



Case study Report

D3.2: Empirical report

WP 3 – Case studies

Deliverable 3.2 – Empirical report

THEME FP7 – ENV. 2010.4.2.3-1: Foresight to enhance behavioural and societal changes enabling the transition towards sustainable paths in Europe.

Grant Agreement number: 265191



ACKNOWLEDGEMENT

The research leading to these results has received funding from the European Union FP7 ENV.2010.4.2.3-1 grant agreement n° 265191.

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Manuscript completed in [March, 2012]

This document is available on the Internet at: www.incontext-fp7.eu

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LIST OF ABBREVIATIONS

AAFNs	Alternative Agro-Food Networks
BSE	Bovine Spongiform Encephalopathy
CAP	Common Agriculture Policy
CSA	Community-supported Agriculture
EDORA	Alternative and Renewable Energy (Sources) Federation (Fédération de l'Énergie d'Origine Renouvelable et Alternative)
EU	European Union
EVA	Ethical Vegetarian Alternative
EZ	Emissions-Zero
FAO (or UN-FAO)	Food and Agriculture Organization (of the United Nations)
FDA	Food and Drug Administration (US)
GHG	Greenhouse gas
GMF	Gents Milieu Front
HORECA	HOTel / REstaurant / CAfé
ICS	Intelligent Cooking and Storing
IPCC	Intergovernmental Panel on Climate Change
JNM	Jeugdbond voor Natuur en Milieu
MIVB STIB	Maatschappij voor het Intercommunaal Vervoer te Brussel Service de transports en commun bruxellois
NGO	Non-governmental organisation
NGO	Non-governmental organisation
NIMBY	'Not in my backyard'
NMP4	Fourth National Environmental Policy Plan of the Netherlands
npo	Non-profit organisation
REC	Renewable Energy Community
RES	Renewable Energy Source(s)
REScoop	Renewable Energy Sources cooperatives (European federation)
SAW	Walloon Alternatives Society (Société des Alternatives Wallonnes)
SHN	Sustainable Household Nutrition
SO	strategic objective
TM	Transition management
TVD	Thursday Veggie Day
UK	United Kingdom
UN	United Nation
UNEP	United Nations Environment Programme's
US	United States (of America)
VUB	Vrije Universiteit Brussel
WP	Work Package

A. EXECUTIVE SUMMARY

This empirical report presents the four case studies that are at the heart of the InContext project's Work Package 3 (WP3). The general purpose is to provide a better understanding of how niches of alternative and more sustainable consumption and production practices are created, and how they can later be diffused or mainstreamed. These four case studies are:

- ▶ Gela community, the first community supported agriculture (CSA) project in Austria (case study carried out by Ecologic).
- ▶ Wolfhagen 100% Renewable Energy Community, a community that aims at covering its entire energy needs with locally generated renewable energy by 2015 (case study carried out by UFZ).
- ▶ Thursday Veggie Day, a campaign launched in Ghent in 2009; its 'a veggie day a week' scheme has already been adopted worldwide (case study carried out by ULB).
- ▶ Emission-Zero cooperative in Wallonia, which promotes socially-aware wind projects, and short-electricity supply chains. It also actively supports a model based on local renewable energy infrastructures owned by the citizens/residents (case study carried out by ULB).

Content of the D.3.2 'Case Study report: empirical report'

This deliverable intends to complete the descriptions of the case studies, based on document analysis (and reported upon in the deliverable D3.1), and to extend the scope of analysis by addressing the key issues that were identified previously: the specificity of the niche configurations and their replicability.

To do so, this deliverable is structured along the following reasoning and steps:

1. Provide an overview of each case study to make this deliverable a stand-alone product (i.e. not requiring a reading of D3.1).
2. Question the alternative practice and the related niche: is the theoretical framework relevant for analyzing the specific case study? How does the niche contribute to sustainable development?
3. Retrace the process that resulted in the emergence of alternative practices, and describe the niche through its processes of creation and institutionalisation
4. Understand the ability / capability of this innovative practice to continue, change, become institutionalised and spread/diffuse
5. Describe the governance processes – internal/external/both – and assess their impact on the evolution of both the practice and the niche over time and space. This assumes also an analysis of the impact of public authorities and institutions and investigation of the participatory aspects
6. Understand the configuration that makes such alternative practices come into being and endure (or not): assess the specificity of this configuration and question its replicability / translation

In other words, each of the subsequent four sections intends to understand the shift from a specific niche configuration to its more or less widespread (potential for) diffusion or

translation, and thus to identify possible pathways towards more sustainable production and consumption practices in food/energy domains.

Methodology

Document analysis (see also D3.1)

For each case study, the research team collected and analysed a set of relevant documents from different sources. The sets of documents were examined in detail to draw insights on the research question, and to identify perspectives for further empirical research (such as identify main actors of the niches). The analysis presented for each case study is structured in seven main sections: 1) methodological description of the sources; 2) content analysis; 3) background to the niche development; 4) discussion of outcomes; 5) current and past dissemination; 6) insights on governance aspects; 7) conclusions.

Participative Network Analysis (PNA): Approach and purposes

The network analysis should reveal a better understanding of the interplays and interrelations between the actors of the niche. The analysis can be done with one or more (but better not more than three) participants who have been identified as key actors (it's strongly recommended to conduct the analysis with a homogenous actor group).

Semi-structured Interviews and observations

Semi-structured interviews are based on a generic questionnaire that has been elaborated collectively (for all 4 case studies). The generic guidelines propose a series of questions dealing with the following main themes: Actors, Roles and Linkages; Drivers and Barriers; Diffusion; Governance.

Case studies : empirical reports

GELA - GEmeinsam LAndwirtschaften

Gela ('GEmeinsam LAndwirtschaften') is the first Community-Supported Agriculture project in Austria. In this project consumers can sign up in advance for an annual or a seasonal supply of organic vegetables grown at a local farm ('Gärtnerhof Ochsenherz'). The scheme aims to provide the producers with security of income over the year, and thereby allows them to optimise their farming practices according to the principles of biodynamic farming. Consumers enjoy a weekly supply of organic, locally grown vegetables and seeds of good quality, which are purchased directly from the farmers. The project is co-managed by a group of active consumers and the farmers.

One of the interesting questions is whether the alternative practices emerging from a CSA are indeed more sustainable. On the positive side, CSAs enhance the financial and social sustainability of the farm, by securing fair wages for farmers and protecting them from external disturbances, such as natural conditions leading to low yields or reforms in agricultural subsidies. Social sustainability is further enhanced through building bridges between consumers and producers, as well as between city dwellers and rural areas, thus contributing to rural development, to community building and to enhancing social solidarity among urban populations. Environmentally, CSA supports farmers practicing advanced organic or biodynamic practices which – at least in the case of Gela – have proven difficult to

sustain otherwise. In Gela's case, this included reviving seed and plant varieties (contributing to biodiversity), which have largely decreased due to industrial agricultural practices.

However, as small units of production, CSAs often lack the efficiency of large production units, potentially creating trade-offs for sustainable development. For example, both producers and consumers are often required to travel by car in order to distribute or pick up the food products, which creates negative environmental and social externalities. Furthermore, Gela's case study shows that transitions towards alternative practices demand a high level of commitment, sometimes at high personal costs, which can be deemed unsustainable – although such an assessment is difficult to make, since such transitions also bring significant personal benefits. Hence, it may very well be that the assessment of the self-sustainability of such practices can only be made after they have become sufficiently established.

Generally speaking, the current political interest in CSAs is quite low. Actors were ambivalent whether this is positive or negative for the creation and diffusion of CSAs. On the one hand, in the case CSAs (such as Gela) are created to regain autonomy over the production process, political interventions could interfere with this goal. On the other hand, as a relatively new niche in the food sector, CSAs face numerous problems which could be facilitated through political intervention. For example, Austria does not have a form of collective ownership (which exists in other countries like e.g. France), a factor which hinders the ability of a community to collectively own the farm. In addition, CSA farms need to produce a relatively high variety of products in small quantities, in order to provide a relatively small number of consumers (a few hundred people) with a rich diet. However, farms growing large varieties face problems with inspection procedures, as agricultural agencies and the rules they enforced are geared to specialised agricultural production common on conventional farms.

In sum, public actors could do a great deal for creating favourable conditions for the creation of CSAs, but direct interventions to foster them might face crucial limitations. Nonetheless, civil society organisations are currently engaged in efforts to disseminate CSAs in new political contexts, partially with governmental support – such as the 'CSA in Europe!' project, funded under the European Commission. The success of such initiatives remains to be explored in further research. Furthermore, the large-scale proliferation of CSAs in recent years has increased public and political interest, and it remains to be seen how these trends will influence the niche, as well as the food system it was created to modify.

Wolfhagen: Municipal Energy Transition Process

The German case study is located in the city of Wolfhagen which is a middle order -urban area situated 30 km west from the high order centre Kassel. It is connected to transport by a federal motorway (A 44) and by regional train lines. The city area of Wolfhagen is subdivided into a core city and eleven rural districts. About 13.840 inhabitants are living in the city, about 7.620 of them in the core city. For the future, the decline in population is predicted to reach about 6% in 2020. A large percentage of the employed persons travel to work – mainly to Kassel or to Baunatal (VW factory). In the city of Wolfhagen the economy is diverse: retail trade, crafts, car dealers, fragmented trade, traditional and medium-sized industry and with tendency to rise: innovative small enterprises especially in the energy sector, like energy technology, wood gasification, thermal power station and energy saving window glass. Studies about prospective economic sectors in Wolfhagen designate the sectors tourism, education and renewable energies as most promising (IHK & University of Kassel, 2010).

Wolfhagen is well equipped with public facilities (kindergartens, schools, trade schools, hospital, a retirement home and a senior citizen centre, rural district office, police station).

The WP3 case study Wolfhagen focuses on the local process of aiming to become a 100% renewable energy community and reducing the local climate footprint by fostering energy efficiency. The city of Wolfhagen aims to cover its entire communal energy need (households, commercial and industrial business) from 2015 exclusively with locally generated renewable energy. Beside the positive effects on the communal climate footprint, positive effects on the local economy and an increase in local value should be realised. The measures and projects for fulfilling this aim should be put into practice with an intensive public participation of the local citizens.

The case study of Wolfhagen's energy transition process shows the main influencing aspects, underlying motivations and interplays between local actors. The municipality has been one of the first communities which started their way towards a more sustainable dealing with energy in Germany, driven by local development aims but also by ethical values. At that time when the process started, Wolfhagen took some political decision in contrast to the mainstream practices at that time, especially the privatisation of municipality utilities. Today, these alternative paths turned out to be forward-looking and may become mainstream practices in the future. For example, the remunicipalisation of energy grids and the local production of renewable energy are becoming more common nowadays. Nevertheless, Wolfhagen's path is still remarkable in its consequent focus on local implementation and municipal control linked to a high level of citizen participation.

Thursday Veggie Day

In 2009, the '*Thursday Veggie Day*' (TVD) – *Donderdag Veggiedag* in Flemish – was launched in Ghent by EVA (*Ethisch Vegetarisch Alternatief*), a non-profit organisation (npo) promoting vegetarianism, with the support of the municipality. Its purpose is to promote the adoption of one veggie/vegan day a week as a commitment towards sustainability, health and reducing animal suffering. Therefore, the core practice developed through TVD consists of a voluntary reduction of the consumption of meat and animal products to foster more sustainable food consumption.

TVD campaign is a very fruitful case study to analyse the issues associated with the emergence of a very successful 'niche' of alternative sustainable practices, and the 'imitative ray' this success induces.

The Ghent TVD represents an original and interesting niche, whose emergence is part of critical change in the meaning of an existing practice: vegetarian / vegan food practices are not related solely to animal sufferance, they become part of the answer to environmental, sustainability and health issues. The deployment of this niche of alternative food practice is also very particular, as it is based upon a 'campaign form' (Boltanski & Thevenot, 2006), i.e. a form of action that interrogates the possible mainstreaming of such practices. Media coverage, the municipality's commitment (in a partnership with an npo) and involvement of celebrities are key ingredients of the emergence of the niche within this very specific configuration. And these ingredients impact the whole trajectory of the niche and its replicability, i.e. the diffusion of the niche to various sites and scales by translating it into other configurations.

The comparison with TVD in Brussels offers an important lesson regarding the complexity of this translation process to another site or location and proves the necessity to consider

simultaneously the configuration and the drivers and barriers for the niche creation, perpetuation and institutionalisation.

Emission-Zero cooperative

The ‘recipe’ proposed by wind power cooperatives and particularly by Emission-zero (EZ) is rather simple. It consists of producing electricity locally and, consequently, in materialising/concretising power supply chain to consumers. Indeed, wind turbines and farms contribute to make electricity production more ‘visible’ and concrete. It becomes all the more concrete since citizens can own shares in the wind power cooperative operating the turbine(s). And beyond that, the power supply chain becomes also more ‘graspable’ when a cooperative supplies green electricity at cheaper rates than big power companies. The final result expected is to enable the residents to re-appropriate the power production and consumption over their living territory, and as such it represents an alternative energy practice that is concretised through the creation of niches.

The EZ cooperative was launched in 2007 by members of a non-profit organisation named ‘Vents d’Houyet’. With a noticeable charisma and thanks to the former successful examples of citizen wind turbines, the core actors of this npo convinced a growing amount of a people to take part in the project and to become co-operators of a citizen wind turbine. They collected quickly the capital necessary to launch and build several wind turbines, aimed at diffusing an alternative (more sustainable model of energy production and consumption).

To sum up, the EZ cooperative is a Walloon frontrunner wind cooperative launched by leader activists. As such, the cooperative initiated a process of diffusion of alternative more sustainable energy practices. These practices consist in the local production and consumption of renewable electricity, thanks to a wind turbine collectively owned by citizen share owners – the co-operators.

The process of emergence of this cooperative confirms WP3 hypothesis regarding the impact of a specific configuration that operates as a catalyst in the emergence of the niche. The role played by the ‘leaders’ / ‘founders’ is also crucial in the concretisation of the niche, of which creation requires their experience, expertise as well as their charisma and ability to engender trust. This aspect is all the more important in the case of a cooperative wind turbine since the set-up of the project is a very technical and demanding task, the energy sector is highly regulated and installing a wind turbine requires massive investments.

Within this general picture, this case study offers some particularities and their analysis contributes to answering our research questions. Indeed, this cooperative is a surprisingly activist organisation, partly because of the involvement of well-known activists.

The EZ cooperative rapidly engaged in the diffusion of the niche, providing expertise, skills and knowledge to other collectives who intend to launch a wind cooperative in their area. The EZ cooperative is also part of an expanding network at both the Belgian and European level through REScoop federations, which associate RES cooperatives at both national and EU levels. These networking activities and political engagement contributed to the growing visibility of the cooperative and enabled its members to exert an increasing influence on the RES public policy.

Another key aspect is the crisis that occurred during Fall 2011, a crisis that caused a noticeable change in both the management and positioning of the cooperative.

For now, the diffusion issue remains quite impossible to address as it is a process ‘in the making’, and therefore this issue couldn’t be observed and analysed in detail at this stage of

EZ cooperative evolution. However, our inquiry led us to formulate a hypothesis focusing on the 'legitimacy issue' as an obligatory point of passage towards the diffusion of the niche. This hypothesis should be further investigated in the light of the three other case studies.

Conclusion

The D3.2 empirical report tests the consistency of the theoretical framework and methodological approach that have been developed previously. On the whole, the common methodological framework that has been progressively elaborated by WP3 partners proved here to be operative and efficient in terms of general organisation, theoretical notions and empirical content.

The four case studies thus adopted a rather similar path to push ahead with the description, retracing the 'niche' evolutions and transformations from its creation/emergence to its diffusion. Considering the content of the 4 case study empirical reports and analysis, three notions are particularly salient: 'niche', 'configuration' and 'practice'. However the three notions that lay at the very heart of WP3 theoretical toolbox show also their limits. This calls for further research and for improved analyses of some core issues raised by the case studies.

The integration, comparison, discussion of the analyses of each of the 4 case studies will be carried out in the following months, and reported in D3.3. This final deliverable of WP3 will also be the initiator for an in-depth discussion of the analyses of WP3 and the learning achieved during the WP4 pilot projects.

B. INTRODUCTION

Presentation of the different case studies

This report presents the empirical results of the four case studies of the Incontext project's WP3. The general purpose is to provide a better understanding of how niches of alternative more and sustainable consumption and production practices are created, and how they can later be diffused or mainstreamed. These four case studies are:

1. Gela community, the first Community supported agriculture (CSA) project in Austria (Ecologic).
2. Wolfhagen 100% Renewable Energy Community, a community that aims at covering its entire energy needs with locally generated renewable energy by 2015 (UFZ).
3. Thursday Veggie Day, a campaign launched in Ghent in 2009; its 'a veggie day a week' scheme has already been adopted worldwide (ULB).
4. Emission-Zero cooperative in Wallonia, which promotes socially-aware wind projects, and short-electricity supply chains. It also actively supports a model based on local renewable energy infrastructures owned by the citizens/residents (ULB).

These case studies were chosen because they represent an array of collective initiatives aiming towards more sustainable practices in the food or energy domains. Furthermore, these projects can be interpreted as niches, i.e. fostering innovative / alternative practices towards more sustainable consumption/production. With these case studies we aim to answer the following research questions (for more detail on these research questions and the methodological approach followed, we refer to the document 'WP3 – Case Studies: Research Guidelines. Common methodology for analysing case studies').

WP3 Case Studies Research Questions

- a. What are the drivers and barriers in both inner and outer contexts for the creation of niches of alternative (sustainable) consumption and production practices, and
- b. Do the configuration(s) of these niches highlight possible pathways towards diffusion?

Summary of insights from Deliverable D3.1 'Case Study analysis: Document analysis'

The document analysis explains the aim of each initiative and sketches a first description of the actors involved and the arguments and reasons they mobilise to justify their commitment. Deliverable D.3.1 gives then a first account of the process that led to each initiative, and provides some insight on its evolution over space and time (past, present, future).

One of the main aims of D3.1 was to confirm that the four case studies can be considered as niches of alternative practices towards more sustainable food / energy consumption. Each case study results from a very specific process and a critical engagement of key actors towards the issues at stake. The document analysis shows clearly the context(s) – and especially policy and regulatory frameworks –, process and actors' commitment are the core ingredients that make sustainable alternatives possible. Many drivers and barriers are affecting the emergence of these innovative collective practices. Not only are these drivers

and barriers of various types, but they may bifurcate and evolve in several ways: ultimately, a driver can become a barrier and *vice versa*.

The rather unsettled nature of the drivers and barriers challenges the potential scaling-up of such niche configurations and calls for deeper empirical research to improve our understanding of the ‘inner’ and ‘outer’ (see WP2 and the common framework of InContext for a detailed development of the inner/outer nexus) contexts’ impacts on both the niche and alternative practices (i.e. at the individual and collective levels).

The document analysis in D3.1 carries out a first identification of main actors, successive stages of the processes of niche creation and a depiction of the related alternative more sustainable practices. It provides insights on the key features that the four case studies have in common: a specific configuration that permits the emergence of a niche of alternative practices towards more sustainability, the forms of engagement deployed by the stakeholders, the niche evolution over time and space – especially in terms of diffusion or replication of the observed pathways.

However, the document analyses could not deliver a clear view of the inner context aspects, which requires conducting interviews through fieldwork. Further empirical research proved necessary to retrace in detail the process and configurations, but also to improve our understanding of the internal and external governance schemes of the niches, as well as the extent to which the niches could be replicated or translated to other contexts or sites.

Content of the D.3.2 ‘Case Study report: empirical report’

This deliverable intends to complete the description based on document analysis and to extend the scope of analysis by addressing the key issues that were identified previously: the specificity of the niche configurations and their replicability.

To do so, this deliverable follows the following reasoning and successive steps:

1. Provide an overview of each case study to make this deliverable a stand-alone (not requiring to read D3.1)
2. Question the alternative practice and the related niche: is the theoretical framework relevant for analysing the specific case study? How does the niche contribute to sustainable development?
3. Retrace the process that resulted in the emergence of alternative practices and describe the niche through its processes of creation and institutionalisation
4. Understand the ability / capability of this innovative practice to continue, change, become institutionalised and spread/diffuse
5. Describe the governance processes – internal/external/both – and assess their impact on the evolution of both the practice and the niche over time and space. This includes also the analysis of the impact of public authorities and institutions and investigation of the participatory aspects
6. Understand the configuration that makes such alternative practices come into being and endure (or not): assess the specificity of this configuration and question its replicability / translation

In other words, each of the subsequent 4 sections intends to understand the shift from a specific niche configuration to a more or less widespread diffusion or translation, and thus to identify possible pathways towards more sustainable production and consumption practices in food/energy domains.

This deliverable presents results for each of the 4 case studies independently. Each empirical exploration was conducted by following a common methodological guideline, and with a series of recurrent moments of exchange between the researchers. While questions and approaches were thus streamlined, the contextual factors of each case study call for a very prudent approach before implementing an integration of conclusions or an extrapolation across the cases. While the analyses are thus voluntarily kept independent from each other, an explicit integration of the analyses will be carried out for the next and final deliverable of WP3, i.e. D3.3.

C. METHODOLOGY

Document analysis (see also D3.1)

For each case study, the research team collected and analysed a set of relevant documents from different sources. The sets of documents were examined in detail to draw insights on the research question, and to identify perspectives for further empirical research. The analysis presented for each case study is structured in seven main sections: 1) methodological description of the sources; 2) content analysis; 3) background to the niche development; 4) discussion of outcomes; 5) current and past dissemination; 6) insights on governance aspects; 7) conclusions. The purpose and content of these sections are described below.

- 1) The first section reports the documents that have been collected during the first stage of the research. For each case study, the specific approaches adopted to collect the set of the most relevant documents is explained and their content is quickly described. More precisely, the source (newspaper, internet, radio, TV, advertising, etc.), the context and the nature of the documents (written, audio, video, picture, etc.), the specific information they provide (content and purpose) and their eventual reception and consequences are taken into account. .
- 2) The second section, gives an overview of the case study's purpose(s). It lists the key actors involved and outlines an early description of their arguments, reasons and motivations to participate to the initiative. It concludes by providing a first account of the process and timeline of the case study. This overview is thus composed of 4 main stages:
 - The *overall aim of the case study*, i.e. the goal(s) of the concerned actors, which provides some explanation about the alternative practices and, sometimes, about the ways actors intend to challenge the mainstream practices.
 - The *key actors of the case study and their motivations*, which may vary amongst the various types of actors. Some 'inner' context aspects are highlighted on the basis of these clarifications.
 - The *description of the process and timeline* shows the creation and evolution of the niche over time and space.
 - *Future steps*: This section reports on the actors' view on the future of the niche/practices.

This general description of each case study is partial, as it depends upon the document sources that are available, and particularly on the media coverage and the way actors' views are reported in the media.

- 3) The third section is more analytical. It begins with the background to the niche development, starting with the question: is it relevant to qualify this case study as a 'niche'? Why and to what extent? This will provide insights on the specificity of the niche and the corresponding properties. Thereafter, the niche is put into perspective through an overview of the niche development in other contexts (other sites/ locations in the same country, or similar cases that exist abroad or previous attempts to build such niche, etc.). This inquiry into the background is then completed by a first screening of the policies and legislation in the relevant policy field(s), which should also highlight the path dependence impacting the

niche, the constraints imposed by the policy and legal frameworks and the evolutions of this frame over time and space.

- 4) In the fourth section (entitled ‘discussion of outcomes’), the resulting overall depiction of the niche is completed by investigations into both the experiences of similar niches in other contexts. The policy and legal framing that impacts the niche is also evoked to provide a first view on the drivers and barriers in both the ‘inner’ and ‘outer’ contexts (see WP2 for a specification of terminology) which are identifiable at this stage of the research. Indeed, an inquiry into drivers and barriers requires more research and the conduct of interviews, especially when addressing the inner context aspects.
- 5) The previous discussion of outcomes raises directly the question of the past and current diffusion processes. This section provides insights into the crucial issue of the diffusion/translation of the niche. It investigates the pre-existing niches and current similar niches (their evolution over time and space, networking activities, success and failures, etc.). Indeed, these similar cases could put a new light on the WP3 case studies, and illustrate possible diffusion paths and futures.
- 6) Finally, the sixth section deals with the governance of the niche, which is divided into three sub-questions related to public authorities’ governance, self-governance of the niche and the interplay between these two forms of governance:

Governance – Sub-questions:

- 1) What is the role of public actors and how are they governing niches for alternative more sustainable practices?
- 2) How do these niches govern themselves?
- 3) How do these two strands of governance interact? (possible co-evolution process, etc.)

Governance aspects represent a key issue for WP3 because they highlight the ways actors deal with the ‘outer’ context – i.e. how they cope with both drivers and barriers – and how the external and internal governance of the niche has an impact on the path of evolution of the niche. The description of the interplay between these two forms of governance will contribute to improve our understanding of the creation of the niche and the evolutionary processes, in other words, the niches’ institutionalisation will be highlighted. This also allows the identification of possible levers of action and pathways towards the diffusion of the niche.

Participative Network Analysis - PNA

PNA: approach and purposes

The network analysis should reveal a better understanding of the interactions of the concerned actors. The analysis can be done with one or more (but better not more than three) participants who have been identified as key actors (it’s strongly recommended to conduct the analysis with a homogenous actor group). If the investigated case study turns out to be rather complex or controversial, it could be advisable to have more than one participatory network analysis in order to be able to include heterogeneous views.

The PNA should offer information about:

- The trajectory of the case and of the actors involved across the time;
- The network structure (and its evolution);
- Linkages between the collective and institutions, and the processes of institutionalisation;
- Both the drivers and barriers, and the external and internal constraints that have influenced these processes;
- Communication paths;
- Included / excluded actors and if possible related type of actions, behaviors, etc.

The results of the PNA are presented as a network graph for each case study and a description of the findings.

Method

Preparation	
Participants	Usually 1 (at the maximum 2 per session)
Timeframe	2-3 hours
Material	Pinboard, cards
Staff	1-2 experienced interviewer(s)

How to...

Prerequisites:

- The selected participants should have profound knowledge about the case/niche/project.
- The PNA should be based on a case specific interview grid, containing questions like:
 - Who belongs to the key actors?
 - Who is working together with the network?
 - Who is observing the network (not actively involved)?
 - Who should belong to the network in the future?
 - Who left the network?
 - etc.
- Depending on the participants or on how you would like to conduct the interview, the following steps do not define a strict plan but **should give you an idea** about how to conduct a PNA.
- Conducting a PNA should follow the **aim to gain as much and as profound information as possible** ('form follows function'). In that way, the first step of a PNA can be seen as a kind of **moderated brainstorming process** (avoid interruptions, use of open questions etc.). A PNA needs experienced interviewers because the

dynamic of this method could lead to misunderstandings or in the case of an inexperienced interviewer to manipulative questions.

Proceeding

1) In the first step, write the name of the actors on a card.

2) Then define their role within the network and,

3) Add this information on the card.

4) Categorise the actors into: ▶ Key actors (KA)

▶ Network allies / supporters(AS)

▶ Observers (OS)

▶ Opponents (OP)

5) Ask the participants where to put the card on the pin board.

6) Define the interactions of the different actors and visualise them by drawing lines.

Remark: Generally, it makes sense to start with defining the key team members, put them on the pin board and then go on with defining the most active network members and their role within the network. But it is also possible to define all / or most of the actors in the beginning and sort them in a second step. Also a mixture of these approaches is possible.

7) Cluster the actors by type, e.g.: ▶ Civil actors

▶ Political / public actors

▶ Economic actors (position of the cards)

▶ etc.

Semi-structured Interviews and observations

General Guidelines:

- › *The guide is a generic questionnaire, which can be used for all interviewees. Naturally, certain questions will be more relevant for some interviewee than for others (e.g. not all could answer questions regarding governance of public institutions). Hence, the interviewer can skip certain questions if he/she feels they are not relevant for the interviewee.*
- › *The guide uses terms from the project (such as drivers and barriers) in order to relate the questions to our general analysis. However, interviewers are welcomed to change these terms into less technical language.*
- › *In-text guidelines for the interview are added in RED. A final version without the guidelines will be available on Basecamp.*
- › *The numbers in brackets behind each question indicate into which chapter of the case report the elicited information could flow (this not fixed final obviously, only a help).*

1. Introduction

- **Who we are?** (Name, title, institution)
- **What is our research project about?** InContext is an EU-funded 3-year project, which studies transitions towards more sustainable behaviors/practices at the individual and community levels. In the course of the project, we study 4 case studies of collectives creating niches of more sustainable practices, and how these niches are then spread/ duplicated. Our research team will study the [Gela/Wolfhagen, Thursday Veggie day, Emission-Zero cooperative] project.
- **Purpose of the interview:** To get an understanding of how the project was created/initiated, its evolution process over time and space, the drivers and barriers it faced and still faces, and how it was/can be diffused and/or translated into other contexts.

2. Actor, roles and linkages: (4)

- Perhaps you can introduce yourself and tell us shortly how you got involved in the project? (4.2, 6.2, 7.1)
 - How do you consider the process that resulted in this project and its evolution path? How would you describe your role in the project? Has it changed over time? If so, how? (4.3, 5.1)
 - What linkages do you have to other actors in the project? (4.2, 5.1)
- › *Can be asked vis-à-vis the PNA.*
- › *For external actors – the emphasis should be how their work relates to the project (5.2, 5.3, 6.1)*

3. Drivers and Barriers:

The drivers and barriers can relate to the creation of or participation in the niche, depending on the actor and its involvement in the project – questions should be adjusted accordingly.

3.1 Inner Context

- What are your main motivations for creating/joining [the project]? (6.2, 4.5, 7.1)
- Do they relate to personal concerns / vision? (6.2, 4.5, 4.6)
- *Inquire about the relevance of sustainability to the above concerns / vision*
- Have these motivations changed over time? If so, how? (6.2, 4.3)

-
- On a personal level, what obstacles did you encounter with when creating / joining the project? (6.2)
 - What would make you opt out of the project? (6.2)

-
- What are in your opinion the drivers and barriers individuals and collective have to face to initiate and realise such project?

3.2 Outer Context

- What factors – in your external environment - support the creation of / participation in [the project]? (6.1, 5.2, 5.3)
- Which external factors and actors hinder the creation of / participation in [the project]? (6.1, 5.2, 5.3)
- How do you think these factors might evolve in the future (short and long term)?

These factors can relate to people (peers), structural possibilities or constraints (time, money, convenience, etc.), influential actors, other competing practices, etc. It may be useful to precise the sorts of possible factors to the interviewee if the question seems him/her too 'abstract'. Note that governance related structures are covered under section 5: 'governance'.

4 Diffusion:

- Would you like [the project] to grow? If so, how and to what extent? (7.2, 7.3)
- Would you like [the project] to be replicated elsewhere? Under what conditions? (7.2, 7.3)
- Which actions are being taken in order to diffuse [Gela]? Which further actions should be taken? (7.3)
- Can [the project] be mainstreamed to a societal level? Please explain why. (7.2, 7.3)

5 Governance

5.1 Public Governance

- How is [the project] being governed by public authorities? (5.2, 5.3)

Inquire into policy context, relevant legislation, market structures and institutional framework - based on the background analysis.

- Do these forms of governance create opportunities or put constraints on [the project]?

Please explain. (5.2, 5.3)

5.2 Self-Governance

- How is [the project] managing itself? What is the organisational structure? (5.1)
- Do you find this form of management/organisation effective? (5.1) What should be transformed and how?
- ❖ **Is there anything else you would like to add?**

Overview of the case specific methodological aspects

In this subsection, we present the most salient case-specific methodological adjustments that have been made to fit the common methodology to the fieldwork.

Gela

a. Document Analysis:

The document analysis was divided into two tasks: studying internal documents of the CSA and studying external documents.¹

The internal documents were accessed with the permission of the CSA coordinators. Documents were available in a Google-group established by the CSA. The internal documents analysed here include minutes of project committee and annual meetings held since the initiative formed in 2009 as well as group emails sent over the same time frame. The external documents were publicly available in the internet.

b. PNA

The PNA was conducted with three participants, who were the main actors in the formation of the CSA: the two farm owners and the leading consumer delegate. Since a CSA is essentially a partnership between producers and consumers, it was deemed important to have the leading actors from both sides in the PNA.

The PNA was conducted at the farm owners' garden, near Gärtnerhof (Austria), and lasted about 2.5 hours. In the first part of the PNA, participants were asked to tell their narrative of the evolution of Gela. In the second part, participants were asked to mention the main actors in the CSA, as well as their individual roles and how they are linked to Gela. This part was done using an interactive mapping, through cards (for the actors) and arrows (for the roles and linkages). The results of this mapping were later digitalised, as shown in Annex A.2: Participative Network Analysis.

¹ A complete list of documents is presented in Annex A.1: Document Analysis.

c. Semi-structured interviews

The choice of interviewees was guided by two main considerations: 1) Targeting the main actors as highlighted by the PNA; 2) aiming for the inputs needed to answer the research questions, specifically with regard to knowledge gaps which could not be covered through the document analysis or through the interviews with the PNA participants. These include:

- Interviews with three consumers, to inquire into the drivers and barriers in the inner and outer contexts for joining the scheme. This included an interview with a consumer who is a member of the Gela Working Group, which enabled to inquire into aspects of self-governance. It also included an interview with a consumer who left the project, in order to shed additional light on the possible barriers.
- Interviews with Gela's supporting network, in order to learn about Gela's creation from an outside perspective, and to inquire about diffusion aspects. These included three interviews: a) A member of an NGO which was part of the Working Group during the creation of the project; b) The founder of the CSA in Buschberghof which inspired the creation of Gela; c) Managing director of an agricultural association with which Gela is associated.
- Interviews with key actors which interact with Gela through formal institutions (such as the Austrian Federal Ministry of Agriculture, Forestry, Environment & Water Management or Demeter Austria), in order to inquire more into Gela's interaction with the outer context and possibilities to mainstream the niche.

Overall, 12 people were interviewed: interviews were semi-structured and conducted in the interviewees' native language (German), and then summarised in English. However two interviews were conducted in writing. A complete summary of all interviews is provided in Annex A.3: Interviews.

d. Observations

- Visits to the farm: the research included two visits to the farm, one in the early stages of the research, and one during the PNA. During both visits we had a chance to talk to the farm employees and to get a feeling for the atmosphere at Ochsenherz. In addition, both visits included a meeting with the consumers' leading delegate.
- Monthly meeting of Gela Working Group: during one of the visits, we attended Gela's monthly meeting, in Vienna.

e. Data limitations

- Data on the wider group of yield shareholders: the data are focused on the frontrunners leading to Gela's creation and evolution, but it is not meant to be representative of the entire group of yield shareholders.
- Data on agricultural policies: the data are meant to reflect on Gela's experience with agricultural institutions, not to represent a comprehensive picture of the opportunities and constraints posed by these institutions.

f. Citing the empirical findings

When citing interviewees' statements in the report, they will be presented in an indented paragraph and font size 10 (but not in quotation marks, as these are translated statements and not the interviewees' original wording). In some cases, reference will be made to the original German terms used by the interviewees. Referencing will be made as follows: (personal communication, full name of interviewee, Month and Year).

Wolfhagen 100% RES

a. Document analysis

Three key sources were accessed for conducting the document analysis: web pages, the city council archive, and the public utility company's archives. Different kinds of documents were examined to reveal information about Wolfhagen's energy transformation process. A) Minutes of proceedings (city council) which contain brief information about resolutions or ongoing processes. B) Communal gazette articles (council member series about the energy concept Wolfhagen, in the original: Kommunalvertreter-Serie zum Energiekonzept Wolfhagen) which are an important part of the public relations campaign for convincing the local citizens to support the energy transformation process. Additionally newspaper articles and information leaflets were analysed.

b. Participative Network Analysis of Wolfhagen's Energy Transition Process

The participative network analysis (PNA) was conducted with an actor who has worked both in the energy agency 'Energie 2000 e.V.' and also in the field of energy management in the administrative district of Kassel (Wolfhagen is part of this district) for many years.

The PNA was conducted in October 2011 together with the WP4 transition team member Dr. Sybille Bauriedl from the PARG-Project at the University of Kassel who is the developer of this method. The network analysis interview took two hours.

c. Guided interviews with drivers and initiators of Wolfhagen's transformation process

In total, four interviews have been conducted. Three of the interviewees were members of the core team that was identified in the network analysis: the manager of the public utility company, the head of the department of building inspection and the head of the energy agency 'Energie 2000 e.V. These three interviewees all held engineering degrees.

The fourth interviewee has been actively involved in the founding of the citizens' energy cooperative and also has been a founding member of the local NGO's 'Climate initiative Wolfhagen' and 'ProWind'. She is also member of the city council and of the local advisory council in one of Wolfhagen's districts.

All interviews were conducted in January 2012. The duration of the interviews ranged from 50 minutes to 110 minutes.

Thursday Veggie Day (TVD) from Ghent to Brussels

a. Document Analysis

The TVD is no longer an intimate ‘niche’ in the sense that it touches a several thousands of people/consumers each week throughout the world. As a consequence, media coverage on TVD is considerable, not only in Belgium, but also internationally. While this fact simplified somewhat the collecting of documents, it rendered their exploitation more time-consuming. As a consequence, document analysis was conducted rather as a screening & scanning exercise than as a line-by-line reading of all documents.

b. PNA

The PNA was conducted with a single actor, i.e. with the initiator of the niche, member of EVA (Flemish Vegetarian Association). The interview lasted for the typical 2 hours. Of particular importance it should be mentioned that the interviewee has an experience as researcher, as he possesses a PhD in Philosophy; while this simplified the usual classical problems of trust between society and science, it induced a high social proximity between interviewers (Ariane Debourdeau and Gregoire Wallenborn, who both are experienced researchers in social sciences) and the interviewee.

c. Semi-structured interviews

Considering the high number of people engaged in the TVD practice (e.g. thousands in Ghent), we made the choice to conduct few deep interviews. Indeed, it was neither possible to focus only on the npo EVA, which would have involved to focus on a social and political movement, which is not the exact purpose of WP3 case studies, nor was it feasible to realise a relevant and representative empirical study of the whole population involved within this process.

We completed the work carried out in Ghent by two interviews with two women in charge of TVD implementation in Brussels (one from EVA and the other from the Walloon government) in order to grasp the diffusion issues.

d. Data limitations

The inquiry into the inner context of people committed to the TVD (i.e. the ‘consumers in the niche’) was mainly achieved through indirect sources. The acquisition of original data (e.g. through questionnaires or participatory consumer panels) would have been highly interesting, but exceeded the available resources in WP3.

Up to now, it was impossible to interview officials from the city of Ghent (e.g. representatives from the city council), mainly because of difficulties inserting ourselves into their agendas.

e. Citing the empirical finding

Quoted statements collected during empirical research are mentioned in specific intended paragraphs and font size 10. Presence or absence of quotation marks differentiates two main situations related to linguistic aspects:

- 1) The quotation marks indicate that the statement was made in English and, consequently, that it is accurately reported
- 2) Absence of quotation marks corresponds to statements that were enunciated in other languages than English (i.e. mostly in French, German, Flemish) and are translated in the present report (with the imprecisions, displacement of meaning/sense and tiny interpretations such translation implies).

Emissions-Zero cooperative

a. Document Analysis

Launched by two RES activists, the EZ (Emission Zero) cooperative has been given a massive media coverage since the very beginning. Media reports were thus used to grasp and collect the reactions generated by the EZ-cooperative members. Since Spring 2009, EZ cooperative has been the focus in numbers of press articles, magazine interviews, television- and radio broadcasts, conference presentations and internet-based audio-video recordings.

We collected also a series of internal documents: most of them were open access documents, often available on the internet: general assembly announcement and minutes, status reports, annual activity reports, calls for subscriptions, internet fora, etc. To complete our information-base, some of the permanent actors gave us a series of out-of-date documents which proved not very useful for our study. Nevertheless, some of them complemented the huge amount of non-confidential documents that had been collected.

We also had to find specific documents dealing with the political and regulatory framework: in the deliverable D3.1, we focused mostly on sources dealing with the revision of the Walloon Reference Framework for Wind power. This perspective has been further complemented for this deliverable D3.2, by retracing the main historical evolution of the legal framework which regulates cooperatives.

Although we found plenty of documents dealing with the EZ cooperative, some aspects of the cooperative's trajectory remained obscure in the absence of any report: this is particularly true for the period of crisis which the cooperative was facing. The lack of information on that episode has been overcome by the face-to-face interviews.

b. PNA

During our interview with the main founder of the cooperative, doing the PNA proved rapidly unfeasible considering the very talkative and direct personality of the interviewee. However, the most important information that should have been provided by the PNA was collected throughout the very long interview conducted with him (more than 3 hours).

c. Semi-structured interviews

2.000 cooperators are taking part in the EZ cooperative. It proved rather impossible to identify a representative sample of the actors to be interviewed. Moreover, selecting one or two actors among 2.000 would have inevitably caused major bias. Consequently, we made the choice to focus on the core actors of the cooperative – namely B. Delville (interviewed twice) and J.-F.

Mitsch. These two constitute the main founders of the EZ cooperative. Moreover, the tensions and oppositions within the cooperative did not facilitate the empirical fieldwork; in this situation of internal crisis, several people refused to be ‘interrogated’.

d. Observations

While the rural location of the fieldwork has been a practical barrier to the empirical research, the two meetings with B. Delville generated a highly interesting set of four to five hours of interview material. Beyond this, the interviewee quite rapidly proposed engaging in a relationship of another type (e.g. developing joint research projects); though not problematic as such, this aspect needed to be mentioned. Informal discussions enabled us to complete the empirical research, in a more ethnographical way. We held several long discussions with activists involved in npo Vents’ d’Houyet, as well as with the staff of both the npo and the cooperative.

e. Data limitations

Cooperators’ motivations are only investigated through secondary literature, reports and opinions asserted in the course of interviews we conducted. Therefore, it is rather difficult to account for the inner context of the cooperators in a very detailed way and on an accurate basis. In the current situation of internal conflicts that characterised the Emission-Zero cooperative (see *infra*), any interviewer tends to be considered as a potential ally or enemy. Consequently, many interviewees tried to ‘convince’ the interviewer or, on the contrary, they did their best to avoid giving any important information or opinion that could become an argument against its original enunciator.

f. Citing the empirical finding

Quoted statements collected during empirical research are mentioned in specific intended paragraphs and font size 10. Presence or absence of quotation marks differentiates two main situations related to linguistic aspects:

- 1) The quotation marks indicate that the statement was made in English and, consequently, that it is accurately reported.
- 2) Absence of quotation marks corresponds to statements that were enunciated in other languages than English (i.e. mostly in French, German, Flemish) and are translated in the present report (with the imprecisions, displacement of meaning/sense and tiny interpretations such translation implies).

D. CASE STUDIES

I GELA - GEmeinsam LAndwirtschaften

I.1 Overview of the Case Study (fact sheet)

Gela ('GEmeinsam LAndwirtschaften') is the first Community-Supported Agriculture project in Austria. In this project consumers can sign up in advance for an annual or a seasonal supply of organic vegetables grown at a local farm ('Gärtnerhof Ochsenherz'). The scheme aims to provide the producers with security of income over the year, and thereby allows them to optimise their farming practices according to the principles of biodynamic farming. Consumers enjoy a weekly supply of organic, locally grown vegetables and seeds of good quality, which purchased directly from the farmers. The project is co-managed by a group of active consumers and the farmers.

Gela's Main actors and organs

The Farm – The farm (Gärtnerhof Ochsenherz), is a small biodynamic farm (Demeter² certified), settled on an area of about 5.5 hectares of rented cropland, approximately 30 km north-east of Vienna. The farm is owned by Dr. Peter Lassnig and his partner, Lilli Henzl, and is currently employing seven permanent workers and two volunteers³.

Yield share-holders – As of May 2011, about 200 people have registered as yield shareholders, i.e. consumers who participate in the CSA⁴.

Consumer delegates – Two representatives of the yield shareholders are sitting in the steering committee (in charge of internal supervision). They are elected at Gela's annual assembly⁵.

Working Group – Gela's main governing body consists of 10 to 20 people who regularly participate in the monthly working group meeting and carry out various tasks in the project. The group includes the farm owners, several of the farm workers and several consumers, including the consumer delegates.

Annual assembly - Yield shareholders meet once a year in the annual assembly, where the budget for covering the costs of vegetable production is presented and divided among the Yield Shareholders⁶.

² Demeter is a brand for products from biodynamic agriculture, which is known for its strict verification process: <http://www.demeter.net/>

³ Website Ochsenherz Gärtnerhof: <http://www.ochsenherz.at/gaertnerhof-mitarbeiter.html> (accessed September 2011).

⁴ Personal communication, Eva Maria Haas, July 23rd 2011.

⁵ Minutes of the first annual assembly of "gemeinsam landwirtschaften" Ochsenherz, Vienna 10 November 2010.

Timeline

The following timeline lists the milestones of Gela's creation:

Dec. 2009: The Gela working group was established. In the following year, the working group met monthly and developed its own CSA model for Ochsenherz.

Nov. 2010: The working group organised two public discussions in Vienna and in Gänserndorf to present the new CSA model. Recruitment of consumers began.

Nov. 2010: The first constituting annual assembly was held. At this point 140 consumers had already joined the group.

Feb. 2011: Vegetable distribution according to the new system began.

March 2011: A new Gela online platform was established.

April 2011: The first Gela action day was held, calling on consumers to help out one day on the farm (established as a monthly routine).

May 2011: The second annual assembly was held, allowing more participants to join. The project reached the mark of 200 participants. All harvest shares are now taken.

1.2 Overall aim: characteristics and purposes sought by the niche creation

1.2.1 Alternative practices

Dissatisfaction with the current food system and the desire for an alternative practice

Creating an alternative and sustainable practice is at the heart of the core group's vision for the project. Vision building in the early phase of the initiative and the legal agreement ('Vereinbarung'⁷ in German) that resulted from these discussions demonstrates the participants' commitment to a form of agriculture which follows its own set of principles, differentiating itself from industrialised modes of agricultural production and distribution systems, and thereby proposing an *alternative* to mainstream practice.

Gela's actors' wish to create an alternative food practice stems from their dissatisfaction with the current food system. This food system is identified with capitalist market structures that result in a type of 'supermarket consumerism' ignorant of its environmental and societal impacts:

Supermarkets, but also producers of other goods, e.g. clothes, cannot be trusted. Even organic labels cannot always be trusted and do not guarantee that products are

⁶ Minutes of the first annual assembly of "gemeinsam landwirtschaften" Ochsenherz, Vienna 10th November 2010.

⁷ Legal agreement for the Community Supported Agriculture Ochsenherz (Gela-Ochsenherz) to be signed by all participants in the season 2011/12, available on the project website at: http://www.ochsenherz.at/Texte/Vereinbarung_%20gela_wirtschaftsgemeinschaft_jahr_2011_12.pdf (accessed September 2011).

‘fair’, i.e. that workers receive fair wages. (Personal communication, Yield shareholder, Oct. 2011)

The idea to progress beyond buying [‘Idee des Kaufes zu durchbrechen’] and thus evade capitalism in this field [‘dem Kapitalismus ein Schnippchen schlagen’]... food should not be a good like any other where profit is all that counts, where soils are being exhausted and where workers are not treated well. The result of such mad global practices [‘globaler Wahnsinn’] is food with no life and no taste. The consciousness of these facts created a sort of suffering [‘Leidensdruck’] which served as potent driver to change consumption practices. (Personal communication, Yield shareholder, Oct. 2011)

In addition, learning and making new experiences is often mentioned by actors when describing their experiences with Gela, which is inherent to the creation of new practices. The following Chapter will unfold these alternative practices, and highlight how they deviate from their corresponding mainstream practices in the food system.

Unfolding the alternative practices

In principle, it can be said that Gela compromises two practices – agricultural food production and agricultural food consumption. Gela aims to create alternatives to both of these practices, as well as to the relationships between them.

Alternative production practices

With regard to the first practice, agricultural food production, Gela’s alternative practice comprises of several elements, which are clearly formulated by the farmers: a) adhering to principles of bio-dynamic farming, which entails aspiring to a closed cycle using as few inputs from outside as possible and reusing agricultural waste products as inputs to farming and aspiring to a high level of biodiversity and soil regeneration; b) experimenting with non-hybrid varieties of both vegetables and seeds and reviving old varieties⁸; c) securing long-term economic viability of the farm and fair wages for all workers; d) creating a communication space where people like to come to get together, to find new energy and to celebrate⁹.

These elements differentiate Gela from mainstream agricultural production, which is mostly profit-driven, and is thus characterised by specialisation, large-scale production of mono-species, modernisation of agricultural methods, and a rather low share of the transaction flowing back to the farmer: “Prices are fiction, and they are totally unrelated to the actual costs of production” (Personal communication, Farm owner, Sep. 2011). Gela’s farmers and supporters also differentiate themselves from the organic food industry, which turned to large scale production building partially on the same structures of industrial food production mentioned above.

⁸ Conventional agriculture usually cultivates hybrid species, i. e. plants that stem from crossing different species. Hybrid species often achieve higher yields, however these plants cannot reproduce. As a consequence farmers remain dependent on buying new seeds for each season.

⁹ Minutes of working group “gemeinsam landwirtschaften” from 12 December 2009.

In addition, industrial farmers are largely dependent on companies selling hybrid seeds, which have a high productivity but cannot reproduce. Gela's farm owner insists on growing original seeds in order to revive agro-biodiversity and restore the farmers' sovereignty in seed production. This involves a learning process which demands quite a lot of time and effort for the farmer:

On the face of it, integrating agro-diversity into a farm or horticultural company is less efficient since it makes operations more complex (high number of crop producing relatively small quantities). By deciding to obtain his own seeds, the farmer also takes on a lot of development work which on conventional farms is sourced out to specialised firms. For many old varieties, seeds with sufficient quality and adapted to the specific location do not exist. It requires a lot of experimenting, innovation and developing to produce the seeds needed for cultivation, learn how best to use them and choose appropriate varieties. The enthusiasm mentioned above seems to be a prerequisite for engaging in these activities as they are so time-consuming. (Personal communication, Director of Arche Noah, Oct. 2011)

Alternative consumption practices

As regards to the second practice, agricultural food consumption, Gela's alternative practice is comprised of different elements, which are interconnected through the principle of consumer responsibility for the production process and its different components, including farmers' wages, impacts on land or nature, needs of their fellow consumers, and so on. The three main elements of this practice are the form of payment, the social solidarity mechanism and the method of collecting food products.

The first and perhaps most prominent element comprising this alternative consumption practice is the form of payment, i.e. consumers' commitment to cover the costs of vegetable production in the farm one year in advance. In this way, consumers share the risk of low crop yields, and provide the farm with the financial security necessary to apply the alternative agricultural practices mentioned earlier. Obviously, this practice deviates from the mainstream consumption practice of committing oneself to a one-time payment, usually for a single product, without acknowledging the real (societal, environmental) costs of production. As a founder of a CSA in Buschberghof has put it: "in a CSA you pay for the production, not for the product" (Personal communication) founder CSA Buschberghof, Oct. 2011).

The second element, also related to the form of payment, is the social solidarity mechanism, established in Gela's first annual assembly. According to this mechanism, consumers pledge their contributions according to their level of consumption (depending on family size and eating habits) but also according to their financial capacity. It is thus not considered to be a direct payment in return for a harvest share, but rather a fair contribution taking both private and social considerations into account¹⁰. This deviates even further from the mainstream consumption practice, in which there is usually a direct link between a transaction and the private benefits occurring from it. Indeed, the creation of such an alternative process also involves a learning process. Hence, at the first annual assembly in November 2010, the

¹⁰ Minutes of the first annual assembly of "gemeinsam landwirtschaften" Ochsenherz, Vienna 10 November 2010.

addition of all bids was below the projected annual budget. After more discussion, several participants increased their bid and the budget sum was reached.

The third element deals with the method of receiving or collecting food products. Gela's consumers can subscribe to one of the two subscription schemes: box recipients and free-collectors.

Box recipients pick up a prepared box of food products from one of the different collection points. Free-collectors go to pick-up stations, where they can choose the quantity and the variety of their products (Personal communication, Farm owner, Sep. 2011). The first scheme more closely resembles the common practice by which there is a pre-defined product which you receive in return for your investment (the harvest share), i.e. a weekly supply of a vegetable box. The main difference between the mainstream practice and the Box-Scheme is that consumers give up some of the sovereignty over the contents of the box, which is determined by the farm's yield (Personal communication, Consumer delegate, Sep. 2011). This practice resembles other direct-selling schemes, in which consumers sign up to a weekly food-box from either a single farmer or a cooperative of farmers. Such schemes have recently gained increased popularity in several European cities, including Vienna (IFZ, 2010; Personal communication, Austrian Ministry of Agriculture, 2011).

The second scheme, free-collection, is more innovative in the sense that instead of receiving a fixed product, consumers receive a share in the total product (i.e. total amount of vegetables produced for the free-collectors). In this new practice, consumers learn to consume not as individuals but as part of a collective, and they learn to be sensitive about how their consumption affects the ability of their fellow consumers' to meet their needs. Indeed, at the beginning some consumers found this new practice quite intimidating or challenging, and describe the learning process involved in adopting the new practice.

Bridging production and consumption practices

It is important to note that Gela does not only create alternative agricultural production and consumption practices, but it also reshapes the interaction between these two practices. For example, Gela consumers' way of assuming responsibility for the production process is not limited to the form of payment, but also includes participation in different activities which support the production process, such as managing the free-collection stations or taking part in the monthly work-day at the farm. Furthermore, a core group of dedicated consumers take part in the management of the CSA through participation in the Working Group meetings, and by taking on different tasks, such as the recruitment and registration of yield shareholders, communication, marketing, etc. (Personal communication, Farm owner, Sep. 2011).

Therefore, Gela provides a venue for interaction between the production and the consumption practices, which creates an alternative practice of its own. Such interaction distinguishes Gela from the conventional food system, where production and consumption practices are almost completely separated, interacting indirectly through economic transactions. The interaction between consumers and producers in the Gela project was instrumental for creating trust and building social solidarity, which in turn created favorable conditions for the emergence of the alternative practices described above. This will be discussed in more depth in the following section, which addresses the relations between the framework of a CSA and the alternative practices emerging within it, in the context of the Gela project.

1.2.2 Niche characteristics

“Niches are protected spaces in which socio-technical innovations and alternative practices can mature and become sufficiently powerful to put into trial the prevailing regime of production and consumption (Kemp, Schot & Hoogma, 1998; Rip & Kemp, 1998, Wiskerke, 2003; Smith & al., 2005; Smith, 2006 & 2007).”

In order to examine whether Gela serves as a niche, we first investigate the actors' perception of the Gela project. One way by which actors frame Gela as a niche is in the relationship of the project with the prevailing regime, be that the current food system, industrial production or the capitalist market. Actors, both within Gela and those who supported its creation from the outside, speak of Gela – and of CSAs in general - as an alternative economic model for the current (capitalist) market structure and industrial production system:

For some time now, people at Gärtnerhof Ochsenherz have tried to decouple the economic conditions under which the farm operates from market-based competition and create an alternative economic model. The aim is to enable a form of economic activity that is based on needs in order to remove the constraints that push the farm towards profit-oriented production of goods¹¹.

Furthermore, actors stress that because CSAs (such as Gela) are niches which offer an alternative to the prevailing regime, there is bound to be competition between the two:

CSA-farms represent future models of sustainable (social, economic, ecologic) agriculture. Nevertheless, CSA-activities will remain a niche in food production without a substantial change of global economy and agricultural policy, because they act beyond capitalistic market and therefore are potential competitors for food industries (Personal communication, Groier, Oct. 2011).

Hence, at least some of Gela actors view Gela as part of a bigger movement of change, which challenges the prevailing regime. Indeed, although Gela is the first CSA in Austria, it belongs to a rather new and emerging movement of CSAs in Europe, which is recently receiving increasing acknowledgement from politicians and academics. The location of Gela within the wider diffusion of CSA niches in the food sector will be discussed in 1.4.

One of the key features of niches is that they enable the emergence of alternative practices, which can come together to form alternative market structures (Schot et al., 1994). They do so by creating open and protected spaces, where actors can experiment, sometimes at high personal costs, with new ideas, artifacts and practices, without full exposure to the range of processes channeling regime development (Rip & Kemp, 1998; Schot, 1998: 588; Seyfang & Smith, 2007; Geels, 2004). As described in the previous chapter, Gela provided its actors with exactly that: a protected space, where farmers and consumers alike could experiment with new alternative practices, and engage in a process of learning, as individuals and as a community.

¹¹ Translated from Ochsenherz's website: <http://www.ochsenherz.at/csa-gemeinsam-landwirtschaften.html>

For the farmers, the niche – or the CSA – provides financial security, enabling them to experiment with innovative farming practices (reviving old seed and plant varieties) which demand great time and effort, and would be unprofitable in the current market structures (Personal communication, Farm owner, Sep. 2011). In addition, the niche provides farmers with a supporting community, which acts out of social solidarity for its members (see Box 1 below).

Consumers also speak of the niche as a learning space, which allows them to gain confidence and overcome anxieties about forgoing old practices and experimenting with new ones. In part, the learning space is facilitated by personal relations with the farmers and mutual trust (Personal communication, Supporter and member of Agrar Attac, Oct. 2011), as well as the existence of a community where experiences can be shared (Personal communication, Yield shareholder, Oct. 2011).

Box 1: Social solidarity at times of crisis

An outstanding example of the support which the Gela community provides for its farm occurred in the fall of 2011, when one of the farm's employees – an immigrant from Romania – was falsely accused of burglary and was sentenced deportation from Austria. With the support of the Working Group, the farmers hired an attorney who managed to overhaul the verdict. Short of being able to finance the legal procedure, the farmers turned to the community for additional support of 1,000€. Within less than a couple of days, the sum was covered, and additional people pledged to donate in support for the employee and the lost work days which he suffered due to the legal incident. This case exemplifies the how Community Support is practiced in the Gela project, both within the farm, and by the yield shareholder community.

Source: Gela mailing list, 23rd November 2011

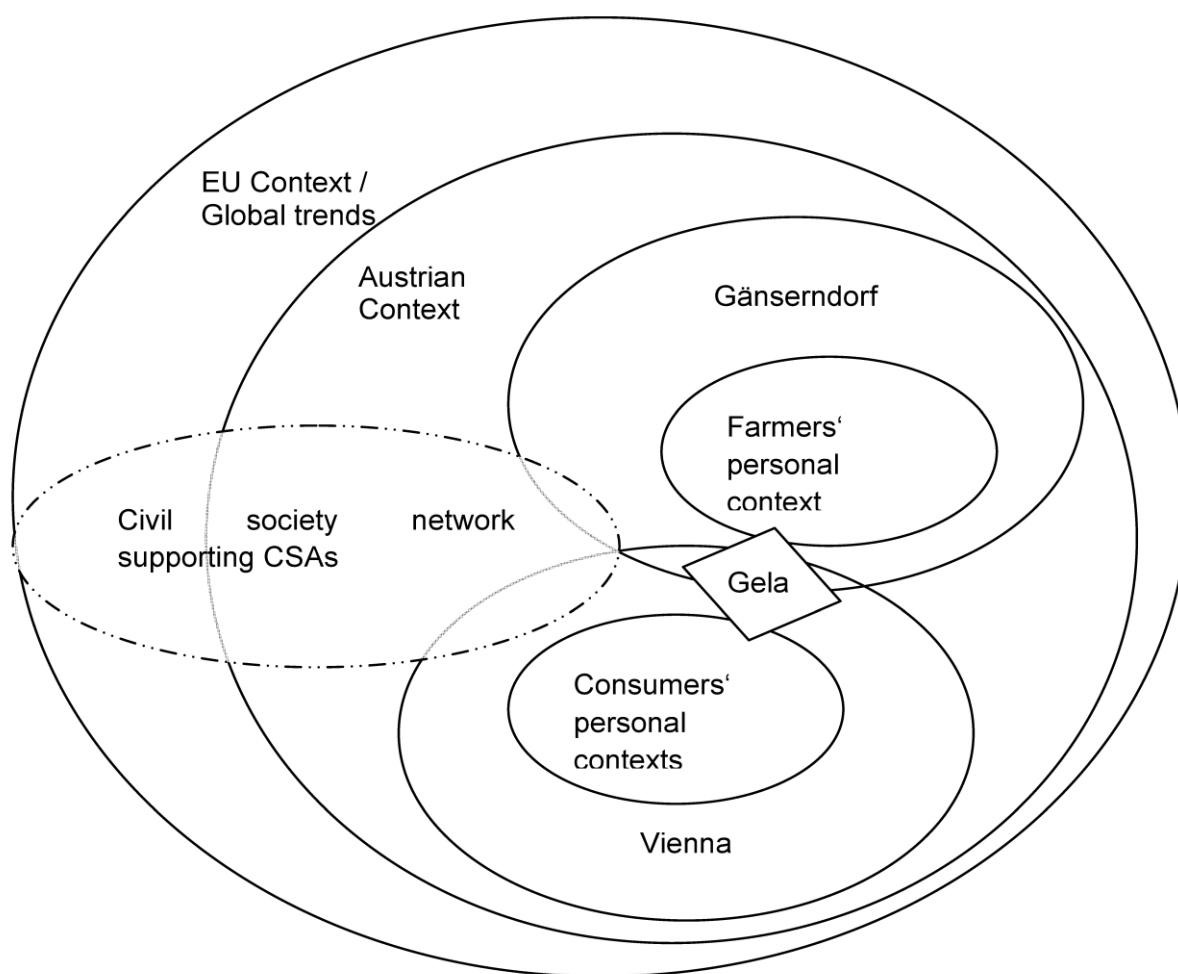
The following chapter elaborates further on the process of the niche creation depicted above, and the driving forces behind it. The possibilities for niche diffusion and its ability to put in trial the prevailing regime – are addressed in Chapter 1.6.

1.3 Emergence of a 'configuration that works'

This chapter will address the individual and collective contexts involved in Gela's creation, in order to identify the driving forces and the enabling factors leading to Gela's creation, as well as the barriers its actors had to overcome in the process. Figure 2 provides a depiction of the individual and collective contexts. In the inner circles are the individual contexts of the main actors involved in Gela's creation, namely the farmers and the consumers.

In the outer circles are Gela's collective outer contexts, or its 'external environment', which can be broken up into several layers: a) the local contexts (Gänserndorf and Vienna); b) the Austrian context; and c) the EU context (see Figure 1).

The chapter describes and analyses these contexts, in the following order: section 1.3.1 addresses the collective outer contexts (local, Austrian and EU), while section 1.3.2 addresses the individual contexts of farmers and consumers. The results are consolidated in section 1.3.3.

Figure 1: Depiction of the contexts involved in Gela's creation

1.3.1 Grounds of the process: Gela's collective contexts

On the whole, the empirical findings do not put too much of an emphasis on Gela's outer contexts as a positive driving force to Gela's creation. On the contrary, it often seems as if Gela was developed despite the outer context or even as a reaction to it. For example, when asked about their motivations for creating or joining the project, actors often speak of their frustration with the current food or agricultural system (see Chapter 1.2).

Nevertheless, actors also mention the importance of having a supportive network made up of colleagues, other CSAs, organisations and networks supporting CSAs and alternative agricultural practices, and so on. They also mention the potential support that they wish to have from external actors who have either ignored or been unsupportive of Gela. The following section analyses the opportunities and the constraints put forward by Gela's collective outer context, beginning with the local context, following through the Austrian context and ending with the EU contexts (see Figure 1). The analysis is based on information extracted from literature, internal documents, the PNA and personal interviews.

The local context

Proximity to a large city

The farm is located in a small rural village, called Gänserndorf, in the state (or province) of Lower Austria (in German: Niederösterreich). An important factor in this location is the proximity to Vienna (approximately 30 km), the largest city in Austria. The proximity to a big city is important for the development of local food systems in general, since a city offers a large pool of consumers with a relatively high buying power, who at the same time lack access to fresh and locally grown food products (IFZ, 2010).

One common means by which farms interact with consumers in nearby cities, is through markets, sometimes those specialising in local, organic food. Indeed, Ochsenherz began selling its products in markets in Vienna (Personal communication, Farm owner, Oct. 2011). In this way, many consumers made their first personal contact with Ochsenherz and learned to appreciate its products. Following this interaction, some consumers signed up to a weekly vegetable box scheme. This first personal contact, where consumers gain trust in the farmer and his products, was an important factor supporting consumers' decision to join the CSA at a later stage (Personal communication, Yield shareholder, Oct. 2011; Consumer delegate, Oct. 2011). Indeed, about half of Gela's first yield shareholders were Ochsenherz's consumers before the CSA was established (Personal communication, Farm owner, Oct. 2011).

As mentioned earlier, another advantage of large cities is the potential for attracting a relatively large pool of consumers. In the case of Gela, the recruitment of yield shareholders began in November 2010, and within days the first annual assembly was held with 140 yield shareholders. Only six months later, a second annual assembly was held to allow more participants to join, reaching the final target of 200 yield shareholders.

The recruitment of yield shareholders was facilitated by public discussions which were held in different venues around Vienna and in Gänserndorf. It was further facilitated by: a) publicity through local NGOs, such as SOL - a magazine of the association People for Solidarity, Ecology and Lifestyle; and b) local media channels, such as Falter¹² – an alternative weekly magazine, or Rondo¹³ – a weekly magazine in a national newspaper called 'Standard' (Personal communication, Yield shareholder, Oct. 2011; Farm owner, Sep. 2011). Thus, a big city can potentially offer certain facilities which improve the farmers' ability to attract a rather large pool of consumers in a fairly short amount of time.

Municipality of Gänserndorf

Up until now, the municipality has not shown any particular interest in Gela, nor has it been supportive of Gela in overcoming certain constraints, such as the search for new arable land (see Chapter 1.3.2 below).

¹² Falter is an alternative weekly magazine reporting on politics, media, culture and the Vienna city life, from a rather left-liberal perspective: <http://www.falter.at/>

¹³ Rondo is Standard's weekly magazine focusing on fashion, travels, design, technical innovations, food, music or films: <http://derstandard.at/>

In addition, a rather small number of yield shareholders actually come from Gänserndorf, despite the fact that it hosts an Eco-Village, with a potential pool of interested consumers. Indeed, the farmers wish is to have a better connection with the community of Gänserndorf and the surrounding area, and that more yield shareholders would come from this area (Personal communication, Farm owner, Sep. 2011).

Austrian context

Overview of the agriculture sector

Of Austria's 8 million inhabitants, about 3.9% of the Austrian population works within the agricultural and forestry sectors, which account for about 1.9% of Austria's Gross Domestic Product. Austrian agricultural structure is "small-scale and comparatively weak in relation to the sector's international competitiveness" (European network for Rural Development 2010, 1). The strength of the agricultural sector in Austria lies in agro-tourism and the organic food industry, with organic farms holding some 14% of the agricultural land (Lebensministerium, 2006).

It is important to note, however, that organic farming in Austria is only partially associated with local production, as large retailers have taken over a large portion of the market for organic products (Balázs, 2009). Furthermore, agricultural policies in Austria generally favor large-scale specialised industrial farms, e.g. in the form of subsidies based on the size of the arable land (Levidow, 2009). Small-scale farms, growing a large variety of products, receive smaller subsidies, and suffer greater administrative burdens due to the large variety of products which need to be controlled (Personal communication, Farm owner, Oct. 2011).

Government programmes to support rural development

Assistance to small farms in rural areas is dealt with under the Rural Development Programme. The programme is aimed at decreasing disparities with farmers in remote regions, and it supports projects which promote short supply chains through direct sale, product processing on farms, and co-operation between producers and consumers (IFZ, 2010: 11). For example, the programme offers subsidies for single investments which enhance direct selling from farmers to consumers, such as opening a shop (Personal communication, Austrian Ministry of Agriculture, Nov. 2011). However, such programmes often set a minimum size of production unit or investment, thus effectively excluding many small-scale projects, such as Gela (Levidow, 2009: 20).

A more comprehensive scheme for rural development is the LEADER program – a subsidy scheme under the EU Common Agricultural Policy which has been widely used in Austria for supporting bottom-up projects with a decision-making power to local action groups, building local public-private partnerships and supporting localised innovative projects (IFZ, 2010; Levidow, 2009; Lebensministerium, 2006). However, only certain areas are assigned for the programme – based mostly on their socio-economic characteristics – and these do not include the area where Gänserndorf is located.

In sum, Gela's project seems to 'fall between the cracks' of the policies in the agricultural sector. As a novel niche in the agricultural sector, Ochsenherz does not receive special financial support for its biodynamic farming practices or efforts for enhancing agro-diversity. As the first CSA in Austria, Gela has not yet been publically rewarded for its benefits for rural

development, such as bringing higher prices to producers or building solidarity among producers and consumers – although these are included in the goals of Austria’s rural development policy (IFZ 2010, 11). On the contrary, Gela faces some legal barriers, such as the absence of a legal form which allows a collective – rather than an individual - to own a farm (which exists in other countries, like France) (Personal communication, Supporter and member of Agrar Attac, Oct. 2011). This lack of public recognition is perhaps inherent to the creation of a niche, which aims to step out of the structures of the current regime. Even if there is political will, changes in public institutions can take time before more favorable conditions are created for such niches.

Supporting network

While governmental support is limited, Gela did receive support from civil society organisations which promote alternative and more sustainable development of the food sector in Austria. One of these organisations is Agrar Attac, an NGO promoting food sovereignty and counteracting the negative impacts of globalisation on the food sector.¹⁴ The organisation supported Gela through a personal acquaintance between the farmer and a member of Agrar Attac, who was part of Gela’s Working Group and gave many impulses during the creation phase.

Furthermore, Ochsenherz’s financial existence is still dependent upon its participation in a niche market for vegetables, seedlings and seeds of rich varieties and high qualities. Ochsenherz’s products are certified by Demeter, a label for biodynamic agriculture products known for its high standards and strict verification process.¹⁵ Ochsenherz’s vegetables are sold to several organic shops and restaurants in the surrounding area (Personal communication, Farm owner, Sep. 2011).

As a pioneer in reviving old seeds and seed variety, Ochsenherz also receives support from *Arche Noah*, an organisation promoting agro-biodiversity. Arche Noah provides visibility to those farms involved in the preservation and breeding of old varieties and supports them through networking and knowledge exchange (Personal communication, Director of Arche Noah, Oct. 2011). Arche Noah buys seeds from its farmers and sells them to different end users in the market (Personal communication, Farm owner, Sep. 2011).

EU Context

EU’s agricultural policies will not be covered here in detail, as they are well reflected in Austrian agricultural policies, discussed earlier. Austria mainly implements EU’s Common Agricultural Policy (CAP). It should be mentioned that member states do enjoy some freedom in the application of CAP’s funding instruments, but in the case of Austria, there is rather limited use of this flexibility to support alternative local food systems (Levidow 2009).

¹⁴ <http://community.attac.at/agrarattac.html>

¹⁵ Demeter’s website: <http://www.demeter.net/>

Civil Society movement supporting alternative food systems

At the same time, the EU is also seeing a growing movement of people who are highly concerned with the conventional food system's negative impacts on the quality of food or the natural environment, and share a growing concern with the uncertainty and anonymity that characterises supermarket consumerism. This movement leads to a growing demand for local production and direct sales, as consumers wish to reassert control over the food system (Personal communication, Researcher, Federal Institute, Nov. 2011). This movement, described by one of the interviewees as 'the spirit of our time' (Zeitgeist in German), has been further strengthened by external events, such as the recent food scandals in the EU (Personal communication, Founder of CSA Buschberghof, Oct. 2011).

Indeed, a recent study has pointed to the proliferation of alternative local food systems (or agro-food networks) in the EU. These alternative systems "engage public concerns about community, social justice, health issues such as nutrition and food safety, and environmental sustainability", and in some areas are advanced enough to be seen as "an emerging European sector in the food-related economy" (IFZ, 2010). One model of these alternative local food systems are CSAs. The recent emergence of CSAs in the EU, as well as their supporting networks, is covered in Chapter 1.6.

1.3.2 The concretisation of the niche: Individual inner and outer contexts

The following sub-chapter addresses the individual contexts of Gela's main actors, namely the farmers and the consumers. Through an analysis of their personal narratives, this sub-chapter sheds light on the main driving forces leading to Gela's creation, as well as the barriers it had to overcome in the process, in the individual contexts of its main actors. These individual contexts refer to: a) individual inner contexts, such as motivations for creating Gela, and – when mentioned – how these relate to personal visions and values; b) individual outer contexts, such as characteristics of one's own household.

Farmer's personal context

This section begins with a description of the farmers' narratives, with a main focus on the farmer owner.

Personal vision and financial backdrop¹⁶ (Personal communication, Farm owner, Sep. 2011)

The farm owner was not a farmer to begin with. He is a botanist by training, and only at a later stage of his life he turned to farming. About 20 years ago he moved into the Eco-village of Gänserndorf, and his vision was to supply the 30-40 families from the village with food. He also developed an interest in growing and developing seeds, and developing new breeds. In the course of his training on a farm, he participated in a framework program called Scientists for Economy, where he experimented with growing old non-hybrid plant species.

In 2007, he started his own farm (Ochsenherz), together with his wife (Lilli) and his colleague (Stefan). His vision was to grow as many plant species as possible, without any hybrid species and without using any yield enhancing methods, like fertilisers. This makes production very

¹⁶ The titles in the narrative are author's own additions

expensive, since yields are lower and the procedures are more labour intensive, compared to industrial agriculture. He found it hard to communicate this to consumers, and to communicate that there is much more behind the vegetable that they grow, compared to the ones grown in industrial production: “They (the vegetables) go through my hands”.

In addition, stepping out of the hybrid system and growing your own seeds demands investing in research and development – an effort which most farms outsource to seed companies. Hence, it soon became clear that one of the main challenges Ochsenherz would face is how to survive financially. They started off by selling products at the Naschmarkt, and in 2008 they started a weekly box scheme with several consumers. By 2009, they already had 60 subscribed consumers, but the farm was still far from an economically viable level, even taking into account financial assistance from friends and family members. If the farm wished to be profitable – without following the path of specialised agricultural production - it had to search for alternative ways of funding. This was one of the drivers for the creation of a CSA.

CSA emerging as an optional solution

The concept of a CSA was known to the farm owner and his colleagues for quite some time. He learned about the Buschberghof CSA through a diploma thesis, and in 2007 the farm owner's wife went to Boulder, Colorado, and worked on a CSA farm. When she came back, they saw the movie 'The Real Dirt on Farmer John', in an event with Slow Food Vienna. The movie inspired them to think more concretely about adopting 'this alternative form of agriculture'. They organised two more screenings of the movie, together with consumers, which created enthusiasm among them. This led to the decision to establish a Working Group, made up of the farm owner and his wife, colleagues from Ochsenherz and several consumers, which would research what kind of CSAs existed. In the course of this research they learned more about the CSA in Buschberghof, and in December 2009, they invited one of Buschberghof's founders for a panel discussion on CSAs. The discussion with Stränz was the turning point for the farm owner, when he realised that this could be a feasible alternative to secure income for the farm.

Gela's first steps

In the following year, the Working Group met monthly and developed its own CSA model for Ochsenherz. The Working Group received significant external support. This included people from Agrar Attac or from a local University, who helped in developing the CSA model; as well as contacts in other CSAs, CSA networks or networks of Agricultural Solidarity (mainly in Germany).

In November 2010, the Working Group organised two public discussions in Vienna and in Gänserndorf to present the new CSA model, and to start recruiting consumers. The discussions followed press releases and articles in local media channels. Shortly afterwards, the first constituting annual assembly was held with 140 yield shareholders. In February 2011, the distribution of vegetables according to the new system began, and in March 2011 Gela started its online platform. The first action day, calling consumers to help out one day on the farm, started in April 2011, and soon became established as a monthly routine (every first Saturday of the month). In May 2011, a second annual assembly was held, allowing more participants to join, and reaching the target amount of 200 yield shareholders.

The farmers' narrative shows that the initial driver for establishing Gela was a need to find an alternative way to survive economically, without having to follow the path of industrial agriculture. The farmers' vision was to be able to farm according to the principles of biodynamic farming and to revive plant diversity – and in this way regain the autonomy or sovereignty over the farm (including its inputs and outputs), which farmers have lost in conventional industrial agriculture (Personal communication, Farm owner, Sep. 2011). In the current market structure this farming practice was simply unprofitable, and the farmers could barely survive financially.

Hence, establishing a CSA was initially a practical solution for farmers that would enable them to pursue their vision. One can assume that the concept of a CSA also fit into farmers' vision, as CSAs too belong to the biodynamic discourse: "In its treatment of the farm as a self-contained entity or farm organism, bio-dynamics completes the circle with appropriate marketing schemes to support the economic viability of farm. The Demeter label for certified biodynamically grown foods is one avenue. A second outgrowth of this view is the Community Supported Agriculture movement" (Diver, 1999).

Furthermore, what supported the creation of Gela was the existence of an inspirational model, such as the CSA in Buschberghof. The discussion with one of Buschberghof's founders was the turning point for the farm owner, which convinced him that building up a CSA is a feasible opportunity for their farm. Moreover, the early process of learning about the concept of CSAs and researching different CSA models, was facilitated through interaction with networks which allow knowledge exchange and transfer of ideas (such as Agrar Attac or the local University where the farm owner first learned about CSAs).

The land issue

One of the greatest challenges that the Gela project is facing is securing land for its farm. The farm currently cultivates 5.5 ha of rented cropland, and the lease agreement will expire by January 2013. This plot of land could be designated as building land in the near future (in German the term for this area is 'Bauhoffnungland'), and the land owner prefers to convert the land to buildings in order to increase its value. In the past, Ochsenherz already had to return five hectares of land, so it could be converted into building land (Personal communication, Farm owner, Sep. 2011).

The farmers are thus looking for new farmland in the surroundings, of about the same size or even slightly bigger (5-10 hectares). An important criterion for the farmers is that the new land will be close to the location of their own grounds, as they live in a community housing project close to the farmland. In addition, the land has to be suited for organic/biodynamic farming, since converting land which has been used for conventional agriculture can take several years. Finding new land is a major issue, which already came up during the preparation phase of Gela. If not solved in time, this issue could endanger the future of the project¹⁷.

Consumers' personal context

The following section describes and analyses the narratives of four Gela consumers, including: one of the leading consumer delegates, a consumer subscribed to free-share (and involved in the Gela Working Group), a consumer subscribed to the box scheme and a Gela consumer who has left the project. This analysis begins with a short background on their motivations for getting in touch with Ochsenherz and their first experiences with its products. It continues with an analysis of their personal motivations for joining/creating Gela, as well as the barriers they encountered in the process and external factors which created opportunities or constraints.

¹⁷ Gela info-mail, 18 August 2011.

Getting in touch with Ochsenherz – motivations and first experiences

Even before joining Gela, the interviewed consumers had a rather high level of consciousness regarding their food consumption, and the benefits of purchasing local, seasonal and organic food:

The family considers very consciously what to buy and what to eat (Personal communication, Former consumer, Oct. 2011).

Indeed, for some of the consumers the initial motivation to get in touch with Ochsenherz was to purchase high quality and locally grown vegetables (Personal communication, Yield shareholder, Oct. 2011) and to know where the vegetables come from (Personal communication, Former consumer, Oct. 2011). Eva, the leading consumer delegate, is also dietician by training, with a diploma thesis on psycho-social food nourishments. Her interest in getting in touch with Ochsenherz, and establishing the CSA at a later stage, is also related to her professional background.

In the beginning, some consumers became enthusiastic about Ochsenherz's products simply because of the taste experience:

One reason is that the vegetables are a real pleasure in taste (Personal communication, Yield shareholder, Oct. 2011).

One consumer tasted Ochsenherz's products at a colleague's place, which made her curious to taste more of the old varieties (Personal communication, Yield shareholder, Oct. 2011). Other consumers met Ochsenherz in the market, and were at same time curious and intimidated by the appearance of the strange looking vegetables. However, they overcame such anxieties through positive experiences with the new tastes and with the new recipes which were added to the food box (Personal communication, Consumer delegate, Sep. 2011). Consumers also said they joined Gela in order to enjoy the special energy the vegetables carry (Personal communication, Former consumer, Oct. 2011).

However, some consumers also experienced troubles with the new varieties, especially those having big families which found it difficult to adapt their eating habits to the selection of vegetables offered by Ochsenherz:

The diversity and the old varieties were a barrier for joining Gela since the family needs bigger quantities of classic cooking vegetables such as potatoes, carrots, beans and so on, but the box often contained only small quantities of these. The old varieties, in turn, proved to be very difficult for cooking and required many experiments. Some of them were not very tasty (Personal communication, Former consumer, Oct. 2011).

In sum, at least for some consumers, the initial contact with Ochsenherz was related to their motivation to purchase locally grown, high quality organic vegetables, supported by their positive taste experiences with Ochsenherz's products. However, the decision to join Gela, or the CSA, was another step for consumers, which demanded a more significant change in lifestyle, and was often tied with personal values and beliefs about one's own lifestyle and the organisation of society and economy. This is supported by claims such as:

The project ties with the values of the family who lives in a very conscious and spiritual manner (Personal communication, Former consumer, Oct. 2011).

The project ties with her values since she strives to do as little harm as possible to other living beings (Personal communication, Yield shareholder, Oct. 2011).

Creating/Joining the CSA

As mentioned in Chapter 1.2, one of the main motivations for consumers to join Gela is their dissatisfaction with the current food system and their wish to pursue alternative ways of consumption, which avoid the negative impacts of the conventional food system:

The vegetables were therefore not the main reason to join Gela, but rather the idea behind the initiative, the idea to progress beyond buying [*'Idee des Kaufes zu durchbrechen'*] and thus evade capitalism in this field [*'dem Kapitalismus ein Schnippchen schlagen'*]. After having learnt so much about the practices in the food industry, she did not want to be an adapted consumer anymore (Personal communication, Yield shareholder, Oct. 2011).

Consumers described the frustration with the current system, and how Gela offered them a way of self-empowerment, of re-asserting control over one's own lifestyle and finding a way to make a positive contribution (or to avoid the negative impacts of one's own consumption):

The dilemma is that, if one leaves the system, the workers do not get any pay at all. In this context, she feels disempowered as a consumer [*'entmachtet'*] and Gela offers a way to participate, to contribute and to have some influence, e.g. working towards fair wages for the Ochsenherz team (Personal communication, Yield shareholder, Oct. 2011)

Indeed, an important part of this self-empowerment was the ability to exercise solidarity with farmers, to make sure that the farm continues its operations and that the farm workers receive fair wages. For Consumer delegate, this motivation was the trigger to create Gela, or to move from consuming its products to 'ensuring that the production continues' (Personal communication, Consumer delegate, Sep. 2011).

For other consumers, the personal contact with producers was an important motivation, both in itself and for building trust, which is essential for practicing a CSA – partially because of the upfront payment:

She enjoys having a direct relationship with the food producers, contributing to their development [*'Entfaltung'*] by contributing financially and also her time (looking after the distribution point). It is qualitatively different relationship than one normally has with producers, built on trust (especially when the money needed to be paid up-front in the first year of the box scheme) (Personal communication, Yield shareholder, Oct. 2011).

Aside from the relationship with the farmers, consumers also mentioned getting in touch with the farm itself and/or with nature as an important motivation:

Also, yield shareholders would like to grow food in her garden, but this is not possible for other reasons. Joining Gela, having a relationship to the producers and being able to go there and work on the fields is a means to fulfill this need for gardening [*'Bedürfnis'*] (Personal communication, Yield shareholder, Oct. 2011).

It should be noted, that engaging in Gela's alternative consumption practices was not without difficulties. In particular, consumers speak of the anxiety regarding the free collection practice, where consumers go to the market stand and collect as many vegetables as they need. For some consumers, this anxiety was a barrier to participating in the free-collection in the early stages:

She first decided against the free share because the idea of freely choosing the amount of vegetables was stressful to her, being used as stupid consumer to always get a fixed amount for a given price ['Konsumtrottel'] (Personal communication, Yield shareholder, Oct. 2011).

Other consumers described how they gradually gained confidence in the new practice, through successful experiences:

Also fears of unfair distribution during the pick-up of the free share proved to be unsubstantiated. Many participants, including myself, were originally afraid of taking too much and were very hesitant. But over time, everyone learnt that it regulates itself and there is enough for everyone (Personal communication, Yield shareholder, Oct. 2011).

Hence, having a choice between the two practices – one being closer to the conventional way of consuming (vegetable box) compared to the other (free-collection) – was helpful for consumers who were uneasy with the free-collection or needed to make a more gradual change towards it.

Another barrier was the loss of flexibility in when and where to go and pick up your vegetables. For some consumers – who decided to join Gela - the limited amount of distribution points which require one to go by car over large distances was a barrier for participating in Gela, both because of time and costs required, and because of the environmental impact of using one's car so often (Personal communication, Consumer delegate, July 2011; Austrian Ministry of Agriculture, Nov. 2011).

Consumers who did join the scheme also mention the family support as an important factor, both in sharing the effort in picking up the vegetables and – more importantly – in cooking together. For some consumers, having a weekly supply of fresh vegetables demanded that they cook more at home in order to utilise the supply, which would have been difficult had they not had a partner to help them (Personal communication, Yield shareholder, Oct. 2011; Yield shareholder, Oct. 2011).

1.3.3 Intermediate summary

The following section provides an intermediate summary of the results of chapter 1.3, presented in Table 1 below. The table summarises the results for each of the five contexts, and locates them in one of the three categories: driving forces, enabling or supporting factors, and Stumbling blocks¹⁸ leading to Gela's creation. As the table shows, the main driving forces

¹⁸ Stumbling blocks mean factors or processes which intervene with actors' initial intentions, and thus can create potential barriers for action, but can also create potential drivers for different (unintended) actions (author's own definition).

for Gela's creation stem from its core actors' inner motivations, a common feature of CSAs (Schlicht, 2011). In addition, the table shows that Gela was created despite numerous stumbling blocks in its outer contexts (at the local, Austrian or EU level) – which coincides with Gela's alternative nature. In a way, the surmounting of stumbling blocks has become an important feature of Gela, and at times also contributed to its inner strength – such as in bringing its members closer together:

The difficulties also bring the people together, and make the connections stronger (Personal communication, Farm worker, Sep. 2011).

One can even hypothesise that there is a certain reinforcing relationship between the strong driving forces in Gela's core actors' inner contexts, and the stumbling blocks in Gela's outer context: 'we did not ask anybody, we just did it' (Personal communication, Farm owner, Sep. 2011). Clearly further conclusions on this matter demand further research, but this relationship tends to feature other CSA initiatives, and this is elaborated in Chapter 1.6.

Finally, the following table also shows the enabling or supporting factors in Gela's external environment. The proximity of the farm to a big city like Vienna was probably one of the determining factors which enabled the farm to reach a large pool of consumers in a relatively short amount of time, together with the existence of a supportive network. In addition, Gela received support from a variety of civil society organisations.

Table 1: Intermediate summary of drivers, stumbling blocks and enabling or supportive factors in the creation of Gela

Context	Driving forces	Enabling or supporting factors	Stumbling blocks
Farmers	<ul style="list-style-type: none"> • Farming biodynamically, reviving plant variety; regaining autonomy, dis-engaging from conventional market; finding alternative ways to survive economically. • External inspiration (Farmer John, Buschberghof) 	<ul style="list-style-type: none"> • Professional networks enabling exchange of knowledge and ideas • Personal network (family, colleagues) 	<ul style="list-style-type: none"> • Land issue
Consumers	<ul style="list-style-type: none"> • Locally grown, healthy organic food; taste experience. • Dissatisfaction with conventional food system => engaging in new type of consumerism • Solidarity with the farmers; personal contact and trust; Connection to nature/farming. 	<ul style="list-style-type: none"> • Family support • Gradual shift in lifestyle though multiple options for engagement 	<ul style="list-style-type: none"> • Troubles in dealing with varieties • Anxieties regarding new practices • Time • Travelling by car to pick up the vegetables

Local	<ul style="list-style-type: none"> Proximity to a nearby city Publicity channels: local media, NGOs 	<ul style="list-style-type: none"> Municipality and local community are still not involved
Austrian	<ul style="list-style-type: none"> Supportive network of civil society organisations Niche market and certifications for high quality food products. 	<ul style="list-style-type: none"> Falling between the cracks of agricultural policies and the subsidy regime Institutional barriers
EU	<ul style="list-style-type: none"> Other CSAs and CSA networks; emerging sector of alternative local food systems, supportive civil society network. 	

I.4 On-going process: perpetuation, governance and institutionalisation of the niche

I.4.1 Evolution and transformation of the niche

This chapter deals with the evolution of Gela over the course of its first year (i.e. May 2011 to January 2012). The chapter addresses some of the key issues that Gela had to deal with and some of the transformations which occurred during its first year. However, it should be noted that Gela continued to evolve in parallel to the present research (second half of 2011) and thus information on Gela's evolution remains somewhat limited. The information is both based on interviews and the PNA, which were conducted some eight-nine months into Gela's existence and internal documentation.

All in all, this chapter addresses two main issues: a) the involvement of yield shareholders in Gela's management and the distribution of workload; and b) the creation of a legal agreement.

The involvement of yield shareholders in Gela's management and the distribution of workload

Gela's main management organ is the Working Group. Although the Working Group has generally maintained its core actors (i.e. farmers, key farm workers and consumer delegates), it has experienced some changes in the composition of its members, with some people who supported Gela in the early stages leaving the group, while some yield shareholders joining the group (Personal communication, Supporter and member of Agrar Attac, Oct. 2011; Yield shareholder, Oct. 2011). The increased involvement of yield shareholders in Gela's working group goes hand in hand with an important trend in Gela's evolution, and that is yield shareholders assuming greater responsibilities and taking on tasks related to Gela's management.

In part, this trend or shift came as a response to the overload of work which farmers faced in the first year of Gela's operation:

One of the problems is that this is a system which still exploits its people, e.g. if we have to work from 7 am to 9 pm on harvest days, and we still don't have enough people for the work (Personal communication, Farm owner, Sep. 2011).

In several communications between the farmers and the yield shareholders, the farmers expressed their difficulty in dealing with the unexpected administrative workload resulting from the CSA set-up. One example given by the farmers is that in the course of one season they have written about 2,000 emails, in addition to the long working days at the farm (e.g. during harvest season) and the time and effort required for distributing the food products. In addition to the personal costs involved in such work overload, Gela also faced problems in meeting its annual budget (Gela info-mail, Sep. 2011).

As a consequence, the farmers repeatedly invited yield shareholders to participate in Gela's working group, to take on several administrative tasks and/or to help at the distribution points. Indeed, some administrative tasks have been delegated to consumers in the course of 2011, such as registration of yield shareholders and the corresponding email communication (Gela info-mail, December 2011). In addition, several yield shareholders have taken on the responsibility of managing the free collection points (Personal communication, Yield shareholder, Oct. 2011; Consumer delegate, Sep. 2011).

Aside from inviting yield shareholders to share the administrative burden, farmers are also learning to evaluate more carefully the workload associated with Gela's management. One of the proposed solutions discussed in the Gela Working Group is that in 2012 yield shareholders will cover most of the hours for administration and communication. Among the discussed options were setting a mandatory amount of days which each yield shareholder will have to contribute every season, or allowing yield shareholders to reduce their annual share below the 'reference value'¹⁹ in exchange for regular voluntarily work (Minutes of Gela Working Group, Dec. 2011).

Although the outcomes of these discussions are still unclear, it can be observed that Gela is experimenting with innovative mechanisms to distribute the workload among its members – particularly to yield shareholders. This will allow the farmers to focus on the demanding farming practices, but one can assume that it also enables yield shareholders to gain an increased sense of ownership over the project. When asked about the realisation of Gela's vision, the farmer noted that one of his future aims is to increase consumers' involvement and awareness:

In addition, only a small percentage of the consumers are really aware why they do it this way, and I would like to have an agricultural system with even more participation on the consumers' side. I would like to raise consumers' awareness about agriculture, the production process and the ecological processes (Personal communication, Farm owner, Sep. 2011).

¹⁹ The reference value is yield shareholders' recommended annual contribution (per person), which is given at the annual assembly when the budget is presented. As mentioned in Chapter 1.2.1, yield shareholders can choose to pledge contributions above or below the reference value, according to their food-related needs and financial abilities.

Hence, although Gela makes an important contribution to bridging the gap between production and consumption, this issue still remains one of its key challenges.

The beginning of a formalisation process

Another important evolution that occurred in the first year of Gela's existence was the beginning of a formalisation process, which came about through: a) the evolution of Gela's agreement; b) the search for a legal form.

In its first year, Gela's working group began establishing an agreement, or memorandum of understanding ('Vereinbarung' in German). The agreement defines the project vision and the main aims of the project, and the main functions and tasks which Gela fulfill, including: the agricultural methods applied in Gela, the distribution of food products, the tasks of its different management organs, and the financial arrangement (agreement for the Community Supported Agriculture Ochsenherz (Gela-Ochsenherz) – draft version, Dec. 2011).

The agreement was signed by all yield shareholders in Gela's first year, but it is not legally binding, and thus serves more as an agreement of honour. Nevertheless, the working group continues to edit this agreement through Gela's second year, and it could serve as an initial framework for the future formalisation of the project.

In addition, Gela is searching for a legal form. Currently, Gela is not recognised by Austrian law, partially because the Austrian legal system does not allow a collective ownership of a food system, such as Gela. Furthermore, taking on a legal form would imply formalising the relationship between yield shareholders and farmers in a legally binding way, and perhaps also registering some of Gela's practices in their corresponding authorities (e.g. food storage and distribution). It is unclear at this moment, whether Gela's actors are interested in such a transition, but they are researching the different possibilities.

In sum, it can be observed that Gela's first year of evolution is marked by three main processes: learning and experimentation; increased involvement of yield shareholders; and formalisation of relationships and practices. The first year has been a year of experimentation with new practices, and actors are gradually learning how to manage these practices in a more sustainable way. This means that hours and budget are calculated more carefully and methods are considered for their distribution among Gela's members. In part, this entails increased involvement of yield shareholders in the project management and operation, thus further bridging the gap between consumers and producers. In addition, formalisation of practices helps to make them more manageable, and this is somewhat reinforced in through Gela's legal agreement (although it is unclear whether this process is pursued by Gela's actors voluntarily or not).

The following chapter will describe and analyse the main self-governance structures characterising Gela, and how they are influenced by the above mentioned trends in Gela's first year of evolution.

1.4.2 Internal governance of the niche

Overall, Gela is not characterised by rigid governance structures, and the project was not built upon formalised institutions and legally binding agreements, but on relationships of trust, transparency, and personal commitment. Furthermore, similar to the project as a whole, self-governance structures are still in stages of evolution and experimentation. Nevertheless, Gela

established several self-governing organs, some more formal than others. These include: the Annual Assembly, the Steering Committee and the Working Group. This following chapter will describe these organs, and how they are being shaped in light of the above-mentioned trends in Gela's evolution (namely formalisation and enhanced yield shareholders involvement).

The Annual Assembly

The first and perhaps most formal governance structure is the annual assembly. All yield shareholders have to attend the annual assembly or send a representative with power of attorney. The annual assembly is used for settling the budget of the previous year and the following year, as well as for determining the form and size of contributions made by yield shareholders. For example, in the first annual assembly yield shareholders agreed on the solidarity mechanism, by which yield shareholders can pledge contributions according to both: a) their level of consumption (depending on family size and eating habits), and b) their financial capacity. Following this process, yield shareholders pledge their contributions. At the first annual assembly, the addition of all bids was below the projected annual budget. After more discussion, several participants increased their bid and the budget target was reached.

The second governance-related organ is the steering committee, which is in charge of monitoring financial performance vis a vis the annual budget, as well as monitoring payments of yield shareholders. The committee consists of the farm owners and two consumer delegates who are elected at the annual assembly (one from the free collection scheme and one from the box scheme) (Legal agreement for the Community Supported Agriculture Ochsenherz (Gela-Ochsenherz) – draft version, Dec. 2011).

The third and perhaps most significant organ for Gela's management is the Working Group. The Working Group was established in December 2009, with the mission of developing a CSA model for Gela. From then on, the Working Group became Gela's main decision-making forum, which also serves as a venue for cooperation between farmers, consumers and Gela's supporting network.

The participation in the Working Group is voluntarily, and it is open to all members of the project. The Working Group meets monthly in various locations in Vienna, and its core participants are the farmers, several of the farm's permanent employees, consumer delegates and other engaged consumers. The Working Group deals with different tasks related to administration, recruitment events, budget, organisation of the distribution of vegetables, cooperation with Gela's external network, etc. It takes decisions on the day-to-day management of the project, but the more fundamental decisions which impact the wider group of yield shareholders – e.g. increasing the budget - are dealt with at the annual assembly. The group publishes the meeting minutes on the Gela Google Group, and thus transparency is ensured.

One of the interesting management challenges Gela is facing is the gradual transfer of responsibility from farmers to the Gela Working Group (and thus to yield shareholders), which is related the above mentioned trends in Gela's evolution. Hence, the border between decisions which the farmer should take and decisions which the Working Group should take is constantly being redefined. On the one hand, the farmers have unique expertise which demand that certain decisions stay under their responsibility. On the other hand, there is a need for the increased involvement of yield shareholders if the project wishes to sustain itself (see Chapter 1.4.1 above). Apparently, this dilemma also features in other CSAs:

Issues relating to agriculture should be left to the farmer – you should allow the farmer to run his farm. But, there is not always a clear division between issues related to agriculture and issues related to the CSA, and consumers should also have a say, for example, on what will be produced in the farm (Personal communication, Founder of CSA Buschberghof, Oct. 2011).

Indeed, the farm owner has also described his personal transition, e.g. in the process of giving more authority to Gela for handling the land issue (Personal communication, Farm owner, Sep. 2011). Initially, the land issue was dealt with solely by the farmers. This issue even stood at the centre of a dispute between the farmers and one of the consumers, who offered the farmers a plot of land, but his offer was rejected by the farmers since it did not suit their needs (Personal communication, Former consumer, Oct. 2011). At one point, the farmers decided to bring this issue to the Working Group, and to ask the larger group of yield shareholders for assistance (Gela info-mail, August 2011). This marked the gradual change through which the farmers are going, in the transfer of responsibilities to Gela and the yield shareholders.

1.4.3 ‘External’ governance of the niche

External governance structures are described in Chapter 1.3.1, and thus will not be elaborated here. Overall, external governance of Gela is limited to formal but rather marginal interactions. These include complying with AMA’s monitoring and inspection procedures²⁰; as well as applying for agricultural subsidies. These interactions are not particularly supportive – Gela’s specialisation in reviving plant varieties creates a great deal of administrative burden in the inspection procedures, which does not justify the financial support Gela receives in return (Personal communication, Farm owner, Sep. 2011). In 2011, it was expected that governmental subsidies will account for about 2% of Gela’s annual budget²¹. Furthermore, on the local and regional levels there is virtually no interaction with governmental agencies. These interactions have not changed in Gela’s first year of operation.

1.4.4 Intermediate conclusion: Drivers and barriers towards niche creation, perpetuation and institutionalisation

Chapter 1.3.3 provided a summary of the driving forces, enabling/supporting factors and stumbling blocks for Gela’s creation, across its different contexts. Since Gela’s evolution and institutionalisation is still in its infancy, this chapter will provide only a few additional insights into driving forces, enabling factors and stumbling blocks in Gela’s evolution.

Overall, three main trends have been observed:

- a) The overwhelming workload associated with Gela’s first year of operation, which has been mostly taken on by the farmer, his wife and their employees: Partially in

²⁰ AMA is a governmental agency in charge of implementing Austria’s agricultural policies, including subsidy schemes.

²¹ Minutes of the first annual assembly of “gemeinsam landwirtschaften” Ochsenherz, Vienna 10 November 2010.

response to this problem, farmers have called for the increased involvement of yield shareholders in administration work and the distribution of food products, which has been realised to some extent. Hence, this initial ‘stumbling block’ (the workload) has actually created opportunities for further bridging the gap between producers and consumers, which is one of the goals of the project. However, this opportunity is not without difficulties, such as those related to the transfer of authority.

- b) Management challenges: enhanced involvement of yield shareholders in Gela’s management also entails that farmers forgo part of their independence in deciding how to run their farm. This is creating some initial conflicts, but these seem to be rather marginal in scope and scale. Nevertheless, this potential stumbling block sheds important light on the challenges of experimenting with new structures in which the classical roles of consumers and producers are changing.
- c) External governance: there seem to be little or no significant interaction between Gela and its external governance, but this can be partially attributed to Gela’s novelty in its local, regional and national contexts, as will be discussed in the following chapter.

1.5 Patterns of diffusion

This chapter addresses aspects related to the diffusion of Gela’s CSA model, as a niche in the food sector. The main question this chapter addresses is what are the prospects for diffusing Gela’s CSA model, either through replication, mainstreaming or enlargement? Diffusion can take different forms, which are addressed in the different section. Chapter 1.5.1 discusses the prospects for replicating Gela, either as a niche or through mainstreaming its model on a societal level. Chapter 1.5.2 discusses the possibilities for diffusing Gela through enlargement, and Chapter 1.5.3 consolidates the insights on possibilities and constraints for the realisation of these diffusion processes.

1.5.1 Configurational specificity and replicability

This section addresses the question: what are the prospects for replicating Gela? As any other niche, Gela has a certain configuration, made up of its different constituting elements: the farming techniques and food products, the necessary infrastructure, the ideas and values upon which the project was established, etc. The main question here is can this configuration be replicated elsewhere. Such a replication is partially dependent on the distance between Gela’s configuration and the configuration of its ‘adopters’ – and it could be hypothesised that the closer the configurations, the more likely such an adoption process will happen elsewhere.

In principle, Gela’s replication could take place in two ways:

- a) Mainstreaming: Gela’s configuration is close enough to the configuration of the current regime, and could potentially be adopted by it and mainstreamed;
- b) Replication as a niche: Gela’s configuration is close enough to the configuration of other similar niches in the food system that are currently emerging, and could thus be picked up and replicated as a niche in other contexts.

Mainstreaming

Overall, the empirical findings tend to reject the option of mainstreaming Gela, at least on the short-medium term. To begin with, Chapter 1.2 already highlighted that one of the main motivations for creating Gela was the dissatisfaction with the current food system, and the wish to create an alternative to it. This entails deviating as much as possible from its key configurations, including a profit-driven and competitive orientation, industrial production techniques, large-scale and anonymous retail systems, etc. Furthermore, the empirical findings show that the regime itself is quite reluctant or hesitant to ‘adopt’ Gela. This was evident in different contexts: in the local municipality, in the Austrian Agricultural Ministry and to some extent also in the bio-dynamic farming network.

In the local context, the local municipality of Gänserndorf has not shown any particular interest in supporting Gela, nor has it been supportive in the process of securing land for the project (Personal communication, Farm owner, Sep. 2011). In the Austrian context, it seems that the Austrian Ministry of Agriculture does not see much prospect for the diffusion of Gela’s CSA model in Austria, and prefers to support either big and important organisations supporting niches in the food system, or other niches which have a slightly more ‘mainstream’ configuration. One example which was given is a relatively known food box scheme in Vienna, called Adamah²²:

This is really a success story: you do not need to fetch the products, they come to you. You can choose your food products each week. It is more comfortable and more economically sustainable (Personal communication, Austrian Ministry of Agriculture, Oct. 2011)

Furthermore, several actors expressed skepticism regarding the potential pull of consumers who would be conscious enough (of their food choices) in order to engage in a CSA:

... despite the recent surge in interest in food and agriculture issues, it appears that the interest remains limited to an elite of well-educated, conscious consumers. It is unclear how the mainstream consumers can be reached (Personal communication, Director of Arche Noah, Oct. 2011).

Even at the level of bio-dynamic farming networks, there does not seem to be special capacity for supporting CSAs. According to Demeter Austria, CSAs are seen as a marketing technique, and it is up to the farmers to decide how to market their products (Personal communication, Demeter Office manager, Nov. 2011). Furthermore, Demeter is a brand for bio-dynamic products, which serves consumers who do not have direct contact with producers and are thus reliant on a trustworthy brand. Gela’s model actually reduces the necessity for such brands, since consumers’ trust is gained through the direct relationship with the farmers (Personal communication, Founder of CSA Buschberghof, Oct. 2011).

Hence, Gela’s configuration seems to deviate from that of its local or national regime, and there seems to be little interest on the side of actors in this regime to mainstream the niche. CSA’s alienation from the political regime has also featured their introduction in other

²² Adamah has a rather familiar box scheme, in which consumers sign up for a weekly food-box from a certain farm, but they are free to quit the agreement at any time <http://www.adamah.at/das-adamah-kistl/kistl-faq.html>.

European contexts, such as in Germany (Personal communication, Founder of CSA Buschberghof, Oct. 2011). However, a recent increase in the number of CSAs in Europe has raised initial political interest in several EU countries (*ibid.*), and thus Gela's alienation could partially be attributed to the novelty of this niche in the Austrian context. The recent proliferation of CSAs exhibit great potential for the realisation of the second option: the replication of Gela as a niche in other contexts.

Replication in other contexts

As in the case of mainstreaming, this option depends to some extent on the similarity between Gela's configuration and the configuration of other similar niches (i.e. CSAs). Here we would like to explore whether Gela is a 'stand-alone' example, or is part of a larger movement of niches which are currently being diffused in the food sector. This option will be explored, first by giving an overview of the diffusion process which resulted in and results from Gela's creation, and then by comparing Gela's configuration with the configuration of other CSAs.

Part I – Gela's diffusion

To begin with, Gela's creation is the result of a diffusion process. Gela's CSA model was inspired by the CSA in Buschberghof, near Hamburg, Germany. Indeed, the public discussion with Founder of CSA Buschberghof, one of Buschberghof's founding members, was the turning point for the farm owner which made him realise that a CSA could be a viable solution for Ochsenherz. The founder of CSA Buschberghof continued playing an important role in Gela's creation, e.g. by providing the Buschberghof memorandum of understanding between farmers and consumers, which served as a template for Gela's formal agreement, or by attending Gela's first annual assembly in November 2010.

Before Gela's establishment, the Working Group conducted research on the different CSA models in the EU and in the US. One of the farmers has worked on a CSA farm in the US, where she came across the documentary 'The Real Dirt on Farmer John' - which tells the personal story of a farmer who loses most of his land and assets, but unlike most of his fellow farmers at that time manages to revive his farm through the establishment of a CSA. The documentary provided initial inspiration for recruiting consumers and for the establishment of the Gela Working Group.

In addition, the replication of Gela's CSA model is stated as one of the project objectives²³. For this reason Gela maintains a connection to the CSA community. For example, one of the consumer delegates took part in the first CSA meeting organised by 'CSA for Europe'. Funded under the Grundtvig programme²⁴, 'CSA for Europe' aims to "share learning between farmers and consumers in all partner countries, through knowledge exchange workshops and farm visits, in order to promote the idea of CSA as well as to share best practice throughout

²³ Gemeinsam landwirtschaften!, Project description developed in 2010.

²⁴ Grundtvig is an EU funded project aimed at promoting adult education by providing ways to improve their knowledge and skills, facilitate their personal development and increase their employment prospects http://ec.europa.eu/education/lifelong-learning-programme/doc86_en.htm

Europe²⁵. In its first meeting there was great interest in Gela's experience – especially because it is a pioneer in its respective country – and several members were invited to attend Gela's annual assembly in January 2012 (Minutes of the Gela Working Group, November 2011). Furthermore, Gela's model has already inspired the creation of a CSA in Eberswalde, Germany, which is currently being developed (Minutes of the Gela Working Group, September 2011)²⁶.

In sum, Gela's creation and evolution has been largely inspired by the CSA movement, and Gela is further contributing to this movement by inspiring the creation of other CSAs. Not surprisingly, Gela's CSA model has much in common with that of other CSAs. This 'configurational' similarity and its implications for replication are discussed below.

Part 2 – Configurations and replicability

Although there is not a single unified definition of CSAs, and worldwide CSAs do vary to some degree in form and size, all CSAs share some basic notions, such as consumers' commitment to finance the farmer's production costs in advance. The United States Department of Agriculture (USDA) has provided the following definition for CSAs:

In basic terms, CSA consists of a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or 'share-holders' of the farm or garden pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. In return, they receive shares in the farm's bounty throughout the growing season, as well as satisfaction gained from reconnecting to the land and participating directly in food production. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests²⁷.

An important component which differentiates CSAs from other forms of agriculture is that consumers do not pay for the product, but rather for the work of the farmer: "In the moment at which there is no longer a price connected to the product but the work of the farmer is valued, it is a CSA" (Schlicht, 2011). In a CSA, the business is carried out by the community as a whole, and not only by the farmer, and this can be exercised by consumers in several ways – from the upfront payment, committing to a given amount of workdays at the farm, through joint administration, etc.²⁸. Additionally, the focus in a CSA is on covering the costs of production, not on maximising profits (Schlicht, 2011).

Most CSAs are based on the notion of solidarity with farmers, providing them a security of income which reduces their vulnerability to the pressures of the free market, to political dynamics influencing agricultural policies, as well as to natural diversity in yield production.

²⁵ Source: <http://www.urgenci.net/page.php?niveau=2&id=CSA%20for%20Europe!>

²⁶ Members of the CSA in Eberswalde have declined the interview request, and thus additional information on this diffusion process could not be obtained.

²⁷ Source: www.nal.usda.gov/afsic/csa/csadef.htm

²⁸ <http://www.urgenci.net/page.php?niveau=3&id=The%20World%20of%20CSA>

Most CSA farms practice organic or biodynamic agriculture, providing their consumers with high quality products (Schlicht, 2011).

Over the last couple of decades, Japan, the US and several EU countries have seen a proliferation of CSAs. In the U.S., the first CSA was established in 1986, and by 2005 there were 1,144 CSAs registered in USDA's database (Adam 2006)²⁹. In France the first CSA (called 'Association pour le Maintien de l'Agriculture Paysanne', or AMAP) was created in 2001, and has since been widely adopted as means of supporting of small-scale family farms which were on the verge of bankruptcy³⁰. In 2009, it was estimated that there are about 1,200 AMAPs in France, organised under a common network, with a unified charter³¹. In England, CSAs were introduced only in 2006, but have already reached 80 farms by 2012³². Germany has also seen a recent increase in the number of CSAs since 2006, reaching roughly 20 in 2011, and numbers increasing quickly³³.

The spread of CSAs has been partially facilitated by regional, national and international networks. One of these networks is URGENCI, a non-profit association which focuses on: "fostering peer-based solidarity among Community-Supported Agriculture initiatives worldwide to actively contribute to the food sovereignty movement"³⁴. URGENCI is actively involved in disseminating information and supporting new CSAs, particularly in countries which have few or no CSAs and/or lack a supportive network. This currently involves projects in 10 central and eastern European countries, as well as in Morocco³⁵.

Therefore, there seem to be many prospects for the replication of CSAs, particularly in European countries. Gela seems to be quite well integrated in this diffusion process. Gela's CSA model – inspired by one of Europe's early CSAs - seems to be much in line with the common configuration of CSAs, discussed earlier. Gela further participates in networks facilitating the diffusion of CSAs in Europe (e.g. 'CSA for Europe').

One of the interesting questions which remains to be explored, is how the recent diffusion of CSAs would influence their respective regimes, and would it allow for further niche-regime interaction and possible mainstreaming of CSAs? To some extent, early signs of this process are already visible, such as the EU-funded project for supporting and disseminating information about CSAs, mentioned earlier.

Nevertheless, there seem to be controversial opinions within the CSA movement about whether such a process is at all desirable. In essence, CSAs seem to be most dependent on the commitment of the community, and some actors claim that this process cannot be fostered through top-down interventions (Schlicht, 2011). Furthermore, actors fear that such

²⁹ It should be mentioned, however, that about 75% of these CSAs are called 'subscription CSAs', where consumers' involvement is limited to the financial commitment; only 25% are 'shareholder CSAs', which resemble much of the CSA model discussed above (Adam 2006).

³⁰ AMAP official website: <http://www.reseau-amap.org/>

³¹ MRAMAP (an AMAP network) website: <http://miramap.org/Origine-des-AMAP.html>

³² <http://www.soilassociation.org/communitysupportedagriculture/theproject>

³³ http://www.urgenci.net/uploads/paragraphe/documents/Germany_CSA_overview_Susanne.pdf

³⁴ URGENCIA's website: <http://www.urgenci.net/index.php?lang=en>

³⁵ <http://urgenci.net/page.php?niveau=2&id=EEM%20project>

intervention will limit CSAs' autonomy, which seems to be a crucial element in their configuration (Personal communication, Founder of CSA Buschberghof, Oct. 2011). Yet, actors do acknowledge the benefits of non-governmental networks supporting CSAs, such as in France. They also acknowledge potential roles that local governments can play for supporting CSAs, such as providing publicity, meeting venues, etc (Schlicht, 2011). Hence, it remains to be seen what will be the potentials and pitfalls of more intense niche-regime interaction in the case of CSAs.

1.5.2 Enlargement

In addition to the diffusion prospects discussed earlier, another possibility for the diffusion of a niche is enlargement, which in Gela's case would mean cultivating more land and supplying a larger number of yield shareholders. Although most CSAs are created by small-scale farms, supplying no more than a few hundred consumers, there are several large-scale CSAs (particularly in the US), cultivating hundreds of acres and supplying two or even three thousand consumers³⁶.

However, Gela's actors seem quite hesitant regarding a significant expansion of the project. One of the factors determining the size of the project is the capacity of the farm – i.e. how many people can the farm supply with food, taking into account the size of the land, the manpower required for farming, and the administrative effort required for managing the CSA. In its first year of operation, Gela's survival relied on a significant amount of voluntary work and a high level of commitment among its actors, but it is unclear if this arrangement can be sustained in the long term, and whether it can be applied on a larger scale (Personal communication, Supporter and member of Agrar Attac, Oct. 2011; Yield shareholder, Oct. 2011).

Furthermore, actors fear that if Gela grows (significantly), some of its key features might get lost – such as the personal contact between its members, or the shared vision which currently brings many of them together (Personal communication, Yield shareholder, Oct. 2011; Founder of CSA Buschberghof, Oct. 2011; Yield shareholder, Oct. 2011).

Nevertheless, Gela is searching for a new plot of land in the range of 5-10 hectares, which signifies farmers are open to increasing the size of the farm (currently cultivating only 5.5 hectares)³⁷. Actors can also envision joining other producers (e.g. a bakery) (Personal communication, Yield shareholder, Oct. 2011) or even applying Gela's principles to other consumption domains (Personal communication, Yield shareholder, Oct. 2011). However, actors agree that the first priority is to make Gela 'manageable' for the farmers, before options of enlargement can be put on the table (*ibid.*).

1.5.3 Insights on the diffusion of the niches: drivers and barriers

This section will consolidate insights on the opportunities and constraints for the diffusion of CSAs discussed in Chapters 1.5.1 and 1.5.2.

³⁶ <http://www.urgenci.net/page.php?niveau=3&id=The%20World%20of%20CSA>

³⁷ Gela info-mail, 18 August 2011.

With regard to the mainstreaming of CSAs, Gela's case study shows that current constraints do not create many prospects for the realisation of this option. Both CSAs such as Gela and politicians seem to be reluctant to mainstream CSAs, each for their own reasons. However, since CSAs are growing in numbers, political interest in mainstreaming may arise, which could potentially create both opportunities (e.g. logistical support of local governments) and constraints (e.g. limiting CSAs' autonomy). The further realisation of this diffusion option remains to be explored.

With regard to replication, there seem to be positive prospects for the diffusion of CSAs, since Gela's model is an adopted model of other CSAs, and since Gela is actively involved in dissemination of the concept of CSAs in Europe. In this category, we also included actors' analysis of the potential opportunities and constraints for the replication of Gela's CSA model in general, building on Gela's specific experience. Opportunities include increased awareness of negative impacts of the conventional food system, as well as what actors call: 'Spirit of our Time' ('Zeitgeist' in German) – the discourse of our time. Other opportunities are created through dissemination activities organised by CSA networks, partially through public funding (which signifies early political interest).

Several constraints were mentioned, including: the necessary personal commitment, due to the initial effort required for setting up the CSA, which involves acquiring quite a lot of know-how through experimenting and learning. Furthermore, some farmers are reluctant about starting a CSA because they have made other investment in marketing (e.g. a shop on the farm) and expect a return on their investment. Like many other local food schemes, CSAs also face constraints related to limited food variety and seasonal variation in production (e.g. low yields in winter and high yields in summer) – which require consumers to adapt their lifestyles accordingly. Finally, bridging the gap between farmers and consumers may take time, particularly with regard to increasing consumers' awareness of farming practices (e.g. natural variations in productivity).

Finally, as with regard to enlargement, Gela's case study mostly demonstrates the constraints on a significant enlargement of the CSA. Some of these constraints have to do with the fact that Gela is in early stages of development, and is still coping with the challenge of sustaining itself in its current size. However, other constraints seem to be more fundamental, such as actors' fears that enlargement of Gela will come at the expense of some of the project's key features, such as personal contact between members of the community or the possibility to share a common vision. Farmers are currently searching for a new plot of land, but are not looking to increase their current plot by more than a few hectares. Hence, overall a significant enlargement of the project is not foreseen in the near future.

Table 2: Possibilities and Constraints for diffusion of CSAs

Diffusion options	Opportunities	Constraints
Mainstreaming and adoption by regimes	<ul style="list-style-type: none"> <i>Regimes can facilitate CSAs, by creating a supportive network (e.g. for knowledge exchange), or through local government interventions (e.g. providing meeting venues)</i> 	<ul style="list-style-type: none"> Lack of political interest – on local and national level Uncertainty regarding the amount of interested / conscious consumers Limited interest in the agricultural sector, including organic/bio-dynamic networks Lack of interest among Gela's actors to develop CSA to a mainstream concept (wish to be alternative) <i>Top-down interventions can be counter-effective, since they might limit CSAs' autonomy or disturb community's ownership over the project.</i>
Replication	<p>Gela</p> <ul style="list-style-type: none"> Gela's configuration seems to be much in line with that of other CSAs, and it is involved in networks promoting the dissemination of CSAs in Europe <p>CSAs in general</p> <ul style="list-style-type: none"> Increasing awareness of negative impacts of conventional food system (environment, farmers' wages, etc.) – supported by recent food scandals 'Spirit of our time' Supporting networks involved in disseminating CSAs Initial political interest in some EU countries 	<p>CSAs in general</p> <ul style="list-style-type: none"> Personal commitment required from the actors involved, which is often based on a common set of values or beliefs Required know-how, learning space Barriers of local food schemes (limited variety of food products, seasonal variations of production, etc.) Lack of consumers' awareness
Enlargement	<ul style="list-style-type: none"> The need to search for new land might create an opportunity for enlarging the farm. <i>Opportunities could open up once Gela learns to sustain itself</i> 	<ul style="list-style-type: none"> Current land plot has a certain capacity Gela has not learned yet to manage its current capacity, e.g. with regard to the administrative burden. Actors fear of losing personal contact Actors fear of losing shared vision

1.6 Conclusion

This chapter brings forward the main conclusions regarding the drivers and barriers in both inner and outer contexts for the creation and diffusion of CSAs – as an example of niches of alternative and more sustainable practices. It is important to note that these conclusions are based on an analysis of a single case study (Gela), and a literature survey on the creation and diffusion of other CSAs, and thus further research is needed in order to come to robust conclusions regarding the creation and diffusion of CSAs in general. Nevertheless, the Gela case study feeds into a broader analysis of niches in the food and energy domains, and thus this chapter offers possible insights and hypotheses on the creation and diffusion of such niches.

The chapter focuses on three main themes: a) How do CSAs contribute to the creation of alternative and more sustainable practices in the food sector; b) Key actors' motivation for action; c) Mainstreaming and replication of CSAs – the potential role of public governance.

How can CSAs contribute to the creation of alternative and more sustainable practices in the food sector?

Chapter 1.2 addressed the hypothesis that Gela can be considered a niche in the food sector, building on two main arguments: first, Gela was defined by its actors as an attempt to create an alternative form of economic interaction, which *aims* to set itself aside from the conventional food system – including its fundamental structures, such as anonymous retail systems, specialised production and profit orientation. Second, Gela created a learning space where actors could experiment with alternative practices of food production and consumption, sometimes at high personal costs. This learning space is crucial in order to allow new practices to gradually mature and become sufficiently robust to develop niche markets, branch out and attract mainstream interest (Schot et al., 1994).

CSAs, such as Gela, can provide this learning space in several ways. To begin with, they provide farmers with a security of income, which allows them to focus on enhancing their (organic/biodynamic) farming activities rather than on maximising profit. This is particularly important for farmers in the phase of transition towards innovative practices, for which there is limited know-how and where experimentation is essential. In addition, CSAs create a supportive community, which facilitates transitions in both production and consumption practices. For example, farmers can call consumers to help out on the farm or with administrative tasks, especially in times of high work load (e.g. harvest); at the same time, consumers can decide to support their fellow consumers, by allowing low-income households to contribute less to the annual budget, independently of their harvest share.

One of the interesting questions is whether the alternative practices emerging from a CSA are indeed more sustainable. On the positive side, CSAs enhance the financial and social sustainability of the farm, by securing fair wages for farmers and protecting them from external disturbances, such as natural conditions leading to low yields or reforms in agricultural subsidies. Social sustainability is further enhanced through building bridges between consumers and producers, as well as between city dwellers and rural areas, thus contributing to rural development, to community building and to enhancing social solidarity among urban populations. Environmentally, CSA support farmers practicing advanced organic or biodynamic practices which – at least in the case of Gela - have proven difficult to sustain otherwise. In Gela's case, this included reviving seed and plant variety (contributing to biodiversity), which have largely decreased due to industrial agricultural practices.

However, as small units of production, CSAs often lack the efficiency of large production units, potentially creating trade-offs for sustainable development. For example, both producers and consumers are often required to travel by car in order to distribute or pick up the food products, which creates negative environmental and social externalities. Furthermore, Gela's case study shows that transitions towards alternative practices demand a high level of commitment, sometimes at high personal costs, which can be deemed unsustainable – although such an assessment is difficult to make, since such transitions also bring significant personal benefits (as the next discussion will show). Hence, it may very well be that the assessment of the self-sustainability of such practices can only be made after they have become sufficiently established.

Key actors' motivation for action – driving forces and stumbling blocks

One of the main aims of this analysis was to analyse the drivers and barriers behind the creation of such niches. In the case of Gela, and perhaps many other CSAs, the main driving forces clearly lay within the inner motivations of the core actors establishing the CSA. In Gela's case, these motivations related to personal values and beliefs, e.g. regaining autonomy or freedom in one's own lifestyle (e.g. how to farm, how to consume food, etc). Such strong driving forces, coupled with a high level of commitment by Gela's main actors, were crucial in order to overcome the numerous barriers (or stumbling blocks) involved in the creation of new practices. These barriers refer both to the personal energy required for learning and experimentation, as well as to external ramifications created by the outer context – from legal barriers, to lack of political recognition, etc.

However, in this analysis we preferred using the term stumbling blocks rather than barriers, as it seemed that in many cases these stumbling blocks worked to motivate action – rather than to hinder it. In some cases, it was the ability to overcome certain stumbling blocks which provided actors with additional motivation to carry on the project. For example, the ability of consumers to overcome anxieties regarding the shift to new forms of consumption created confidence in the project and additional motivation for greater involvement in it. For farmers, overcoming stumbling blocks in the outer context was a way to fulfill their wish to regain autonomy over the production process.

Although additional research into actors' motivations is needed in order to generalise from this phenomenon, it clearly signifies the complexity of engineering pathways for bottom up projects such as Gela, in terms of identifying drivers and barriers. The following section elaborates further on the prospects for governmental intervention for fostering the creation of CSAs.

Mainstreaming and replication – the potential role of public governance

Generally speaking, the current political interest in CSAs is quite low. Actors were ambivalent whether this is positive or negative for the creation and diffusion of CSAs. On the one hand, in the case CSAs (such as Gela) are created to regain autonomy over the production process, political interventions could interfere with this goal. On the other hand, as a relatively new niche in the food sector, CSAs face numerous problems which could be facilitated through political intervention. For example, Austria does not have a form of collective ownership (which exists in other countries like e.g. France), a factor which hinders the ability of a community to collectively own the farm. In addition, CSA farms need to produce a relatively high variety of products in small quantities, in order to provide a relatively small number of

consumers (a few hundred people) with a rich diet. However, farms growing large varieties face problems with inspection procedures, as agricultural agencies and the rules they enforced are geared to specialised agricultural production common on conventional farms.

Besides removing bureaucratic requirements, some studies also suggest potential roles that local governmental actors could play in facilitating the creation of CSAs, such as providing venues for meetings or creating visibility through local media channels. Furthermore, governmental agencies can support CSA networks, which facilitate knowledge exchange between CSAs and the dissemination of CSAs in new political contexts. This process is already partially taking place in countries where there are highly developed networks supporting a large number of CSAs (e.g. in France).

However, actors mention that there are limitations to fostering CSAs through political interventions. As CSAs are first and foremost the property of the community, there is a danger that this sense of ownership and commitment could get lost in case an external entity creates the driving force for initiating the CSA. Instead of creating new CSAs, governments could seek ways for enlarging existing projects, but this option faces other fundamental problems. CSAs such as Gela demand a high level of trust, built on personal relations between farmers and consumers and among consumers themselves (e.g. for the free collection of vegetables out of a common 'pot'). Hence, actors fear that such elements would get lost should the project grow in scale.

In summation, public actors could do a great deal for creating favorable conditions for the creation of CSAs, but direct interventions to foster them might face crucial limitations. Nonetheless, civil society organisations are currently engaged in efforts to disseminate CSAs in new political contexts, partially with governmental support – such as the 'CSA in Europe!' project, funded by the European Commission. The success of such initiatives remains to be explored in further research. Furthermore, the large-scale proliferation of CSAs in recent years has increased public and political interest, and it remains to be seen how these trends will influence the niche, as well as the food system it was created to modify.

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Annex A: Methodological specifications - Gela

Annex A.I: Document Analysis

Table 3: Internal Documents – Gärtnerhof Ochsenherz

Name of Document	Date	Author(s)	Type of document	Source
Ein Ochsenherz für Landwirtschaft.	Nov. 2010	Irena Rosc	Article in Vienna city magazine	Falter 45/2010
Community Supported Agriculture (CSA) – Gärtnerhof Ochsenherz in Gänserndorf	Spring 2010	Eva-Maria Haas	Article in <i>SOL</i> , magazine of the association „Menschen für Solidarität, Ökologie und Lebensstil“ [People for solidarity, ecology and lifestyle]	SOL No. 139
Gärtnerhof Ochsenherz. Erdiges Experiment	Jan. 2011	Katharina Seiser	Article in <i>Der Standard</i> ; an Austrian daily, section Lifestyle	Der Standard, 22 January 2011
Landwirtschaft hat Zukunft, wenn auch in ganz anderer Form als bisher	June 2010	Susanne Sureth-Steiger	Article in magazine <i>Permakultur</i>	Permakultur June 2011
Minutes of the Working Group 'gemeinsam landwirtschaften' meetings (monthly)	Dec. 2010 – March 2011	Various group members	Internal minutes in bullet points, including minutes of subgroup meetings	Gela google group
Vereinbarung 'gemeinsam landwirtschaften'	Jan. 2011	Gela Working Group	Memorandum of Understanding to be signed by each CSA participant and the farm owner	Gela website
Group emails shared on gela google group	March 2010-Aug. 2011	Various gela participants	Internal Emails	Gela google group
Gela info-mail	Aug. 2011	Farm team	Internal information mail	Gela google group
Gela info-mail	Sep. 2011	Farm team	Internal information mail	Gela google group
Gela info-mail	Dec. 2011	Farm team	Internal information mail	Gela google group
Minutes of the Working Group „gemeinsam landwirtschaften' meetings (monthly)	Nov. 2011	Various group members	Minutes of monthly meeting	Gela google group
Minutes of the Working Group „gemeinsam landwirtschaften' meetings (monthly)	Dec. 2011	Various group members	Minutes of monthly meeting	Gela google group
Agreement for the Community Supported Agriculture Ochsenherz (Gela-Ochsenherz) – draft version	Dec. 2011	Gela Working Group	Formal agreement	Gela google group

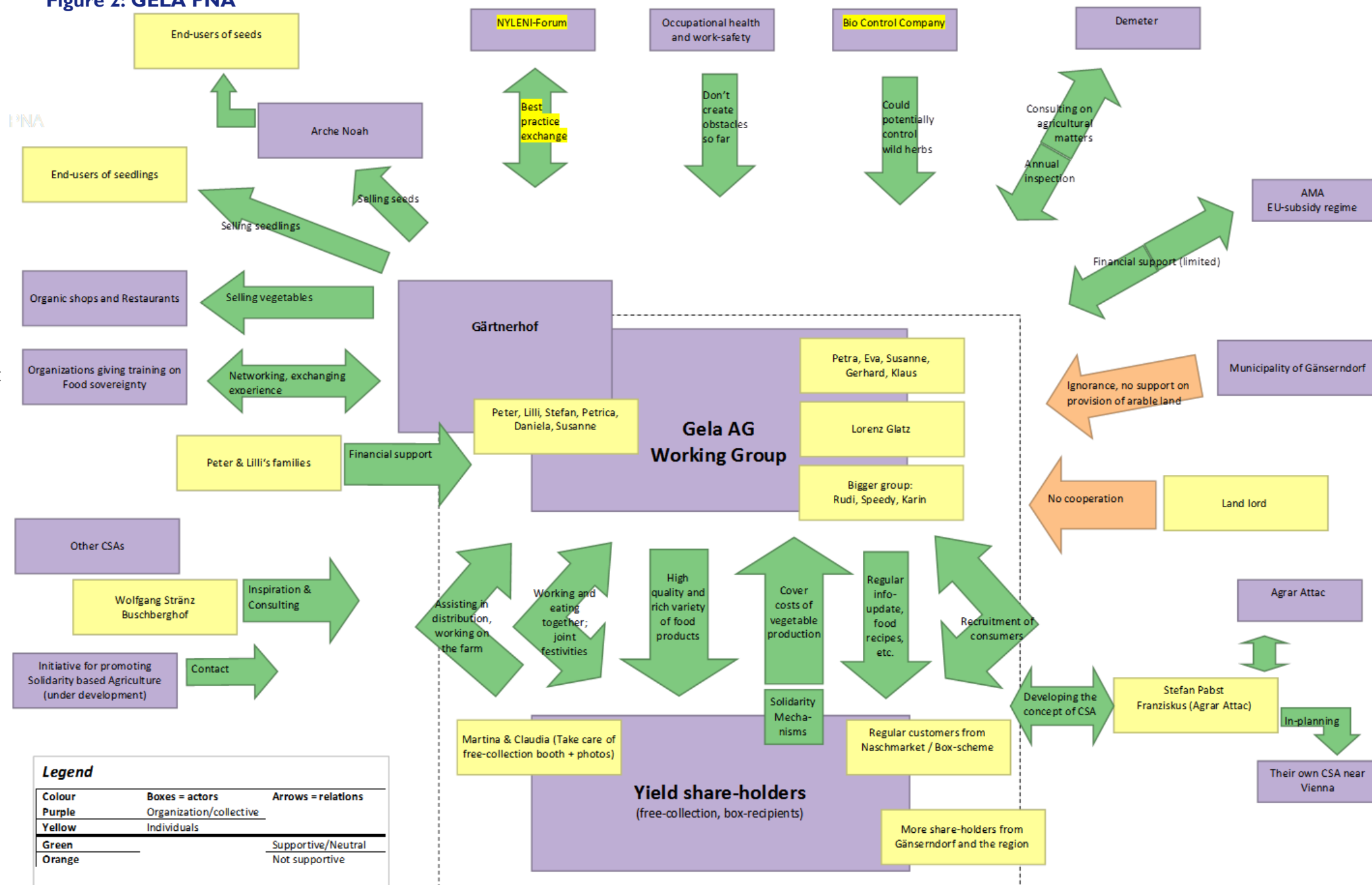
Table 4: External Documents

Name of Document	Date	Author(s)	Type of document	Source
Overview of CSAs				
Community Supported Agriculture	2006	K. L. Adam	Institute Publication	ATTRA –National Sustainable Agriculture Information Service (www.attra.ncat.org)
Community Supported Agriculture (CSA): Building Community Among Farmers and Non-Farmers	2002	J. Sharp, E. Imerman and G.Peters	Journal Article	Journal of Extension, Volume 40, Number 3
Eating for Your Community	Fall 1995	R- Van En	Journal Article	IN CONTEXT, Volume 42
Buschberghof Case Study	Nd		Case study description	Google
Buschberghof CSA, a multifunctional farm successful for more than 20 years	May 18, 2010	W. Stränz	Website article	http://forum-synergies.exemole.fr/en/corpus_experience/fiche-experience-23.html
The Austrian Context				
Rural Development 2007-2013: Austria's 2007-2013 rural development national strategy plan	2006	Lebensministerium	Policy document	Lebensministerium.at
Rural Development Programme (RDP) Austria	02/2010	European Network for Rural Development	Policy Document	European Network for Rural Development, European Commission
National Policy Contexts with Potential Relevance to AAFNs	2009	Les Levidow	Working paper	FAAN: Facilitating Alternative Agro-Food Networks, FP-7 project
Local Food Systems in Europe	2010	IFZ	Project Booklet	FAAN: Facilitating Alternative Agro-Food Networks, FP-7 project

Annex A.2: Participative Network Analysis

(See next page)

Figure 2: GELA PNA



Annex A.3: Interviews

Table 5: List of interviewees

N #	Role	Affiliation	Specific Role	Comments
1	Farm owner	Ochsenherz	Farm owner	Interviewed through the PNA
2	Farm worker	Ochsenherz	Farmer's wife	Interviewed through the PNA
3	Consumer delegate	Gela-AG		Interviewed through the PNA
4	Yield shareholder	Gela yield shareholders	Box consumer	
5	Yield shareholder	Gela yield shareholders	Free collection consumer	
6	Former consumer	Gela consumers	Left project	
7	Supporter and member of Agrar Attac	Agrar Attac	Early supporters	
8	Director of Arche Noah	Arche Noah	Director	
9	Founder of CSA Buschberghof	CSA Buschberghof	Inspiration for Ochsenherz	
10	Austrian Ministry of Agriculture	Austrian Ministry of Agriculture, Forestry, Environment & Water Management	Agri-Environment unit; deals with subsidies and financial support.	
11	Researcher, Federal Institute	Federal institute for less favoured and mountainous regions	Senior researcher	Written interview
12	Demeter Austria	Demeter Austria		Written interview

2 Wolfhagen: Municipal Energy Transition Process

2.1 Overview of the case study in Wolfhagen

The German case study is located in the city Wolfhagen, which is a small town situated 30 km west from Kassel. Its transport links include a federal motorway (A 44) and regional train lines. The city area of Wolfhagen is subdivided into a city core and eleven rural districts. About 13.840 inhabitants live in the city, with about 7.620 of them in the city core. For the future, the decline in population is predicted to reach about 6% until 2020. A large percentage of the employed persons travel to work – mainly to Kassel or to Baunatal (VW factory). In the city of Wolfhagen the economy is diverse: retail trade, crafts, car dealers, fragmented trade, traditional and medium-sized industry and with tendency to increase: innovative small enterprises especially in the energy sector, like energy technology, wood gasification, thermal power station and energy-saving window glass. Studies about prospective economic sectors in Wolfhagen designate the sectors tourism, education and renewable energies as most promising (IHK & University of Kassel, 2010). Wolfhagen is well equipped with public facilities (kindergartens, schools, trade schools, hospital, a retirement home and a senior citizen centre, rural district office, police station).

The WP3 case study Wolfhagen focuses on the local process of aiming to become a 100% renewable energy community and reducing the local climate footprint by fostering energy efficiency and renewable energy. The city of Wolfhagen aims to cover its entire communal energy need (households, commercial and industrial business) from 2015 onwards exclusively with locally generated renewable power. Beside the positive effects on the communal climate footprint, positive effects on the local economy and an increase in local value should be achieved. The measures and projects for fulfilling this aim should be put into practice with an intensive public participation of the local citizens.

The main actors identified in this process are the public utility company, especially its manager, the regional energy consultancy 'Energie 2000 e.V.', the head of the city's building department, members of the city council, including the mayor of Wolfhagen, and founding members of the citizens' energy cooperative. A participative network analysis and interviews have been conducted with representatives of these institutions to analyse the development process in Wolfhagen.

The reasons found for aiming to become a 100% REC are varied: from global climate change responsibility and the need for climate protection, to local value creation through municipal energy production and energy supply, to benefits on an individual level, like sustainable investment funds for the planned citizen-owned wind park (which should deliver two-thirds of the local energy requirements in the future).

In 2005, the power grid's licensing agreement between Wolfhagen and the energy supplying company E.ON expired. Usually, such contracts are entered for a maximum term of twenty years. In many cities these contracts have been renewed after this period as a matter of routine. But in the case of Wolfhagen, the city decided to hand over the right of use to the public utility company. It was one of the first cases in Germany in which a community discontinued the power grid contract with E.ON, and after years of quarrel about the value of the wirings, Wolfhagen succeeded in taking over their local energy grids by an out-of-court-

settlement with E.ON. Locally owned power grids are one essential aspect for local self-sufficient renewable energy politics because it enables (or at least facilitates) the feeding of the produced power into the energy grid.

The next big step towards the 100% REC aim took place in 2008 when the municipality services started to deliver exclusively 100% renewable energy to their customers. Currently, the energy requirements are covered by hydro power, which is bought in Austria.

In October 2010, the Federal Ministry of Education and Research recognised Wolfhagen as one of the top five German towns in energy efficiency (Energy Efficient City). This award was combined with promotional funds for fostering further projects in energy efficiency. Currently a scientific-practitioners project concerning the city's sustainable energy supply founded by the Federal Ministry of Education and Research is being developed (Wolfhagen 100% EE). Project Members are the City of Wolfhagen, 'StadtwerkeWolfhagen GmbH' (i.e. the public utility company), Energie 2000 e.V., Fraunhofer-Institute for Building Physics and deENet e.V.

'StadtwerkeWolfhagen GmbH' is the name of the public utility company in Wolfhagen. The company is owned by the city of Wolfhagen and is responsible for the city's energy and water supply and also for the refuse collection.

The regional energy consultancy Energie 2000 e.V. works as an advisor for communities and community facilities, associations, private citizens and companies concerning energy saving and the use of renewable energy devices. The consultation follows the standard of being product independent, not guided by selling interests and aims on finding equally ecological and economic practical solutions for the individual case. Additionally, Energie 2000 e.V. offers trainings for operators and users of energy devices, prepares technical and economical calculations, implements public relation activities for renewable energy and energy savings etc. From 2000 to 2003 Energie 2000 e.V. supported and supervised the local Agenda 21 process in the administrative district of Kassel. Energie 2000 e.V. works together with other regional and trans-regional advice centres to offer citizen-friendly and demand-oriented information.

The Fraunhofer Institute for Building Physics (IBP) conducts research, development, testing, demonstration and consulting in the field of building physics. The topics are various from noise control and sound insulation in buildings, the optimisation of auditoria acoustics to energy-related issues like solutions for improving energy efficiency and optimising lighting technology. Also issues of climate control and indoor environment, hygiene and health protection, building material emissions, weatherproofing and protection against heat and moisture, preservation of building structures and the conservation of historic monuments are part of the institute's work. In the Wolfhagen 100% project, the IBP focuses especially on energy efficient building, e-mobility and decentralised energy grids and also is the project lead of the Wolfhagen 100% EE project.

deNet e.V. is a network of excellence in the field of decentralised energy technology, which focuses on networking activities for business and research in the field of decentralised energy techniques and energy efficiency. It was founded 2003 in the city of Kassel. In the Wolfhagen 100% project, deNet works together with the IBP and the public utility company on sustainable energy efficient solutions for the community.

The main aims of the project 'Wolfhagen 100%' EE are: energy saving, energy-related redevelopment, smart metering and consumer information, a potential assessment of e-mobility. Beside renewable energy production, the reduction of energy requirements has been discerned as an important aspect for reaching the 100% REC aim.

From 2015 the whole energy requirements should be covered by locally produced energy from wind power, biomass and photovoltaic. The major part of energy should be produced by a citizens' owned wind park. The location of the planned wind park has led to conflicts in Wolfhagen. The majority of political actors support the project, but a local protest group opposes the location with nature conservation arguments. This conflict is still unresolved though a lot of efforts have been made, e.g. by a mediation process. Though this argument is quite complex, it has little influence on the process as a whole because it is restricted to a location conflict, which is mainly driven by well-known NIMBY ('not in my backyard') effects. The opponents do not reject the principle aim of a becoming a 100%REC community.

2.2 Overall aim: characteristics and purposes sought by the niche creation in Wolfhagen

2.2.1 Wolfhagen's energy transition process: an alternative practice?

In general, the alternative practices regarding the Wolfhagen case could be identified as 'alternative' political decisions that led to 'alternative' practices in the field of energy production and consumption. From a present day perspective, where the energy transformation appears to be becoming a (more) mainstream practice in Germany in the future, the evaluated case shows the pathway of a community that could be seen as a frontrunner towards more sustainable energy use and production. The following elements were identified in the process as being not only alternative to mainstream practices, but also working as the main driving factors for the energy transition process.

- 1) The actors' ability to see alternatives to current energy production systems and their motivation for change.
- 2) The remunicipalisation of the energy grid.
- 3) The cooperation of local actors, including cross-party alliances and close cooperation between governmental and non-governmental actors.
- 4) The citizens' participation in organisational decision making.
- 5) The communal energy production.

In the following section, the most important motivations, practices and developments that could be identified as different from mainstream practices are described and analysed in detail.

Actors Motivations

Social-economic transition processes result from the decision processes of actors in the field. Therefore, actors also play a central role in the work package's empirical work. In this case study, four interviews with supporting actors in the process were conducted to find out why they choose to play an active role in, as well as how they contributed to, the local energy transition process. Three interviewees belong to the process' core group (see also the PNA), while one is a member of the planning group for the citizens' energy cooperative.

During the interviews with main actors in the energy transition process, some insights about their motivation and underlying convictions were revealed.

One of the core group actors reported during the interview that the oil crisis in the 1970s left a deep impression of the vulnerability of non-renewable resources. Furthermore, he was influenced by the environmental pollution discourse at that time. Both aspects, the non-sustainable use of resources and the pollution of the environment, were seen in the context of harming intergenerational justice. These experiences, awareness and ethical values provided a direction for his later studies and professional career as an engineer and as a result he focuses strongly on finding and implementing technical solutions for a more efficient use and a more sustainable production of energy. From his point of view, there are already a lot of technical possibilities to contribute to more sustainable energy production and consumption but a lack of knowledge, political resistance and the interests of the large energy suppliers, who are still mainly producing non-renewable energy, hamper this development.

Two other actors of the core group described their motivation for more sustainability in terms of dealing with energy as a learning process, which was in the beginning not motivated as much by environmental issues, but rather by the need for finding more economical energy solutions to reduce the communal budgets for which they were responsible in different departments. Later, after also being influenced by local activities, e.g. by the screening of the Al Gore movie 'An Inconvenient Truth', climate change impacts became a more important aspect for decision making and implementation processes.

A slightly different learning process was reported by the fourth interviewee, who was also the only one of the interviewed persons with a non-technical or non-engineering professional background, but with a legal degree instead. As a member of the local council, she was involved in the political decision process about the site of the wind power plants. She was not only involved in the political process, but was also directly affected by the planning as a resident. During her consideration process, she came to the conclusion that refusing the installation of the wind turbines would follow the St. Florian's principle of shifting responsibility. In her view, local responsibility for the effects of climate change also includes bearing some negative or unintentional aspects like a change of the landscape by the wind turbines. This interviewee referred strongly to local responsibility and global justice as the main motivational aspects.

Starting point: the remunicipalisation of the energy grid

The first milestone which laid the foundation for the further developments was the process of remunicipalisation of the energy grid (2003-2006) which was mainly inspired by increasing the municipal value creation but also aimed at retaining and increasing the public utility company. The mainstream trend at that time moved in the opposite direction which resulted in privatisation or downsizing of public utility companies as an answer to shrinking municipal budgets. Wolfhagen adopted a different and more long-term oriented strategy by expanding the business area of the public utility company. In the first step, the remunicipalisation of the energy grid gave the municipality more freedom of action regarding future electricity feeds which was a central aspect for a future profitable local energy production. The first impetus for the remunicipalisation was given by the manager of the public utility company who achieved the local politician's commitment and support.

A remarkable aspect regarding this process was the close cooperation and agreement between local political actors from different parties right from the beginning of the process. On the local scale, politicians even made and supported decisions which were in opposition to regional or national politics of their own party. The energy transformation process in

Wolfhagen could be identified as one of the rare cases of local cross-party policies. The involved parties at that time were the social-democratic party (SPD), the conservative party (CDU), the liberal party in cooperation with an independent voters' association (FDP / Wolfhager Liste). The green party in the city council supported the general energy transition aim, but they opposed the construction of the wind turbines on the designated area because of nature conservation considerations.

Public relation, social learning processes and public participation

From 2006, the manager of the public utility company and the owner of the local cinema screened the Al Gore film 'An Inconvenient Truth' several times (partly with discussions or additional presentations about climate change issues afterwards). As an outcome, these events led to the foundation of the local climate initiative ('Klimaoffensive Wolfhagen') in January 2007. A high percentage of the 37 NGO foundation members were already actively involved or employed in local politics (e.g. as members of the city council) and state-owned enterprise (manager of the public utility company) and civil society (e.g. representatives of the Protestant Church). The founding of this NGO does not follow the more common pathway where members of alternative grass root movements are usually not the same persons who are engaged in local (mainstream) politics or public administration.

Regarding the public involvement within the energy transformation process, it becomes apparent that there had been intensive public relation activities from an early time. For example, in 15 articles in the communal gazette ('Stadtanzeiger Wolfhagen') council members from the above-mentioned parties jointly informed the public about the energy transformation process and upcoming projects (from 2008).

The citizens' energy cooperative ('Bürgerenergiegenossenschaft') is unique in its planned structures and its scope of influence. It is planned so that the members of the cooperative become shareholders of the public utility company, and also should be represented in its supervisory board. Though financial participation approaches in the field of renewable energy projects are not new and there are already some examples for citizen's owned wind parks in Germany, up to now there has been no direct financial citizen's participation in a public utility company. Other energy cooperatives usually focus on certain projects, mainly wind power plants but do not become part of a public utility company.

Communal energy production

Most municipalities entering the field of renewable energy production conclude a contract with a project developer, who earns revenues from energy production and pays local business tax to the municipality. Even in the field of energy production, Wolfhagen and its public utility company chose another way by operating the power plants by the utility company. This means another expansion of the public utility companies' business sector and includes taking on employees.

Actor's point of view

During the interviews and the PNA, the actors did not use the term 'alternative' for describing the energy transformation process, but they expressed the different pathway with phrasings like, we "did it in another way", or "in Wolfhagen we decided to do it differently than most other communities". The reasons why the term alternative was not in use might relate to the

meaning of this wording in the German language. The term 'alternative' in Germany has a double meaning; it could be read like something being different (something is an alternative to something else), but even more often, especially in political context, the term is linked to certain political orientations, namely 'green alternative' politics. It also could be read as being somehow alternative to the established politics as a whole. As already described, the energy transformation process in Wolfhagen was initiated and basically influenced and pushed forward by people who have already been part of the local politics and administration. Therefore, the term 'alternative' might be seen as unfitting for describing this process which emerged out of existing policy and administrative structures.

Alternative practices towards a more sustainable development?

The described practices (the actors' ability to see alternatives to current energy production systems, the remunicipalisation of the energy grid, the cooperation of local actors, the citizens' participation in organisational decision making and the communal energy production) could contribute towards more sustainable development in several ways. Regarding aspects of economic and ecologic sustainability, the retaining and increasing of the public utility company contributes to local value creation, e.g. by placing orders to local craftspeople, increasing number of employees in the public utility company and the reduction of driving distances between contractors and place of performance.

Positive impacts on social sustainability could be seen in the strengthening of the local identity by public participation in the energy transformation process, awareness-building on climate change responsibility, justice and the demonstration of abilities to act locally. The public involvement in Wolfhagen goes beyond the scope of public relation by offering local citizens the chance to become shareholders of the public utility company by signing cooperative shares in an upcoming citizens' energy cooperative. This includes a direct scope of influence on the public utility companies' decisions and direct access to information (as members of the managing board) but also it means that the members of the cooperative are taking directly responsibility for the local climate footprint.

The term sustainable development was mainly used in terms of a more sustainable and responsible use of resources. From the interviewed actors' points of view, terms like climate justice and responsibility, environmental protection, and positive impacts on local development were used for giving reasons why the energy transformation process was established. Covering the local energy requirements by producing renewable energy locally is closely related to a sustainable use of resources which also includes taking on responsibility for the municipal climate impact. Some of the interviewees pointed out their own experience with the oil crisis in 1973 when they first became aware of the finitude of non-renewable energy resources, which influenced their view on the use of resources and motivated them to engage in more sustainable solution findings in their fields of work. Another effective motivational factor for the engagement in the energy transformation process was seen in global environmental and climate justice issues. In this context, the local responsibility for climate impacts was highlighted.

2.2.2 Wolfhagen's niche characteristics

The energy transformation process can be defined as being a niche concerning its spatial and temporal characteristics. Regarding the spatial aspect, the niche could be defined as the

municipality as a whole because the above-mentioned practices and steps all focused on the city of Wolfhagen as a whole.

Looking at the temporal factor, the energy transformation process started very early in Wolfhagen. At that time, the current turn of the energy debate in Germany had not been started or could not be foreseen.

Wolfhagen could be identified as an innovative front running community in becoming a 100% Renewable Energy Community by simultaneously focusing on municipal development and public participation. The participation of local citizens also contains elements of direct involvement by the founding of the citizens energy cooperative which will be represented in the supervisory board of the public utility company. Every energy customer of the public utility company will be allowed to purchase cooperative shares. In spring 2012, the city council and the public utility company decided on the founding and details of the citizens' energy cooperative, which was established at the end of March 2012. This kind of far reaching and direct involvement in the business decisions of a public utility company is one step towards direct democracy in Wolfhagen.

2.3 Emergence of a 'configuration that works' in Wolfhagen

2.3.1 Grounds of the energy transition process

The development of Wolfhagen's energy transition process was mainly influenced by the following outer context factors which can be categorised into legal developments, contractual relationships and technical developments in the field of renewable energy production.

Legal developments

In 1998, Germany's Energy Industry Act (Energiewirtschaftsgesetz, EnWG) induced the liberalisation of the electricity market. Subsequently, the energy customers could choose their energy utility independently from their location. This led to a rising competition stress also for public utility companies. During the following years, a couple of public utility companies were privatised or at least partly privatised (e.g. in Berlin, Essen and Düsseldorf), other public utility companies had to face cuts in their budgets and personnel cutbacks.

Since 1991, the law on feed-in tariffs ('Stromeinspeisungsgesetz') has regulated the access of renewable energies into the energy grid. At that time, renewable energy could barely be produced at a reasonable price. In the year 2000 the German Renewable Energy Act (Erneuerbare-Energien-Gesetz, EEG) came into force and has led to a tremendous development in the sector of renewable energy in Germany. The Act granted a fixed feed-in tariff for every kilowatt-hour generated from renewable energy facilities, and with that it protected investments in such facilities. These guaranteed payments particularly supported small and medium-sized enterprises by offering a high rate of planning security with a fixed price for twenty years.

These acts were important influence factors for the energy transformation process in Wolfhagen. The liberalisation of the electricity market forced the municipality to decide how they wanted to operate their municipal utility in the future. In 2002, the former municipal utility was transformed into a 100% municipal owned public utility company (company with limited

liability; 'Gesellschaft mit beschränkter Haftung GmbH') to gain more flexibility regarding the company's management. Since then, the new manager of the public utility company played a central role in the transformation process and could be identified as being the core actor of the whole process.

Contractual relationships

In 2006, the licensing agreement between Wolfhagen and E.ON on the operation of the energy grid expired. This offered the chance for the remunicipalisation of the energy grid, which was mainly initiated by the manager of the public utility company who managed to convince the local decision-makers of this plan. The remunicipalisation of the energy grid enabled or at least simplified the feed-in of renewable energy in the grid. The expiration of the energy grid contract opened a window of opportunity for the further development. From 2007, the public utility company started to deliver only 100% renewable energy, which to date has been bought from water power facilities in Austria.

Technical developments

The technical developments and the rising degree of effectiveness in the field of renewable energy generation during the last years has made investments in power plants more attractive and financially feasible to municipalities. Therefore, it seems nowadays a worthwhile investment for Wolfhagen to produce renewable energy for meeting its local energy requirements. In 2015 Wolfhagen should be able to cover its energy needs with the locally produced renewable energy, meaning that Wolfhagen could become one of Germany's first energy autonomous cities. Another important influencing factor for the decision of investing in the municipal energy production can be seen in the rising electricity rates, which burden the municipality budgets. Instead of spending more and more money to fulfil the municipality's energy requirements, the local energy production could create income for the community.

2.3.2 Main aspects of the energy transition process

The energy transition process is motivated by local development goals and the need for municipal budgetary savings but also by ethical values especially climate and intergenerational justice convictions of core actors in the process. The transition process focuses on a more sustainable energy production and consumption which is based on locally produced renewable energy and a more efficient use of energy.

The case of Wolfhagen is complex and generally involves all local citizens who could take part in the process. Because of this complexity an exhaustive analysis of the process could not be performed. Therefore, the main actors and networks who contributed to the process will be highlighted by presenting the results of the Participative Network Analysis (PNA).

Timeline

The following timeline provides an overview of the milestones of Wolfhagen's energy transformation process in a chronological order:

1991 and 1994: Innovative energy efficiency systems for the recycling of waste heat (energy absorber) were installed as part of the redevelopment of two municipal open air swimming pools.

1992: Wolfhagen's first photovoltaic installation was constructed on top of a public building ('Haus des Gastes').

2002: The administrative building for the public utility company, constructed as a passive house, was officially opened. In the same year, the public utility company started its free energy consultancy for its customers.

2003: The city council decided upon the remunicipalisation of the energy grid.

2006: The Al Gore-movie 'An Inconvenient Truth' and public dialogues on climate change issues in the local cinema were organised by the manager of the public utility company and the owner of the local cinema. These events were the stimulus for the foundation of the climate initiative in Wolfhagen.

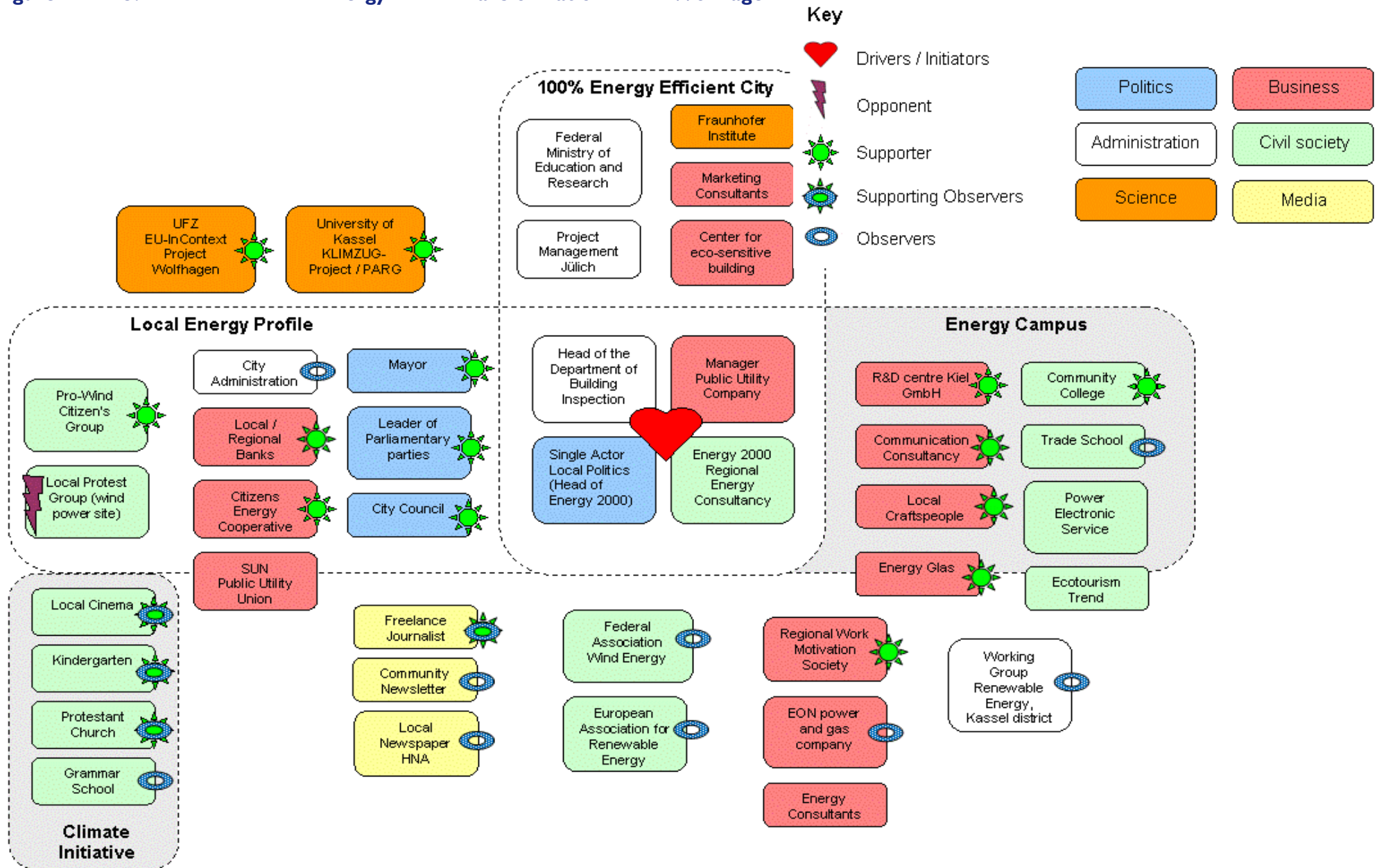
2006: The remunicipalisation of the energy grids was finalised and the operation of the grids were handed over to the public utility company.

2007: The climate initiative in Wolfhagen ('Klimaaoffensive Wolfhagen') was founded. In the same year, the public utility company started to only deliver 100 % renewable energy from water power plants for all customers.

2008: An inter-party information tour with local politicians to the wind park Druiberg (near the district Dardesheim in Saxony-Anhalt) was organised by the public utility. Four weeks later, the city council decided upon the energy transformation process as a general aim and placed the order to the public utility company for the development of appropriate concepts. Participative processes with municipal administrators and stakeholders from different sectors like forestry, nature protection NGO's etc. were committed and appraisal reports about potential sites for wind power plants were obtained. The progress and the results of the process were communicated to the public via internet and press releases. Additionally, the public utility company organised guided tours to wind parks nearby for interested citizens. In the same year, the city council decided to cover its energy requirements by 100% renewable energy and its participation in the prize competition 'Energy Efficiency City' ('Energieeffiziente Stadt', Federal Ministry of Education and Research).

2010: Wolfhagen was recognised as one of five German 'Energy Efficient' cities. Five communities, Delitzsch, Essen, Magdeburg, Stuttgart and Wolfhagen have been recognised as energy efficiency communities in Germany by the Federal Ministry of Education and Research in Germany (BMBF). The prize winners will get funding for implementing innovative strategies and services for energy efficiency in their communities. Currently, several projects in this field of action are about to be implemented in Wolfhagen within the context of the local project 'Wolfhagen 100% Energy Efficiency' (see above).

Figure 3: PNA Energy Transformation Wolfhagen



The Participative Network Analysis (PNA) was conducted in 2011 with an actor from the Energy 2000 agency who has been working in the field for many years. The results have been presented during the interviews with local stakeholders and their comments have been integrated in the graph.

The figure above illustrates the main actors in the field of Wolfhagen's energy transformation process. In middle are the four main initiators. During the network analyses and also in the interviews the manager of the public utility company turned out to be the most influential in the whole process. The energy agency 'Energie 2000 e.V.', the head of this registered association, and the head of the local department of building inspection were early supporters and active drivers in the process.

The previously mentioned 'climate initiative' is shown on the bottom at the left. The foundation group consisted of 37 members in total, though in the PNA only some of them were mentioned. The conflict about the location for the wind power plants separated the initiative and their members are now mainly active in two other NGO's: the Pro-Wind citizen's group and their opponents from the local protest group. Both groups are classified here as part of the local energy profile.

The political actors in the field of the local energy profile are Wolfhagen's mayor, the leader of the above mentioned parliamentary parties and the city council are also identified as supporters of the transformation process (these statements refer to the time period 2002 – March 2011 before the latest council elections). In the business sector, local and regional banks have supported the transformation process, e.g. by granting credits. The citizens' energy cooperative also supports the process financially with their cooperative shares.

On the right, some main actors in the field of the energy campus are shown. The energy campus is an area under development located on a former site of the German Armed Forces, who left their barracks in 2008. At this location, the company Energy Glass started its production of energy-saving window glass in 2008. Further small businesses in the field of innovative energy production (wood gasification) and energy efficiency products are planned or currently under construction. Additionally, a trade school is located on the campus. The top of its building (the former tank hangar) is completely covered with an innovative transparent photovoltaic rooftop³⁸.

In the lower part of the figure, actors from the media and business sector, NGO's and administration that are supporting or observing the transformation process are shown. In the upper left two current scientific projects are classified as supporters, one of them is the InContext project itself and the other is the subproject 'Participation, Acceptance and Regional Governance' in the regional climate change adaptation project network KLIMZUG-Nordhessen which focuses inter alia on energy issues in the context of adaptation to climate change.

In the middle and on top of the figure, the main actors of the upcoming 100% Energy Efficiency project are shown. This project, funded by the Federal Ministry of Education and Research, will focus on implementing energy efficient measures from an inter- and a transdisciplinary perspective.

³⁸ http://www.herwig-blankertz-schule.de/woh/_presse/pdf/2010/SZ39-architektur.pdf

2.4 Ongoing process

2.4.1 Evolutions and transformations in the case of Wolfhagen

The energy transformation in Wolfhagen follows a step-by-step process. Each step enabled further development pathways; e.g. the remunicipalisation of the energy grid allowed or facilitated the feed-in of decentralised produced renewable energy.

The motivations for supporting and contributing to the process are rooted in different factors, especially local development and aspects of justice can be identified as powerful values. The interviewed actors reported the different learning processes that led them to support or initiate the process.

Since 2006, the number of people involved in the energy transition process is rising. A key event can be seen in the founding of the local climate initiative which has led to awareness rising of climate change effects and local responsibility.

Two main conflicts have been identified in the energy transformation process. The first conflict referred to the remunicipalisation of the energy grid between the city council and the network operator E.ON about the rateable value of the grid. This conflict was resolved in an out-court-settlement in 2006 with the takeover of the energy grids by the municipality.

The second conflict, over the location of the wind turbines in the municipality, is still alive and is also affecting the local political conditions. It is important to mention that this conflict is not jeopardising the local energy transition process in general, though it can be identified as a side conflict which possibly influences the public perception of the energy transformation debate. As already mentioned above, the very early inter-party cooperation and agreement on the remunicipalisation of the energy grid, the agreement on renewable energy production and the fostering of energy efficiency is not only remarkable from a political science perspective but it is one of the key success factors within the entire transformation process. From a very early stage in the transition process (in 2003 when the debate on the remunicipalisation of the energy grid started), an inter-party cooperation between the social democratic party (SPD), the conservative party (CDU) and the liberal party (FDP) which cooperates on the municipal level with the independent voters' association Wolfhager Liste (WHO) supported the ideas of the public utility's manager. This also includes the support of the wind park location at the Rödeser Berg.

The table below shows the distribution of seats in Wolfhagen's city council:

Table 6: Distribution of seats in Wolfhagen's city council

Election year	Total seats	SPD	CDU	Grüne	FDP	Wolfhager Liste* since 2006	BWB* since 2011
1993	37	18	13	4	2	X	X
1997	37	19	14	4	0	X	X
2001	37	18	15	3	1	X	X
2006	31	15	13	1	X	2	X
2011	31	13	9	4	X	1	4

* independent voters

Source: Wolfhagen city archive

In the last elections in March 2011, the independent voters' association BWB ('Bündnis Wolfhager Bürger') won four seats in the city council. The BWB and the green party reject the intended site of the wind power plants ('Rödeser Berg'). Main arguments refer to nature conservation reservations and negative changes in the landscape given its location in a cultivated forest on top of a knoll. But both parties are supporting the developing of decentralised renewable energy resources in general which they emphasise also in their public representation on their websites. The BWB stated on their website the inclusion of alternative or renewable energies and energy efficiency strategies in compliance with nature³⁹. Instead of the intended location, both parties prefer other sites on defunct industrial sites and regionally planned bigger wind parks. These alternative ideas have been rejected by the public utility company and the Council's political majority (SPD, CDU, WHO/FDP) referring to data of the local wind measurements.

Though there are current conflicts about the site of the local wind turbines, the main process towards the 100% renewable energy aim and the minimising of the local climate footprint are not doubted. The upcoming project 'Energy Efficient City' will be the next step which also aims to reduce energy consumption.

2.4.2 Governance of Wolfhagen's energy transition process

As described above, the main initiative came out of the public utility company which also had a big impact on the public relations and participation. The process was supported by the local decision makers from the very beginning. In the future, the direct participation of citizens in the public utility company through shareholding by the citizen's cooperation will could lead to a shift in the power relationship. Depending on the number of citizens who will take part in the cooperation, the shareholdership could also contribute to more direct democracy in the business decisions of the local public utility company. The energy transition process is mainly governed by local decision makers and local stakeholders but also with an intensive and increasing level of public participation. The citizens' energy cooperative was founded end of March 2012.

2.4.3 Intermediate conclusion

The activities which had led to the transition process were strongly influenced by developments in the legal framework concerning renewable energy (see 6.3.1). These developments allowed communities in Germany to invest in renewable energy by offering a higher planning certainty and a better overview about upcoming costs and amortisation periods. Also project funding like the upcoming BMBF-project 'Energy Efficient City' is important for the testing and implementation of new practices and technical developments. These projects are governed by a close municipal-scientific cooperation.

An important influencing factor for the starting of the transition process lays in the shrinking communal budgets. The rising costs for energy consumption (e.g. for public buildings) impose municipal budgets and forced the municipality to find solution strategies. Municipal renewable

³⁹ <http://www.bwb-wolfhagen.de/wir-ueber-uns.html>,
online.de/41427.html

<http://www.gruene-in-wolfhagen.homepage.t-online.de>

energy production could be one strategy to address this problem. Therefore, some basic requirements are essential: local knowledge and skills, the ability to control the process by the municipality which is closely linked to public utility companies which are under the ownership and control of the local authorities and suitable conditions for producing renewable energy. In the case of Wolfhagen, the required knowledge and skills to estimate the requirements and the chance of success were basically available in the public utility company. Additionally, the second requirement, the ability to control the process, was already given in this case. In contrast to a lot of other municipalities, the city of Wolfhagen did not privatise their public utility company and therefore held the autonomy of decision to start the transition process. The third condition for producing renewable energy is also given in Wolfhagen, which is not only equipped with a suitable location for the installation of wind turbines but also has the agricultural potential to produce biomass.

Transition processes towards renewable energy and energy efficiency are about to become a (more) mainstream practice in Germany, which is also supported by project funding from the Ministry of Education and Research. For example, the BMBF launched a call for projects in the context of an environmental and socially compatible transition of the energy system in 2012⁴⁰.

2.4.4 Wolfhagen's energy transition process: pioneering, repeatable or unique?

Concerning the question of whether Wolfhagen's energy transition process could be repeatable in other municipalities or regions, the general answer could be yes. Currently, more and more communities in Germany are aiming towards more sustainable energy production and consumption practices though their pathways often differ for a number of reasons. Regarding the case of Wolfhagen specific aspects which had a decisive influence have been identified.

First, knowledge and motivation – these two aspects can be seen as the main conditions for starting the whole process. Within the process' core team and especially in the person of the public utility manager, knowledge about the technical feasibility, economic viability and the local implementation capacity of the applicable steps was already in place. This also includes the structure of the public utility company as a municipal owned company which allows flexible business decisions (in contrast to administrative units) on the one hand and municipal governance on the other. This was the basis for convincing the local decision makers to investigate, to support and to foster the further developments. Regarding the political process, the willingness for inter-party cooperation can be seen as another important influence faction. Though these kinds of cooperation are not unique in municipal politics, the stability of the inter-party cooperation in this case is remarkable. Since the remunicipalisation of the energy grid, the close cooperation of the SPD, CDU and FDP/WHO was continued in all decision processes concerning the energy transition process. As a result, there has been a political stability and a clear political majority in the city council during the whole transition process.

Other contextual factors that strongly supported the process are the legal frameworks at the national level, especially the German Renewable Energy Act ('Erneuerbare-Energien-Gesetz',

⁴⁰ <http://www.bmbf.de/foerderungen/17319.php>

EEG) from the year 2000, which afforded municipalities the necessary planning reliability for investments in renewable energy.

The production of renewable energy requires suitable conditions, like good wind conditions for the operation of wind turbines, the agricultural conditions for biomass productions or suitable conditions for photovoltaic installations. All these conditions are fulfilled in the municipal area of Wolfhagen so generally; renewable energy may be produced at a reasonable price.

The first step, the remunicipalisation of the energy grid, has already been described as a main influencing factor for the further development. The expiration date of the energy grid's concession contract had a significant influence on the chronology of the process.

Intrinsic aspects like ethical values (esp. justice) have been identified as strong motivational aspects of core actors. Also the willingness to contribute to a positive local development has been mentioned as an important motivator.

The participation of citizens in the energy transition process was one of the main arguments for the Ministry of Education and Research for awarding Wolfhagen in 2010 as one of the top five energy efficient cities in Germany. Including citizens directly in the public utilities company decision processes via the energy cooperative goes far beyond the scope of other participatory process which are common in energy transitions processes and often are aiming 'only' at public acceptance.

In sum, it is a mixture of these aspects, influences and preconditions which have influenced the energy transition process in Wolfhagen therefore it might not be possible to 'copy and paste' the Wolfhagen development and repeat it elsewhere in the similar way. For example, the manager of the public utility company in Wolfhagen holds an engineering degree and was already an expert in renewable energies before he started his work there. This specific knowledge enabled him not only to realise the potentials of the energy transformation process for the community but also was an important aspect for the local decision makers to trust him and his ideas. This kind of specific knowledge is not necessarily available within public utility companies in Germany because most of them are focusing mainly on the administration of energy supply and leave the energy production and the operation of the energy grid to external energy suppliers and companies.

Another central aspect is the ownership of the public utility company. As a city-owned company, the municipality is directly involved in its development and decision processes. Being convinced that renewable energies are a promising path for local development, the political decision makers had the power to start the implementation of the process. Being part of the community, the interests of the public utility company and the city are similar: offering public service for the citizens, local value creation, sustainable production and use of energy, job creation etc.

The members of the core team and other actors in the transition network are disseminating Wolfhagen's plans and experience widely. For example, the manager of the public utility company is often invited as a conference speaker. Other forms of dissemination are information exchanges in existing networks and projects, e.g. the 'Arbeitsgemeinschaft Deutsche Fachwerkstädte e.V.' (which is an association of German cities with historical city centres which are dominated by half-timbered houses). Through these activities, local initiatives and ideas for renewable energy production and energy efficiency are promoted on regional and communal level. For implementation, the specific conditions in the particular cases must be considered. For example, the ownership of the public utility company plays an important role regarding the community's ability towards a sustainable energy transition

process. During the 1980s privatisations of public utility companies were common to reduce municipal debts. This has led to a loss of influence of local governments and could turn out as a barrier in the local development of renewable energies today. Similarly, the ownership of the energy grid is another important aspect for the communities' flexibility.

In general, political and legal developments on different scales are influencing the development of energy transition processes strongly. Recently, the national subsidies for photovoltaic systems have been decreased, which has produced debate and controversy. Opponents criticise that the cut back of subsidies will inhibit the development of photovoltaic systems in Germany and will also lead to job losses in the renewable business sector. For local decision makers, the reliability of subsidies is an important argument for investment decisions in renewable energy. If renewable energy solutions will be more costly than non-renewables, the communities have very little scope for decision making towards renewables because of institutional and budgetary provisions. In sum, temporal aspects, legal developments and environmental discourses are essential for the development of sustainable energy transitions, not only on a local but also on a national and supranational level.

2.5 Conclusion

The case study of Wolfhagen's energy transition process shows the main influencing aspects, underlying motivations and interplays between local actors. The municipality has been one of the first communities which started their way towards a more sustainable dealing with energy in Germany, driven not only by local development aims, but also by ethical values. At that time when the process started, Wolfhagen took some political decisions differing from the mainstream practices at that time, especially the privatisation of municipality utilities. Today, these alternative paths turned out to be forward-looking and may become mainstream practices in the future. For example, the remunicipalisation of energy grids and the local production of renewable energy are becoming more common nowadays. Nevertheless, Wolfhagen's path is still remarkable in its consequent focus on local implementation and municipal control linked to a high level of citizens' participation.

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3 Thursday Veggie Day

"A man of my spiritual intensity does not eat corpses."
George Bernard Shaw



3.1 General picture of the case study

In 2009, the 'Thursday Veggie Day' (TVD) – *Donderdag Veggiedag* in Flemish – was launched in Ghent by EVA (*Ethisch Vegetarisch Alternatief*), a non-profit organisation (npo) promoting vegetarianism, with the support of the municipality. Its purpose is to promote the adoption of one veggie/vegan day a week as a commitment towards sustainability, health and reducing animal suffering. Therefore, the core practice developed through TVD consists in a voluntary reduction of the consumption of meat and animal products to foster more sustainable food consumption.

Main actors

- ▶ **EVA: Ethical Vegetarian Alternative** (Director: Tobias Leenaert), Belgium's biggest vegetarian non-profit organisation (npo), founded in 2000 and the only vegetarian npo that is funded by Flemish government (since about 2003). EVA is composed of 9 permanent members, a director and a board of directors.
- ▶ **Ghent city council**, and particularly:
 - Tom Balthazar, Labour party, Deputy-Mayor for the Environment and Social Affairs
 - Rudy Coddens, Deputy-Mayor for Education and Training.
 - The Health Service: Leen Van Zele – Health Service City of Ghent
 - The Environmental Service: Maaïke Breugelmans
- ▶ **Npo / associations:**
 - GMF (Gents Milieu Front) : a regional environmentalist organisation
 - JNM (Jeugdbond voor Natuur en Milieu): a youth federation for the nature and the environment

► **Partners from private sector:**

- Restaurant & chefs in Ghent (see Ghent Veggieplan), like Philippe van den Bulck, a well-known vegetarian chef, one of Flanders's top chefs and food writers who served in April 2009 a veggie gastronomic tour de force at the town hall, which persuaded the Lib-Lab coalition running the city to back the idea of a TVD.
- Alprosoya, the 'European pioneer in the development of 100% plant-based drinks and soya-based food products'.
- Horeca: Horeca corresponds to the syllabic abbreviation of the words 'Hotel/Restaurant/Café', which refers to the sector of the food service industry and to establishments which prepare and serve food and beverages.

► **In Brussels:**

- **Officials** and especially with the implication of some personalities such as Evelyne Huytebroeck, member of the Ecolo party, Minister of the Government of the Brussels-Capital Region, responsible for the Environment, Energy, Water Policy, Urban Renovation, Fire-fighting, Emergency Medical Assistance and Housing and Bruno De Lille, State Secretary. On May 26, 2011, Evelyne Huytebroeck and Bruno De Lille presented to the press the campaign Thursday Veggieday, and especially during the press conference at the VUB, the bilingual vegetarian city map of Brussels and the Thursday Veggieday Guide.
- **EVA:** Annemarie Ijkema, project manager of the « Thursday Veggie Day » in Brussels
- **Planète-vie:** Planète-vie (a name that could be translated into something like 'planet-life') is a non-profit organisation committed in environmental issues and oriented towards lifestyles and behaviour necessary change towards more sustainability. Planète-vie is a sort of hub collecting observations, ideas, information, on purpose of encouraging innovative and collective thoughts and creating action plans to improve the relationship between human kind and the living world. So its involvement in TVD initiative seems relevant. Yet, its effective role in the Brussels TVD requires further research to become clearer.
- **Business partners** (VUB, Mobistar, MIVB / STIB, BNP PARIBAS Fortis, Kamilou, Institut Redouté Peiffer, Le Mess, Chalet Robinson)
- Leefmilieu Brussel/ Bruxelles Environnement

Timeline

2000: Creation of EVA, a non-profit organisation that is granted a structural support and substantial funding from Flemish government (since 2003). Late 2001, EVA counted about 1000 members (3000 now).

2000-2008: (IVU Interview) Tobias LEENAERT mentions following examples of EVA's accomplishments until the year 2008: The organisation of a scientific congress with the Belgian Society of Dietiticians, the association's "unique and spacious information centre with a nice kitchen for cooking demos, a literary and a room for lectures", and the fact that EVA received a grant from the Ministry of Health to teach food service professionals (Food and Health Award for the Best Project 2008).

August 30th, 2008: npo EVA organises at the University of Ghent, in collaboration with WWF Belgium and Grenpeace Belgium, a conference entitled ‘Less Meat, Less Heat’, in which the IPCC Chairman R. PACHAURI is the keynote speaker. This conference attracted a large audience (about 600 people), including many municipality officials and deputy-mayor Tom Balthazar, who declared that this conference convinced him of the importance to commit with such initiative.

April 2009: Philippe VAN DEN BULCK, a well-known vegetarian chef (who is one of Flanders's top chefs and food writers) serves a veggie gastronomic tour de force at the town hall. This taste experience persuades the Lib-Lab coalition running the city to back the idea.

April 16th, 2009: Board of Mayor and Deputy-Mayor decide to support the TVD in Ghent.

May 8th, 2009: Local councilor for Education Rudy CODDENS announces that city schools will also join the TVD campaign in October.

May 13th, 2009: Thursday officially declared as a ‘Veggie Day’ by the Deputy-Mayor in charge of Environment and Social Affairs, Tom BALTHAZAR, during a public event in the Groetenmarkt (kick-off event launching the campaign).

June 2009: EVA organises the Veggielympics in Leuven (Louvain)

July 2009: EVA hold a ‘Veggieburger stand’ for 10 days during the Ghent festival

October 1st, 2009: Cities of Hasselt and Mechelen launch their TVD.

October 1st, 2009: 35 city schools representing 11.000 children join TVD, by proposing a vegetarian meal as ‘default’ menu each Thursday. About 95% of the parents gave their consent to the initiative, and most of the children adopt the vegetarian diet on Thursday (93%).

December 3rd, 2009: Public letter to Mayor and European Parliament (accompanied by a conference) addressed by both Paul MCCARTNEY and Rajendra PACHAURI to ask policy makers for weekly ‘veggie days’.

2010: Diffusion of the TVD worldwide, especially in: Bremen (Germany, January 2010); San Francisco (USA, April 2010); Eupen (Belgium, May 2010); Washington DC (USA, June 2010); Zagreb (Croatia, June 2010); Cap Town (South Africa, July 2010); Sao Paulo (Brasil, Octobre 2010); Gloggnitz (Austria, Octobre 2010)...

May 26th, 2011: TVD campaign launched in Brussels.

3.2 Overall aim: characteristics and purposes sought by the niche creation

3.2.1 Alternative practices

As emphasised by the word ‘alternative’ in EVA acronym, a vegetarian/vegan diet still does not correspond to a mainstream practice. TVD proposes to adopt progressively vegetarian/vegan diet as an alternative and more sustainable (according to scientific analyses) food practice. Indeed, the corresponding ‘mainstream’ food practice consists of an increasingly meat-based diet which has been adopted in western countries and tends to diffuse in developing countries. Therefore, TVD claims to reverse this general trend, as a

condition for supplying enough food to meet the human needs worldwide. As such, changing the mainstream food practice is a philosophical and agronomic / biological necessity which would have consequences on the general economy of food, and especially on the breeding industry (so it is logical that their main opponents are the farmers unions...). This means also that sustainability issues lie at the very heart of the TVD campaign and the alternative practices they promote. Sustainability is indeed a key argument in favour of the reduction of meat consumption, which is supported by much scientific research and publications (mentioned by TVD promoters).

However, a vegetarian/vegan diet cannot in itself be considered as an innovative or new alternative practice. In a way, it is a matter of labeling: ‘adopting a vegetarian/vegan diet’ is not equivalent to ‘reducing meat consumption’. Actually the word ‘alternative’ remains cautiously used by TVD promoters, and all the more since they intend to mainstream veggie/vegan meals and to make it become a mainstream practice. This has to do with the specificity of what we call here the ‘campaign form’⁴¹ to designate the public campaign calling for the individual and collective adoption of a day without meat each week. This ‘public campaign’ form implies that the ‘alternative’ is not sought for itself as defining the identity of a group (politically or socially) — an identity that could be lost if the alternative practice becomes mainstream. In a way, the identity of the frontrunners (being veggie/vegan) is also preserved by the target adopted by the TVD, which is to promote veggie/vegan consumption practice without claiming for a veggie/vegan diet in a dictatorial or imperious way.

Yet, TVD represents a potential breakthrough in food practice, as it attempts to bring veggie meals into the mainstream. So the TVD stands for a first step in a long-term process toward a reduction of meat consumption. It proposes a credible ‘alternative’ to the current dominant food practices and attempts to create the conditions for vegetarian/vegan practice to substitute/replace progressively our unsustainable western meaty diets.

3.2.2 Niche characteristics

We assume that the proposal ‘eating less meat/reducing meat consumption’ represents a sociotechnical innovation toward more sustainable food practices. Thus, TVD can be considered as a ‘non-technical’ niche⁴², or, in other words, as an attempt to modify significantly the existing sociotechnical regime that is framing the food production and consumption practices. This niche proposes a *re-framing* of food practices. To do so, the TVD initiative is based on a few core principles: the non-compulsory character of the TVD (i.e. a voluntary engagement to adopt a vegetarian lifestyle one day a week), which is combined by

⁴¹ The notion of « form » is here inspired by the « affair form » as developed by sociologist Luc Boltanski in *Distant Suffering: Morality, Media and Politics*, Cambridge: Cambridge University Press, 2004 (1999) and Boltanski & Thevenot, *On Justification: Economies of Worth*, Princeton: Princeton University Press, 2006.

⁴² Indeed, this case study echoes the niche-based approaches as defined Seyfang and Smith: “Niche-based approaches explore problem-framing (eg. mobility, food, energy services) and search for solutions – in contrast to technology demonstration projects that begin with “technical solutions” to highly framed problems. Niches practices that resonate with widespread public concern sometimes catch on, get copied, became adopted and spread.” (Seyfang & Smith, 2007: 589). Moreover, the TVD tends to create a niche which is specifically not grounded on a technical innovation and/or disruption but on a rather distributed sociotechnical change.

an institutionalisation process that has been made possible by co-operation / partnership with public government. Indeed, the involvement of the municipality proved (and still proves) to be a very powerful leverage that differentiates the Ghent initiative from any former quite similar projects.

TVD deploys also some action models which are typical of niche creation⁴³: an important networking activity, a scientific basis grounding the arguments in favor of the alternative practice, and a learning process through cooking courses, recipes, massive information but also events, incentives, contracts of commitment. TVD is a campaign in the whole sense of the term, which means a way of making things public and durable...

Indeed, the public campaign form contributes to create a rather specific sort of niche, which consists in a protected space for particular practice but also in a diffused practice aimed at contaminating the largest possible public. To characterise this niche, several aspects are particularly salient: 1) the development of this practice supposes a specific agencement/agency or configuration, i.e. the public campaign involving various types of actors; 2) this practice is rather located in particular site(s); 2) the perpetuation of the practices supposes that this located configuration is still fostering the practice; 3) TVD is a social innovation that proposes an alternative to mainstream meaty food meals/practices.

Thus, making vegetarian food 'mainstream and marketable' – to quote the EVA founder and director T. Leenaert – is undoubtedly part of a niche creation process, which is all the more interesting since it initiates a worldwide diffusion process.

3.3 Emergence of a 'configuration that works'

3.3.1 Grounds of the process

International and European Context: global trends

Historically, the necessity of reducing meat consumption is associated with two critical periods: during World War I & II, US governments called upon national solidarity and reallocation of meat scarcity in favour of soldiers (home front vs. abroad front). It is not until the 1970s that the reduction of meat consumption has been invoked for ethical and environmental reasons by emerging but marginal vegetarian/vegan movements (e.g. yearly 'Veggie Day' initiated in 1974).

Recently, sustainability issues have reframed and extended the meaning of reducing meat consumption. This evolution is reinforced by a growing interest in assessing the

⁴³ Existing case studies on niches (for a review, cf. Schot and Geels, 2008) globally suggest that niche approach calls for investigations particularly oriented towards: a) **expectations**, which play an important role in the success or failure of niche building, of which robustness depends on its share by many actors, whereas its specificity and high quality are substantiated by ongoing projects; b) **social networks** are also of high importance, and all the more that membership is broad and deep (i.e. based on plural perspective and substantial resource committed by members); and c) **learning processes**, and especially in regard with alternative cognitive frames and different ways of valuing and supporting the niche (Hoogma et al, 2001). According to Geels (2002) and Raven (2006), these three processes (a, b, c) exert a crucial influence on the capacity of the niche to influence wider institutional changes (Geels, 2002; Raven, 2006).

environmental impact of meat / cattle breeding, including in the scientific field (cf. FAO, 2006). This question seems to occupy a more and more important place in the international and European political agenda. Nevertheless, for now, there are very few regulatory policies that frame sustainable food consumption and production; all the more as the food policy is still focused on hygiene and other labeling, not on sustainability as such.

At the same time, if they do not lead to strong public policy regulations, successive recommendations and advice, whether expressed by international, European or national institutions, may contribute to inscribing the meat consumption issue on the political agenda. Indeed, the growing consensus on the environment and health impacts of meaty diets makes people progressively more aware of the necessity of reducing meat consumption. For example, periodic UN reports assert that a global shift towards a vegan diet is vital to save the world from hunger, fuel poverty and the worst impacts of climate change and, furthermore, that the growing world population (predicted 9.1 billion people by 2050) must not adopt the unsustainable western tastes for diets rich in meat and dairy products. As a recent report from the United Nations Environment Programme's (UNEP) international panel of sustainable resource management states:

Impacts from agriculture are expected to increase substantially due to population growth increasing consumption of animal products. Unlike fossil fuels, it is difficult to look for alternatives: people have to eat. A substantial reduction of impacts would only be possible with a substantial worldwide diet change, away from animal products⁴⁴.

Regional / national context

More than the federal level, the regional level influenced – at least indirectly – the emergence of TVD. Indeed, the Flemish government contributed the creation of a favorable climate for the TVD at first by subsidizing the npo EVA since 2003.

Since 2008, the Flanders' government set up a mid-term 'generic' policy in which food is considered an important part of environmental and sustainable planning. TVD can be seen as compliant with general environment and health objectives expressed in several documents:

- Environmental Policy Plan 2008-2013 (under construction): Environmentally sound product use, Action 3: Stimulate the inhabitants of a city to consume in an environmental-friendly way (among which: Promotion of sustainable nourishment with particular attention to biological agriculture, local and seasonal products, vegetarianism, etc.)
- Health Policy Note 2008-2013: Action 2: Health stimulation on municipal and personnel level (among which: promotion of healthy nourishment)
- Animal Policy Note 2008-2013: Action 21: Promotion of a vegetarian day⁴⁵.

To sum-up, the public policies and regulations do not exert a critical influence on the creation and development of sustainable niches like the TVD. Policies do not impose strong

⁴⁴ UNEP, Assessing the Impacts of Consumption and Production: Priority Products and Materials, UNEP, 2010: 82.
http://www.unep.org/resourcepanel/documents/pdf/PriorityProductsAndMaterials_Report_Full.pdf

⁴⁵ City of Ghent, *Thursday Veggie Day in Ghent – Detailed information*, March 2010, p. 3.

constraints that would set-up a rigid framework for alternative food practices. However, public authorities are still reluctant to cause damages to the meat production sector and, consequently, they do not initiate the structural changes that are necessary to mitigate the environmental impacts of this sector. And, at the same time, the possible changes in food practices depend on incentives established by public policies and institutions.

The local context

The local context plays a key role in the concretisation of the TVD niche. More specifically, the city of Ghent presents several characteristics and features that fostered the emergence and success of TVD:

- Firstly, Ghent is a relative ‘young’ city which is particularly open to veggie/vegan food: for instance, Ghent has the highest rate of vegetarian restaurants by inhabitants in Belgium – as T. Leenaert underlines: “It’s the greatest city in Belgium. Young, vibrant, progressive, historic, not too big, not too small it has a big student population”;
- Secondly, the implementation in Ghent of npo EVA which has been funded by the Flemish government since 2003 and has a good reputation (professionalisation and reliability of the npo);
- Thirdly, the local environmental policy and councilor in charge of the environment (Tom Balthazar) gave impetus to the municipal support to TVD initiative.

One of the most important factors is obviously the official/ institutional support, which plays a major role in the launching and institutionalisation of the initiative. Indeed, the commitment of (local) public and political authorities is considered by both EVA members and Ghent municipality representatives as the necessary catalyst that conditions the possible existence of an effective TVD.

3.3.2 The concretisation of the niche / Enactment of alternative collective practices

Precedents and key events

2000: Creation of EVA, a non-profit organisation that is granted a structural support and substantial fundings from Flemish government (since 2003). Late 2001, EVA counted about 1000 members (3000 now).

2003: The Baltimore City Public School system is about to become the first fully Meatless Monday school system in the U.S.

2000-2008: Institutionalisation of the npo within the local associative landscape.

August 30th, 2008: npo EVA organises at the University of Ghent, in collaboration with WWF Belgium and Grenpeace Belgium, a conference entitled ‘Less Meat, Less Heat’, in which the IPCC Chairman R. Pachauri participates as keynote speaker.

April 16th, 2009: Board of Mayor and Deputy-Mayor decide to support the TVD campaign in the city of Ghent.

May 8th, 2009: Local councillor for Education Rudy Coddens announces that city schools will also join the TVD campaign in October.

May 13th, 2009: Thursday officially declared as a ‘Veggie Day’ by the Deputy-Mayor in charge of Environment and Social Affairs Tom Balthazar during a public event in the Groetenmarkt (kick-off event launching the campaign).

From personal context to collective action

The TVD niche has undoubtedly become possible thanks to the commitment of several key actors. Therefore, the ‘personal context’ of these core people contributed to frame the TVD and to give a specific meaning and orientation to the collective action.

Indeed, the main actors exerted a critical influence on the TVD campaign: first of all, EVA and especially its leader Tobias Leenaert; IPCC president R.K. Pachauri whose 2008 conference in Ghent entitled ‘Less meat, less heat’ gave a decisive impulse to the TVD; Ghent labor party councilor for the environment, Tom Balthazar (who initiated municipality support) and a bit later his fellow councilor in charge of Education and training, Rudy Coddens, who decided to implement TVD in school canteens.

Tobias Leenaert is undoubtedly the key character of this case study; therefore, his trajectory is rather interesting. Especially because it underlines that for EVA’s founder and director (since 8 years), TVD results of a sort of broadening process that extended vegetarian/vegan food practice beyond his own personal motivations. Indeed, animal sufferance was originally the key reason that led T. Leenaert to become a veggie:

I was about twenty-two at the time I went completely vegetarian. Two years later, I was vegan. Actually, I had been thinking for years, since I was fifteen or so, about becoming vegetarian. That was because basically I couldn’t explain the difference of treatment between our dog, sleeping peacefully near the fireplace and the cow in the meadow that had to be out in the rain and that people would eat later. It was only several years later though, that I put my thoughts into practice. [...] I read *Animal Liberation* by Peter Singer, then wrote my university dissertation about the human-animal relationship. Then, I interned for half a year at American animal rights organisations. When I came back, I was convinced – and have become even more convinced along the way – that being active for vegetarianism is one of the single most effective things you can do to make the world a better place to live for every living being, including the Earth itself.

Animal cause seems here to be the core reason for EVA’s leader becoming a vegan and later an activist committed against animal sufferance. His engagement into PETA while he was in the USA has certainly influenced the way he conceived the TVD campaign proselytizing vegetarian/vegan food practice ‘only’ once a week but seeking for a large public endorsement. Launching a ‘day meatout’ (in 2007) does not cover the whole story. Indeed, Leenaert’s ‘tour de force’⁴⁶ consisted in organising the venue of IPCC’s president Rajendra Pachauri to Ghent to give for the first time a lecture entirely devoted to the issues associated with vegetarianism and entitled ‘Less Meat, less heat’ (August 2008). This conference represents EVA’s ‘momentum’, i.e. a powerful catalyst to TVD’s broadening and a strong

⁴⁶ It is still one, even though T. Leenaert feels like to underline that he just had to call his office many times to finally set-up a date for the conference : « I just asked him, if you want to know how I did that ! » (this has become part of the « storytelling » of TVD’s creation, as T. Leenaert mentioned it during the interview, as well as many other interviews reported in the press coverage !

leverage to convince a large public of the scientific legitimacy of adopting and enlarging veggie food habits.

Pachauri's conference in Ghent on the 31st August 2008 was a breakthrough in the process of creating the niche for several reasons. Because IPCC's president provided a strong scientific basis to the TVD initiative, and also because he argued and claimed for the very relevance of TVD: "In terms of immediacy of action and the feasibility of bringing about reductions in a short period of time, it clearly is the most attractive opportunity [...] Give up meat for one day [a week] initially, and decrease it from there."

Pachauri's support initiated a core aspect of the TVD initiative, as "Tom Balthazar, the councilman responsible for the environment, was there, after that, he became more and more convinced of the importance of meat reduction. We made contact with two of his staff who were also enthusiastic, and we suggested that they ask Balthazar if he would be prepared to officially proclaim Thursdays to be veggie days in Ghent. Apparently, he didn't need much convincing, and he managed to get his colleagues on the executive council of the city to go along with him⁴⁷." As a result, the venue of Pachauri made an innovative and decisive alliance possible: EVA received an effective support from the city of Ghent thanks to Tom Balthazar's engagement in favour of such sustainable and healthy initiative: "[it] is good for the climate, your health and your taste buds. [...] A balanced vegetarian meal is not only sustainable, but also a healthy meal. [...] We eat too much meat in Flanders and too little fruit and that has disastrous consequences for our health. [...] Too much meat eating increases the cholesterol and the risk of some cancers, diabetes and obesity⁴⁸." A few months later a real partnership was set up between the municipality of Ghent and EVA, which co-produced the actual TVD campaign in accordance with their common concerns and respective self-interest. For instance, from the very beginning of their association, Tom Balthazar emphasises the fact that TVD doesn't represent any constraint or obligation imposed by the City council; on the contrary, it is based on voluntarily commitment of the inhabitants: "There's nothing compulsory. We just want to be a city that promotes sustainable and healthy living." (*The Guardian*, Thursday 14 May 2009). EVA's members praise the decisive involvement of the municipality ("So no, it's definitely not just lip service⁴⁹", mentions Leenaert in a press interview) as EVA's spokesperson does: "It was really the first time that a government — even on the city level — is behind such a campaign".

The main characters involved in the creation of the TVD initiative provide a good illustration of the various personal contexts and trajectories – combined with catalysing events – that founded the TVD project, and especially the innovative partnership between Ghent city council and npo EVA. Though all of them share a common concern for environmental and sustainability issues, their main foci still differ and reflect their original motivations and inner context aspects.

For EVA's members, the shift from inner context to collective action corresponds to an extension process that goes from animal sufferance & veggie diet to the diffusion of

⁴⁷ Interview of T. Leenaert, September 2009, available at <http://www.ivu.org/news/online/climate.html>

⁴⁸ Interview with Tom Balthazar, "Gent declares every Thursday 'Veggie day'", *The Telegraph*, 14/05/2009 – as mentioned previously, it has (for now) been unfortunately impossible to conduct an interview with T. Balthazar during the empirical research.

⁴⁹ Interview of T. Leenaert, September 2009, *op. cit.*

alternative veggie/vegan practices. This raises possibly the following question: to what extent does TVD represent an ‘acceptable’ compromise to spread their ideas (health and sustainability as core arguments, relegating animal sufferance?) – and we may hypothesise that some of EVA’s members decided to leave the npo for such reasons (this aspects was evoked and quickly eluded by all the interviewees).

For City councilors, scientific proof and the reliability of Pachauri contributed to convincing them of the relevance of TVD, and especially Balthazar, who put the emphasis on health (obesity, diabetes, etc.) and very salient environmental/sustainability issues such as climate change and GHG emissions.

Association between EVA and Ghent city council is based on the shared evidence that the TVD campaign shall be based on the ‘contractualisation’ of volunteer engagement / overcoming reluctances (taste, recipes, health, etc.)

Arguments, reasons and motivations

The TVD campaign material displays the main reasons for adopting a vegetarian diet, at least one day a week (quotations):

- 1) It’s healthy,
- 2) It’s good for our planet (and climate),
- 3) It’s good for the animals,
- 4) It’s good for people in the south,
- 5) And (most of the times) it’s very tasty.

The impact of meat production and consumption on environment and health are the main justifications and arguments emphasised by the public campaign City council instigated largely this position, and especially the ranking of the issues at stake. Furthermore, the key officials involved in the TVD consider that this campaign brings a positive image of the city, and therefore reputational benefits in terms of tourism, etc.

World hunger and animal suffering are also important but ‘secondary’ reasons, if we refer to the official public campaign and related discourses⁵⁰, yet both might be given a greater importance by some other actors, especially EVA members.

Taste is the last (but not least) key argument mobilised and this argument differs noticeably from the previous ones. In a way, taste goes along with health aspects; yet the argument of the taste is also meant to recuse a common negative opinion about vegetarian meals, which are presumed to have unpleasant or nasty taste and prevent people to engage in the TVD initiative. This taste argument is also accompanied by a range of information materials, from the ‘veggie map’ to vegetarian recipes or cooking tips to inform the citizens. So the next step should consist in having a better understanding of the actor’s motivations and justifications that result in a citizen commitment in this weekly vegetarian practice. As it is rather impossible to lead a large inquiry into the population of Ghent, this aspect will be deepened mostly through interviews with EVA’s activists.

⁵⁰ See “Thursday Veggie Day in Ghent – detailed information” issues from 2010 and 2011.

Another striking aspect is the involvement of scientific arguments to justify and legitimate the project. TVD initiative is indeed presented as the necessary result of well-established scientific facts – enunciated by Rajendra Pachauri during the Conference he gave in Ghent on August 2008. Scientific arguments lay at the very heart of the TVD project and they are frequently re-asserted through campaign materials, flyers or position papers. Among scientific arguments, it is possible to identify key themes that deal respectively with:

- *Environmental arguments*, including those related to the large impact of livestock's production and consumption, and especially of cattle breeding and meat consumption on the environment. According to the frequently quoted Food and Agriculture Organization of the United Nations study (FAO, 2006) food production and consumption rank on the top 3 of the causes of each environmental problems such as global warming (18% of global GHG emissions, more than transportations which represent 'only' 14%); deforestation, overfertilisation, water problems and loss of biodiversity.
- *Health arguments*, including those related to cholesterol levels and consequently risks on heart and vascular diseases, some cancers, diabetes and overweight. (Reference study: *The Lancet*, 2007.)
- *'Meaningful' equivalences and calculations*, where equivalences and calculations contribute to raising people's awareness of meat impacts, especially by drawing comparison with the transport sector. For example: "If all 243.000 inhabitants of Ghent participate in TVD, they reach the same effect as when 19.000 cars are taken off the road." (interview with T. Leenaert)

3.4 Ongoing process: perpetuation, governance and institutionalisation of the niche

3.4.1 Evolutions and transformations of the niche

A successful campaign: TVD and its expansion over time and space

All the stakeholders, and especially EVA and Ghent city council, agree on the statement that TVD is a real success, which is still growing thanks to a permanent public campaign (organisation of events, etc.). Indeed, since 2009, TVD received huge media coverage and a good reception from Ghent citizens, local authorities, npos and NGOs. The TVD also drew significant interest beyond Ghent, in Flanders, Belgium and worldwide and the growing number of similar initiatives over the world testifies to this unexpected wave of enthusiasm⁵¹, as T. Leenaert underlined already in 2009:

⁵¹ In September 2009, Tobias Leenaert was already impressed by the success and the diffusion of the TVD : "The town of Hasselt has already declared that it will start in October. There have also been some other towns expressing an interest, and we will start working on the bigger cities, like Antwerp and Brussels. Internationally, Sao Paulo, Brazil is already convinced, and they're working on it in France, UK, Austria, Israel, etc." (<http://www.ivu.org/news/online/climate.html>).

We have certainly received a lot of attention and inquiries, and we have attracted new advertisers and interested potential partners. We recently also received a national sustainability award. I can feel that the whole campaign has brought us a lot of recognition and that the road is wide open for further growth. We have also received a lot of international inquiries from sister organisations all over, and it's particularly rewarding to see that our campaign has inspired other people⁵².

In Ghent, the launching of the campaign has been followed quickly by an institutionalisation process, thanks to the partnership set-up between EVA and the municipality:

The city supports the campaign in several ways: we receive financial support; several city employees have already spent many days on the campaign; we have developed and distributed campaign materials together; we organised the launch event together; and from October, 2009 onwards, city funded schools will have vegetarian dishes by default on Thursday. The latter was decided by the councilman for the environment. (T. Leenaert, *ibid.*)

According to the actors, a critical milestone was set-up in fall 2009, with the participation of all the 35 city schools (counting for 11.000 pupils) – and all the more since it resulted in 95% of Ghent students and faculty taking part in TVD. Campaign materials (posters, flyers, t-shirts, stickers, placemats...) and the various aspects addressed through the campaign give an insight into the scale of TVD in Ghent : more than 150 000 « Veggieplans Gent » have been distributed in 2009-2010, and more than 1500 brochures have also been distributed to the restaurants of the city, which have also extended their vegetarian menu. The EVA team has launched dozens of events (recently, for instance, a national veggie BBQ), a magazine (EVA-mag), elaborated a cookbook and many guides providing veggie tricks and recipes, a veggie lunchbox, information for various sorts of audiences – scholars, professors, parents, etc., an internet site « Veggie for chefs » to improve professionals' skills in cooking veggie dishes, etc. TVD has also been extended to several cities over Belgium: Bruxelles, principalement: Brussels, Hasselt, Eupen, Saint-Nicolas, Antwerpen.

An institutionalisation 'in the making'

The results of a survey realised by iVOX in March 2011 confirm this strong institutionalisation of TVD in the Flemish food landscape; some of these results are summarised in the following table.

Table 7: Results of iVOX survey, March 2011

Items / area	Ghent	Flanders
Participate at least once a month	30%	17%
Participate Weekly	19%	13%
Will try	43%	42%

⁵² *Ibid.*

Is aware of the campaign	67%	30%
Ate less meat because of the campaign	15%	13%

The iVOX survey clearly shows that TVD is rather well implemented in Flemish people's everyday lives, and of course especially in Ghent which is the cradle of the project. A large part of the Flemish population is aware of the campaign and a rather high rate of people takes part in the TVD (more or less frequently). Yet, a few people are thinking that their meat consumption has decreased thanks to the campaign.

The institutionalisation of the TVD is obvious when considering the durability of media coverage. "When the city of Ghent in May 2009 Thursday proclaimed Veggie Day no one could suspect that journalists in more than two years later still would come from far and wide to discover more about the campaign of the socio-cultural movement EVA. Today, almost three years after launch, the value of the stories on radio, television, written press and the web about the Ghent Veggie estimated at 19,688,885 euro⁵³."

EVA's development and networking

Npo EVA has experienced a concomitant evolution, and is now composed of nearly 4000 members, a staff of 6, plus many volunteers, a Director, a Human Resources director, an administration that oversees fundraising, education and campaigns. Its yearly budget reaches € 300.000. This significant impact and scope is reinforced by various means of communication, through which EVA "reaches nearly 3,000 people a day through our website, 10,000 readers via EFTA Magazine, 14,000 subscribers through [our] newsletters, and many people using fireworks, cooking classes, lectures, film screenings and other activities⁵⁴." Moreover, EVA intends to continue reaching a larger public without becoming a bigger structure, as underlined in its 'Beleidsplan 2011-2015' (*ibid.*).

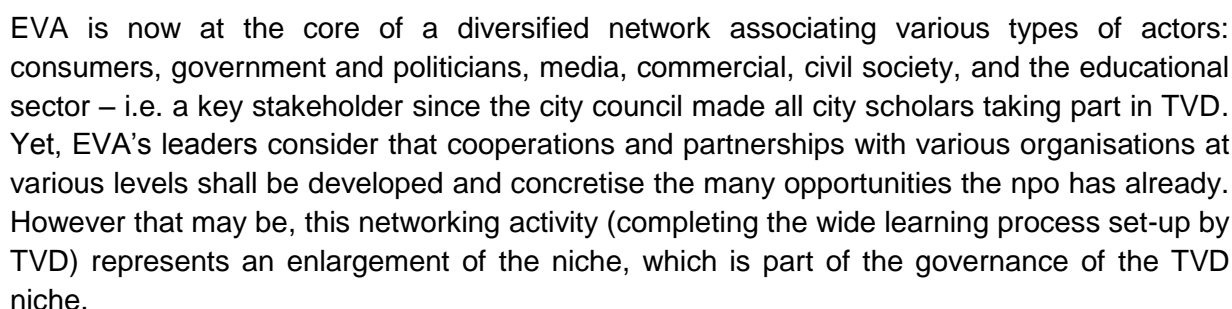
Furthermore, EVA has also developed a large network of stakeholders, which is summarised in Figure 4 below (for a detailed version, see annex)⁵⁵.

Figure 4: EVA's stakeholders (summary)

⁵³ "Donderdag Veggiedag levert Gent 20 miljoen euro aan persaandacht", *Federatie Sociaal-cultureel Werk*, Thursday 2nd februari 2012, available at: http://www.fov.be/spip/IMG/IMG/ppt/spip.php?article1691&debut_articles_rubrique=1120

⁵⁴ EVA VZW, Beleidsplan 2011-2015, p. 13, available at : <http://www.evavzw.be/download/beleidsplan2011-2015.pdf>

⁵⁵ These Figures come from *ibid.*, p. 21.



The questions of 'external' and internal or self-governance⁵⁶ are two sides of the same coin. According to the discourses held by the various concerned actors (EVA and Ghent's city council), the TVD niche governs itself through the co-operation between activists and public authorities, completed by a larger partnership. However, we assume here a rather artificial partition which consists in attributing EVA the internal governance of the niche and City council the external governance of the niche. This distinction has been made for practical reasons (clarification and readability of the analysis), yet it is also legitimated by the fact that the TVD campaign is basically led by EVA – with the support of a City council that does not intervene in the routine and everyday life of the TVD campaign.

⁵⁶ Or, in other words, the question “how do these niches govern themselves?”

of, on the one hand, “preventing the consumer from losing interest thanks to a proposal for minor behavioural changes (one day a week)”, and on the other hand, the strong intuition “that a specific day as the vegetarian day, sticks better in people’s minds.”

Moreover, the growing success of the TVD initiative has complexified the internal organogram of the association, which now integrates recently created ‘regional groups’ aimed at diffusing the TVD with an effective local anchorage. This evolution is highly visible in the above figure, which reproduces EVA’s organogram (from ‘Beleidsplan 2011-2015’, *op. cit.*). The diversification of its activities is also manifest for both volunteers and team members, whose specialisation apparently increases with the professionalisation of the npo, a specificity of EVA that T. Leenaert wants to preserve and foster:

[...] what we are trying to do is to be mainstream, professional, positive and trustworthy, so that people, big organisations, politicians, etc. think of us as a good partner to do business with. We attach a lot of importance to a professional image in all our communication, including the layout of our publications. I think it’s important to appear very normal, even if you are not ;-) (*Ibid.*)

Furthermore, EVA’s organogram conveys the idea of a rather hierarchical organisation and a centralisation of the skills, knowledge and ‘decision power’ in the hands of EVA’s director. This observation is confirmed in the recent document devoted to EVA’s internal governance entitled ‘Beleidsplan 2011-2015’, which provides EVA’s internal organogram (reproduced in Annex C). The npo proposes here an assessment of its current state, organisation and elaborate a programme composed of 5 main strategic objectives for the coming years. In the SWOT analysis that precedes the Policy Programme 2011-2015, it is indeed explicitly mentioned that “There is too much work / knowledge / decision-making centralised in one person (the director and co-founder)” (p. 19).

It is also noticeable that EVA’s members feel highly concerned by the assessments of the initiative and the diverse forms of extension they propose. So they go beyond a common ‘niche’ perspective by claiming for a process of mainstreaming alternative sustainable food practices (cf. the text written by T. Leenaert’s in 2010-2011 entitled ‘Mmmmm! Making Meat Moderation Mainstream and Marketable: the case for a weekly vegetarian day’, prepared for the 2nd European Sustainable Food Planning Conference, University of Brighton, 29-30th October 2010). Furthermore, this view is confirmed in the 5 strategic objectives (SO) of the 2011-2015 Policy Programme (cf. the summary of these 5 objectives in annex C). This Policy Programme 2011-2015 highlights several interesting aspects of the internal governance of the niche (which is hardly detachable from EVA’s governance). The 5 SO correspond to 5 key issues that have been identified by EVA’s members: providing information, and enlarging inhabitants skills and knowledge about veggie/vegan food practices (in terms of health, but also cooking recipes, taste, etc.); culinary skills and expertise (an obligatory point of passage to establish sustainable veggie/vegan meals and habits within food practices); increasing governmental and public support to veggie practices (in terms of scientific research, production, incentives, etc.); and the effectiveness and professionalism of the npo itself. The description of these 5 SO directly evokes this professionalisation purpose: each SO comes in several operational objectives, with the related possible actions and indicators. Noticeable is also the fact that the Policy Programme 2011-2015 mentions an expression like ‘total quality’, referring to the total quality management. All these examples denote the importance of organisational aspects in the governance of the niche: EVA and TVD are meant to be more and more efficient, well-managed and professional.

Hence, the internal governance of the niche echoes the success of the TVD campaign and growing importance of EVA, resulting in a rising complexity of the organigram and a quest for a continuous improvement of the professionalism of the npo – a professionalism which relates to the external governance of the niche, particularly since EVA's partnership with Ghent municipality represents a pioneer collaboration.

3.4.3 'External' governance of the niche

As previously mentioned, public actors – particularly the local government of Ghent – lie at the very heart of the project and give the TVD its effectiveness and specificity in comparison with similar initiatives.

Therefore, public authorities and npo EVA developed a rather original 'business model' or 'niche model', based on the strong co-operation between public actors and activists. More generally, the idea of partnership between public and private sectors (or even public-private-citizen partnership, cf. *infra*) aims to progressively extend the number and the depth of concerned actors' engagement.

Strikingly, npo EVA has been fully integrated in the Ghent municipality sustainable management, and considered apparently as a partner for developing TVD in the 'right way'. Two aspects mentioned in the City of Ghent documentation about the project directly evoke this official co-operation:

- Decision of the Board of Mayor and Deputy-Mayors 'Thursday Veggie Day' - September 2009.
- A service assignment has been given to npo EVA.

Moreover the project is now integrated in the Flanders mid-term policy plans. Ghent municipality publishes an annual assessment of the situation and results of the TVD; and assessment from March 2010 underlines that the TVD echoes to various policy programmes:

- Environmental Policy Plan 2008-2013 (under construction): "Environmental sound product use, Action 3: Stimulate the inhabitants of a city to consume in an environmental-friendly way (among which: Promotion of sustainable nourishment with particular attention to biological agriculture, local and seasonal products, vegetarianism, etc.)."
- Health Policy Note 2008-2013: "Action 2: Health stimulation on municipal and personnel level (among which: promotion of healthy nourishment)."
- Animal Policy Note 2008-2013: Action 21: "Promotion of a vegetarian day."

It is for now premature to suggest any conclusion on the real integration of TVD projects in the public policy devices, and especially for the long-term. Yet, this aspect calls for further empirical investigations.

However, the document from 2009 entitled 'Environment Outlook 2030: Flanders in transition?' testifies the embeddedness of TVD in the general framework of sustainable public

policies⁵⁷. Indeed, this long-term strategic agenda for Flanders claims for a transition approach and the corresponding forms of governance. For Flanders' policy-makers, TVD belongs to a well-identified type of governance "that invests in broad, transparent networks by public and private partners, in which policy is developed by thinking, doing and learning together. The government can initiate those networks but the initiative may also come from others. Furthermore, the government does not necessarily have the lead over it. It is a partner, alongside the other actors but one that gives a direction, creates conditions, makes connections and opens up opportunities. Leadership is consequently expected from the government both as regards content and process⁵⁸." This report addressed to the Flemish Minister for the Environment, Nature and Culture, sketches the transition governance and the conditions of its effectiveness which are: the development of partnerships – like here between EVA, the city council, municipality services and some private partners –, to elaborate visions of society, the set-up of participatory processes, learning processes and practical experiments.

In this view, governments are required to initiate and take part in practical experiments and niche development – regardless of the type of actors or collectives (officials, activists, ngo's, citizens, etc.) who raised the idea of this niche. As a result, TVD initiative is conceived by public authorities as an exemplary social experiment that enacts a certain governance of sustainability. Indeed, the project proposed by EVA and co-elaborated with the City council is progressively elevated to a role model of 'sustainable non-technological niche'⁵⁹, induced by a npo to challenge mainstream food sociotechnical regime⁶⁰.

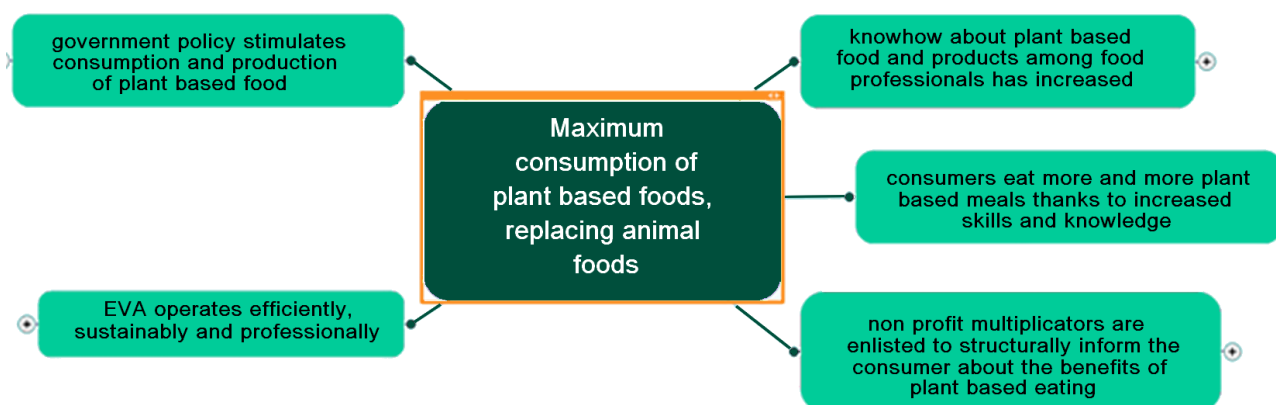
Moreover, the 'transition governance' tends to become a theoretical and practical framework that makes the concerned actors (here the government and public authorities) consider progressively TVD initiative as a 'niche' creation process. So this 'reflexive governance' seems to be progressively incorporated / re-appropriated by the actors themselves, as the following figure on EVA's positioning clearly shows:

⁵⁷ VAN STEERTEGEM Marleen (dir.), *Environmental Outlook 2030: Flanders Environment Report*, Presented on 11 December 2009 to Joke SHAUVLIEGE, Flemish Minister for the Environment, Nature and Culture, 2009.

⁵⁸ *Ibid.*, p. 356.

⁵⁹ *Ibid.*, p. 361.

⁶⁰ *Ibid.*, p. 362.

Figure 5: EVAs positioning and focus

“Finding our proper niche once the message gets adopted by bigger organisations and the mainstream (dilemma)”: this pre-conclusion⁶¹ of a presentation prepared by Jade from EVA in which she suggests that EVA is somehow part of citizen entrepreneurship (referring explicitly to Ashoka, a global organisation that identifies and invests in leading social entrepreneurs).

3.4.4 Intermediate conclusion: Drivers and barriers towards niche creation, perpetuation and institutionalisation

Outer context’s constraints and *path dependencies*

Developed western countries and cultures do not have currently any real legislation or legal framing explicitly aimed at reducing meat (over)production and (over)consumption. Similarly, existing sustainable policies remain very timorous and do not address this issue. Historically, only extreme situations like famines or wars, i.e. context of scarcity, have legitimated campaigns for reducing meat consumption as a patriotic act. Consequently, current public policy does not impose effective constraint and just enunciates ‘recommendations’ or ‘advices’ referring to the positions of public health authorities. Operational regulations of meat production and consumption are oriented toward health and hygiene matters (e.g. the BSE crisis during the 1990’s exemplifies this aspect very clearly). They can also be justified by economic considerations of agricultural policy for instance to restrain imports and protect domestic meat markets.

This brief overview of the long-term relationship between political authorities and food domain underlines the reluctance of public policy and government to interfere with food habits and practice except in critical situations or contexts (like war or epidemic risk...). Food practices

⁶¹ Jade concludes her presentation by raising the following question: “Business opportunities in Social Entrepreneurship: how to launch projects to solve social problems?”

are thus regarded as non-negotiable: food incarnates the right to privacy and delineates the boundaries of public action.

Furthermore, the economic weight of the meat production sector contributes to the impediment of radical policy measures to decrease meat production/consumption. Indeed, governments have to cope with possible contradictory economic interests, and especially those of powerful agriculture sectors and the food processing industry. The mobilisation of the Farmers Union of Belgium against the diffusion of TVD niche to other Flemish cities like Hasselt or Mechelen illustrates this issue perfectly. According to T. Leenaert, the Farmers Union "sees the campaign as a threat [...]. It distributed meat samples during city council meetings in Hasselt and Leuven, when the campaign was being discussed there⁶²."

With respect to these privacy-related and interest-based issues, many actors involved in the TVD point to a certain inertia, and experience difficulties in reaching some 'acceptable compromises'. For instance, they underline insistently the necessary non-compulsory character of the TVD and the prominent role of incentives, information and good practices in introducing a progressive change in food practices. Such a major shift in food practices requires also a series of adaptations and transformations that would impact the whole food regime, e.g. by implying a redeployment of food sector towards vegetable and innovative alternatives to meaty products.

However, the positioning of EVA's members still questions the arrangement built by these activists to reconcile their engagement in rather strict vegan/veggie diet and against animal suffering (i.e. inner context aspects) with the 'campaign form' of the TVD which necessarily euphemises the meaning of their strong personal engagement. To cope with this apparent contradiction, npo EVA tends to hybridise rather traditional management principles with a very earth-friendly and humanistic posture:

One of our principles is that we are always very positive. People say our organisation has a nice feel and is very open and tolerant towards anything and anyone. For instance, we avoid talking about vegetarianism but rather talk about vegetarian food, so that people don't feel pushed towards an all or nothing situation. Everyone is welcome, no matter what he or she eats. We just provide the information so that people can make an informed (as opposed to a blind) choice. We don't push; we just give the facts, in as objective a way as possible. (T. Leenaert, *op. cit.*)

Drivers and barriers according to EVA

EVA's members identified four main barriers to the development of alternative vegetarian food practices, which are combining institutional factors (political and economic), cultural aspects and inner context aspects:

- 1) "**Government** is reluctant to interfere" (private matter + economic interests, cf. *supra*)
- 2) "Animal products are omnipresent in our lives; alternatives aren't, yet": this refers to the lack of alternative veggie/vegan and good-tasting products that can be substituted to meat products. For EVA's actors, this substitution represents a possible

⁶² Bhansali Mehta Karishma, "A tale of two veggie-friendly cities", *Flanders Today*, December 1, 2010, <http://www.flanderstoday.eu/content/tale-two-veggie-friendly-cities>.

redployment for the food sector and should be encouraged and supported by political authorities.

- 3) “Large **lack of knowledge** concerning the problem, both in theory and practice”: vegetarian and vegan food practices remain unconventional and as such, they are not well understood by the public. Environmental, health and sustainability issues associated with meat consumption are often ignored by most of the people who are moreover lacking from the knowledge and skills (recipes, etc.) required for preparing tasty veggie meals.
- 4) “‘Less meat’ is easily interpreted as ‘no meat’”: because veggie food practices are still marginal and supported by activists, a lot of people overestimate the extremism of the TVD initiative. EVA still have a limited audience and suffers from the prejudice attached to veggie/vegan food habits (yet, this image is compensated by the reputational benefits of its professionalism). A lot of people are still suspicious about vegetarianism, which is often associated with misunderstood notions like degrowth, sufficiency, etc. T. Leenaert is of course aware of this image deficit:

"Vegetarianism is still too often associated with sober living, something you don't do for pleasure. Vegetarians should be able to go to a cosy restaurant and enjoy a nice, long dinner, like everyone else." (*ibid.*)

To face these barriers, the association also realises its auto-assessment, in order to identify its strengths, weaknesses, opportunities and threats, reproduced in the table below.

Table 8: EVA's auto-assessment in 2011 (SWOT analysis)

Strengths		Weaknesses	
1. Professional results with little resources		1. Lack of means considering the opportunities	
2. Monopoly position		2. Large staff turnover	
3. Image		3. Too much knowledge and experience concentrated with one person	
Opportunities		Threats	
1. Health, agricultural, food, environmental crises		1. Dependence on subsidies	
2. Increasing attention for the topic among consumers		2. Growing too fast	
3. Many possible partnerships		3. Organised opposition	

Table 8 synthetises EVA's auto-assessment and it shows how the TVD niche is intrinsically tied to the npo: EVA's properties, *i.e.* strengths, weaknesses, opportunities or threats characterise also the TVD campaign. Consequently, we hypothesise that these properties of EVA and TVD are evolving concomitantly and therefore that they are impacting the diffusion

of the niche, the possible reframing of the socio-technical regime and transition pathways towards sustainability.

3.5 Patterns of diffusion

3.5.1 Configurational specificity and replicability

Drivers and barriers of both inner and outer context evolve over time and space. They impact the successive steps of the process of niche creation, perpetuation and institutionalisation. Therefore, these constraints cannot be analysed separately. As they depend on the very configuration of actors, process and events, they must be analysed in consideration of the configuration of the niche. Indeed, the TVD case provides a good illustration of a specific configuration that works, i.e. culminating in the creation of a niche. In the case of Ghent TVD, the project is obviously framed by events such as Pachauri's conference, by the actors that actually intervene in the course of the situation (npo EVA or Ghent councilor Tom Balthazar), and also by all the 'things' that compose and impact the global arrangement or configuration (city council's majority party, ability of some actors to build alliances, new actors entering into the arena and reframing it, like the city councilor in charge of education, success or failure of the collaboration between npo and municipality, effective support of the authorities with an effective financial and logistic support from public authorities, etc).

In this respect, the emergence of the TVD niche in Ghent is inseparable from a configuration that sounds highly specific and, consequently, impossible to reproduce elsewhere. This approach through the configuration of the niche sheds the light on the problematic replication of a niche like TVD. How to assess the role of EVA as an actor, and does it condition the spread of the weekly veggie day practice? Could TVD be set-up and developed without municipality support? How to adapt TVD and its 'campaign form' – and first of all adapt it to a specific public?

The relative 'success' of Ghent TVD initiative results from a specific 'configuration that works', i.e. that is made possible by a particular arrangement or configuration of:

- Actors (npo EVA, city councillors like T. Balthazar, city services, HORECA, vegetarian chefs and restaurants, among and other partners),
- Events (R. Pachauri's conference on 'Less Meat =, less Heat),
- Scientific issues and publications (FAO, 2006;The Lancet, 2007),
- Health concerns (diabetes, vascular diseases, obesity, etc.),
- Public policies influenced by transition theories (cf. *Environmental Outlook 2030 – Flanders Environment Report*, 2009),
- Ghent cultural specificity (especially in regard with the 13 vegetarian restaurants, the highest rate per inhabitant in Europe, before launching the initiative)
- Worldwide media coverage, etc.

And this is the specific configuration that largely contributed to the emergence of the Ghent TVD as a true non-technical niche, by officialising and institutionalizing reduction of meat production and consumption as an acknowledged (as a scientifically 'proven') innovation.

At the same time, this configuration also takes part in the many attempts to disseminate and translate this successful experiment to other sites in Belgium and abroad. Within this configuration, the governance issues (from public policies to self-governance) are of high importance to understanding the variables / core-factors that need to be adapted to another site's configuration, and how this translation succeeds or fails.

At first sight, the media coverage and the success of TVD in Ghent resulted in a number of similar initiatives at the national and international scale. Yet, the effective set-up of a TVD campaign and the accurate imitation of Ghent frontrunner TVD project cannot be taken for granted, but must be questioned. To do so, the coming analyses are based on a brief insight into the TVD in Brussels, with the purpose to put the translation process of the niche on empirical trial.

3.5.2 Current diffusion processes and strategies

Considering the fact that Ghent TVD has been imitated worldwide, the subsequent analysis will not deal with all diffusion processes that took place, but will focus on the diffusion processes and strategies developed by npo EVA itself. This section is grounded on the interviews realised with EVA members in Ghent and Brussels, and also on second-hand literature and press/interview sources.

Since the launch and growing success of TVD during Spring 2009, EVA leaders have in mind to contribute to the wide diffusion of the TVD campaign. Diffusion processes initiated by EVA have been progressively identified and defined more precisely in accordance with the professionalisation and expertise attainment; the 5 strategic objectives reproduced in Annex C show this very clearly.

Broadening the scope and public visibility: Ambassadors

Since 2009, one of the two main strategic axes to diffusing the TVD campaign consists of 'broadening the scope', i.e. intervening in the public space at the local, regional and federal level, but also at the European or even international level:

We are now trying to organise something on the European level, and are checking if we can collaborate with the Meatless Monday campaign by Paul McCartney. We are also getting the support again of Dr. Pachauri, who will urge other cities to follow Ghent's example. (www.vegetarisme.be/. . . article&id=792). Furthermore, we want to make sure Ghent succeeds as a pilot city and serves as an example for other cities to follow. (interview of Tobias Leenaert, September 2009, *op. cit.*)

This first strategy is based on reputational effects, which have been brought by the huge media coverage on TVD campaign. Therefore, EVA needs the support of VIPs or personalities, which are called 'ambassadors' in the Policy Programme 2011-2015. R.K. Pachauri and Paul McCartney support and commitment in favor of TVD have certainly contributed to the emergence of this diffusion strategy. People like Pachauri or McCartney indeed contribute to the circulation and visibility of the TVD campaign⁶³, and they foster the

⁶³ A good example of this strategy is given by the event on global warming and food policy that took place on 3rd December 2009 in the European Parliament plenary chamber, in Brussels. During this

legitimacy of such campaign (for various reasons: empathy, scientific proof, etc.). Celebrities / 'ambassadors' thus represent quite a media by themselves, which enables a large diffusion of information and knowledge about TVD issues.

Working with government: meal and politics

The second main strategy developed by EVA consists in working with politics – and as such it is not disconnected with the previous strategy. This diffusion strategy is likely to come from the recognition of the decisive role played by the Ghent city council in the emergence and success of TVD campaign. As mentioned in Chapter 3.4.4, public authorities are still hesitating to involve in such initiatives. Nevertheless, governments and politicians have a key role in influencing the collective inner context in favour of veggie meals and, beyond, to preserve health and: environment. In his paper 'Mmmmm! Making Meat Moderation Mainstream and Marketable: the case for a weekly vegetarian day' (*op. cit.*), Tobias Leenaert underlines this ambiguous positioning of public authorities and the necessity of their commitment towards reduction of meat consumption – as process which is timidly beginning:

[...] why government and politicians are very wary of campaigning for less meat, forms a very important part of indicating some of the social barriers against meat reduction. Several things might be happening here. First of all, there's a problem of knowledge, both on the part of the citizens as well as on the part of politicians and other decision makers. The problems implied in meat production and consumption for the planet, our health and animal welfare and even though more and more is being written and disseminated on the topic in the press, by researchers, etc. [...]

It seems that, in light of these changing perceptions and a growing critical mass supporting meat reduction, government might be more prone to actively stimulate meat reduction among its citizens. As to the second question: should it? [...]

The situation seems to be changing, however, and around the world, local, state and national governments are starting to encourage their residents to fight climate change and improve their health by making one simple choice: eating fewer animal products. From the USA to Sweden, England, and more, governments are increasingly recognizing that the fork is one of the most powerful tools to help improve the environment, human health, and animal welfare.

This importance of government and politicians involvement is vigorously reasserted in the Policy Programme 2011-2015 (see Annex C): indeed, OS 4 claims for a governmental support for the production and consumption of vegetarian food through research on protein transition.

Furthermore, EVA tends to proclaim its political role, as the organisation intends to include meat moderation in the programme of 3 Flemish political parties and in at least 5 policy

event, entitled "Global Warming and Food Policy: Less Meat = Less Heat", Chairman of the Intergovernmental Panel on Climate Change Dr Rajendra K. Pachauri and environmental activist Sir Paul McCartney urged legislators and experts to focus on what an individual can do to fight climate change, for example by eating less meat.

documents (municipal, provincial, regional and federal level), with a number of concrete actions related.

If EVA pursues its local action in Ghent and through the creation of regional groups, it is likely to progressively adopt a 'lobbyist' mode of action, which is considered to be the most efficient way to enlarge its audience and diffuse the information and knowledge that could foster an effective change in food practices.

3.5.3 Insights on the diffusion of the niches

To address this subsection, we briefly evoke the case of TVD in Brussels, which was launched in May 2011. More precisely, we describe an enlightening aspect of the translation of TVD from Ghent to Brussels and only sketch some relevant components/actors of the configuration of Brussels TVD. Compared to Ghent which is a whole Flemish city with an eco-friendly propensity, Brussels is a more conflict-prone locality, at least because it is a European capital in which Flemish and Walloon are compelled to cohabit. In this context, many political initiatives induce harsh debates and time-consuming negotiations to reach a sort of (non-satisfying) compromise. This general context was soon evoked during the interview conducted with a member of the staff of Evelyne Huytebroeck's, the ECOLO minister in charge of energy and urban renovation for Brussels-capital Region. The interviewee was rather voluble and committed in the TVD in Brussels – as a councillor for Waste prevention, sustainable food supply and ERE (Education relative to the environment). She explained that they really wanted to follow the Ghent example, and especially regarding the set-up of the TVD in school canteens – a political initiative that largely contributed to the success of Ghent TVD. However, the context was not so easy to manage, because of the partition of the Brussels schools between Flemish and Walloon people. They had also to face some reluctance towards the TVD initiative from some conservative traditional parties closely related to Farmers Union. She proudly explained that they finally reached an agreement on the implementation of the TVD in school canteens... which proved a bit surprising. Indeed, this agreement consists of introducing the TVD in school canteens, but on a very different way than in Ghent. Brussels-Capital Region councillors agreed on the following device: everyday meat portions are reduced – by about 100 g – which is equivalent to the results of the TVD in terms of weekly meat consumption. Therefore, the final result in terms of meat reduction is equivalent to TVD, and they avoid facing the reluctance of parents and children towards the TVD initiative, especially from the Wallon part of the population. Indeed, as T. Leenaert explains:

EVA is not very active in Wallonia. Yet, beyond this statement, Flanders has forty restaurants that are exclusively vegetarian and largely frequented by young people. In Wallonia, there isn't a single. In this respect, Belgium is really a fault line in Europe. The more one moves to the north, the more vegetarianism has no limit. In the French-speaking countries, vegetarianism is still regarded as a little dated and dull matter. It is true that part of – the older – Flemish vegetarian are most concerned about their health. They also consume organic food for this purpose. Young vegetarians are more

connected to the ethical and environmental issues. From these results EVA's concern is to promote a fun and attractive way: "eat vegetarian, it's fun"⁶⁴!"

The purpose of this example is not to pass any judgment on the relevance of the agreement on which is based the TVD in Brussels schools. It is a rather interesting case, which illustrates both the relevance of configurational approach and the very complexity of niche translation from one site to another – and the possible solutions and compromise that actors have to elaborate in situation.

The political and cultural configuration in Brussels⁶⁵ compels all the concerned actors to adopt a very different trajectory to set-up the TVD in school canteens. The agreement resulting from fierce negotiations between the stakeholders establish a 'curious' arrangement in which the children won't really be aware of their participation in the TVD. At the end of the process, the reduction of meat portions is certainly the same in absolute terms of 'quantity' of non-consumed meat. But this arrangement does not really foster any change in food practices, any learning process nor effective engagement towards sustainability, health, environment and animal sufferance.

Obviously, the Brussels configuration did not authorise a careful translation of the initial TVD campaign and it will not have similar results – except quantitatively in a restricted area, schools, and without actually diffusing veggie food practices. To a certain extent, such establishment of TVD does not actually consist in creating a protected space for alternative more sustainable practices. Indeed, existing food practices are not really at stake in this process and Brussels TVD in schools does not convey alternative food practices towards more sustainability. Though the bottom line in terms of meat consumption is the same, the process only results in an accountant outcome that can hardly be qualified as a 'niche'.

This example thus emphasises the very limits of an approach of niche diffusion based on notions like 'replication' or simple imitation. It shows that drivers and barriers for both the inner and outer context are part of a more complex process that involves a specific configuration and a certain conception of the translation of sustainable niches which is still lacking for a methodology.

3.6 Conclusion

TVD campaign is a very fruitful case study to analyse the issues associated with the emergence of a very successful 'niche' of alternative sustainable practices, and the 'imitative ray' this success induces.

The Ghent TVD represents an original and interesting niche, whose emergence is part of critical change in the meaning of an existing practice: vegetarian / vegan food practices are not related solely to animal sufferance, rather they become part of the answer to environmental, sustainability and health issues. The deployment of this niche of alternative

⁶⁴ Interview of T. Leenaert in Lamotte Philippe, "Tobias Leenaert: sus au steak!", *Nature Progrès Belgique*, 10th January 2010, http://www.natpro.be/pdf/2010/10_01.pdf

⁶⁵ The interviewee went deeper into the negotiations and the related power struggles. If they are of course part of the configuration, we did not found necessary to mention all the details that were not useful for our analysis.

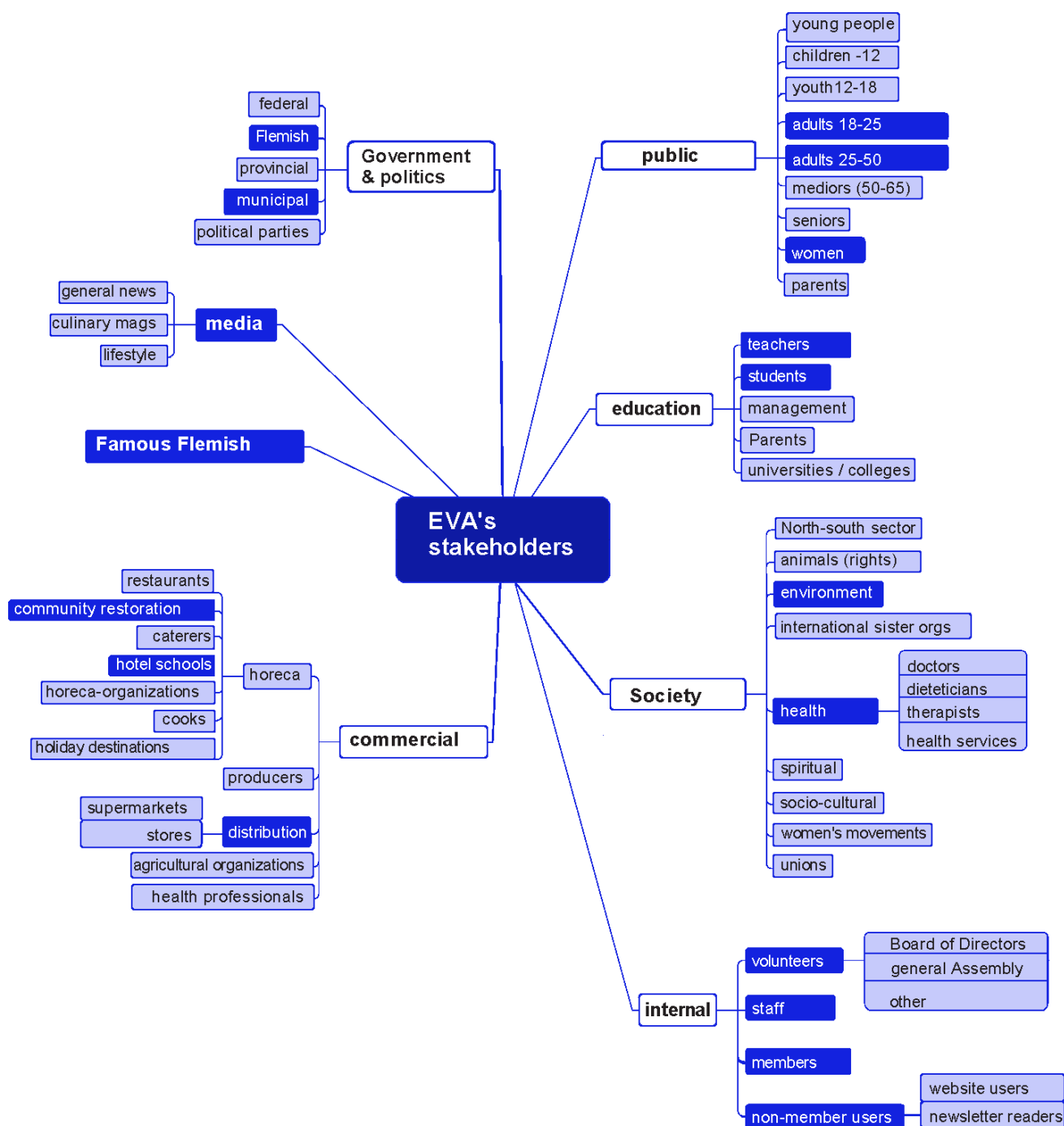
food practice is also very particular, as it is based upon a ‘campaign form’ that interrogates the possible mainstreaming of such practices. Media coverage, municipality’s commitment (in a partnership with a npo) and celebrity involvement are key ingredients of the emergence of the niche within this very specific configuration. Additionally, these ingredients impact the whole trajectory of the niche and its replicability, *i.e.* the diffusion of the niche to various sites and scales by translating it into other configurations.

The comparison with TVD in Brussels offers an important lesson regarding the complexity of this translation process to another site or location and proves the necessity of considering simultaneously the configuration and the drivers and barriers for the niche creation, perpetuation and institutionalisation. Indeed, our understanding of the translation processes remains limited and necessitates the elaboration of accurate methodological tools for the concerned actors.

Annexes

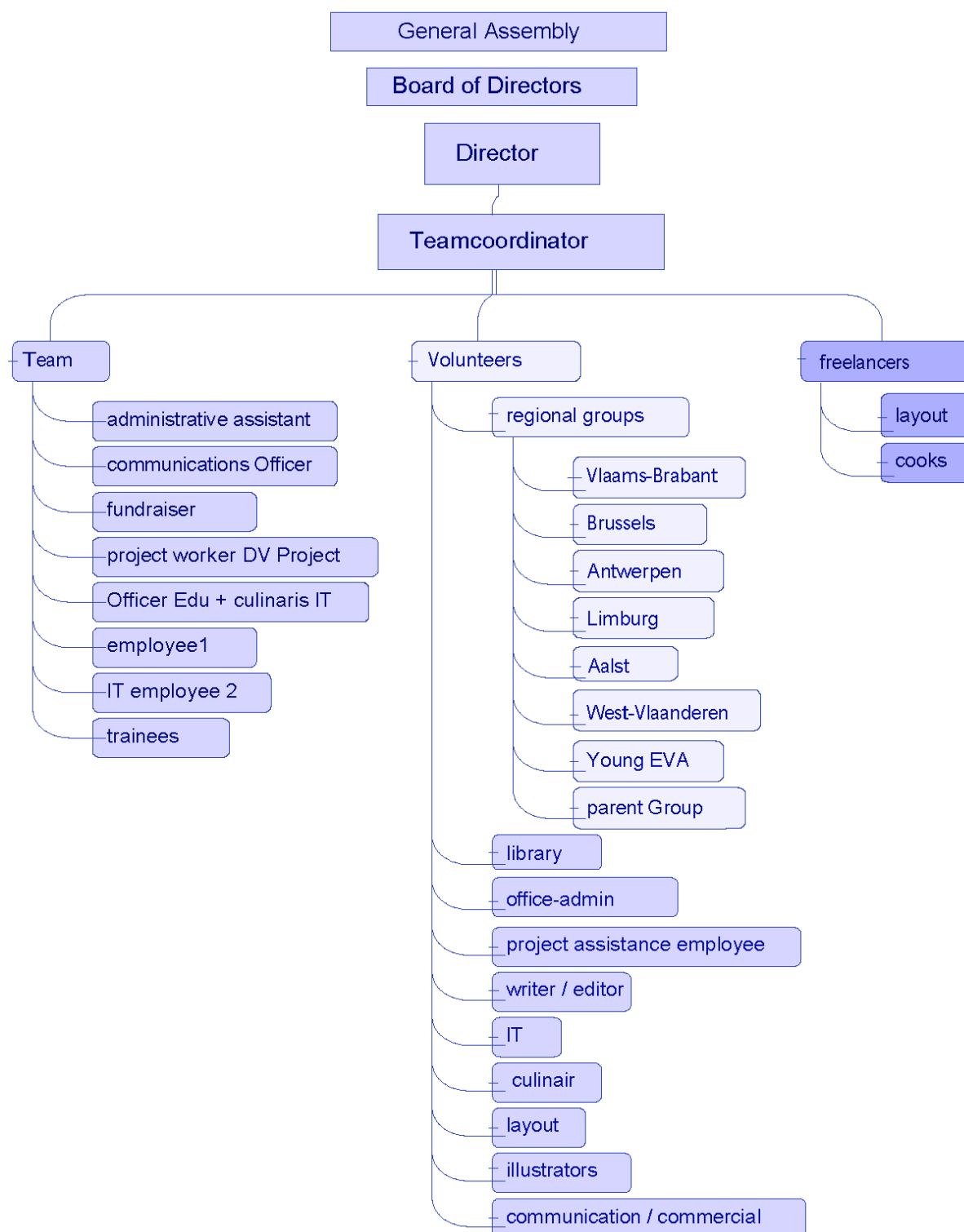
Annex A: EVA's Stakeholders (detailed version)

Figure 6: EVA's Stakeholders (detailed version)



Annex B: EVA's internal organogram from the Policy Programme 2011-2015

Figure 7: EVA's internal organogram



Annex C: The 5 Strategic Objectives (SO) – EVA Policy Programme 2011-2015

SO 1: Consumers eat more vegetable meals with increased skills and knowledge

- 1.1 EVA's culinary coordinator leads a culinary task force
- 1.2 Thursday Veggie Day is promoted throughout the year by numerous ambassadors, including at least a well-known ambassador.
- 1.3 EVA has 10,000 members at the end of 2015
- 1.4 EVA maintains a qualitative and accessible external communications via paper, digital and social media channels and through the media.

SO 2: The midfield sensitises the structured consumer about the benefits of plant foods

- 2.1 At least one major health organisation promotes Thursday Veggie through a sustainable, permanent partnership with EVA
- 2.2 At least one major environmental organisation promotes Thursday Veggie through a sustainable, permanent partnership with EVA
- 2.3 EVA has access to substantial know-how to produce sound files on sustainability and health

SO 3: Culinary expertise on qualitative plant foods among food professionals has increased

- 3.1 EVA has a team of culinary experts at least five (/ ambassadors) that operate within the context and style of EVA
- 3.2 Within 10 approved training nutrition / cooking / Dietetics is about quality teaching vegetarian diet (by the end of the policy period)
- 3.3 EVA facilitates structural support of the chefs at three major caterers in community restoration.

SO 4: The government encourages the production and consumption of vegetarian food

- 4.1 Meat Moderation is included in the party of 3 Flemish political parties, with a number of concrete actions related
- 4.2 Meat Moderation is included in at least 5 policy documents (municipal, provincial, regional and federal level)
- 4.3 The government supports research on protein transition (production or consumption)
- 4.4 A qualitative vegetarian dish is on Thursday the education standard in the city in ten of the fifty largest cities of Flanders

SO 5: EFTA's internal operation is efficient, sustainable and professional

- 5.1 The financial policy is clearly structured and systematically followed by the coordinators and evaluated quarterly by the board of directors.
- 5.2 A structured and transparent personnel contributes to an annual job satisfaction score among employees of an average of 75% and positive assessments by the employer
- 5.3 An efficient volunteer policy by 2015 in each province a local group active EVA annually organises at least 6 activities
- 5.4 The fundraising policy supports the growth of EVA to at least 10 FTEs in 2015
- 5.5 A maximum of administrative and IT support to help the efficient use of our resources into ensuring

4 Emission-Zero cooperative

4.1 General picture of the case study

What is a cooperative? “A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically-controlled. This form of society is a member-based enterprise, the financial surplus of which serves to meet needs or to achieve specific objectives. Indeed, like any other enterprises, cooperatives must be economically successful, although their objective is to meet the economic and social needs of their members and/or of the general interest.”

The ‘recipe’ proposed by wind power cooperatives and particularly by Emission-zero is rather simple. It consists of producing electricity locally and, consequently, in materializing/concretising the power supply chain to consumers. Indeed, wind turbines and farms contribute to making electricity production more ‘visible’ and concrete. It becomes all the more concrete since citizens can own shares in the wind power cooperative operating the turbine(s). Furthermore, power supply chain becomes also more ‘graspable’ when a cooperative supplies green electricity at cheaper rates than big power companies. The final result expected is to enable the residents to re-appropriate the power production and consumption over their living territory, and as such it represents an alternative energy practice that is concretised through the creation of niches.

Emission-Zero (EZ) cooperative was launched in 2007 by members of a non-profit organisation named ‘Vents d’Houyet’. Thanks to the successful examples of former citizen wind turbines, the charismatic core actors of this npo convinced a growing number of people to take part in the project and to become co-operators of a citizen wind turbine. They collected rather quickly the capital necessary to launch and build several wind turbines, aimed at diffusing an alternative (more sustainable) model of energy production and consumption.

EZ cooperative main actors⁶⁶

► Vents d’Houyet members, who are the founders of EZ cooperative and especially:

- Bernard Delville, a civil engineer and well-known RES activist, who has founded the npo Vents d’Houyet, and several other npos devoted to RES. He is one of the key founders of the EZ cooperative and has been one of the 3 delegated administrators of the EZ cooperative from 2007 to 2011. During that period, he was also in charge of the project’s development.
- Jean-François Mitsch, who is also a founder of the cooperative and has been a delegated administrator between 2007 and 2011. He was in charge of the

⁶⁶ Most of the actors involved in Vents d’Houyet, and especially the founders and leaders of both the npo and EZ cooperative are public actors, i.e. they are very engaged in the public debate about renewable energy sources and social/cooperative movements. Considering this specificity, real names of the actors have been kept. Yet, a few sensitive quotations are anonymized.

relationships with the cooperators and contributed largely to the everyday life of the cooperative and to the diffusion of information about EZ, the cooperative model and the RES.

- Philippe Delforge, the third delegated administrator from 2007 to 2011 was in charge of the management/operation of the installations. Since 2012, he has become the treasurer of the cooperative.
- Marc Installé is the current president of EZ cooperative.
- ▶ Municipalities involved: Houyet (3 wind turbines), Dour, Quievrain, Mesnil St Blaise, Tournai-Antoing-Brunehaut (2 wind turbines inaugurated on 25th March 2011)
- ▶ The cooperators, who may be residents from the municipalities involved or not.
- ▶ The network of cooperative associated with EZ cooperative: RESCOOP (associates Enercoop, clef, Beauvent, Courant d'air, Citipar), ICA, AllertSaSouffle), ENERCOOP, Clef, Beauvent, Courant d'air, Citipar, ICA, AllertSaSouffle
- ▶ Opponents (targets of the critiques addressed by the npo and cooperative and sometimes in conflict with EZ actors): Electrabel (amongst others private power companies), promoters and constructors, npo 'Vent de Raison' (of which members consider that the Wallonia is already saturated by windturbines)

Timeline

2002: Creation of npo Vents d'Houyet initiated by Bernard Delville. Its explicit purpose is first to encourage citizen appropriation of renewable energies by providing them relevant information, especially for children.

2006: Creation of the cooperative 'Allons en Vent' ('*Il wind*' –implicitly evoking children) which initiates the 'Children's wind turbine' located in 'Grand Sart', a 800 kW wind turbine of which owners are 800 children. These 800 children were granted 2000 shares (to the value of 100€ each) thanks to a public subscription. The objective is to make children and teenagers aware about environmental problems and to stimulate an emblematic operation in the adults view.

April 2007: The exemplary success of the 'Children's wind turbine' results in the creation of the cooperative 'Emissions-Zero' by npo 'Vents d'Houyet'.

October 2007: Official approval of the cooperative 'Emissions zero'.

2007-2009: Collected capital amounts to 1.042.350 €.

Late 2010: Collected capital amounts to 1,5 million € / 978 cooperators (1000 cooperators and 10 000 affiliated members are currently claimed by the cooperative) / 4 functioning wind turbines.

2011: Seven functioning wind turbines + first dividends for the share owners

4.2 Overall aim: characteristics and purposes sought by the niche creation

Emission-Zero cooperative – hardly separable from npo Vents d'Houyet – aims to promote alternative (more) sustainable practices for energy production and consumption, consisting of:

- Reducing dependency to fossil energy by investing in energy production from renewable energy sources (RES): wind, hydraulic, solar and biomass;
- A local and socially aware reappropriation of RES (production and consumption) by citizens and inhabitants;
- A greener and more direct power supply chain that benefits to all concerned actors;
- And reduction of energy consumption.

These alternative practices are made possible by the existence of the cooperative, which can be considered as a 'niche' creating the protected space that enables the emergence of such non-mainstream practices.

4.2.1 Alternative practices

The EZ cooperative contributes to the emergence and setting up of alternative practices, consisting of producing electricity from wind turbines launched and operated by a cooperative and owned at least partly by citizens and residents. More precisely, the EZ cooperative model enables citizens to own shares of the cooperative wind turbine and to receive the corresponding dividends. By doing so, they contribute to electricity production from renewable energy sources and, consequently, to more sustainable energy production and consumption. EZ cooperative also intends to increase this more sustainable energy consumption by becoming a 'green' electricity supplier providing relatively cheap electricity from RES to its cooperators (like Ecopower does).

Moreover, cooperative models for energy production and consumption are considered a (more) sustainable alternative to over-exploitation of the territory by private power companies, whose business model results in speculation on landownership and private (or capitalist) appropriation of a local common good: wind resources. Consequently, Emissions-Zero cooperative supports a real alternative and more sustainable model for energy production and consumption, in which inhabitants and citizens are empowered to launch, develop and operate local wind projects. Thus, they are meant to become the third part of new type of association: public-private-citizen partnerships. Arguments that legitimate such 'alternative' way of producing and consuming electricity are quite well explained by J.-F. Mitsch in an interview he gave (quotation):

Such a system enables to solve easily a current major contradiction. Indeed, the interest of a project funder is to return on his investments as quick as possible, through high prices of power supply. On the contrary, consumer interest is actually to get power for a modest sum. Consequently equity is only possible when the consumer is simultaneously the investor and only a power producer owned by local consumers can make it possible! It is really what *Nature & Progrès* calls a short circuit of distribution. And what is true for food supply is true for electricity: only a short supply chain can guarantee a fair price at all the levels, because there are direct relationships between the investment and the end product.

Citizen-cooperators regain energy autonomy and power (in every senses of the word) and contribute to the decentralisation of electricity production (and supply) – which remains the mainstream scheme of both power production and consumption. It represents also a socially aware initiative which proposes an alternative to the mainstream economic model that rules power supply. Compared to mainstream energy production and consumption, the EZ

cooperative model enables its cooperators to be directly involved in energy production and consumption and thus to contribute to shorten and materialise the power supply chain. This aspect will become even more reliable if the cooperative becomes a power supplier providing wind power at a lower price (or if the cooperative encourages a sort of auto-consumption at the local scale).

Hence, can the cooperative model become a widespread practice that would challenge the mainstream? To what extent? Nominally, wind cooperatives could proliferate right away and this wind-power supply could even be completed by other RES cooperatives. If so, decentralised renewable energy production (and supply) by cooperatives could become a mainstream practice challenging the current capitalistic model of centralised production and supply by companies. If such a change is considered by the actors, and especially by the cooperative founders, it would suppose a major shift in policy and regulatory framework in favour of cooperative model. This would also require a massive decentralisation process (both technically and economically) and a reduction of the importance that is de facto given to private companies, including in RES development.

The long-term objective for Emissions-Zero to reach consists then of setting up about 500 new wind turbines in Wallonia (cf. Box 2 below), of which socially aware local cooperatives should be part as much as possible.

Box 2: An ideal to reach? 500 wind turbines to achieve 100% green electricity supply in Wallonia: EZ and Vent d'Houyet views on the future of wind power)

**Extrapolation on the hypothesis of 500 wind turbines in 2020:
100% socially aware electricity:**

Two 2.3 MW wind turbines for each town – which corresponds to 500 wind turbines - would cover the average residential electricity consumption of 725,000 Walloon households (500 x 1450 households).

The 2020 target is a 30% reduction of household consumption. An average household consumes 3.500 kWh/year x 70% = 2450 kWh/year

A 2.3 MW wind turbine produces the equivalent of the consumption of 5.060.000 kWh/year / 2,450 kWh/year/household = 2065 households

The 500 wind turbines production would then be equivalent to the consumption of 500 x 2065 = 1.032.500 households, representing almost the entire Walloon population (about 1.1 million electricity meters in Wallonia, CWAPE 2003). To cover residential consumption of Brussels, 200 wind turbines would be sufficient.

Yet, this mainstreaming of cooperative energy practices relies on public authorities' involvement to support and develop these alternative business models for green energy production and consumption. Such a process requires an improved Reference Framework that supports renewable energy cooperatives (cf. *infra*), whether owned by citizens, municipalities or by public-private-citizen partnerships.

4.2.2 Niche characteristics

By enabling citizens to collectively become electricity producers, the (wind) cooperative model thus challenges the mainstream energy practices, i.e. the consumption of electricity produced in a centralised way by big (often polluting) utilities and supplied by private companies.

EZ cooperative can be considered a niche that enables (and even conditions) the emergence of those alternative practices. Indeed, the cooperative is a sort of an 'obligatory point of passage', as an organisational structure that launches and operates the wind turbine owned by citizens. This organisational structure/institution thus make the alternative practices possible and with this respect EZ cooperative and alternative sustainable energy production and consumption practices are highly entangled and dependent to each other.

As such, the niche creation requires the setting up of a cooperative structure and organisation that will play a core role in the management of the project at all the stages (from the conception to the building and operation). Alternative energy practices are not directly resulting from the existence of the cooperative, but the cooperative creates the 'protected space' that permits citizen to collectively own a wind turbine and to produce (and consume) local renewable energy. Furthermore the cooperative becomes a sort of necessary (and sometimes implicit) framework within which various alternative more sustainable practices may emerge:

- Increasing part of RES in the global energy mix that encourages people to consume green electricity.
- More attention can be given by citizens and inhabitants to energy consumption practices and their impacts on the environment.
- Social and environment friendly short energy supply chains.

4.3 Emergence of a 'configuration that works'

4.3.1 Grounds of the process

Wind cooperatives in Europe

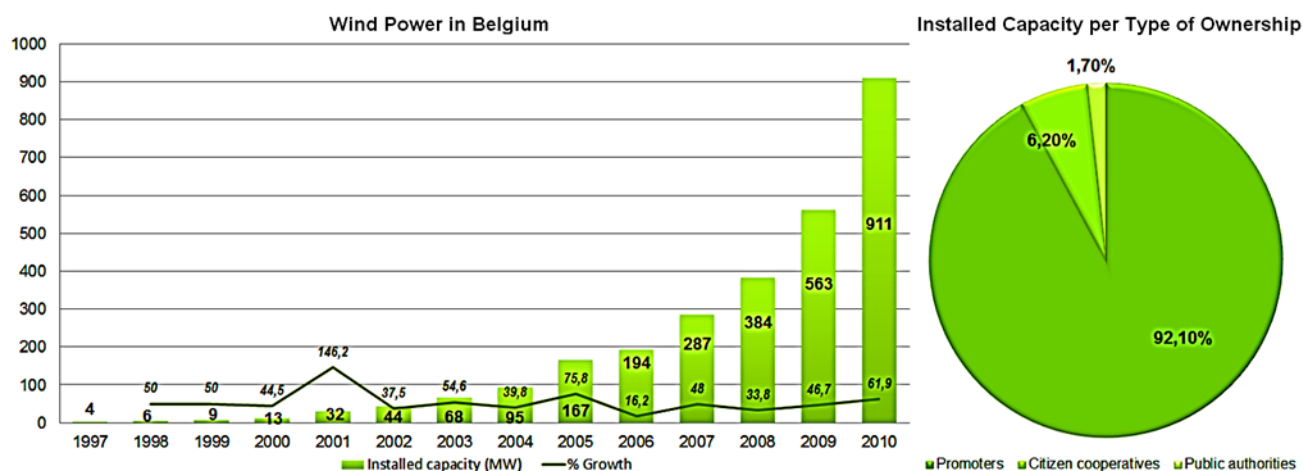
In the last decades, wind cooperative niches have emerged in many western countries and they have largely contributed to the development of wind power in frontrunner countries, such as Denmark or Germany. Indeed, a (short) comparison with similar niches in other countries (see deliverable 3.1 for a detailed description of wind cooperative worldwide) shows the determinant influence on wind power cooperatives development that results from the favourable framework established by public policy. Moreover, Danish and German examples suggest that such evolution hangs on diverse factors and especially on the concerned actors' capability to promote and, more, to enact such a cooperative model.

Wind power and wind cooperatives in Belgium

In Belgium, wind power plays a major role in the development of renewable energy sources and the number of both wind turbines and wind farms has grown exponentially during the last decade (see figure below retracing the evolution between 1998 and 2010 and development of

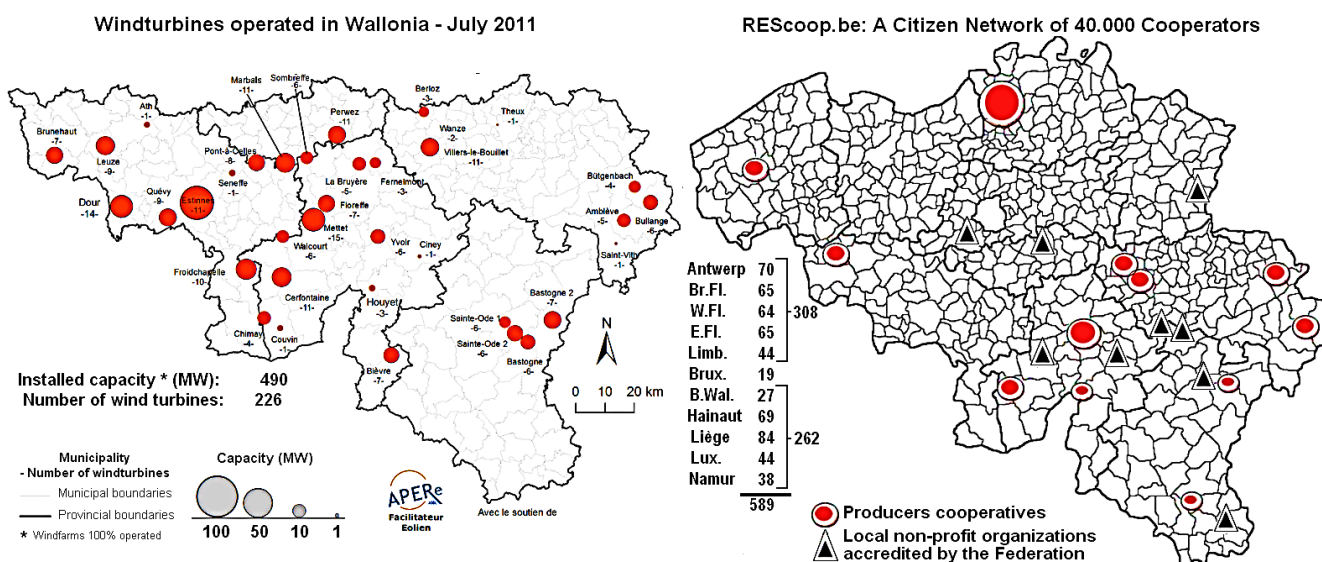
wind cooperatives). Yet, in parallel with this high growth rate, mid-2010, among the 170 wind turbines installed in Wallonia, only 6 were owned by citizen cooperatives⁶⁷, which is not very much considering the 150-year-old cooperative tradition in Belgium (and its revival in 1970's).

Figure 8: Evolution of wind power in Belgium



As the figure 9 representing the installed and authorised capacity per type of owner shows, the citizen cooperatives take a rather little part in the total installed capacity that is largely dominated by the promoters. This statement is also obvious in the two maps displayed in Figure 10 below, which illustrate the geography of wind turbines in Wallonia in 2011 in terms of installed capacity and producers cooperatives.

Figure 9: Wind turbines operated in Wallonia (in total and by cooperatives)



These statements about the current state of wind power in Wallonia call for further inquiry into the regulation of wind power sector and they require paying attention to the social status attributed to citizens' and municipalities' participation in the development of this sector.

⁶⁷ COLLARD M.-C., ed., *Initiatives citoyennes, l'économie sociale de demain?*, SAW-B asbl Study, 2010: 82.

Indeed, most of the rules for participation are displayed in a *Reference framework* ('Cadre de référence' or CRD) for wind power implementation in Wallonia that has been published for the first time in 2000-2002. This reference framework is currently under a revision process and its coming version should be more in favour of citizens and communal participation in wind power development, through partnerships and cooperatives.

The Reference framework for wind power in Wallonia (2001) and its consequences

The Reference Framework for implementing wind turbines, approved in 2001 by Walloon government but deprived from any law enforcement, provides several statements dedicated to citizen participation in wind turbines:

Box 3: Reference Framework approved by Walloon government in 2002

Citizen Participation:

Municipalities and their inhabitants are the first to perceive the presence of wind turbines. They can reap the interesting benefits of the wind turbines in terms of image and attractiveness, in terms of revenue (cadastral income and the rights of way for land use for the cables-laying), or in terms of citizen participation in projects for clean energy production (opening of the capital to the commune or to citizens). The latter aspect may be an element of the success or failure a project may experience, as people might sometimes have the feeling that *their* landscape, a public good, is sacrificed to general or private interests in which they do not recognise themselves.

It has to be noticed that, abroad, some project promoters include the owners of the lands located within a given radius in the dynamics of their project, including those whose plot does not comprise foundations for wind turbines. This allows all the owners to feel attached to the project and avoid the frustration of land owners whose plots are adjacent to the wind turbine land without bringing any advantage. (p. 28-29)

Though energy domain, and especially renewable energy, is constrained by many sociotechnical issues, regulations and rules, the framing of citizens' participation in wind cooperatives remains relatively loose.

Moreover, it doesn't seem to foster a real development of cooperatives, even though their usefulness is recognised. Whilst many wind farm projects must face inhabitants' protests, this cooperative alternative approach increases the social acceptance of wind turbines and facilitates their implementation. Due to its ability to overcome local reluctance, the cooperative alternative represents increasingly both a transition tool and an ecological economic model and exerts a growing influence on renewable policy. As expert pioneers underline: "some projects like wind farms are still fought locally by noisy minorities, but the overall picture is positive and will not stop over".

Nevertheless, in Belgium, beyond the two 'dominant' cooperatives – Ecopower, and Emission-Zero / Vent d'Houyet -, the recent emergence of a dozen renewable energy cooperatives is a powerful vector for diffusing the cooperative model, all the more since these cooperative actors are coordinated within a federation that is capable of influencing both public authorities and public opinion (REScoop.be). Therefore, the REScoop federation is progressively becoming the main spokesperson of the renewable energy cooperative model, which becomes more visible and potentially mainstream.

A long term anchorage of key actors and npos

The emergence of a cooperative like EZ echoes this phenomenon. Indeed, EZ cooperative is rooted in long term engagement of key actors in favour of alternative energy production from RES. This long-term commitment explains, at least partly, the conditions that enabled EZ cooperative to come into being. For instance, a person like Bernard Delville is involved in renewable energy since the 1970's during which he launched a first association in favour of renewables in the Belgian Ardennes. Npo Vents d'Houyet created in 2002 is conceived by Delville as the inheritor of this pioneer npo, testifying for the long term anchorage of social and environmental activism in favour of RES. The long-running activism of key actors like Delville – who is also well-known for his commitment in the 'mass-moving' cultural movement after 1968 in Belgium – played also a major role in making emergence of the cooperative possible, because they contributed to build proximity and trust, which represent undoubtedly two important component of the cooperative's success.

4.3.2 The concretisation of the niche / Enactment of alternative collective practices

Timeline

1973: First cooperative created by Bernard Delville and others, who realised the first studies of the wind resource in Belgium. Npo Vents d'Houyet is somehow the inheritor of this original association.

2002: Creation of npo Vents d'Houyet initiated by Bernard Delville. Its explicit purpose is first to encourage citizen appropriation of renewable energies by providing them relevant information, especially for children.

2003: Creation of a 'learning structure', 'L'Académie du Vent' (i.e. 'The Wind Academy'), to diffuse information and educate people about renewable energy, cooperative model and energy efficiency.

2004: A 600 kW wind turbine is installed and operated in Tchérettes, funded by the 'Objectif 2' programme (from EU and Wallonia Region); actually this first wind turbine launched the programme 'VENT' at Houyet.

2006: Creation of the cooperative 'Allons en Vent' ('// wind –implicitly evoking children) which initiates the 'Children's wind turbine' located in 'Grand Sart', a 800 kW wind turbine of which owners are 800 children. These 800 children were granted 2000 shares (to the value of 100€ each) thanks to a public subscription. The objective is to make children and teenagers aware about environmental problems and to stimulate an emblematic operation in the adults view.

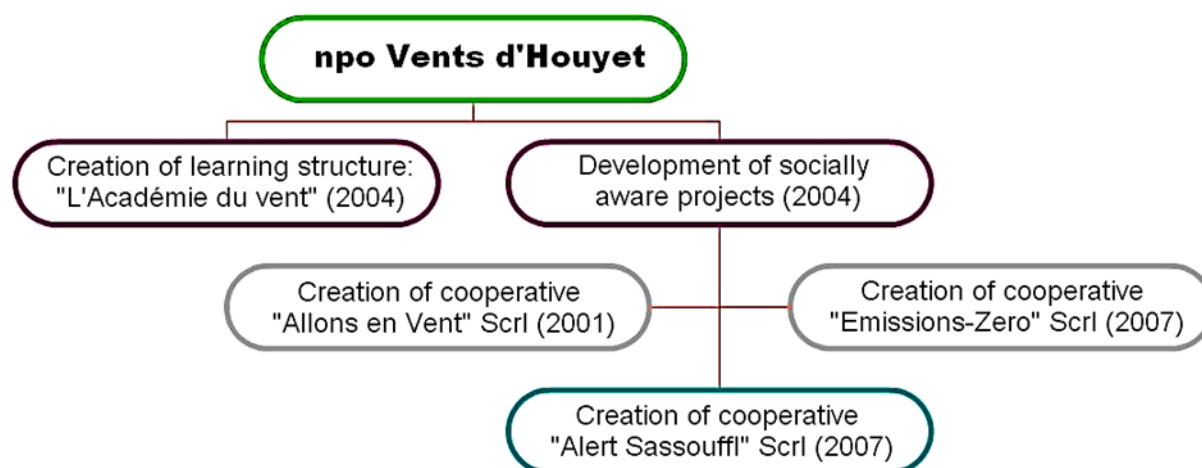
April 2007: The exemplary success of the 'Children's wind turbine' results in the creation of the cooperative 'Emissions-Zero' by npo 'Vents d'Houyet'.

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2011: Seven functioning wind turbines + first dividends for the share owners



A step by step process

As the timeline above underscores, the creation of EZ cooperative is the result of a long term process fostered in the 1970's and which actually started in earnest in the 2000's. This long term process is therefore strongly tied with the commitment of a few key actors who believe in renewable energy local production and consumption as an important part of sustainability. Amongst these actors, Bernard Delville appears as the most salient figure, whose strong and long-term involvement combined with a sort of charisma contributed to convinced people to create the cooperative and/or to join it. Trust plays here a key role, in the sense that actors like Delville or Mitsch have to persuade people to invest money in a long-term project of which success cannot be guaranteed at all.

If charisma is an ingredient for hundreds of people joining the project, it is complemented by the past successful experiences and credibility of the leaders of npo Vents d'Houyet. In particular, Delville is the founder of many organisations: Vents d'Houyet of course, but also several cooperatives (cf. figure above) and especially of the Children's wind turbine. Indeed, the Children's wind turbine created in 2006 proved to be a big success and a very convincing pioneer experience that involves children and their parents, materialises both sustainability and future generations and testifies to the profitability of a cooperative wind turbine.

Clearly, the Children's wind turbine represents a key experiment, becoming a kind of catalyst for the development of wind cooperatives. This well-known experience contributed to building trust in the actors of npo Vents d'Houyet, who have now publicly demonstrated their skill in financing a cooperative wind turbine and making it profitable. Therefore, the Children's wind turbine undoubtedly played a significant role in framing the inner context of trust that makes potential cooperators engage in the cooperative.

This is also the reason why Delville and Mitsch managed rather quickly to recruit new cooperators and to collect the amount of money necessary to launch the project (700 000€ / 1350 households and/or cooperators).

The financing of the cooperative wind turbine lies at the very heart of the concretisation of the niche; in other words, here also "money is the sinews of war". A wind project is funded in accordance with the following general frame. A 2,3 MW wind turbine requires an average investment of 3.500.000 € (including permits, wind turbine, reads, cabling, grid connection, etc.), which is composed of:

- ▶ Shareholders' equity (Emission-Zero): 700.000 €

▶ Wallonia Region subsidies (10%):	350.000 €
▶ Bank loan:	2.450.000 €

The financing of the cooperative is all the more important since it supposes that cooperators agree to mid and long-term investment. Indeed, a wind power project needs 3 to 5 years to be concretised and the capital must be invested in the cooperative at least for 3 years. Furthermore, the cooperative's life expectancy is unlimited whereas the investments made by the cooperative have a limited life expectancy. For instance the life expectancy of a wind turbine is about 20-25 years. Thanks to the profit realised, the cooperative can invest in other projects, which secures the capital invested by making as it is part of several projects. Therefore, it is interesting to invest all together in a cooperative, and not in a wind turbine solely.

Reasons invoked by the main actors involved

The justifications and reasons invoked are varying according to the types of actors:

- For EZ cooperative and npo Vents d'Houyet, cooperatives represents a sort of extension of the npo, which preserves its activist orientation and enables at the same time concrete actions (like wind turbines implementation) and their counterparts, i.e. economic activities and profits.
- For citizens: participation / engagement towards more responsible and sustainable electricity production and consumption conveys a positive social image; socially aware investments encourage citizens to own shares for both ethical and financial reasons (dividends).
- For inhabitants / residents (who live nearby the wind turbines): local involvement towards a more responsible and sustainable management of power supply and consumption, development of local and direct relationships, empowerment and re-appropriation of their territory.

4.4 Ongoing process: perpetuation, governance and institutionalisation of the niche

4.4.1 Evolutions and transformations of the niche

General evolution of both the npo Vents d'Houyet and the EZ cooperative

Another noticeable aspect is the core role played by the npo Vents d'Houyet and the EZ cooperative in Belgian wind cooperatives' landscape (see annex 9). Indeed, EZ cooperative is at the same time:

- An **activist cooperative** engaged in the governmental renewable policy and in the public debate dealing with wind power at both national and local level;
- An **'expert' cooperative** that provides advices and technical, financial or pragmatic support to various projects;
- A **'professional' cooperative** characterised by its long-running experience and which initiates and/or takes part in different projects (currently 4 projects: Tchesteole

(Neufchâteau), Nossemoulin (Gembloux), Brab'éole (Walhain), Chaumont (Atoutvent), Ferréole (Ferrières).

As an illustration of the 2 last aspects, since 2011 an engineer is employed by the cooperative to manage its various projects.

Considered separately, EZ cooperative's evolution offers some salient periods which are delineated by a key event: the effective operation of some wind turbines in January 2011 and the negotiations about the first dividends. Indeed, EZ cooperative experienced important tensions during the year 2011, which underlined some difficulties associated with the cooperative model and, consequently, the management of the niche.

Evolution of the EZ cooperative

a) From 2007 to 2011

This period is characterised by the increasing development of the cooperative which consists of: a growing number of co-operators; more and more financial resources; the launch of several wind turbine projects across Wallonia: professionalism and expertise; activism by the cooperative against big electricity companies' wind power policy and practice.

b) 2011 crisis

In January 2011, seven wind turbines were operational and the first dividend should be distributed to co-operators. This first distribution of the profit resulted in a sort of crisis within the cooperative which is due to several reasons and positions:

- Some of the co-operators, and especially the founders, want to pursue the social and environmental commitment of the cooperative through the launching of new projects, even if it means taking new risks.
- This position is strongly criticised by many co-operators who don't want to take more risks by investing in new projects whilst they earn their first dividends three or four years after their initial capital investment. These co-operators would prefer to consolidate the current state of the cooperative before going further and they would like to benefit from the first profit realised, ie getting refund and dividends.
- Moreover, the specific case of J.-F. Mitsch has crystallised these two rather opposite positions: on the one side, those who agree with J.-F. Mitsch's claim for a compensation for his four years voluntary commitment in the cooperative since it is now profitable, in accordance with the Belgian legislation on cooperatives described below (J.-F. Mitsch played a great role in promoting the cooperative through the creation of its internet site but also through public intervention in public meetings and the medias); on the other side, those who insist on this voluntary engagement to argue the illegitimacy of his claim for a payment.

During fall 2011, these positions resulted in tensions – or even a crisis – between the most activist members, often the founders of the cooperative, who consider the cooperative to be an economic tool to foster development of RES as part of a more sustainable and socially

aware model⁶⁸, and some ‘grassroots’ co-operators who are more in favour of a ‘good father’⁶⁹ management of the cooperative associated with little risk investments that guarantee the distribution of earnings. Consequently, this crisis also raised the issue of the ‘leadership’ of the cooperative, which is in a way a rather classical issue in such organisations, echoing the opposition between activist founders’ normative legitimization (better environmental and democratic solutions) and grassroots co-operators’ pragmatic legitimization (advantages to the different stakeholder groups)⁷⁰. This conflict also exemplifies the problematic of ‘cognitive legitimacy’, that is a certain difficulty to grasp acutely the “hybridity between business and social or environmental needs, or between business and democracy⁷¹” and to act accordingly in the cooperative model.

c) 2012: Back to normality?

Not enough time has passed for us to assess in detail the consequences of this crisis; furthermore, it would require pursuing this research beyond the limits of the WP3 case studies. Nevertheless, the EZ internet site and the documents available⁷² provide some insights into the recent evolutions of the cooperative, which could be described as both a compromise and a sort of normalisation process.

A compromise is evident in the sense that some core principles grounding the cooperative are strongly reasserted in the document:

- The mid-term or long term capital investment (at least 3-5 years)
- The financial management of the cooperative, and especially the distribution of profits: reminder of the legal obligations (legal and banking capital reserves, dividends capped to 6%) and of the philosophy of the cooperative which is aimed at investing in new renewable energy projects
- The hybrid status of the cooperative, which is both an enterprise that can take risks and cannot guarantee the capital invested and a socially aware organisation that cannot be introduced on Stock exchange and doesn’t seek to realise speculative profits.

‘Normalisation’ aspects can be identified through the lower visibility of EZ cooperative’s activist founder:

⁶⁸ For instance, for B. Delville, EZ cooperative should evolve in accordance with the cooperative principles, i.e. it should not be driven by profit motive and, on the contrary, always seek for socially and environmentally oriented activities.

⁶⁹ A series of cooperators want to gather the earnings of their investment and increase safely this profit (e.g. through the setup of new wind turbines), thus adopting an economic behavior that follows market rationality in the first place.

⁷⁰ Cf. Huybrechts B. & Mertens S. (2011), "The role of social enterprises in institutionalizing social innovation: the case of renewable energy source cooperatives (REScoops) in Europe", Working Paper, HEC Management School, University of Liege.

⁷¹ *Ibid.*

⁷² Update of the general information about the cooperative from late December 2011: Emissions-Zéro SCRL, *La cooperative Emissions zero: ses objectifs et ses moyens*, 2011/12/31, <http://www.emissions-zero.be/images/pdf/presentation%20EZ-%2020111231.pdf>

- New Board of administrators: Delville and Mitsch resigned and new administrators have been chosen among the ‘grassroots co-operator’; the treasurer Ph. Delforge is the only member of the former BOA to stay in the new one.
- New official location of the cooperative, now in Namur.
- Good father’s management of the cooperative is underscored.
- The idea of supplying energy seems to be re-launched, whilst it used to be a matter of tensions between co-operators and founders (according to Bernard Delville, the former were too ‘timorous’ and wanted to slow down this evolution and the latter wanted, on the contrary, to accelerate this transformation of the cooperative).

The idea of ‘normalisation’ here refers to a sort of ‘routinisation’ / ‘trivialisation’ of the niche governance, which is not any more led by the charismatic founders of the cooperative. Such evolution seems to be an obligatory point of passage for any committed organisation — sociology of collective action underlines very often this aspect. Yet its consequence on EZ cooperative are particularly unexpected, for instance in terms of diffusion or the niche or scaling-up of alternative practices associated with cooperative wind mills.

4.4.2 Internal governance of the niche

Internal governance of the niche directly relies on the cooperative principles established by the International Cooperative Alliance in 1995. This ‘Statement on the Co-operative Identity’⁷³ resulted also in the Recommendation 193 (from 2002/06/03) of the ILO (International Labour Organisation), which intends to promote the cooperative model and invites employer organisations, trade unions and states to support the cooperative structuring.

The cooperative principles ground the identity of EZ cooperative and represent the main reference evoked by EZ key actors (in the press coverage, during interviews, in the cooperative internal documentation, presentations, annual reports, internet site, etc.). Therefore, it seems that these principles are part of the internal governance of the niche.

Broadly shared principles and ideals: the 7 cooperative principles and the federal Shared Energy-Charter

As engaged in the cooperative movement at the federal and European levels, EZ cooperative endorses the International cooperatives principles that establish the most important rules that any cooperative organisation has to respect. These seven principles are summarised in the following Box 4

⁷³ <http://www.ica.coop/coop/principles.html>

Box 4: The 7 Cooperative Principles from ICA's 'Statement on the Co-operative Identity' (1995)

Cooperative Principles

- ▶ **Voluntary and Open Membership:** *Co-operatives are voluntary organisations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination.*
- ▶ **Democratic Member Control:** *Co-operatives are democratic organisations controlled by their members, who actively participate in setting their policies and making decisions.*
- ▶ **Members' Economic Participation:** *Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative.*
- ▶ **Autonomy and Independence:** *Co-operatives are autonomous, self-help organisations controlled by their members. If they enter to agreements with other organisations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their co-operative autonomy.*
- ▶ **Education, Training, and Information:** *Co-operatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their co-operatives.*
- ▶ **Cooperation among Cooperatives:** *Co-operatives serve their members most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures.*
- ▶ **Concern for Community:** *Co-operatives work for the sustainable development of their communities through policies approved by their members.*

EZ cooperative subscribes to these principles, which lie at the very core of EZ organisation. Indeed, the cooperative principles define the key aspects that contribute to the social awareness of the organisation — hence to its 'alternative' character.

Furthermore, EZ is also a co-founder and member of the Belgian renewable energy cooperatives REScoop, which has also some impacts on the way the cooperative is governed. Indeed, all REScoop members have signed the so-called 'Shared Energy-Charter' (see Annex A) which completes the seven cooperatives principles and applies more specifically to renewable energy cooperatives. This charter enunciates the main aspects and goals attached to renewable energy cooperatives and claim for their contribution to more sustainable energy practices. Yet, all these principles will be tested by further empirical analysis.

These general principles and rules also match the Belgian legislation (which is developed below in the 'external governance' subsection). Indeed, EZ has been granted an official assent in October 2007, which allows the cooperative to launch public subscriptions (since that time). As a result of this official acknowledgement two main principles are guiding the cooperative functioning: 1) one co-operator equals one vote (during the yearly general assembly) and, 2) the provision of dividends is capped at 6% (legal limit), but the cooperative may distribute benefits such as, for instance, electricity vouchers or products and services related to energy savings.

Organisation and functioning of EZ cooperative

- The cooperative model, and particularly the social purpose of the cooperative, prevents EZ from being listed on the stock exchange and requires it to lead non-speculative projects. It is still a company, so it can take risks and the capital invested is not guaranteed.
- The co-operators (share owners) designate the board of administrators and have access to the mechanisms of control that regulate the cooperative.
- The board of directors is composed of six people (seven before the 2011 'crisis') including a president and a treasurer.
- The annual general assembly is the main decision-making structure.
- 'One co-operator = one vote', which is a statutory rule.
- Cooperative's accounts are made by a certified public accountant and verified by an independent auditor before the general assembly.
- Organisation of general assembly:
 - The board of administrators presents the annual results and the strategic prospects.
 - According to financial needs and investments planned, the dividends may be distributed. The decision is taken by a vote.
 - If the general assembly endorses the non-distribution of dividends, the corresponding sum is added to the capital of the cooperative or it is invested in the development of new projects. These strategic decisions are approved by putting them to a vote.
 - Allocation of profits is proportional to the interests owned and their duration (depends on the date of the release of funds).
- Rights of share(s) owners:
 - One cooperator = one vote.
 - There is no restriction or limitation of the number of shares that can be owned / bought, yet the principle one person = one vote is fundamental with respect to the democratic spirit of a registered cooperative.

It can be noticed that organisation and self-governance have a lot to do with the economic and financial aspects. The benefits generated by the electricity production are divided up in accordance with the decisions taken by the yearly general assembly, after the presentation of the results made by the cooperative's board of directors nominated by the general assembly. In parallel, all share owners have access to the cooperative's control mechanisms. A share costs currently about 260 € and after distribution of the dividends, the remaining benefits are used for cooperative typical uses such as investment in other projects – and especially projects aimed at diversifying the renewable energy sources installations operated by the company –, information, education, training, etc. This entanglement of economic and organisational aspects points to the fact that the cooperative is a company, even if it is a specific one.

4.4.3 'External' governance of the niche¹

As mentioned in the subsection devoted to the grounds of the process, the policy and regulatory framework exerts few specific constraints on wind power cooperatives with respect to their object and purpose (i.e. producing sustainable energy from cooperative wind turbines). For example, the Reference framework from 2001 doesn't preferentially treat any form of citizen/municipal participation in wind projects, as the formulation of the 'citizen participation' reproduced in Box 4 shows (cf. *supra*). Nevertheless, a few laws are regulating cooperative companies in Belgium and this framework applies of course to wind power cooperative such as EZ.

Legal and regulatory framework

Since the 1950's, public authorities have established a legal and regulatory framework that rules the organisation and functioning of any cooperative.

Article 350 of Companies Code defines the cooperative as a company composed of associates (partners, or co-operators) of which number and personal capital contribution are variable. Cooperative companies present two basic characteristics: 1) open membership; 2) cooperative shares can be sold or passed only to people who are name-checked in the statutes or match the legal or statutory conditions to become a co-operator.

The law distinguishes two types of cooperative companies: 1) cooperative companies with limited liability (SCRL) – the category to which EZ cooperative belongs; 2) cooperative companies with unlimited liability.

Of note is the fact that, contrary to most European countries, Belgian law does not refer to the ICA cooperative principles, which remain optional. As a consequence of this 'flexibility', two types of cooperatives are coexisting whether they adhere to and apply the cooperative principles or not⁷⁴. To distinguish these very different types of cooperatives, the Belgian National Council of the Cooperatives was established in 1955. This consultative organism makes recommendations on the official assent of cooperatives (about 600 currently in all sectors), with criteria according to a Royal Order from 1962: voluntary membership; equal or limited vote in general assembly; designation of the board of directors and commissioners by the general assembly; moderate or reasonable interest rates (capped to 6%); refund of the co-operators in proposition to their investment.

Moreover, a cooperative company is a full legal entity, so the following rules in particular apply:

- A financial plan must be drawn up.
- In the case of cash contributions: a special account must be opened in the company's name during the set-up phase.
- In the case of contributions in kind: an auditor's report is required.

⁷⁴ This latter type refers to cooperative companies that do not adhere to the cooperative ideals. Most of the time, these cooperative companies adopted the cooperative status for convenience reasons.

- All companies must enroll on the register of legal entities kept at the commercial court registry. The registry will assign the company an enterprise number.

This set of rules and regulations of cooperatives in Belgium points to the fact that a cooperative is a *company*. Therefore, it must prove a certain professionalism and expertise in coping with the legal constraints. Nevertheless, these constraints are still not insurmountable and we may wonder why the cooperative model is not more widespread. Several main reasons are mentioned in the literature – and they are often shared by our interviewees:

The ‘barriers to entry’ resulting from the former existence of natural monopoly in the energy sector. With the recent liberalisation of energy sector, this market power continued through other means which conducted to the emergence of a sort oligopoly. Indeed, access to lands represents a key barriers for the development of wind power cooperative, since a limited number of promoters and businesses are quickly buying the lands suitable for windmills, then obtaining the related permits and selling both land and permits to large groups (such as Electrabel). In the wind power sector, the situation is all the more favourable for big private companies since the amount of capital required to launch a wind turbine is particularly large. This is why the necessity to revise the Walloon Reference framework for wind power emerged in the recent years as a key issue to enable a larger development of RES cooperatives.

The revision of the Reference framework for wind power in Wallonia

As mentioned previously, the future Reference framework for wind power development in Wallonia should play a major role in the potential development of socially aware wind cooperatives. Indeed, the revision of the Walloon Reference Framework from 2001 represents a core issue, as it should enable a governance of the niche based on:

- A mapping of the wind resources, by delineating the ‘sites’ for which public authorities will make invitations to bid and, after examination, deliver permits to the chosen projects.
- A minimum rate of citizen share owning (20% is evoked by the minister and accepted by renewables professional federation, EDORA) should become obligatory in the new Reference Framework and in the Decree to be published in 2013.
- Indemnities paid by the promoters / developers to landowners and municipalities for land use (without benefiting an expropriation right).
- Dividends capped at 6% (it is already the case for all cooperatives).

If such a framework is instituted, it should encourage a larger participation of citizens and public authorities in local wind turbines projects.

At the local level, municipalities and other local public authorities also exert a non-negligible role, and particularly through their involvement in the wind projects elaborated on their territory. Indeed, local officials can profitably take part in the project elaboration and realisation and, as share owner, in the wind turbine operating. Such municipal participation can provide a very helpful financial resource to concretise also the project and make a decisive contribution to the economic feasibility and sustainability of the project. It also favours consensus among local concerned populations and contributes to overcome residents’ reluctance. However, the current situation is still ambiguous because of the many municipalities that prevent the implementation of wind turbines by refusing permits or land use

and this for various reasons (doubt about the profitability and economic performance of the project, fear of damages to the landscapes or of populations' discontent, etc.)

Intermediate conclusion: Drivers and barriers towards niche creation, endurance) and institutionalisation

In Deliverable 3.1, a table summarizing the drivers and barriers was built on the basis of a special report devoted to renewable energy in Belgium. In this issue, all actors involved in wind cooperative (and socially aware renewable energy production and consumption) were interviewed on the drivers and barriers a cooperative had to face. As a synthesis report of actor's points of views, this table is still relevant and provides a good basis to pursue the analyses on drivers and barriers.

The 'static' table of drivers and barriers is reproduced on next page, to make the following analysis more readable.

Table 9: Drivers and barriers in both inner and outer contexts as identified by core actor of wind cooperatives

	DRIVERS	BARRIERS
OUTER CONTEXT	<ul style="list-style-type: none"> • Increase of energy prices • Increasing importance of climate change and GHG emission issues • Holding of local debates and reflections on energy production and consumption, and the related emergence of a collective awareness about it • The promises of the liberalisation of energy markets didn't materialise in lower prices • Inequity projects for citizen participation in other decentralised power production initiatives proposed by private companies => Alternative solutions like cooperatives (+) • Importance of the local authorities support to associations or cooperatives in the achievement of their project 	<ul style="list-style-type: none"> • <i>Inequity issues associated with mainstream projects</i>:: citizen participation in decentralised power production proposed by private companies: suspicion / distrust / wariness about decentralised energy production projects (-) • Critical lack of information, including among the local councillors who are not aware of the financial benefits of such devices and of the available tools for managing such projects • The local actors' general views are too approximated and segmented, and not correlated with the territory • Citizen dimension remains problematic: certain associations are lacking of transparency in their management = exposed to the critique of a propensity to get rich at other people's expense and not to work for the community (and all the more than existing regulations do not consider the sharing of profits that characterises most of the cooperative projects) • Rather obscure judicial framework, in which local authorities often both judge and are being judged + risks supported by citizens
INNER CONTEXT	<ul style="list-style-type: none"> • <i>Economic attractiveness</i>: collectively affordable + markets regulations (through green certificates) = economic profitability of the citizen participation (through share dividends and rebates on their energy consumptions) • '<i>Small is beautiful</i>': emphasis on local renewable energy sources, of which exploitation is made by small communities /collectives, with citizen structure / organisation, and/or in association with local governments/public authorities • Citizen empowerment: citizens become aware that they can have initiatives, be thoughtfully active, get or recover the hand and re-appropriate their own resources (land, wind, sun, water...) without delegation to distant and powerful entities devoted to profit rather than collective welfare • Positive and now well-established image (more generally) => acceptability 	<ul style="list-style-type: none"> • Ignorance of the issues: from total lack of knowledge about possibilities and potentialities for viable projects to scepticism about the feasibility of project presenting low and well-calculated risks • People are still suspicious of the project itself as well as of its promoter • Reluctance of local councillors who fear to be deprived of their prerogatives, who prefer to commit in more prestigious projects, and are still timorous regarding public-private partnerships associating the citizens

The trajectory of EZ cooperative sheds new light on the differential impacts of the identified drivers and barriers according to the evolution of the niche. At different stages / steps of the cooperative's evolution, the constraints exerted by drivers and barriers may change (and sometimes their impact can even be reversed: a barrier becomes a driver or a driver becomes a barrier)

- ▶ The creation of the niche is maybe the most constraining step, as the outer context and especially the regulatory framework imposes many barriers to the emergence of the niche.
 - In particular, it concerns the rights of way for land use, to set-up the project and get the legal authorisation by public authorities. Local politicians remain reluctant, as they prefer more prestigious projects (and reciprocally, the support of local authorities can be very helpful). Sometimes wind project founders must also cope with power companies (especially when land use is at stake). As Michel Delville and Jean-François Mitsch underline:

The current 'hunt to land' (through options signed with the owners) will stumble in the future over the uselessness of a land reservation without the right of access to the wind. This key element which has been ignored until now will become a legal evidence. The operation 'Rush for the Air' led by REScoop denounces this matter of fact. Developers who have speculated on an unacceptable practice regarding its unscrupulous and discriminatory approach (e.g.: rivalry between farmers and owners / or operators) will have to reposition. The land reservation is a 'risky' expense including regulatory risk (change the rules of the game): any promoter knows. Therefore the land reservation must be codified quickly, and the tools to implement must be equal to the public utility policy devoted to renewable. (REScoop, "Wind and Wind crying laughing!", Press Release, 25th March 2011)

- Another major issue concerns the funding of the project, which is all the more difficult to overcome since the cost of a wind turbine represents a huge financial constraint. Project leaders have to prove charismatic and trustable to recruit enough cooperators that are ready to invest in the wind cooperative (economic attractiveness is then an important driver, and on the contrary lack of knowledge, ignorance of the issues and suspicions can impede the development of the project).
 - Reluctance and opposition to wind turbines are at their highest during this period, and therefore the inner context of the various actors plays a major role.
 - When the global arrangement of the project is achieved, it must be concretised by the building of the wind mill. This is also a critical period of time, and all the more since the project has been initiated since several years – without return on investment for cooperators.
- ▶ When the wind cooperative begins to operate its wind mill, a new issue emerges: the perpetuation of the niche, i.e. organisation of the cooperative assemblies, distribution of the first dividends; consensus or dissent on the niche evolution over time and space & relationships between grassroots co-operators and activists; democratic functioning; local authorities support / involvement. Here, the inner context aspects are the most salient constraints impacting the cooperative. Within EZ, the recent crisis made visible the evolution of drivers and barriers impacting the niche which differ radically from the period of niche creation. .

- The institutionalisation of the niche – which has not been really observable in EZ cooperative, may consist in various types / path of evolutions such as: a routinisation of the cooperative's functioning and its anchorage in local everyday life; deployment of collaboration with public authorities through partnerships, policy making (cf. the Walloon Reference Framework), lobbying activities. These institutionalisation processes can occur at various scales, from local level to national or even European; for instance, broadening the wind cooperative is a constant purpose for B. Delville whilst other cooperators have chosen a more local form of institutionalisation.

4.5 Patterns of diffusion

4.5.1 Configurational specificity and replicability

The creation and relative success of EZ cooperative result from a long-term process that entangles key actors, local activism and successful previous experiences (like the Children's windturbine). Indeed, the creation of EZ cooperative has been made possible by the key actors' expertise in leading such projects whether financially or technically. These two main aspects characterizing the niche's configuration could lead us to think that EZ cooperative is not easy to replicate elsewhere. This is the hypothesis that is addressed in this section.

This specific configuration has certainly constituted a determinant asset to the creation of EZ cooperative in a highly technical and regulated domain: energy production. In this respect, EZ cooperative can hardly be replicated elsewhere by actors with limited skills.

Yet, EZ cooperative niche was also created to diffuse and scale-up alternative and more sustainable practices in renewable energy production/consumption. Its members managed to at least diffuse the wind power cooperative model:

- Learning practices and information about the cooperative model, bringing empirical proofs of its feasibility and profitability (+ sustainability / social awareness).
- Expertise: involvement in several projects; they seem to bring a decisive contribution to their launching and even concretisation.
- Networking activities, and especially through REScoop federation: internal by associating the RES cooperatives in Belgium / external thanks to public, private, citizen partnerships, privileged relationships with *Ecolo* (i.e; the green party) members of Walloon Government in charge of environment, municipalities, NGOs.

The recent transformation of EZ cooperative and the 'grassroots' cooperators' claim for leadership will also put the replicability of the cooperative on trial. This change in configuration represents a major test on the real sustainability of the 'normalised' / 'routinised' cooperative.

4.5.2 Current diffusion processes and strategies

EZ cooperative company 2020 objectives regarding wind power:

The stated objective of EZ cooperative is to take a significant share of the 25% of wind Walloon (+ / -175 wind turbines) reserved for citizens. This implies:

- Investing on behalf of citizens in the means of producing electricity from renewable energy;
- Developing partnership joining local authorities (communes, etc.) and citizen cooperatives;
- Cooperating with other cooperatives and local civic associations to achieve Walloon objectives;
- Providing green electricity produced through REScoop, the federation of citizen cooperatives.

Partnership

Public authorities, while maintaining control over ‘their’ natural resources, engage into partnerships with private entities. The two actors (public and private) are working together in the common interest. In this context, cooperatives (i.e. private industrial actors) bring in the participatory dimension. At the same time, these investments are *re-localised*, since they are owned by the inhabitants and no longer by distant and anonymous financial interests. The association of municipalities and local cooperatives ensures the control of resources and their exploitation in accordance with all components of sustainable development - economic, environmental and social.

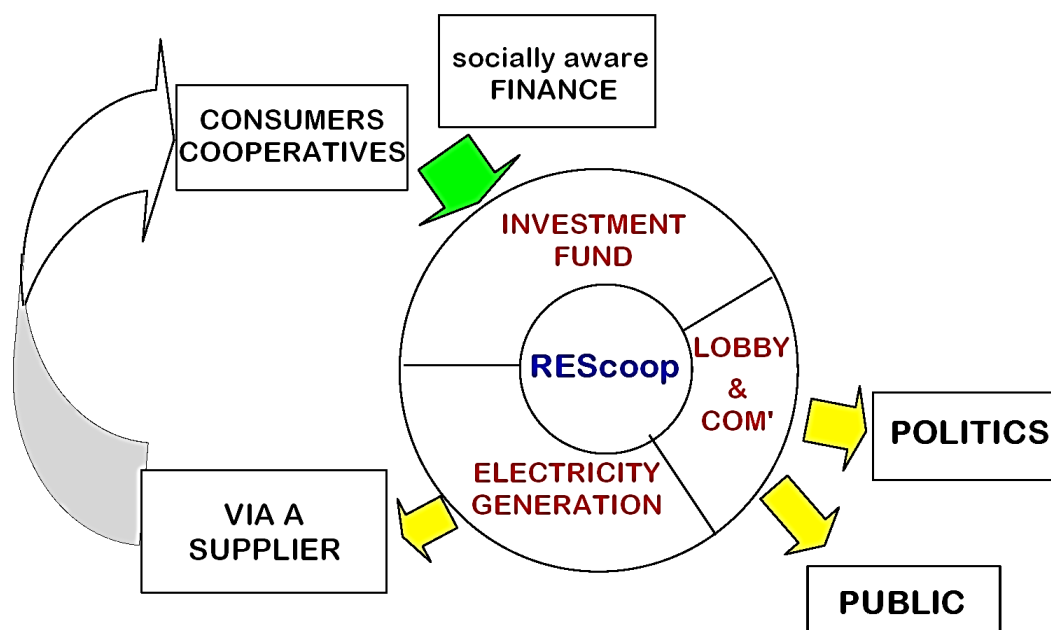
Networking and federal organisation through REScoop

Several networks of energy cooperatives are currently emerging, with the creation of federations at both the national (REScoop in Belgium) and European level (REScoop Europe, launched in 2011 by the Belgian federation of renewable energy cooperatives). Such organisations are still very recent and, consequently, for now it is rather difficult to assess their action and impact. Also noticeable is the fact that these federations take part in the larger cooperative movements like Cooperatives Europe and the International Cooperative Association – which played a great role in establishing the general principles and rules that shall govern any cooperative.

Another noticeable aspect is the core role played by the npo Vents d'Houyet and the EZ cooperative in Belgian wind cooperatives' landscape. The cooperative's importance is obviously reinforced by the role it plays in the REScoop federation that has been created in 2010 by several members: *Ecopower*, *EZ*, *Clef*, *Beauvent*, *Allons en vent scrl*, *Courant d'air*, *Citipar*, *Vents-houyet* and *Luceole*. Currently, the federation is still composed of 8 cooperatives (with official agreement), 15 local socially aware / citizen non-profit organisations. REScoop.be represents more than 40.000 cooperators in the whole country, 100.000.000 € investment – including 2/3 from equity capital, more than 50 MW controlled by the citizens and distributed between biomass installations and more than 20 wind turbines. According to Michel Delville, the federation's goal is to reach 25-30% of energy production managed by house-holds in 2020⁷⁵. His view on the role of the renewable energy cooperatives federation is summarised in the figure below.

⁷⁵ Report and documents from the Public Briefing Session that took place on the 14th October the Compte rendu et documents de la réunion d'information publique du 14 octobre

Figure 6: REScoop's role according to M. DELVILLE (Vents d'Houyet & EZ)



The resulting strategy aims at institutionalizing the RES cooperative model through three complementary ways⁷⁶:

1. **A fierce critique of the current situation** that particularly denounces the abuses due to illegitimate dominant arrangements:
 - **Private power companies and promoters** are maintaining a sort of oligopolistic model that impedes the development of alternative models (e.g. more democratic and less capitalistic) through the appropriation of usable land and more generally of public resource (wind), influence on 'inter-municipal partnerships' for the management of energy as members of the Board of these inter-municipal arrangements, somehow fictitious citizens' involvement in their RES projects, absence of commitment in common interest and reduction of both energy consumption and prices, etc.
 - **Public authorities and particularly municipalities** are selling land to the highest bidders (i.e. promoters and private companies) and they are under the influence of big companies in 'inter-municipal partnerships'; they have too short-term views and therefore consider mostly immediate financial aspects and are 'blind' about the potential benefits associated with alternative models (this trend is noticeably increased by the possible conflicts that may emerge)
2. **Justification and promotion of the cooperative alternative model**, which overcomes some major failures of the dominant capitalistic model: participation of inhabitants that reduces the opposition to RES projects, citizen participation and interests in the profits, decentralisation of energy system and socially and

⁷⁶ This part is largely inspired by the analyses made by Huybrechts and Mertens (*op. cit.*), who draw rather similar conclusion as ours.

environmentally aware model (direct supply chain, reduction of energy consumption, etc.), lower and fairer prices and greener electricity supply.

3. **Alliances and networking activities:** the alliances sought by EZ cooperative (and REScoop) are both internal and external and they contribute to the development of cooperative model in a rather complementary way⁷⁷.
 - **Internal alliances**, i.e. alliances between similar actors consisting of the support and expertise brought by EZ cooperative to similar projects over Wallonia and, beyond, in the creation of REScoop federation which gives some more weight to the cooperative claims as the representative organisation of RES cooperative in Belgium.
 - **External alliances** are built by EZ cooperative and REScoop with most of the stakeholders (policy makers, NGOs, banks, business), in order to set up more and more efficient partnerships. The alliances with policy makers have been given a specific importance, which is concretised in the revision of the Reference framework for wind power in Wallonia.

4.5.3 Insights on the diffusion of the niches

As we already evoked several times, the revision of the Walloon Reference Framework for wind power development represents a possible major shift in the diffusion of wind power cooperatives. This is the reason why we consider that this revision process deserves a specific subsection highlighting its possible impact on the scaling-up of the niche. This will then be completed by a general picture of the paths of diffusion focusing on the legitimisation and institutionalisation of the niche as a way of turning it into a 'standalone' sociotechnical regime.

The revision of the *Reference framework for wind power*: a possible powerful leverage

As of July 2009, the revision of the Reference Framework from 2002 has begun and successive consultations with all the concerned actors were conducted during spring 2010. Walloon government discussed this issue several times in that period and finally announced on the 25th August 2011 its decision to establish a wind power development trajectory in precise figures and the set-up of both a transitory and a permanent regime⁷⁸. The transitory regime is meant to guarantee the continuity of wind power sociotechnical regime and to prepare the passage from one regime to another. The permanent regime shall come from the

⁷⁷ It has to be underlined here that we won't describe the alliance strategy in detail here, as it exceeds the limits of our study of the EZ cooperative. Indeed, this strategy is rather driven by REScoop than by EZ cooperative, and all the less since the activist founders of both EZ and REScoop left EZ Board of administrators.

⁷⁸ For a summary of the Walloon government decision of the 25th August 2011, cf. the report made by officials to the "Association of Representatives and local Presidents" (AMPL) from Centrist and Humanist Party: THONET Fabienne, LOMBART Xavier, PERIN Mathieu Perin, *Cadre de référence éolien (CDR) et outils connexes*, Réunion AMPL, Namur, 26 september 2011, available at <http://217.64.243.205/extranet-new/docs/cadre-eolien.pdf>.

learning process induced by the transitory regime. This forthcoming permanent regime is of particular interest for our case study as it should enforce a decretal framework for wind power – as requested by two members of Ecolo party that belong to Walloon government, Jean-Marc Nollet, who is the current Minister for Sustainable Development and Civil Service in charge of Energy, Housing and Research and Philippe Henry, the Minister for Environment, Town and Country Planning and Mobility.

The current revision of the reference framework for wind power development in Wallonia is still 'in the making', yet this process already initiated the set-up of policy principles, tools and devices that impact directly our case study. Indeed the revision process consisted in consultations, reports and proposals highly and sometimes harshly discussed (and disputed) by the concerned actors (from private sector, npo and cooperatives municipalities and other public authorities). The main actors of EZ case study are intensively committed in supporting the two Ecolo ministers proposal. Moreover, REScoop – the Belgian federation of cooperatives for renewable energy – praises explicitly the Walloon government in a press release from September 2011:

The Federation is pleased that the Walloon authorities engage in a significant and promising development of wind resources for the next decade. We, citizens-voters, congratulate the competence of the Office for Planning and Energy and we appreciate as a whole that the Walloon Government assumes its responsibilities on this issue⁷⁹.

The regulations for wind power sector development foresee a law enforcement of the Reference Framework, a mapping of the wind resource in order to improve the general management of the sector, promotion of public-private partnerships and the collective participation (from citizen and local authorities) in wind projects – also as a guarantee of social acceptability. Supported by most of the renewable energy associations or cooperatives, this general direction also induced numbers of discussions and polemics, especially with 'NIMBY' associations (as qualified in the media coverage of the residents' mobilisations who don't agree to continue the installations of wind turbines) and some private promoters.

The future decree is meant to institute some core principles like the official approval of wind power, the regulation of the wind resource through a mapping and the delineation of plots and the establishment of corresponding attribution procedures. Thus, for our case study, one of the most important evolutions of the reference framework will consist in the procedures ruling the citizens' and local authorities' participation in the projects, and in the assessment of indemnities to be granted to the land owners or occupiers.

So the Reference framework for wind power development in Wallonia is now at a turning point. The direction chosen by the two Ecolo ministers should result in a larger participation of citizens, inhabitants and local authorities in wind projects. But this will depend on the effective policy devices and on an obligatory openness of the projects to third parties, etc. The current proposal made by the Ecolo ministers logically received the support of many associations and cooperatives, and particularly Rescoop, Ecopower & Emissions zero. Indeed, the future

⁷⁹ REScoop.be, « Prêt pour l'éolien de demain : partage des revenus et courant en direct, du producteur au consommateur », Press release, 2011/09/02, <http://213.246.214.199/maxinet/Communiqu%C3%A9%20de%20Presse%2001092011.pdf>.

reference framework echoes the orientations claimed by wind power cooperatives in favour of the creation of concessions (similar to those for mining activities) as a model of development⁸⁰. If an obligatory rate of citizen's participation is established (a maximum of 20% of the shares is evoked by the wind power industrials federation, EDORA⁸¹). If the future decree corresponds to this scheme, it will represent an important leverage for the development of renewable energy sources.

Legitimation and institutionalisation of the niche: towards a new sociotechnical regime?

Yet, the expected Reference Framework is a necessary but insufficient condition for meeting the objectives sought by highly engaged actors like B. Delville or J.-F. Mitsch – i.e. 500 wind turbines in 2020, including 25% \approx 175 wind turbines reserved for citizens. EZ cooperative's objectives for 2020 and the related strategies (cf. *infra* Chapter 4.5.2) consist in a wider and reinforced coordination of all the stakeholders engaged in socially aware wind power.

Nevertheless, the issue that remains in the background is the question of legitimacy of this shift towards alternative and more sustainable energy practices through wind cooperatives. Indeed the 'legitimacy' issue conditions the potential commitment of a wide range of actors in favor of wind power.

Furthermore, wind power issues and controversies give rise to a very broad spectrum of opinions and conceptions which can hardly be reconciled. These different views on wind power rely on various forms of legitimacy and legitimation – pragmatic, normative and cognitive. Arrangements between these forms of legitimacy differ according to the type of actors (who can be 'typified', to a certain extent).

The Walloon Reference Framework for Wind Power represents an insufficient condition for wind power development at a large scale, since it cannot address all legitimacy forms. Renewed Reference is a necessary answer to normative legitimacy problems, which must be completed by accurate vectors of pragmatic and cognitive legitimacy.

To clarify this analysis, Table 10 below presents a proposal for understanding the vectors of legitimacy for each type of stakeholders. These vectors are of various sorts, from policy devices, ethical or democratic values, collective re-appropriation of a common resource, to economic mechanisms and profits, etc.

⁸⁰ DELVILLE J.-M., MITSCH J.-F., « Vent qui pleure et Vent qui rit ! », Press Release, March 2011.

⁸¹ EDORA, « Position EDORA – Toilettage du Cadre de référence pour l'implantation d'éoliennes en Région wallonne », p. 8,
http://www.edora.org/newsletters/docs/news_septembre2010/CDR_position_EDORA.pdf

Table 10: Salient aspects of legitimacy according to various stakeholders

Allies / targets	Pragmatic legitimacy*	Normative legitimacy †	Cognitive legitimacy ‡
Policy makers (+ public agencies, energy regulators)	Prices, decrease of energy consumption, green energy, RES development	Reference Framework and support	Institutionalised network decentralisation
Municipalities	Economic and social benefits as partners or members	Participation and citizenship Local autonomy	Community re-building Avoid / reduce conflicts
NGOs	RES development, Green energy supply at cheaper price	Environmentally friendly (green electricity) Social economy and participation	Short supply chain and decentralisation Re-appropriation of common resource
Users (producers, consumers, workers)	Ownership of the organisation and privileged use of its service	Participation and democracy	Feasibility and profitability Re-appropriation of common resource
Businesses	Communication and advertising	Market legitimacy	Ethical values

* *Pragmatic legitimacy*: results from the advantages the stakeholders perceive in the initiative

† *Normative legitimacy*: how stakeholders consider the initiative based on their values and moral judgments

‡ *Cognitive legitimacy*: refers to the extent to which the initiative falls into the stakeholders pre-established categories and is taken for granted

The results displayed in this table are the outcome of a detailed analysis of actors' discourses and viewpoints. It has to be understood as an instrument panel which has to be confronted with the actual/local situations and configurations.

Considering the constraints of the energy domain, the diffusion of the niche is thought to be built on extended coordination between stakeholders and beyond, through the elaboration of relevant tools and devices, i.e. vectors or mediation aimed at fostering an increased legitimacy of the cooperative alternative energy practices.

4.6 Conclusion

EZ cooperative is a Walloon frontrunner wind cooperative launched by a series of lead activists (i.e. themselves frontrunners). As such, the cooperative initiated a process of diffusion of alternative more sustainable energy practices. These practices consist of the local production and consumption of renewable electricity via wind turbines which are collectively owned by citizen share owners – i.e. the co-operators.

The process of emergence of this cooperative confirms our hypothesis regarding the impact of a specific configuration that operates as a catalyst in the emergence of the niche. The role played by the 'leaders' / 'founders' has been crucial in the concretisation of the niche; its creation required their experience, expertise as well as their charisma and ability to generate trust. This aspect is all the more important in the case of a cooperative wind turbine as the set-up of the project is a very technical and demanding task, the energy sector is highly regulated and launching a wind turbine requires massive investments.

Within this general picture, this case study offers some particularities. Indeed, this cooperative is a surprisingly *activist* organisation, partly because of the involvement of well-known activists.

The EZ cooperative rapidly engaged in the diffusion of its niche, providing expertise, skills and knowledge to other collectives who intended to launch a wind cooperative in their area. EZ cooperative is also part of a rising network at both the Belgian and European level through REScoop federations. These networking activities and political engagement platforms contributed to the growing visibility of the cooperative and enabled its members to exert an increasing influence on the RES public policy.

Another key aspect consists of the crisis that occurred during Fall 2011, a crisis that caused noticeable change in both the management and positioning of the cooperative.

Currently, the issue of diffusion of the niche remains quite impossible to address as it is a process 'in the making'. However, our inquiry led us to formulate a hypothesis focusing on the 'legitimacy issue' as an obligatory point of passage towards the diffusion of the niche.

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Annex A: Insight into a cooperative wind turbine's financial plan

Table 1 I: Investment and funding for a cooperative wind turbine

INVESTMENT	COST	%
► Enercon wind turbines	5.770.000€	80,6%
► Grid connection	500.000€	7,0%
► Civil engineering and roads	200.000€	2,8%
► Purchase of permits and engineering	440.000€	6,1%
► Miscellaneous construction expenses	50.000€	0,7%
► Financing costs of the project	200.000€	2,8%
► Total of investment	7.160.000€	100%
FUNDING	AMOUNT	%
► Shareholders' equity	1.100.000€	15,4%
► Subsidies - Wallonia Region + straight loan (1 year)	800.000€	11,1%
► Long term loan (12 years)	5.300.000€	74,0%

Annex B: REScoop's Shared Energy Charter

Table 12: The 'Shared Energy Charter' from REScoop.be

SHARED ENERGY CHARTER

In addition to the seven cooperative principles, here are the inseparable elements which bring together the signatories of this Charter:

FINDINGS

The model of production and consumption in Europe results in four dead ends which represent a major threat to the ability of mankind to live in acceptable conditions on Earth:

- Environmental dead end related to climate changes and other attacks on ecosystems and human life;
- Economic and geo-political dead end considering the non-renewable resources exhaustion at short to medium term;
- Social dead end regarding the inequitable access to basic minimum of energy services and the privatisation of public service.
- The liberalisation of energy sectors did not mean the privatisation of a strategic sector, nor to compel the only consumers to handle the bill for speculators.
- A situation also endured by southern countries;
- Political dead end related to state and communities withdrawal and to energy policies opacity which is a real obstacle to the achievement of energy liberalisation: competitiveness, price, energy independence...

A VIEW

Our view on the future energy system is low power consumption, thanks to the principles of sobriety and efficiency for energy consumption and, to cover the full consumption, a production based on renewables, as part of a balanced regional development with which society lives in harmony.

It is also the active participation of every citizen and every human community in decisions and / or actions necessary to achieve these objectives, framed by a logic of spatial and temporal sharing of the annuities and benefits: between the present and future generations, in a spirit of a true public service providing to all an access to energy in the relevant territory, and also including an international energy solidarity.

MISSION

As part of this view, the mission that the signatories of this Charter set themselves is to enable citizens and stakeholders of the territories to choose, to reappropriate and manage the sustainable means for the energy production and consumption, on the basis of an adjustment between the actual needs and the means of production, of the local consultation and of the

values of this Charter.

To this end and ethic, they support in all the territories the emergence of Citizens Projects:

Each project must be part of a consistent and comprehensive approach: an energy balance and a very favourable environment, respect for the environment and population, and local economic benefits. A socially aware project must meet the following criteria:

Local roots: the company operating the project is controlled by representatives of local civil society, communities and groups, individuals, as close to the project as possible. This implies a majority interest in the capital and / or a shareholders' agreement. It aims at creating short and direct supply chains from producers to consumers, an awareness of the linkages between needs and means of production to be implemented to address them.

- 1) Non-speculative aim: Investments are made to be used (not for resale), and dividends are strictly regulated. Part of the benefits is allocated to the educational dimension and to investment in new projects. As much as possible, construction and operation planned by renewable energy projects require that developers, investors and service providers comply with this rule. It aims at achieving an ethic of socially aware economy *, which allows access to energy at a fair and transparent price, which pays properly invested capital and labour, and of which surplus are used primarily for the development of solidarity or consolidation projects.
- 2) Independence: each project is autonomous and has its own governance which is the most local possible. However, the devices for sharing and solidarity considered for investment and projects purposes, as part of socially aware economy, are thus positioning these projects outside both the public sector (managerial autonomy) and private capitalist companies which have not signed this Charter.
- 3) Governance: to the extent possible, the operation of the company operating the project and its partners (developers, investors, service...) is democratic, cooperative-type, transparent and clear, with guarantees on maintaining the duration of the project purpose. The chosen governance must allow production price controls by the community and total transparency on the operation and financial aspects.
- 4) Ecology: the operating company is engaged voluntarily and sustainably in environmental respect, from global level (climate change, loss of biodiversity, pollution) to the most local level (land use and river, local pollution, noise, landscape...). Wherever possible, developers, investors and other providers (BE, builders, installers...) also respect this rule.
- 5) Economical use of space (even renewable resources are limited) planning study prior to the implementation of project bids in competition?

OBJECTIVES

The signatories to the charter undertake to:

- Promote the concept of citizen project defined above;
- Identify, monitor, and support such projects;
- Find and implement the means and tools necessary for the implementation of this Charter.

** Purpose of service members or the community rather than profit; management autonomy; democratic*

decision-making; Primacy of persons and work over capital in the income distribution.

5 General conclusion

This last chapter intends to draw some conclusive statements – both theoretical and empirical – that will help us to prepare the next and last report of the WP3 Case studies research; Deliverable D.3.3 will collect and integrate the results of the 4 case studies.

As a means of conclusion, we shortly assess the relevance and efficiency of the methodological framework that has been adopted collectively throughout this research process. To do so, the key notions from the guidelines employed here will be used to identify the possible adjustments, shifts or reorientations that must be integrated in D.3.3. Three notions are particularly salient to be discussed: ‘niche’, ‘configuration’ and ‘practice’. So the first part of this conclusion will focus on the uses of these notions within the four case studies, and what we should learn from them. In the second part, we underline some aspects that remain unclear from the empirical explorations, or that could only be partly addressed. The aim is to facilitate the metaintegration of WP results in InContext. This second conclusive part is more programmatic, and intends to explain whose analysis should be pursued or deepened and accordingly the potential lacks or neglected questions and issues that need to be solved to close the WP3 research on case studies.

The D3.2 empirical report allows the testing of the consistency of the theoretical framework and methodological approach that have been developed previously (see Milestone 6 ‘Common methodology for WP3’). On the whole, the common methodological framework that has been progressively elaborated by WP3 partners proved here to be operative and efficient in terms of general organisation, theoretical notions and empirical content.

As we underlined at the end of the general introduction, the four case studies displayed in this deliverable D.3.2 are ‘stand-alone’ analyses. Yet, all the four followed a common methodology composed of three main stages – document analysis, participative network analysis and semi-structured interviews –, and they adopted a common template. The four case studies thus adopted a rather similar process for the description, the retracing of the ‘niche’ evolutions and their transformations from creation/emergence to diffusion.

The notion of ‘**niche**’ appears through the empirical explorations as a relevant and operational depiction tool that provides a common skeleton to the four case studies. Actually, this notion of ‘niche’ is all the more pertinent since it can be efficiently employed to account indiscriminately for the different case studies. This flexibility and consistency of the notion of ‘niche’ provided a common ‘grip’ to put the four case study reports into perspective.

Strongly linked to the notion of ‘niche’, the notion of ‘**configuration**’ was revealed to fit to the described processes and to the purposes of the WP3 research agenda. Indeed, the four case studies show that this concept of ‘niche’ cannot be grasped without considering the specific configurations at stake (a configuration which is often integrated in narratives presenting this arrangement as extraordinary or unique). This intertwinement of ‘niche’ and ‘configuration’ is also mobilised in each case study. No matter if the WP3 research team does not share an absolutely univocal conception of these two key notions: the differences remain marginal. Moreover the two notions testify here their robustness, as they successfully passed the test

by enabling a dynamic description of the four processes of emergence and institutionalisation of niches of alternative more sustainable practices.

The third key notion, **‘practice’** – and implicitly ‘practice theory’ –, appears as the less convincing of the three. Indeed, none of the four case studies proposed a description or an analysis centered on ‘practice’. Shall we conclude that this third notion is unnecessary? We do not think so, as getting rid of this concept would weaken the general theoretical architecture of WP3 case study research: indeed, ‘practice theory’ can basically be considered as the background to the case study analyses (a background that prevents for instance from epistemological incommensurability).

Noticeable is also the fact that the four partners, even equipped with the same conceptual ‘toolbox’, address their respective last chapters devoted to ‘patterns of diffusion’ in very different ways. The previous remarks make us reconsider this toolbox. Indeed, the three notions that lay at the very heart of WP3 theoretical toolbox show here their very limits. This calls for further research and for improved analyses of some core issues raised by the case studies.

In terms of a set of more programmatic conclusions from the empirical report, we propose to introduce a set of remaining ‘problems’/questions that the final deliverable of WP3 (i.e. D3.3) will be addressing.

First, as mentioned above; the **‘patterns of diffusion’** caused a ‘bifurcation’ of all case studies in various directions. At the same time, these analyses tend to move away from the core research questions of WP3:

- It seems to us that the question of the relationship between the ‘inner/outer context’ and the ‘pattern of diffusion’ has been dropped in the writing process of D.3.2. Consequently, this core issue shall be considered in the final report D.3.3 and it could maybe be solved by mobilizing the ‘configuration’ and by clarifying the linkages that tie the ‘configuration’ with the ‘inner/outer’ aspects.
- Governance issues should also be part of these further analyses. A deeper understanding of the arrangements between ‘inner/outer’ context and governance of the niche could shed a new light on how the governance of the niche actually impacts diffusion processes. By doing so, our understanding of the issues of replication, replacement, translation, etc. of the niche could also improve.

WP3 Case studies Research Question

- a. What are the drivers and barriers in both inner and outer contexts for the creation of niches of alternative (sustainable) consumption and production practices, and
- b. Do the configuration(s) of these niches highlight possible pathways towards diffusion?

- Last but not least, these problems could fruitfully be reconnected with the question of the ‘collectives’, whose engagement into the diffusion of the niches could be better understood, and foster innovative explanations about niches’ circulations.

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