliamentary debates, minutes of inquiries (a very rich source), presentation and interpretation of evidence presented to a particular research commission, panel discussions at conferences;
6. *Analyse for positioning effects*: actors can get ‘caught up’ in an interplay. They might force others to take up a particular role, but once others are aware of what is going on, they might also try to refuse it (indicators: ‘No, that is not what I meant’, ‘That is not what it is about

at all'). This positioning not only occurs on the level of persons but can of course also be found among institutions or even nation-states;

7. *Identification of key incidents*: this would lead to the identification of key incidents that are essential to understand the discursive dynamics in the chosen case. As much as possible, these key incidents are then transcribed in more detail allowing for more insights in which determined their political effects;
8. *Analysis of practices in particular cases of argumentation*: rather than assuming coherence on part of particular actors, at this stage one goes back to the data to see if the meaning of what is being said can be related to the practices in which it was said.
9. *Interpretation*: on this basis one may find a discursive order that governed a particular domain in a particular time. Ideally, one should come up with an account of the discursive structures within a given discussion, as well as an interpretation of the practices, the sites of production that were of importance in explaining a particular course of events.
10. *Second visit to key actors*: discourses are inferred from reality by the analyst. Yet when respondents are confronted with the findings, they should at least recognize some of the hidden structures in language. Hence to revisit some key actors is a way of controlling if the analysis of the discursive space made sense.”

In the case of the Murau Energy Vision initiative, relatively few documents were available. Some minutes of workshops and meetings, some presentation slides and a programmatic paper were briefly analysed. A strong focus was put on interviews, which were also complemented by statements of the initiator of the process in an ongoing learning process between four energy region initiatives. Steps 5–8 are only rudimentarily documented in this case, but would be helpful to deepen the analysis. Step 10, the final confrontation of key actors with the findings of the discourse analysis was pursued in several oral discussions and a draft of this paper was commented and approved by the initiator and manager of the Murau initiative.

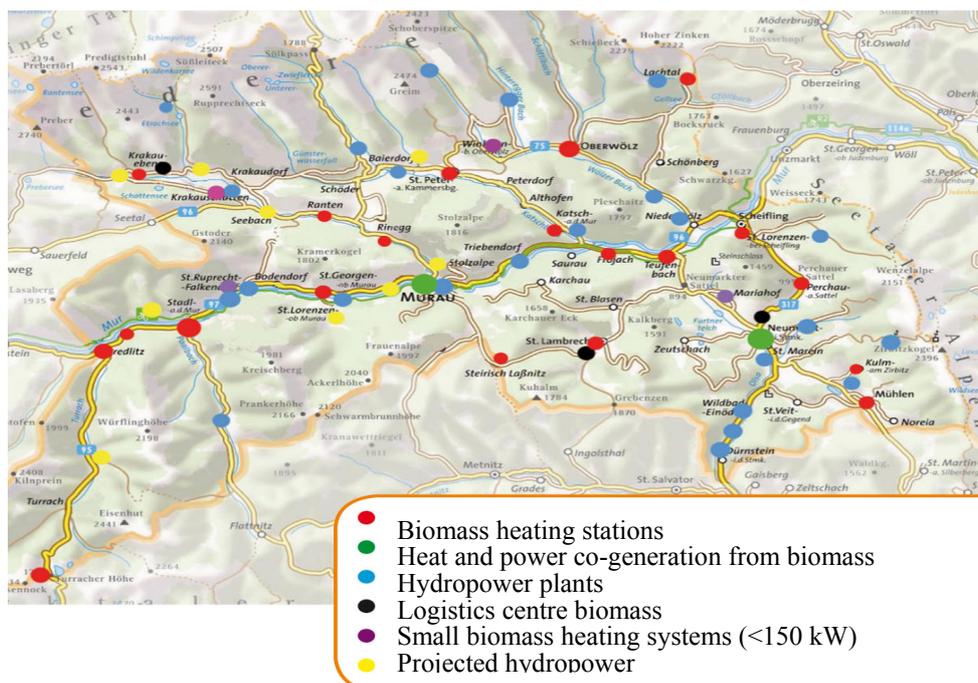
#### **4. Case Study: The ‘Energy Vision’ for Murau**

How well these concepts of ADA can orient an analysis of the discursive dynamics around an energy region shall be demonstrated here by exemplarily analyzing the case of Murau in Upper Styria, Southern Austria. This very alpine and sparsely populated district is named after the little town of Murau in its centre (see Figure 1). This town is situated in a rather remote valley one and a half hours drive from Graz, the provincial capital of Styria. Mountains all around the district rise to more than 2,000 m and a minor road leads up to a pass into the neighboring province of Carinthia. Due to this remote and alpine situation, land use in the district is, to a very large extent, dominated by forests and alpine meadows for summer grazing.

Around the year 2003, an energy consultant leading an EU-funded energy agency (Energie-Agentur Obersteiermark) joined forces with a team of professional process facilitators and together they invited the district’s population and specially selected local stakeholders to develop a vision for the district of a future without fossil energy use.

The first workshops were held in a local pub (see Figure 2) and involved around thirty regional ‘experts’ and people who were, for different reasons, interested in energy issues. Together they developed what they called the “Energy Vision of Murau”. This consists mainly of the “Energy Objectives for 2015” and related implementation strategies, particularly focusing on how to facilitate the use of local biomass-resources.

**Figure 1.** Map of Murau with (existing and planned) sites of renewable energy use (© Joseph Bärnthaler).



**Figure 2.** Group work at a workshop on the energy vision for Murau (© Joseph Bärnthaler).



#### 4.1. The “Murau Energy Objectives for 2015”

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

A fourth and fifth objective were largely overlapping with these first three.

Their vision of ‘energy autonomy’ explicitly does not involve the physical detachment from energy networks but, more pragmatically, aims at a shift towards renewable sources of heat and electricity, indicated by a positive balance of primary energy flows on a yearly basis. The second and third objectives illustrate that the vision was not confined to technical aspects of the energy system alone, but that it importantly also contained a strategy for regional development as a basis for the generation of income and employment. This does not come as a surprise given that alternative development strategies are scarce due to the remoteness of the region, whereas biomass is available in abundance. Given the remoteness and sparse population of the district it also follows that it was considered infeasible to extend a natural gas network into the district. One strategy that might elsewhere compete with a biomass-oriented energy system as envisaged by the authors of the Energy Vision Murau is therefore not relevant in this region. In other words: the broad consensus for the energy vision including its biomass-orientation was only possible because no vested interests were pushing for a gas-based energy strategy due to this particularity of the remote and sparsely populated district.

#### 4.2. Does the Discourse Have Any Effect?

Whether the Energy Vision objectives and the related discourse had any tangible effects can be questioned for many reasons. One is the lack of alternatives and a second one the fact that many contentious issues have actually been avoided through the choice of priorities and implementation strategies. As is the case of many similar examples, the contentious issues of wind turbines and transportation issues have been explicitly ‘framed out’ of the debate in a kind of ‘peace agreement’ e.g. not to promote wind as a means of reaching the set objectives. This seems to have been a necessary precondition for the formation of a sufficiently comprehensive alliance (see [15]). There also was no official mandate to develop such guidelines at all. Nevertheless, local actors are convinced that the envisioning process and its outcome, the energy objectives, were quite influential in various ways.

The energy objectives were frequently used as points of reference with regard to private and public decisions. For example, a call for tender regarding the replacement of heating systems in public buildings was re-formulated in order to match the energy objectives (ultimately ruling out any fossil fuel based approach). In another case, a consortium of local enterprises in the plumbing business jointly re-formulated their corporate strategies (partly restricting themselves to offering biomass-based heating systems) and gained much recognition with what was perceived to be a best practice example of corporate social responsibility. Furthermore, although the energy objectives emerged out of a very informal, non-authoritative process with no associated formal power resources, they have—as a strategic choice of regional development priorities—later been institutionalized at many levels of

regional governance. Various people claim that they strongly influenced the official development plans not only at the district and the municipal level, but also at the intermediate level of the European LEADER<sup>+</sup> regions.

John Dryzek's approach to discourse analysis largely shares its conceptual foundations and ontological assumptions with Hajers ADA, and has also been developed to understand environmental discourse. It is therefore adequate to draw from both author's methodological considerations.

Box 1.3. Checklist of items for assessing the effects of discourses. Source: [31] Dryzek's (2005), p. 21, box 1.3.

1. Politics associated with the discourse
2. Effect on policies of governments
3. Effect on institutions
4. Social and cultural impact
5. Arguments of critics
6. Flaws revealed by evidence and argument

Completing Dryzek's checklist, we can ascertain that (1) there are politics associated with the discourse, for example contentious investment decisions at municipal level concerning the technical equipment of public buildings; that (2) it had effects on policies of governments (for example by predetermining regional development policies) and (3) on institutions (e.g., the strengthening the role of municipal councilors and of the energy agency in matters of infrastructural development); that it had (4) social and cultural impact (e.g., by establishing the imperative to localize economic transactions); that (5) arguments of critics had been considered (e.g., when purposefully blinding out the possibility to improve self-sufficiency via a larger number of wind turbines) and that (6) evidence and argument revealed flaws (such as the inconsistency not to tackle transportation issues, because to promote public means of transport at the expense of individual mobility seems to be politically hazardous, despite its large potential to contribute to the objective of energy self-sufficiency).

If the energy objectives were influencing processes of political choice, they were, however, certainly not doing so because their promoters were in command of any formal sources of power and authority. What other sources of authority might they have been able to draw from?

#### 4.3. Important Story-Lines

We might study what main arguments were used when forming the alliance that consequently promoted the energy objectives in the region. As has been reported to us by key actors in the process, two arguments have been particularly influential.

The first one reads:

*"We should not send so much money to the sheiks—But rather use our own resources".*

While this seems at first sight to be an economic argument, closer examination reveals that it also vaguely relates to foreign relations (the sheiks standing for undemocratic, unstable regimes), to a 'clash of cultures' (the sheiks probably also being Muslim) and to local patriotism.

While this story-line is central to constructing ‘basic entities’ or ‘the ontology of the discourse’ [31] and actively reiterates a typical dichotomy (and the relationship of competition) between ‘us’ and ‘them’, its vagueness at the same time allows everyone, from the rational economist to the blunt nationalist or regionalist, to agree.

A second story-line goes:

*“There is no need to despair: The biomass we have in abundance will allow us to finally improve our remote district’s economy”*

Again, at face value this is an economic assessment: It’s the biomass-economy, stupid. What we have in abundance will finally help us. On a deeper level, it relates to a social norm about how you should relate to ‘your’ region: with an optimistic and activist rather than a pessimistic and apathetic attitude. This dichotomy of two groups—those who despair or leave the region because they are pessimistic about its economic future and those who are astute and strong enough to bring about a bright future for the region—was reiterated in many conversations around the energy objectives. It is a good example for a matter of social positioning, which Hajer advises us to focus on (in step 6 of 10 [32], p. 73). It also lends itself to becoming a social norm given that non-compliance with the optimistic paradigm can easily (and legitimately?) be sanctioned with social exclusion. This makes a commitment to a renewable energy strategy obligatory and transforms it into a social norm.

#### *4.4. The Undefeatable Men I: Reliable Commitments to Joint Efforts*

Closely related to this second story-line is the often conveyed self-image “we are very pragmatic people and get things done” and the imperative: “... if we all stand together!” To “take action” is often contrasted with “just talking” and the preference is clear: social status, particularly of men (see Figure 3) in this rural and alpine context, very much depends on how certain the community can rely on individuals’ commitments with regard to financial and workforce contributions to joint efforts.

**Figure 3.** Farmers taking on the challenge of improving regional wood logistics (© Joseph Bärnthaler).



#### 4.5. The Undefeatable Men II: Development of Technology and Services around High Quality Wood Chips

These people did not allow technical problems to stop them either. When some end users seemed to prefer oil over wood chips because of the dust emitted by the filling of wood chip bunkers in private homes, the proponents of wood-based heating systems linked up with researchers from a provincial research institute and developed—with funding from national R&D programs—a lorry with an improved pumping device for dust-free filling of wood chips bunkers (see Figure 4). They also invented a new service model which allowed end customers to pay just for the heat (in kWh) without having to consider the quantity or quality of the fuel.

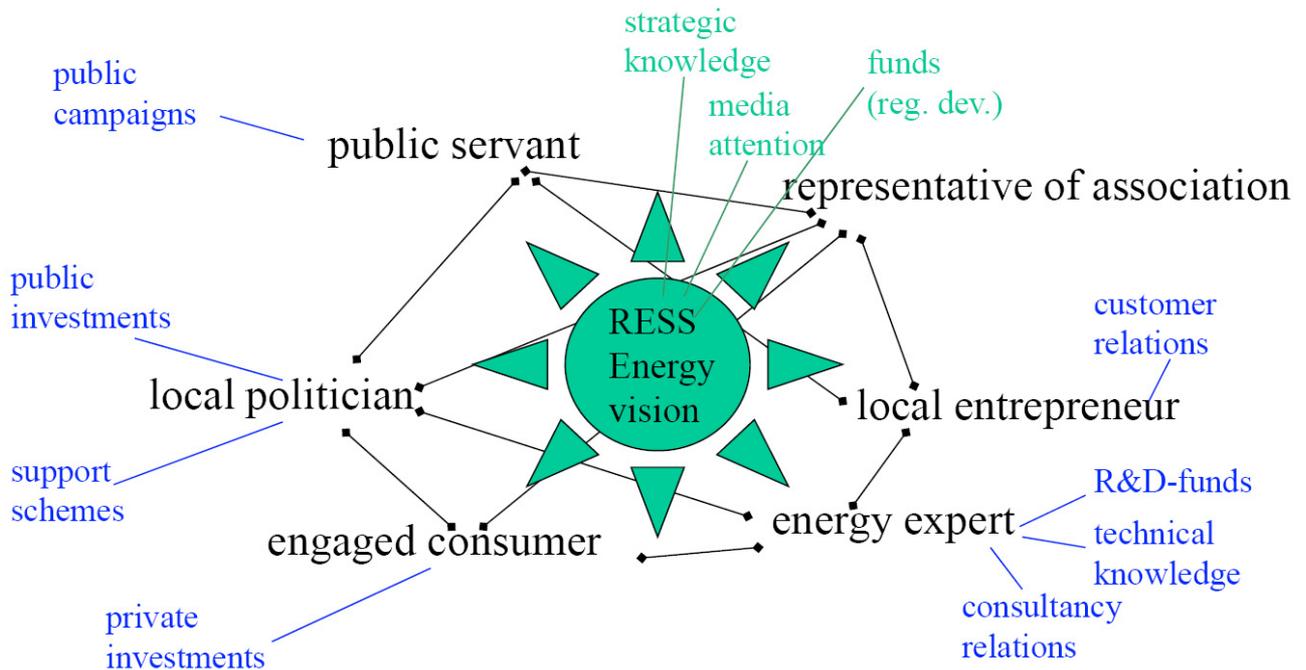
**Figure 4.** New truck for wood chip delivery: “woodchips from *our* forest” (© Naturwärme St. Lambrecht).



#### 4.6. Actors Aligning (Resources) around the RESS Vision

As I have elaborated elsewhere [23], the alliance in favor of the biomass-based energy vision was comprised of actors of very different backgrounds: Farmers, energy consultants, plumbers, local politicians, officers of local administrations, lobby group representatives and other people interested in local energy projects or committed to sustainable development. The composition of the network was strategically shaped—and is important to analyze—with respect to the resources that the various participants were in command of (see Figure 5). Some were important because they had a say in public investment decisions, others brought in their relations to private energy consumers or to relevant media. What is important here is that this alliance, which was quite heterogeneous, for example, with respect to specific technical knowledge, was created and held together through the shared use of the above mentioned story-lines. Additionally, the energy vision was just vague and open enough to be appealing to all the required actors while at the same time contentious issues were sufficiently barred from the debate.

**Figure 5.** The heterogeneous network of actors and the resources jointly mobilized.



#### 4.7. The Practices for Completing a Discourse Coalition

Hajer's ADA suggests looking not only at the actors and their resources, but more comprehensively at 'discourse coalitions', which are "defined as the ensemble of (1) a set of story-lines; (2) the actors who utter these story-lines; and (3) the practices in which this discursive activity is based". ([29], p. 65).

With regard to practices as the third component of these coalitions, we were told that both specifically created institutions and a traditional form and culture of interaction have been important for the success of the initiative. For instance actors acquired the habit of meeting at a "regular's table" (*Stammtisch*) in a local pub, and several working groups were formed and frequently met to develop concrete projects and implementation strategies for a number of sub-topics of the energy vision such as biomass logistics and solar power. However, key actors and particularly observers who are familiar with different examples with which to compare the Murau case also highlight the importance of the different actors in Murau forming a relatively 'close community'. Frequent reference was made to the informal talks that brought the initiative forward, and the way in which people made use of everyday occasions to meet in person from weddings to inauguration ceremonies, from planning workshops to funerals. In this sense, the network benefitted greatly from the habit of directly addressing potential project partners and supporters at these occasions.

#### 4.8. The Crucial Interplay of Discourses

As is the case in many other successful RESS-initiatives, an important aspect of this example is that it interlinked three discourses: that on a transition of the (local) *energy system* towards sustainability; that on local contributions to the mitigation of *climate change*; and, very importantly, that on the *economic development* in the rural district.

The effect of a fusion between the first two discourses on municipal environmental policies has been observed and described by Heather Lovell, Harriet Bulkeley *et al.* as a ‘convergence of agendas’ [32]. In Hajer’s terms, the miracle of communication and joining forces across these fields of politics can be explained by the fact that to focus on renewable energy strategies just “seems right” from the perspective of regional development as much as from the perspectives of climate change mitigation or energy politics. He would term this as a manifestation of “discursive affinity” ([30], p. 71).

#### 4.9. Discourse Structuration?

Does this initiative also fulfill Hajer’s criteria of discursive hegemony? First, are there signs of discourse structuration, which he attests if “a discourse begins to dominate the way in which a social entity (e.g., policy area, enterprise, society as a whole) conceptualizes the world”?

I would say ‘yes’, and argue that firstly *regional development* is now thought of mainly in terms of *energy projects*. Another priority certainly remains tourism, however this is regarded in most cases (with the exception of wind turbines) to be viable in synergy with energy projects. Secondly, I draw attention to the social norm that requires everybody to *be optimistic about a (biomass-based) regional development*. Thirdly, no one could identify any voiced opposition to the energy vision except for some unexpected ads in the local information bulletin in favor of oil-based heating systems and a speech in which a lobbyist warned about the limitations of the local biomass potential. However, this was not perceived as being particularly credible or influential. At least for the period of my direct observation of the initiative from 2004 to 2009, the criterion of discourse structuration has been fulfilled.

#### 4.10. Discourse Institutionalization?

The second condition of “discourse institutionalization” is fulfilled according to Hajer when a discourse starts to be manifested in specific institutional arrangements and organizational practices.

I argue that this condition is also partly fulfilled in this case given that the prioritization of ‘renewable energy’ and particularly the energetic use of biomass became an unquestioned standard strategy for regional development at all regional levels. The “Energy Objectives for 2015” became accepted as an obligatory reference point for public investments, be it in calls for tenders or other planning processes and decisions.

To sum up this brief analysis: Energy objectives have been very strategically selected in a participatory (though not perfectly inclusive) process. This particular framing of a desirable energy future had traceable impact on various political and private decisions (e.g., municipal investments) and shaped following processes of institutionalization (e.g., the setting of priorities for regional development at various governance levels). That the discursive closure of the regional energy and development discourses—despite a lack of democratic legitimacy and mandate—was relatively uncontested and eventually led to discourse structuration and institutionalization can be explained by particular qualities of storylines, of the actor networks that emerge around these storylines and by an interplay or convergence of the discourses on energy, regional development and climate change.

## 5. Conclusions

As much as to study particular actor constellations in RESS-initiatives and the institutional change they are able to initiate, it is also fruitful to study discursive dynamics at the source of such initiatives and to focus on how new visions of regional development are crafted, build up authority over time and eventually can even gain discursive hegemony.

Such discursive dynamics are certainly less tangible and more difficult to analyze than changes in organizational structures and other formalized institutions; however, if we want to really understand the dynamics of such initiatives, and to reach useful assessments of their potential to transform entrenched socio-technical systems (both in particular cases and in general), we certainly need to study these fuzzy discursive processes.

As I have demonstrated, discourses on regional development are particularly bound to locally specific aspects of culture and can often be understood as locally specific adaptations or ‘contextualizations’ of broader discourses such as the universal idea of a transition towards autonomy and a sustainable energy system (see also [21]).

As I have pointed out in a very brief review of contributions by Maarten Hajer and John Dryzek, there is theoretical orientation and methodological guidelines available to assist with the task of designing and conducting such discourse analyses. They should probably not be conducted in isolation, but seem to benefit from studies that are more focused on the development of technology and institutions. To study the early formation of discourse coalitions and emerging degrees of discourse structuration and institutionalization certainly is demanding with regard to the data base required: A reconstruction of how a discourse developed over time cannot just rely on the memories of actors involved since these are necessarily selective and partisan. If such data is used it could be verified, even ex-post, by ‘historic’ sources (minutes of meetings, project reports, newspaper articles, *etc.*) and must always be filtered in real-time by a relatively distanced and strictly critical social scientist. To fully exploit the potential of discourse analysis—for example with regard to strategic conclusions that may be drawn from past developments for future action—would require the use of relatively resource intensive methods of data collection (ethnographic fieldwork, participant observation, *etc.*). However, as I tried to show with my brief analysis of the discursive dynamics around the Energy Vision of Murau, the approach of Argumentative Discourse Analysis (ADA) provides a helpful framework in which even a modestly funded project of accompanying social research can reveal important aspects of, often overlooked, (local) energy transitions. Just scrutinizing interview transcripts, minutes of group discussions and the images used in public presentations, for example, gave us enough hints to build a relatively robust explanation of why this sustainable energy initiative was not facing as much opposition as many such initiatives find elsewhere. To systematically assess such processes of discourse structuration and institutionalization, in turn, will decisively contribute to our evaluation of emergent momentum that may eventually lead to the fundamental transformation of entrenched socio-technical systems.

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## Conflict of Interest

The author declares no conflict of interest.

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