

# Energy Transition in and by the Local Media

## *The Public Emergence of an 'Energy Town'*

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### Abstract

Climate change mitigation and the transition to environmentally sustainable forms of life have become central public issues, and a number of studies have investigated the role of the media in constructing and distributing representations of climate change and sustainability. Most of these studies have addressed the media at a national or international level. This article investigates the mediating of a local, municipal initiative, i.e. the so-called 'Energy Town Frederikshavn' project in northern Denmark, which has set the ambitious goal of complete transition to renewable energy consumption and CO<sub>2</sub> neutrality within a few years. Using frame analysis, informed by discourse studies, the article analyzes how the project emerged and was established as a public phenomenon in the media coverage, including how it was made intelligible and which social actors were represented as having a say on the matter. The findings show several differences to national or international representations of climate change and sustainability, such as a prevalent profiling frame and an indication of a reversal of the so-called Giddens' paradox.

**Keywords:** climate change, frame analysis, discourse, local media, environmental communication, journalism.

### Introduction

Over the past decade, climate change mitigation and transition to environmentally sustainable forms of life have emerged as central public issues. Several scholars have argued that it is crucial to understand how environmental sustainability and global warming are conceptualized and articulated by influential societal actors if we wish to understand the conditions of action on these global challenges (Doyle 2011, Dryzek 2005, Hulme 2009). Within this line of thinking, a number of studies have investigated the role of the media in producing, constructing and distributing representations of climate change and sustainability, especially in the journalistic mass media, but also in politics, science and civil society (Carvalho 2007, Cottle 2009, Doyle 2011, Eide et al. 2010). Most of these studies have addressed media representation at a national or international level, for instance in national newspapers and in the coverage of international events such as the reports of the Intergovernmental Panel of Climate Change (IPCC) or the UN's annual climate change conferences (COP). While studying media representation at a national and international level is of great importance, it is also important to study it at

a local level. This is not at least because whereas decision-making processes furthering sustainability and renewable energy seem to be moving slowly in international fora, many local or regional initiatives have recently been taken in that direction. Examples of such local initiatives are the 'Transition Town' movement, which began as a civil society initiative in Britain (Hopkins 2011), and the 'Energy Towns' in Denmark, where local municipalities have been a driving force (Lassen et al. 2011). This indicates a need for research into the ways in which these local initiatives are mediated and how they emerge as public phenomena in and through the mass media. The present article sets out to study the mediating of one such initiative, namely the so-called 'Energy Town Frederikshavn' project in northern Denmark, which in 2007 set the ambitious goal of complete transition to renewable energy consumption and CO<sub>2</sub> neutrality by 2015.

More specifically, the article investigates the role of particularly the local and regional media in establishing and constructing the Energy Town as a public issue. The research ambition is not to investigate how a given phenomenon, *in casu* the Energy Town project, is covered by the media, but, more fundamentally, how the project emerges and is established as a public phenomenon through the media coverage. This implies an approach to mediating and representation that underlines the constitutive role of discourse and meaning-making for knowledge and identity construction (Foucault 1969, Hajer 1995, Fairclough 2010). Resulting from this ambition, the article will ask how the Energy Town project was made intelligible in the media coverage, including asking which social actors were represented as having a say on the matter.

Analytically, a *frame analysis* will be employed that implies a quantitative analysis of the total media coverage of the Energy Town Frederikshavn project over the first four and a half years of its existence. A quantitative frame analysis has been chosen, as it enables a comparison of the relative strength of different ways of making sense of the Energy Town project. The quantitative analysis of different frames, however, is seen as (chrono)logically based in a qualitative identification of frames. The analysis will focus on the verbal, but also include a short account of the images in the coverage.

The article will unfold as follows: In order to situate the empirical investigation in a broader context, section 2 will provide an overview of recent studies of the media construction of climate change and sustainability. This will be followed by very short background information on the Energy Town project in section 3, after which section 4 will set up the methodological approach. The analysis itself will be presented in section 5, followed by concluding remarks in section 6.

## Mediating Climate Change and Sustainability

Very generally, the impact of the journalistic mass media on the construction of public issues can be summarized in terms of three aspects. First, the media select topics for the public agenda and so help focus our attention on these, although no simple causality between media agenda and audience perception can be assumed (Dearing and Rogers 1996). Second, the media make topics intelligible by relating them to existing frames, discourses, genres, and narratives. This helps sustain, modify or change these frames, discourses, genres, and narratives. Third, the media give voice to certain persons and institutions and position them discursively within a limited number of 'subject positions' (Foucault 1969), such as 'scientific expert', 'protester' or 'pundit'. As a result of this

positioning, some expressions appear to be meaningful and legitimate, whereas others do not. These three mechanisms apply to the media representation of climate change and sustainability, as well, and will be covered in the following account.

Cottle (2009) distinguishes between three phases in the journalistic reporting on global warming and climate change: the phases of *science*, *skeptics* and *spectacle*. The first phase is characterized by only occasional coverage and by attempts to simply disseminate scientific results to the public, “deferentially reporting the findings of scientific studies published elsewhere” (Cottle 2009: 79).

In the second phase, beginning at the end of the 1980s, the issue of climate change receives higher priority on the media agenda. Moreover, it is increasingly politicized, that is, treated as an issue of disagreement and controversy. With respect to Britain, this development is documented by Carvalho (2007) in her study of climate change coverage in three British ‘quality’ newspapers from 1985 to 2001. Carvalho also shows how different newspapers frame climate change quite differently, depending on their political stand. She thus concludes that “the discursive (re)construction of scientific claims in the media is strongly entangled with ideological standpoints” (Carvalho 2007: 223). In addition to ideological positions, journalistic norms play an important role in the representation of climate change. Thus, in a study of climate change coverage in the US ‘prestige’ press, Boykoff and Boykoff (2004) argue that the dominant media treatment of climate change as a two-sided controversy is related to the journalistic norm of balancing competing views on the same matter. Furthermore, according to Boykoff and Boykoff, this balancing norm has paradoxically led to an “informational bias” (ibid.: 126), where the climate-change skeptics are given disproportionately heavy weight (see also Boykoff 2011, Chapter 5 and 6, for an updated account).

In the third phase, ‘spectacle’, the representation of climate change as a contentious issue is partly replaced by (visual) dramatization of the consequences of global warming. With the scientific consensus on anthropogenic climate changes now widely taken for granted, the news reporting draws heavily on spectacular images of people, animals and places affected by global warming (see Lester and Cottle 2009 for an analysis of the visualization on television news in several countries). This may indeed be a means of making climate change easy to perceive, and it may contribute to a nascent ‘ecological citizenship’ (Dobson 2003). At the same time, however, this representation “threatens to position audiences as voyeurs of their own impending peril” (Cottle 2009: 89), at least if it remains “disconnected from possible courses of collective engagement and political response” (ibid.: 91). It thus may give rise to another paradox, namely that we generally carry on unaffected with our daily business, although we are constantly exposed to representations of catastrophic consequences of climate change (Giddens 2009). A similar argument is made by Doyle (2011), based on a comprehensive analysis of the mediating of climate change by journalists, NGOs, scientists and artists. Doyle argues that, generally speaking, the visual articulation of climate change has “served to present humans as separate and disconnected from the environment” and thereby failed to represent “the mutually interdependent relationship between humans and ecosystems” (ibid.: 158).

A different approach to the mediating of climate change is taken by Eide et al. (2010). In a pronounced transnational and comparative approach, Eide et al. bring together analyses of the coverage of climate summits in Bali and Copenhagen in 19 countries on six continents. The study shows that COP15 in Copenhagen was the object of a

new level of global attention and in that sense represented a ‘global public sphere moment’. However, COP15 was covered with very different levels of attention in different countries, for instance Denmark and Bangladesh had a far higher frequency of articles on the summit than did Russia and Chile. Eide et al. underline the diversity in frames and narratives employed in different countries to make sense of the climate summits, but transnational similarities are pointed to as well. Among these is a sense of disappointment about the outcome as well as the fact that the main actors represented in the national coverage were national political actors, despite the global character of the event. Correspondingly, some of the main storylines focused on either blaming or praising the national political actors. Hence, the study indicates that evaluating the role of national political actors in global political negotiations is an important way to ‘domesticate’ the global issue of climate change.

A further supplement to the phases of news reporting on climate change suggested by Cottle can be found in the work of Bäckstrand and Lövbrand (2007). In a discourse analysis of international climate politics, they identify three main discourses (or ‘meta-discourses’): *green governmentality*, *ecological modernization*, and *civic environmentalism*. Bäckstrand and Lövbrand summarize the three discourses as follows:

Green governmentality refers to a science-driven and centralized multilateral negotiation order, associated with top-down climate monitoring and mitigation techniques implemented on global scales. Ecological modernization, on the other hand, represents a decentralized liberal market order that aims to provide flexible and cost-optimal solutions to the climate problem. The civic environmentalism discourse includes radical and more reform-oriented narratives that challenge and resist the dominance of the two former discourses (Bäckstrand and Lövbrand 2007: 124).

Bäckstrand and Lövbrand situate these discourses in relation to different phases in international climate policy. Whereas the discourse of green governmentality dominated in the early 1990s, the discourse ecological modernization (see also Hajer 1995) has come to dominate at least since the Kyoto protocol in 1997, for instance due to the introduction of an international carbon market and the general belief in the “compatibility between economic growth and environmental protection” (ibid.: 129). However, since the efficient global carbon markets are dependent on governmental regulations, it is argued that the discourses of green governmentality and ecological modernization have become “mutually constitutive” (ibid.:131). The discourse of green environmentalism, elsewhere labeled as “Deep Ecologists” (Giddens 2009) or “Green radicalism and looming tragedy” (Dryzek 2005), is seen as a counter-discourse that centers on the concepts of “climate equity” and “climate sustainability” and underlines the role of social movements and civic participation in contrast to that of the state or market (Bäckstrand and Lövbrand: 132-133). Nevertheless, in its reformist version, it might incorporate elements from the two dominant discourses.

Although these three discourses are formulated in relation to policy studies, they offer a strong point of departure for studying media representations as well (see Lassen et al. 2011 for an analytical application). They go beyond the distinction between science, skeptics and spectacle by focusing on the different rationalities that are employed in discussions on how to mitigate global warming. Instead of asking whether representations are pro or contra anthropogenic global warming, or whether they reflect knowledge in the scientific community, the formulation of these discourses open the door to study-

ing discursive articulations and struggles concerning how to conceptualize and reason about societal action on climate change. Whether and to what extent they are drawn upon in the media representation of the Energy Town project in Frederikshavn will be addressed in the following.

## **The Energy Town Frederikshavn Project**

At a local level, several municipalities in Denmark have taken action to initiate a transition to renewable energy sources, often with reference to the challenges of climate change. Among the frontrunners of these is the municipality of Frederikshavn in northern Denmark, which in 2007 established the Energy Town Frederikshavn project. The goal of the project was to arrive at 100 % reliance on renewable energy sources by the end of 2015 for the 25,000 inhabitants of the town Frederikshavn and its closer vicinity. It is worth noting that Frederikshavn is often referred to as a community that is in some ways disenfranchised, partly due to the scarcity of jobs, which began with the shutdown of two large shipyards in the 1980s.

### *Methodological Approach and Data*

The empirical analysis of the media coverage of the Energy Town project consists of a *frame analysis* (Gamson 1992, Gamson and Modigliani 1989, Entman 1993, Gerhards et al. 1998, Reese 2010). Using an often-quoted definition, a frame can be said to "promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation" (Entman 1993: 52). Frames are constitutive of the construction and interpretation of issues; they are "interpretative packages" that we use "in creating understandings of the world" (Reese 2010: 19). This means that themes and problems are rendered meaningful and relevant within certain frames. All representation therefore involves framing. Analytically, frames are identified by "framing devices such as catch-phrases, metaphors, sound bites, graphics, and allusions to history, culture, or literature" (Nisbet 2010: 49).

The notion of frame comes close to the notion of 'discourse', as both signify conditions of possibility for meaning-making (Foucault 1969, Howarth 2000). However, frame analysis mainly focuses on the representational dimension of discourse, whereas the interpersonal dimension, i.e. the ways in which social identities and social relations are invoked and negotiated, is less addressed. Frame analysis has been especially influential within studies of framing in the mass media, for instance of issues such as nuclear energy (Gamson and Modigliani 1989), abortion (Gerhards et al. 1998), terrorism (Reese and Lewis 2009), as well as climate change (Bødker and Neverla 2012).

The current analysis will ask how the Energy Town project was conceptualized and evaluated, including how the objective of the project and the central actors were represented. This is operationalized in the following questions:

1. Which kinds of media covered the Energy Town project, and what was the distribution between local, national, and trade journals?
2. Which frames were drawn upon in the coverage, and which frames were the most prevalent? Moreover, how were different frames combined in the individual articles?

3. Which individuals or groups of actors were quoted in the media coverage, and which (groups of) actors were predominantly given a voice?
4. How was the Energy Town project valorized in the coverage? Was it generally ascribed a positive, negative or neutral value?
5. What were the main objects in the images of the coverage?

The main focus will be on the analysis of frames (question 2), supplemented by the other analyses. The individual analytic questions will be elaborated further in the course of the analysis.

The *data* consist of an approximation of the total coverage of the Energy Town project in the Danish written media, including print and web, from the first 4 ½ years of its existence, i.e. from the end of November 2006 until June 2011. The material has been retrieved from the Danish database InfoMedia. News articles were selected on the basis of two criteria: either the words ‘Frederikshavn’ and ‘Energibyen’ [the Energy Town] or the words ‘Frederikshavn’ and ‘Energiby’ [Energy Town] had to occur in the same article. Articles that were represented in both a print and a web version were counted only once, which resulted in a total of 373 articles. Only items from journalistic media were incorporated into the material. This includes items from newspapers or news institutions as well as from trade journals, but not items from (other) private companies or public authorities. Both news and views, such as lead articles or letters to the editors, were included in the material.

Analytically, each article was coded by the author with respect to media type, frame, actors quoted, valorization, and genre (news or views). As indicated, this has enabled a quantitative comparison of the relative strength of different ways of making sense of the Energy Town project. However, the quantitative comparison of frames was based on a qualitative identification of frames. More precisely, prior to the study presented here, a pilot study using open coding was carried out to inductively identify central frames in the material. This pilot study was informed by the existing literature on climate change and sustainability discourses and covered about 60 articles from different times in the total period.

## Analysis

### *The Types of Media Covering the Energy Town Project*

The media covering the Energy Town Frederikshavn project can be divided into four different types: local media in the area near Frederikshavn, local media elsewhere, national media, and trade- or sector-specific media. The distribution of articles on the Energy Town project in the whole period is shown in Table 1.

**Table 1.** *Types of Media Covering the Energy Town Project<sup>1</sup>*

Types of media	Share of coverage
Local media in Northern Jutland	76 % (290)
Trade journals	16 % (63)
National media	5 % (19)
Other local media	3 % (11)



Table 1 shows that the Energy Town project was predominantly an issue in the local media in the area of Frederikshavn. In the national media, the Energy Town project was occasionally represented, especially in the first part of the period. However, it is interesting that the trade journals account for 63 articles or 16 % of the total coverage. These media are typically directed at different types of professions or organizations, such as the Danish municipalities ('Danske Kommuner Online'), electricians ('installator.dk'), the industry ('Jern- og Maskindustrien'), engineers ('Ingeniøren'), and car dealers ('Motormagasinet'). Thus, apart from the local coverage, the Energy Town project was made relevant in a range of professional contexts, predominantly representing technological expertise. Moreover, whereas the overall coverage increased in 2008 and 2009 (with at high of 124 items) and then decreased again in 2010-11, the share of the trade journals increased throughout the whole period, from 10 % in 2006-7 to 22 % in 2010-11.

### *Framing*

Frame analysis fundamentally asks how an issue is made meaningful by being inscribed into certain frames. In the current case, the analysis of each article sought to identify the frames that rendered the Energy Town project intelligible. Central clues for identification of frames were the kinds of problems, questions, concerns, moral considerations, and evaluation criteria associated with the Energy Town project.

The current analysis allowed for the existence of *several* frames within one article. If an article situated the Energy Town project within more than one frame, all of these were registered. This gave a more comprehensive picture of the coverage and enabled a better estimate of its diversity. On the other hand, to help estimate the prevalence of certain frames, a *primary* frame was identified in each article when possible. Criteria for identifying a primary frame were either repetition in several paragraphs or prominent placement in the article, for instance in the headline. The findings of the frame analysis are summarized in table 2.

**Table 2.** *Framing*

Frame	Total	Primary Frame
Environment	183 (27 %)	54 (23 %)
Profiling of the Energy Town project	122 (18 %)	52 (22 %)
Business and job creation	95 (14 %)	25 (11 %)
Technology	78 (12 %)	36 (15 %)
National political conditions	40 (6 %)	19 (8 %)
Municipal or household finance	39 (6 %)	12 (5 %)
Communication with citizens	33 (5 %)	6 (3 %)
Cooperation with external partners	19 (3 %)	5 (2 %)
Management and internal organization	16 (2 %)	5 (2 %)
Others	44 (7 %)	19 (8 %)
Total items	669	233

Table 2 shows that a plurality of frames was represented in the coverage, including a wide range of considerations and societal fields. However, the table also shows that the

four most prevalent frames accounted for no less than 72 % of both the total frames and the primary frames. In that sense, the plurality was clearly patterned; the coverage relied mainly on a rather limited number of interpretative resources for making sense of the Energy Town project.

The most prevalent frame was *Environment*, which linked and evaluated the Energy Town project in relation to goals like CO<sub>2</sub> reduction, green energy, and environmental sustainability. Responsibilities for the environment were articulated within this frame, but without dramatization of the consequences of global warming. The following quote provides an example of how the Energy Town project was inscribed into the Environment frame.

Frederikshavn Library is holding an exhibition, where you can find further information. Here, you can read about the big, local Energy Town project, find out what you can do to reduce your CO<sub>2</sub> footprint, make a climate promise and much more (Lokalavisen Frederikshavn 5.9.2007).<sup>2</sup>

The results for the primary and total frames show a different picture. As for the primary frames, the environment frame was hardly more frequent than the second most frequent frame (23 % versus 22 %), whereas for the total frames, the environment frame was clearly the most frequent (27 % versus 18 %). In at least 129 articles, the environment frame appeared in combination with other frames, making it the frame most often combined with other frames. Thus, the key role of environmental considerations in the coverage was not least due to the fact that they were articulated in combination with other considerations.

However, although the Environment frame was the most dominant frame, it did not dominate the coverage. About ¾ of the frames registered made sense of the Energy Town project in other ways than by relating it to environmental goals. One of these considerations was about *profiling* Frederikshavn. The Profiling frame was the second most frequent and rendered the Energy Town project intelligible by relating it to accounts of how the outside world viewed Frederikshavn and its (outstanding) qualities. In the profiling frame, the focus was on others' attention to and perception of Frederikshavn and its hopefully unique position vis-à-vis other towns or municipalities. The following quote is an example.

COP15 is a great opportunity for us to call attention to the Energy Town and the unique energy concept that is going to make the plans into reality (Nordjyske Stiftetidende, 10.12.2009).

It is notable that the profiling frame was practically as frequent as the Environment frame in terms of primary frames. A considerable amount of the coverage thus dealt with the ways in which the Energy Town project could improve the image of Frederikshavn.

*Business and job creation* was the third most used frame in total and the fourth most used primary frame. It related the Energy Town to opportunities for local businesses, including farming, and to the aim of creation or maintenance of jobs in the area. The following quote provides an example of how the Energy Town project, here represented by a subproject called 'the Green House', was inscribed into the business frame.

Consultant NN, Frederikshavn Business Council, announces that the idea for the Green House occurred during a workshop arranged by the Business Council in



March. Here, artisans and businesses were invited to learn about and discuss how to make a business out of renewable energy (Nordjyske.dk 23.4.2009).

Given the marked job loss in the recent history of Frederikshavn, it is hardly surprising that opportunities for business played an important role. It is perhaps more surprising that the Business frame accounted for only half the share of the environment frame.

*Technology* was the fourth most frequent frame in total and the third most frequent primary frame. Here, the construction and working of the new energy technology was itself made the object of interest, resulting in more detailed descriptions of the technical characteristics of, for instance, wind turbines or energy saving cars. The relatively high share of technology primary frames was mainly due to articles in national trade journals aimed at audiences with specific educational or professional qualifications, but also local news articles were occasionally devoted to explaining the working of the new energy technology. Here is an example of the former.

The new car will be fitted partly with an electric motor with 80 horsepower, supplied with lithium ion batteries, and partly with a fuel cell system of 13.2 kW with a transformer, which transforms methanol into a hydrogen containing gas, out of which the fuel cell can produce power for the car's electric engine (Ingeniøren 31.10.2008).

A more modest though not unimportant role was played by the frames *National political conditions*, *Municipal or household finance*, and *Communication with citizens*, each of which accounted for 5-6 % of the total number of frames. However, among the primary frames, National political conditions were significantly more frequent (8 %) and Communication with citizens significantly less frequent (3 %). The *National political conditions* frame was often used to refer to what was seen as obstacles to the Energy Town project in the form of national legislation. It was one of the very few frames where conflicts were central, more specifically conflicts between the municipality or the Energy Town, on one side, and state or national politicians, on the other. *Municipal or household finance* viewed the Energy Town project from the rationale of economic gains at a municipal or household level, appealing to the reader as an economic individual. It was often used to stress the economic advantages of energy renovation in individual housing or to point out the energy cost savings at an institutional or municipal level.<sup>3</sup> *Communication with citizens* implied an emphasis on involving local citizens in the Energy Town project in order to improve its democratic legitimacy or efficiency. The moderate strength of these three frames suggests that national politics, economic savings, and citizen communication were considerations well represented in the coverage without a decisive impact on the public construction of the Energy Town project.

The rest of the frames registered played only a minor role in the coverage, but illustrate the variety of contexts to which the Energy Town was related, including education, management, and entertainment.

As appears from Table 2, many articles encompassed more than one frame. Of the total number of articles, 206 (55 %) have been registered as encompassing at least two frames. This demonstrates a considerable plurality in the coverage also within the individual articles. In the current analysis, the co-occurrence of frames was divided into two forms: combinations of frames and integrations of frames. *Combinations* of frames are frames that co-exist in the same article, but are clearly separated in different sentences

or paragraphs. A total of 152 articles with combined frames have been registered, corresponding to 41 % of the total number of articles. *Integrations* of frames, on the other hand, are frames that co-exist not only within the same article, but also within the same sentence, or closely connected semantically within the same paragraph. A total of 95 articles with integrations of frames were registered, corresponding to 25 % of the total number of articles.

Two integrations of frames were particularly frequent. First, the Environment frame and the Profiling frame were integrated in 25 articles or 7 % of the total articles, for instance by suggestions that Frederikshavn could become a “prime example” of “green energy consumption” for the whole world. Second, the Environment frame and the Business and job creation frame were integrated in 18 articles or 5 % of the total articles, for instance via expressions such as “green growth” or “sustainable growth”. It could be argued that these integrations of frames should be viewed as individual frames and added to the list in Table 2, i.e. as a frame of *profiling via environmental initiatives* and a frame of *green growth*. Whereas the latter is relatively well described (cf., e.g., Bäckstrand and Lövbrand 2007), the integration of environmental and profiling considerations represents a frame less frequently accounted for in the literature.

This could in part be due to the local scale of the Energy Town project, in the sense that the Profiling frame presupposes a relation between a bounded community and some ‘outsiders’ who observe and evaluate the community in comparison with competing communities. The profiling frame works as a mirror, making visible to community members how they are viewed by the outside world. On a global scale, this frame would make little sense as there are no obvious competitors for the globe (although supernatural beings could be seen as providing external observers). On a national scale, however, the Profiling frame is easily imaginable.

### *Voices in the Coverage*

In addition to framing, an important part of the journalistic construction of public issues consists in giving voice to (other) social actors. Voices have been studied in very subtle ways within especially literature and discourse studies, for instance via analysis of allusions, presuppositions, and implicit reference to counter-statements (Bakhtin 1986, Fairclough 2003). However, to suit a large-scale, quantitative study, simpler identification criteria were chosen for the present analysis. A voice was registered when a reference to an utterance by another actor than the journalist was made, including both direct and indirect quotes. Thus, it was a criterion for the registration of a voice that the source of the utterance be explicitly mentioned and that some sort of speech act (whether oral or written) be referred to. If a voice was represented in an article, it was counted only once for each article. An author of a letter to the editor was registered as a voice. Table 3 shows the distribution of voices in the media coverage.

In accordance with the dominance of local media covering the Energy Town project, Table 3 shows that most of the voices in the coverage were local. Whereas the most quoted group of actors were local politicians, it is perhaps more striking that representatives of the municipality or the Energy Town accounted for a very considerable share. Thus, taken together the mayor and the leader of the Energy Town project made up a total of 23 % of the voices, which is approximately 50 % more than the share of all

(other) local politicians.<sup>4</sup> One may also note that the mayor and the leader of the Energy Town each were quoted approximately twice as much as the total of ordinary citizen voices. Seen in relation to the total number of articles on the Energy Town project, the mayor was quoted in average in one out of six articles. The analysis of voices thereby indicates that a few top representatives of the municipality or the Energy Town had a strong influence on setting the Energy Town on the public agenda and on constructing it as a public issue.

**Table 3.** *Voices in the Coverage*

Voices	
Local politicians (apart from the mayor)	16 % (80)
Business (including farming and energy sector)	13 % (67)
The mayor	12 % (62)
The leader of the Energy Town	11 % (57)
Frederikshavn municipality (apart from the mayor)	8 % (42)
National politicians	8 % (41)
Ordinary citizens	6 % (31)
Scientific experts	5 % (26)
Local schools	3 % (15)
Other public institutions and authorities	2 % (12)
Other media	2 % (8)
Unions	1 % (7)
NGOs	1 % (5)
Others	4 % (18)

Nevertheless, the analysis also reveals that a wide range of social actors were represented in the coverage. This includes voices from business, farming, civil society, education, and science. Among these, business and farming is by far the biggest group, twice as big as the group of scientific experts or the group of ordinary citizens.

Compared to an analysis of the coverage of COP15 in three Danish nationwide newspapers (Jørgensen et al. 2010), the business voices were slightly stronger in the coverage of the Energy Town project (13 % versus 9 %), whereas the science voices were slightly weaker (5 % versus 7 %). Most striking is the difference in representation of voices of NGOs and ordinary citizens. While these accounted for no less than half the voices in the analyzed coverage of COP15 (ibid.: 153), they only accounted for 7 % of the voices in the coverage of the Energy Town project. Thus, in contrast to the coverage of COP15, civil society did not emerge as a strong stakeholder in the media representation of the Energy Town project.

National politicians did have a voice (8 %) in the Energy Town coverage, whereas international voices were practically absent. This presence of national politicians suggests that the local Energy Town project was constructed as coupled to national politics, possibly similar to the way in which national climate politics can be seen as connected to transnational decisions.

Finally, the findings on voices can be related to the findings on frames. The top four voices, accounting for more than half of the quoted voices, did not use the different

frames to quite the same extent. As for the local politicians apart from the mayor, the Environment frame was clearly the frame most frequently used, followed by the Technology frame and the Business frame. The mayor and the leader of the Energy town, on the other hand, primarily drew on both the Environmental frame and the Profiling frame. They were also frequently quoted in relation to considerations for business and job creation and for national political conditions. This suggests that the mayor and the leader of the Energy Town were represented to a higher degree in the coverage as representing the interests of Frederikshavn to the outside world – via concerns about profiling and national political conditions. As for business representatives, the Environment frame, the Business frame, and the Technology frame were clearly most frequent. Whereas the prevalence of the latter two is hardly surprising, it is worth noting that business representatives voiced environmental rationales as often as business rationales. Perhaps, one may speculate, in order to establish a stronger public legitimacy.

### Valorization

This part of the analysis poses the simple question of whether a positive or negative value was ascribed to the Energy Town project in the media coverage, a question left open by the analysis of frames and voices. To answer this question, all articles were coded into four categories: only positive valorization of the Energy Town project, only negative valorization, both positive and negative valorization, and neither positive nor negative valorization. Valorizations are typically realized through evaluative statements that include evaluative adverbs and adjectives (“the very unique project”, Nordjyske 9.10.2008), substantives with positive connotations (“gathering point for businesses”, ‘lokalavisen’, 29.10.2008) mental verbs (“we are very happy about this cooperation”, Nordjyske 21.12.2006) or metaphors (“takes another step in the right direction”, 25.11.2010). Only valorizations of elements in the Energy Town project were counted. The results of the analysis are represented in Table 4.

**Table 4.** Valorization

#### Forms of valorization

Only positive valorization	66 % (245)
Only negative valorization	5 % (18)
Both positive and negative evaluation	3 % (13)
Neutral valorization	26 % (97)

The results show a clear majority of positive evaluations. Contrary to the widespread belief that the media always focus on the negative side, the Energy Town project was predominantly represented in a positive light. Furthermore, not only were articles with negative valorization rare, articles with both negative and positive valorization were even rarer. This differs from the bulk of political news, where different opinions on the same matter are often juxtaposed in the same article, cf. the balancing norm of journalism mentioned above. The scant juxtaposition of positive and negative evaluation indicates that conflict was not a central news criterion in the media coverage of the Energy Town project, contrary to studies on newsworthiness (Luhmann 1996, Galtung and Ruge 1965). It also suggests that the Energy Town project was *politicized* only to a

very limited degree, i.e. hardly treated as an object for political discussion and struggle (Hay 2007). Rather, the findings suggest that it was largely treated as a given entity to be disseminated to the public.

However, the analysis also reveals that the share of negative valorization increased continuously during the period. The proportion of articles in which negative evaluations were represented, either with only negative evaluation or with both negative and positive, increased from 3 % in 2006-7 to 6 % in 2008, 10 % in 2009, and 14 % in 2010-11. In that sense, critical voices gained weight and the Energy Town project was questioned to a higher, but still very limited degree.

The negative valorization involved most of the frames, including several examples of negative valorization within the Profiling frame ('other municipalities are a head of us') and the Environment frame ('we are not doing enough for the environment'). However, the Business and job creation frame was used for negative valorization to a disproportionately low degree, whereas the negative valorization within the Technology frame was disproportionately high. The latter included problematizations of municipal cars and wind turbines as well as critique of locations of new power plants. In that sense, the practical workings and efficiency of the Energy Town project, rather than the principles behind it, were occasionally called into question.<sup>5</sup>

### *Images*

All images in the media coverage could not be retrieved, but a sample of 45 images in as many articles was analyzed with the aim of identifying the main objects in the images. The analysis allowed for more than one main object to occur in each article. The findings are represented in Table 5.

**Table 5.** *Main Objects in the Images*

Main objects	
Green technology	30 % (21)
Local politicians, municipal or Energy Town representatives	21 % (15)
Local citizens	13 % (9)
Business and work	10 % (7)
Local nature	7 % (5)
Celebrities	4 % (3)
Buildings in Frederikshavn	4 % (3)
Journalists	3 % (2)
Experts	3 % (2)
Others	4 % (3)

Table 5 confirms the local orientation of the coverage, with local citizens, local nature and local politicians, municipality and Energy Town representatives playing a key role. However, the most frequent object in the coverage was green technology, for instance wind turbines, electric cars or biogas installations. Often the objects of green technology were shown together with local Energy Town representatives or citizens. The images mainly represented tangible beings rather than actions, i.e. technology, persons, or landscapes as objects in their own right. Compared to Cottle's account of the national

media representation of climate change, the absence of images of the international consequences of climate change is striking. The same applies to dramatized or spectacular images. Furthermore, the strong representation of green technology is in stark contrast to findings from a study of climate change coverage in the Canadian press, where only 5 % of the images showed green technology (DiFrancesco and Young 2011).

Seen in isolation, the images were discursively rather open and could be related to several frames. A more detailed visual analysis would be needed to analyze the images beyond the 'lexical' analysis above. However, with regard to the interplay between the verbal and the visual, it could be observed that the images appeared predominantly in articles with the Environment frame or the Profiling frame. This suggests that the use of images amplified the dominance of these two frames in the coverage. Finally, the Technology frame was well represented in the articles with an image, using the images as illustrations of the energy technology.

## **Conclusion**

The analysis has shown that the Energy Town project was covered primarily by the local media near Frederikshavn. Different considerations and rationales for the Energy Town were co-articulated in many articles, and the Energy Town project mainly emerged as a phenomenon relevant to environmental, profiling, business and technological rationales. In the individual articles, environmental considerations were often related to other considerations. A wide range of voices was represented, but a few top representatives accounted for a very considerable share. The Energy Town project was predominantly represented in a positive light, and conflicts mainly appeared not within the Energy Town project, but between it and national players.

In comparison to Cottle's (2009) account of the national media representation of climate change, spectacular representations of the consequences of climate change were strikingly absent in the coverage of the Energy Town project. Controversies over anthropogenic climate changes, as in the phase of 'skeptics', did not play any role either. Instead, the coverage revolved around local business or municipal actions, technological change, and environmental progress. Thus, the coverage can be seen as a reversal of the so-called Giddens' paradox, mentioned in section 2, in the sense that there was little talk about catastrophic consequences of global warming in a distant future, but much about concrete, local actions in the present or near future. It is interesting to note, however, that the rationales represented for action were not solely or even primarily environmental.

In relation to the three discourses presented by Bäckstrand and Lövbrand (2007), a discourse of a civic environmentalism was hardly visible in the coverage, as existing living standards and societal structures remained unchallenged. Rather, it can be argued that the discourses of green growth or ecological modernization reflect the ways in which the Energy Town was rendered intelligible. However, it is more accurate to say that the media contributed to a broader co-articulation of considerations. Environmental rationales were thus co-articulated not only with local business, but also with technology and not least with profiling rationales. The co-articulation took place without any indication of conflicts between the different rationales; priority discussions and the weighing of different considerations played only a marginal role in the coverage.



Finally, the media contributed to a proliferation of the Energy Town project into yet wider contexts, including household financing, education, and entertainment. Thereby, the Energy Town project was made accessible and relatable to a broad range of interests, which at first glance may not have seemed related to municipal energy transition.

## Notes

1. In ten cases, articles with identical wording appeared in media of different categories. They were counted in each of the categories, which is why n is 383.
2. The original quotes in Danish are available from the author.
3. This differs from the 'economic consequences frame' referred to by Shehata and Hopmann (2012: 180), where the economic arguments stand in contrast to environmental considerations.
4. There was a change in both the mayoral and Energy Town leader position once during the period. The quotations include both the former and later mayor and Energy Town leader.
5. In a study of climate change controversies in the French mass media, Aykut et al. distinguish between different types of controversies over climate change: ecology, measures, impacts, and existence (Aykut et al. 2012: 167). The relatively few controversies in the coverage of the Energy Town project were primarily about measures.

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