

Green Lifestyles Alternative Models and Up-scaling Regional Sustainability / GLAMURS

Work Package 4

Deliverable 4.3: *Report on future lifestyle scenarios and backcasting vision workshops*

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Summary

- An overview of developments in backcasting has been given in Chapter 2, focussing on the recent developments and attention to apply participatory backcasting on sustainable consumption, sustainable lifestyles and communities
- A participatory backcasting methodology has been developed for the GLAMURS project, entitled participatory backcasting for sustainable lifestyles and a green economy. It consists of two stakeholder workshops; a first workshop for problem exploration and development of visions for sustainable lifestyle and a green economy followed by a second workshop focussing on pathways and implementation.
- In six regions studied in the GLAMURS project vision workshops have been successfully executed using the developed format and guidelines with the flexibility to adjust to local aspects and available expertise in the organising teams.
- In order to get sufficient diversity in the generated visions, the distinction between on the one hand a sufficiency society based on degrowth and moderation of consumption and on the other hand a green growth society based on solving sustainability problems via environmental innovation and a circular economy has been used as an input for the vision workshops.
- All workshops attracted on average 15-20 participants from civil society and bottom-up initiatives, government, and knowledge organisations, whereas the presence of business was lower.
- Thirteen visions have been generated. In the Netherlands and Spain three visions were generated, in Austria partial visions were integrated into one overall vision, while in Germany, Italy, and Romania two visions were developed. In all workshops it was needed to process workshop results further and to elaborate the visions more, thereby identifying issues for further elaboration.
- Visions have been compared on several dimensions including (1) sufficiency versus green growth, (2) individual versus community orientation, (3) governance by government or market, and (4) urban versus rural focus.
- The first and fourth dimension appeared most useful to show diversity in the set of visions and is most appropriate for defining clusters of visions.
- A range of methods have been applied during the backcasting vision workshops, which all contributed reaching the goals as set.
- Considerable learning has taken place among both participants and local case study team organisers.
- Visions have been fed into a second series of backcasting pathway workshops on which is reported elsewhere (Quist and Leising 2016).

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PART 1: BACKCASTING INTRODUCTION AND METHODOLOGY

1. Introduction

1.1 GLAMURS project

The FP7 funded GLAMURS (Green Lifestyles, Alternative Models, and Upscaling Regional Sustainability) project focuses on transitions to sustainable lifestyles. A key starting point is that lifestyles of people engaged in bottom-up sustainability initiatives are (much) more sustainable than regular lifestyles and that stimulating and diffusing those more sustainable lifestyles from their niches will contribute to upscaling regional sustainability. Moreover, the aim of the GLAMURS project is (1) to explore the complex links and interactions among social, economic, cultural, political and technological factors that influence transitions to sustainable lifestyles and transformations to a green economy not only at the individual and micro-economic level, but also at the regional level, the macro-economic level and the European level, and (2) to develop and evaluate models of lifestyle change both at national and European levels in order to provide recommendations on governance designs and policy mixes for pathways for the transitions mentioned. These results should be aligned with the objectives of the Europe 2020 strategy and the Resource Efficiency Flagship Initiative. The project will also develop and assess forward-looking scenarios and desirable visions for transitions through a combination of expert input, stakeholder input, and the involvement of citizens business, and government actors at the regional level.

The empirical work in GLAMURS is done in 7 regions across Europe and consists of research at the regional level as part of WP4 and of in-depth collaborative research with citizen sustainability initiatives in the 7 regions in WP5. The seven regions in Europe studied in GLAMURS are (1) Banat Timis (the region around Timisoara in Romania, (2) Central Germany (the region around the city of Halle), (3) the Danube-Bohemian Forest region in Upper Austria; (4) Galicia in Spain, (5) Lazio including Rome in Italy, (6) the Rotterdam-Delft-The Hague metropolitan region in the Netherlands, (7) and Aberdeenshire in Scotland. For an account of regions and initiatives, see Omann et al (2015) (Deliverable 5.1) and for regional analysis see Deliverable 4.2 Dumitru et al (2016).

According to the GLAMURS DoW, the overall objective of WP4 is to provide an empirically-grounded understanding of (1) patterns of time-use (with an emphasis on work-leisure balance and leisure options, as well as on the perception and effects of time pressure) and (2) associated consumption patterns for the six consumption categories under study (status and use of homes, energy consumption in households, food consumption, mobility patterns, leisure options, and consumption of manufactured products), and (3) on the factors determining these patterns in the seven regions under study, as well as on (4) the trade-offs and spill-overs between time-use categories, levels of consumption and relevant internal and external constraints.

The objectives of WP5 are to investigate sustainable lifestyles initiatives in seven regions across Europe in order to advance our understanding of (i) the determinants of the adoption and evolution of sustainable lifestyles and the resulting alternative consumption-production systems, (ii) the obstacles and prospects for the spread of alternatives from niches to regime and landscape

levels, (iii) the changes in lifestyles, and the effects of these changes on (iv) levels of wellbeing and (v) on environmental footprints, so that more clarity is gained on how the initiatives in the case study regions can be strengthened and brought forward.

1.2 Backcasting for sustainable lifestyles and a green economy

In the empirical work packages of the GLAMURS project (WP4 & WP5) two series of stakeholder backcasting workshops for sustainable lifestyles and a green economy have been included. Task 4.3 (T4.3) guides the first series of workshops consisting of participatory backcasting scenarios workshops in all seven regions studied in the GLAMURS project, and Task 5.3 (T5.3) is meant for backcasting pathways and implementation workshops. These two series of workshops are connected in an integrated backcasting methodology that has been developed for application in the GLAMURS project, but have broader relevance for sustainability transitions at the level of regions and cities that want to include consumer lifestyle as well as economic aspects. The aim of the two tasks is to develop backcasting scenarios for sustainable lifestyles and a green economy at the regional level, and to develop backcasting pathways and implementation agendas contributing to bring about future sustainable lifestyles and a green economy for all case study regions.

In the DOW, T4.3 is described as follows. To conduct exploratory backcasting scenario workshops for future sustainable lifestyles for all case study regions in order to achieve sustainability targets at the level of lifestyles. This task will provide the necessary input for the assessments of alternative future scenarios in WP6 for modelling and WP7 for environmental analysis, consisting of combinations of changes in technology, lifestyles and economic structure. While the assessment of long-term trends will be done in part through expert estimations and modelling approaches, the desired lifestyle change in a sustainable direction for different societal groups will be determined and further specified within the backcasting workshops in the regions, which would be supported by data on environmental impact of different lifestyle options obtained in WP7. Activities for T4.3 include:

- Develop backcasting scenario workshop methodology in alignment with T5.3.
- Organise and conduct backcasting workshops in the seven regions under study involving a range of relevant stakeholders for developing normative backcasting scenarios based on sustainability targets at the level of lifestyles and identifying technological, lifestyle, behavioural, and institutional changes required for realizing the scenarios.
- Analyse the results of the backcasting scenarios and feed them into WP6 and WP7, followed by a cross-case comparison of results and process.

T5.3 is described as follows in the DoW. It comprises conducting backcasting pathways and implementation workshops for future integrated sustainable lifestyles for each case study region. The backcasting pathways and implementation workshops conducted in each of the case study regions will build on the results from the qualitative and the quantitative analyses in WP 4 and 5 and will involve relevant stakeholders in each region. The workshops will focus on how to diffuse, mainstream and integrate sustainable practices and lifestyles through developing transition

pathways and implementation agendas and how these can contribute to the backcasting scenarios developed in T4.3. The task consists of:

1. Developing backcasting pathways and implementation workshop methods for the lifestyle niches as a follow up of Task 4.3;
2. Conducting backcasting pathways and implementation workshops in each of the case study regions, and
3. Report and summarise results of the workshops and make a cross-case evaluation.

1.3 Outline of this report

This report makes up D4.3, which is the deliverable on T4.3. It consists of 3 parts. The first part (Chapter 1) provides an introduction to participatory backcasting in Chapter 2. In Chapter 3 it presents the backcasting methodology for sustainable lifestyles and a green economy at the regional level as it has been developed for the GLAMURS project. It comprises both the backcasting scenario workshops of task T4.3 and the backcasting pathways and implementation workshops of Task T5.3.

The second part consists of chapters on each backcasting scenario and vision workshops in six regions in Europe studied in the GLAMURS project. Each chapter has been written by authors who have been involved in the local backcasting visions workshops. This deliverable does not include a backcasting vision workshop from Scotland. In Scotland existing visions were used as an input to a pathways and implementation workshop, which will be included in deliverable D5.2.

The third part finally compares the different results of the vision workshops across the European regions both on its applied methods and actual results. This deliverable closes with overall conclusions and recommendations.

Finally, results and practical guidelines for the second series of workshops that are part of T5.3 can be found in Deliverable 5.2 (Quist and Leising 2016)

2. Participatory Backcasting

Jaco Quist (TU Delft)

2.1 Introduction of backcasting

2.1.1 Backcasting as a normative approach to foresight

Backcasting literally means looking back from the future. It can be defined as "generating a desirable future, and then looking backwards from that future to the present in order to strategise and to plan how it could be achieved" (Vergragt & Quist 2011: 747). It may but does not always include implementation and generating follow-up activities contributing to bringing about the desirable sustainable futures. Backcasting is a normative approach to foresight using desirable or so-called alternative futures, instead of likely or possible futures (Quist 2007). Due to its normative nature, it is very well suited for sustainability challenges, as sustainability is a normative concept too. Backcasting is very different from regular forecasting, which looks to the future from the present and is not (or only to a very limited extent) normative. Backcasting is also different from exploratory scenario approaches that aim at generating several possible or plausible futures and that generally aim at mapping uncertainty and complexity. Whereas forecasting is used to generate likely futures, also referred to as Business-As-Usual (BAU) scenarios, exploratory scenario approaches – like context scenario approaches developed at Shell or the model-based scenarios generated by IPCC – generate plausible or possible futures, also referred to as exploratory scenarios.

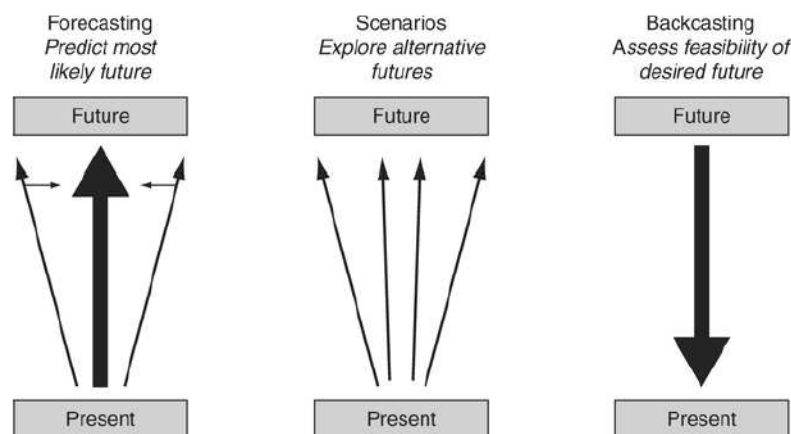


Figure 2.1: Three types of Futures studies focusing on (i) likely futures using forecasting, (ii) possible, alternative futures, using exploratory scenario approaches, and (iii) desirable futures, using backcasting or other normative foresight approaches.

Backcasting is particularly useful in the case of complex problems, when there is a need for major change, when dominant trends are part of the problem, when there are side-effects or externalities that cannot be satisfactorily solved in markets, and when long time horizons allow for future alternatives that need time to develop (Drehborg 1996). These kinds of problems have also been referred to as 'wicked' or 'unstructured' problems; most sustainability problems are obviously this kind of problems. Höjer and Mattson (2000) have pointed to the relevance of doing forecasts and

trend extrapolations whether backcasting is needed. Finally, Giddens (2009: 98-100) has proposed to use backcasting as a sustainable alternative to traditional planning, and as a tool for moving toward alternative futures when dealing with climate change.

2.1.2 Short history and recent developments

Backcasting was proposed in the 1970s in energy studies (e.g. Lovins 1977, Robinson 1990) and later also applied to sustainability planning (e.g. Robinson 1990) and to sustainable organisations (Holmberg 1998). Since the early 1990s it has developed into a participatory approach, taking off in the Netherlands (Weaver et al 2000, Quist & Vergragt 2006), Canada (Robinson 2003) and also Sweden (Holmberg 1998, Dreborg 1996, Carlsson-Kanyama et al 2007).

Other examples of participatory backcasting can be found in various European collaborative research projects (e.g. Kok et al 2006, Kok et al 2011), while related participatory vision development and assessment projects can be found in several countries (e.g. Eames & Egmore 2011; Sondejker 2009). Though most participatory backcasting studies involve (expert) stakeholders, examples involving citizens, consumers or end-users can increasingly be found. Citizens were involved in vision development and backcasting workshops in sustainable urban planning (Carlsson-Kanyama et al 2007) and in developing and evaluating local and regional energy futures in Canada (Robinson 2003, Robinson et al 2011). Strong citizen involvement was also part of local vision development (Kok et al 2006) and defining sustainability research agendas in the UK (Eames & Egmore 2011). In addition, the 'Strategies towards the Sustainable Household' (SusHouse) project involved societal stakeholders like consumer associations and environmental organisation as well as consumers/citizens (Quist et al 2001, Green & Vergragt 2002, Quist 2007, see also Quist 2016). In the SusHouse project, experts and stakeholders were involved in visioning and backcasting workshops, whereas three kinds of consumers were involved in focus groups in which visions were assessed and complemented.

Interesting recent participatory backcasting studies include the BIG2050 (Building Ideas Glocally for 2050) as reported by Georgina Guillen and Marina Nicolau (2013) and the backcasting within organisations as part of the LOCAW project (e.g. Dumitru et al.2013), whereas backcasting and transition management have been combined in the community arena methodology in the InContext project (see also the next section). Other interesting backcasting studies involving citizens, communities or dealing with consumption include the FP7 SPREAD project (Mont et al 2014, Neuvonen et al 2014), the Consensus project in Ireland (e.g. Doyle and Davies 2013, Davies 2015), and some local climate change studies in Sweden (Milestad et al 2014, Carlson-Kanya et al 2013).

2.1.3 Recent developments: Transition Management for communities and local settings

Next to participatory backcasting, transition management is a related major normative approach to sustainability. Transition management has rapidly emerged over the past decade as a new approach addressing complex societal problems and the governance of these problems towards sustainability. It is a participatory learning and experimenting process aiming at creating agency that can put pressure on dominant policy (Loorbach 2007, 2010). The transitions approach

assumes that wicked problems that persist over time require a fundamental change in the structures, cultures and practices of the societal system for bringing about sustainability in the system under study. The transformative processes of change are called sustainability transitions and take a long-time period (over 25 years) to materialise (Grin et al. 2010, Frantzeskaki & De Haan 2009). Until now most transition management studies have focussed on production systems or production and consumption systems. Transitions have been defined as the structural changes, societal process and mechanisms through which novelty in niches matures and becomes mainstream, heavily influencing the dominant practices of consumption and production at the meso-level of socio-technological regimes. Transition Management has also been described as a reflexive governance approach aiming at exploring, initiating and facilitating sustainability transitions, while taking into account system thinking, complexity and uncertainty (Loorbach 2010).

Recently, transition management was applied on the local level with citizens in the Charlois district in Rotterdam (Wittmayer et al 2011). Other even more recent examples include local urban transition arenas that have been applied in major cities across Europe in the MUSIC project (Nevens et al 2014) including cities like Ghent (Belgium), Aberdeen and the development of the community arena methodology in the InContext project. The community arena methodology, in which transition management and backcasting has been combined and integrated, has been developed in the InContext project (Wittmayer et al 2011, 2015) and has been applied in three communities across Europe: the rural municipality of Finkenstein in Austria, the medium-sized town Wolfhagen in Germany, and the deprived urban district of Carnisse in Rotterdam (e.g. Wittmayer et al 2015, Quist et al 2013). A key issue in the InContext project was to support the transition to sustainable behaviour in local urban communities by aiming for a better understanding of how the inner and outer context on individual and group level interrelate with individual and collective strategies and/or practices. The objectives of the InContext project were (1) to facilitate pathways towards alternative, more sustainable behaviours of individuals and (2) to foster collective activities towards more sustainable communities.

Another interesting example of transition management at the local level has taken place in the CRISP project. Wehrmeyer et al. (2013) and Iacovidou and Wehrmeyer, (2014) have reported on the transition pathways generated by teenagers and professionals in 6 EU countries as part of the CRISP project.

2.1.4 Variety and types in backcasting

More detailed overviews of the development and types of backcasting have been provided elsewhere (Quist & Vergragt 2006, Quist 2007, Wangel 2011). These reviews show a considerable variety in backcasting approaches and the way they are turned into methodologies. Variety can be found in the degree and way stakeholder participation is organised, the kind of methods that have been applied within a backcasting framework, the topics and the scale addressed (e.g. local, regional, national, consumption systems, or societal domains), and whether the focus is on impact (e.g. Quist et al 2011) or diversity. Variety is also found in the applied terms. Several authors only refer to backcasting as the backwards looking step/analysis, while they use other names for the entire approach (Quist and Vergragt 2006, Vergragt and Quist 2011). For instance, Van de Kerhof et

al 2003) who label their approach as Participatory Integrated Assessment and Rotmans et al (2001) who refer to backcasting as part of Transition Management.

Several types of backcasting can be distinguished (Wangel 2011; see also Höjer et al 2011): (i) target-oriented backcasting, which focuses on developing and analysing target-fulfilling images in which the target is usually expressed as a quantitative manner; (ii) pathway-oriented backcasting in which setting strict goals is considered less important, the focus is on how change can take place and the measures that support the changes like policies, taxes, or behavioural changes; (iii) action-oriented backcasting in which the main objective is to develop an action agenda, strategy or action plan, the focus is on who could bring about the changes and realising buy-in and commitment among stakeholders; (iv) participation-oriented backcasting (pBC) in which backcasting is used as a creative workshop tool. It must be realised that several types can be combined within a single backcasting study.

These reviews also show that the key to backcasting is the generation and assessment of normative or desirable future visions or images. In this way backcasting including all its varieties can be seen as part of a family of foresight approaches that share the development of normative or desirable future images, which also includes transition management and even regular road-mapping.

2.1.5 Criticism on backcasting

Backcasting has also been criticised: it generally neglects aspects of governance and implementation (e.g. Wangel 2011). Also, it does not build on system innovation or transition theory, unlike transition management, and it generally neglects economic conditions and aspects (Vergragt and Quist 2011, Wittmayer et al 2011). In backcasting studies the focus is often on changing existing socio-technical systems, while paying limited or no attention to cultural changes or changes in the economic system that would support the envisioned changes.

2.2 Participatory backcasting

2.2.1 Stakeholders, Visions, Learning

Backcasting (Quist and Vergragt 2006, Quist 2007) can thus be seen as normative, long-term oriented, system-oriented, taking a broad view on sustainability and sometimes participatory. The shift to participatory backcasting and the growing awareness of realising implementation, follow-up and spin-off in the direction of sustainable development allows for considering backcasting as consisting of 3 key elements:

- **Participation:** Involving stakeholders/actors in a meaningful process of learning and vision generation.
- **Learning:** Learning by stakeholder/actors from each other and from developing visions (that will contain both opportunities and challenges to them) aiming at in particular so-called higher order learning through reflection on own assumptions and worldviews.

- **Developing** visions that are images of alternative, desirable, sustainable futures, but also have the potential to become vehicles for dialogue and learning, as well as shared social constructs (visions) that can provide guidance (what to do) and orientation (where to go).

In a participatory backcasting study stakeholders meet and are involved in developing, assessing, discussing and adjusting future visions. Ideally, the backcasting study functions as a protected experimental space, in which ideas can be articulated and discussed, while ignoring the interests and rules of the outside world. This all stimulates first and higher order learning among the stakeholders involved (Quist 2007, Van de Kerkhof et al 2003, Brown et al 2003). Learning may not only result in increased awareness of and support for these sustainable futures, but may also lead to increased understanding how these futures link to strategic opportunities for stakeholders, as well as on activities that may contribute to bringing about the future vision. Stakeholders seizing opportunities in the future vision can initiate activities or start collaboration to initiate joint actions and activities, which can be research, business-related activities, policy development, user pilots, or others. This process also leads to diffusion of the visions, and the visions can become guiding images to the actors involved (Quist 2007, Quist et al 2011). For a broader exploration of how backcasting and visions may relate to sustainability transitions and lifestyles, see Quist and Pesch (2015).

2.2.2 A methodological framework for backcasting

Despite the variety in backcasting, it has been possible to develop a comprehensive methodological framework (Quist & Vergragt 2006, Quist 2007), consisting of five steps, four types of methods and three kinds of demands (see Figure 2.2 and 2.3). Additional characteristics include being problem- and system-oriented and by turning visions into immediate actions.

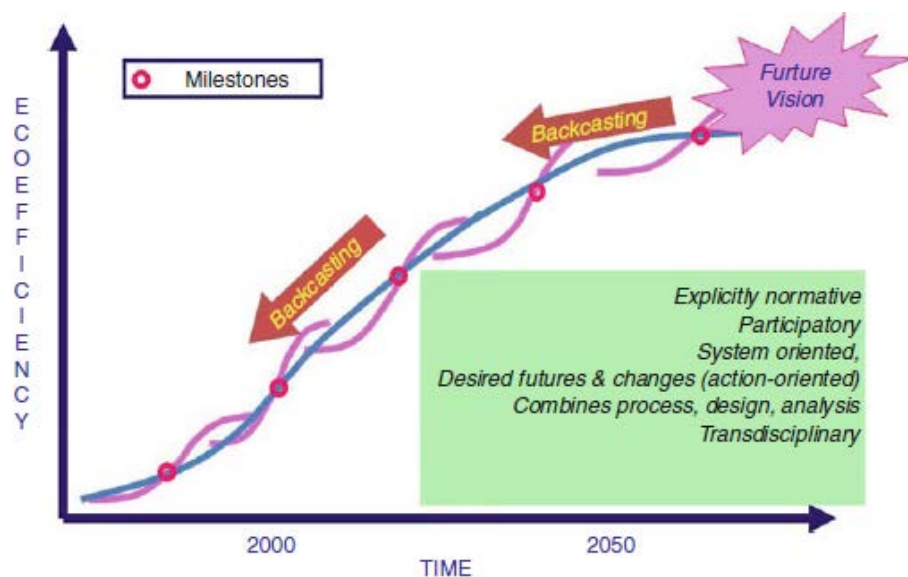


Figure 2.2: Backcasting: key concept and characteristics (Quist 2013)

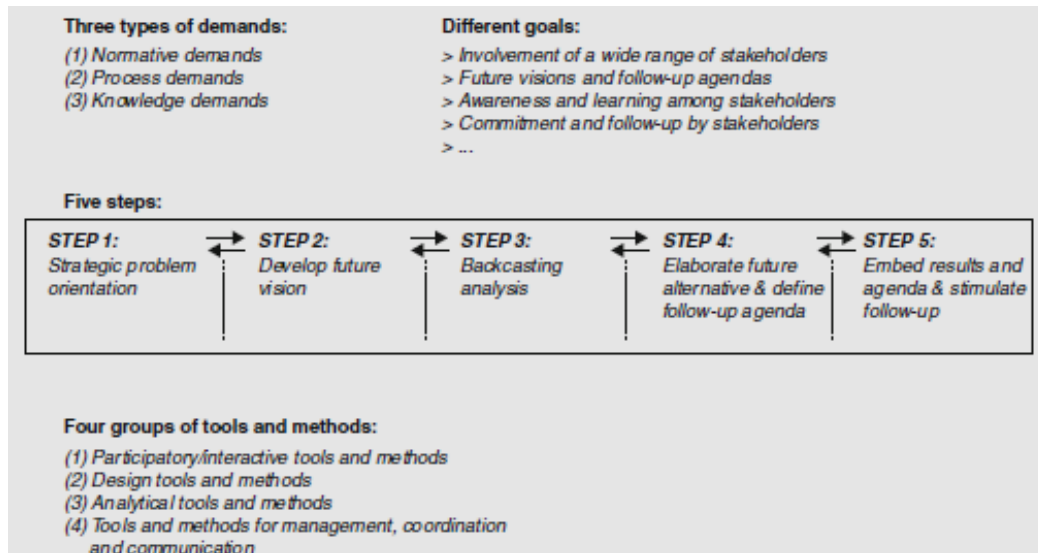


Figure 2.3: Methodological framework with steps, types of methods and demands (Quist 2007).

The developed framework consists of five steps and the outline of a toolkit containing four groups of methods and tools. The backcasting approach reflected by the framework is not only inter-disciplinary (by combining and integrating tools, methods and results from different disciplines), but also trans-disciplinary in the sense that it involves stakeholders, stakeholder knowledge and stakeholder values. It must be noted that though the approach is depicted stepwise and seems to be linear, it definitely is not. Iteration cycles are likely to occur, while there is also a mutual influence between steps following one to another. In addition, the first step includes defining and bounding the system and includes defining time horizon, the number of visions to be developed, and developing the trans-disciplinary or multi-disciplinary research design. Furthermore, four groups of tools and methods are distinguished. In each step of participatory backcasting, methods and tools can be applied from each group. The following five steps have been defined:

- STEP 1 Strategic problem orientation
- STEP 2 Develop future visions / normative scenarios
- STEP 3 Backcasting analysis
- STEP 4 Elaborate future analysis and defining follow-up agenda
- STEP 5 Embed results and agenda & stimulate follow-up & implementation

The 4 groups of tools and methods that make a toolbox for backcasting (Quist and Vergragt 2006):

- **Participatory tools and methods.** This group comprises all tools and methods that are useful for involving stakeholders and generating and guiding interaction and dialogue

among stakeholders. It includes specific workshop tools, creativity tools, discussion tools and tools supporting stakeholders to conduct backcasting and participatory envisioning.

- **Design tools and methods.** This group consists not only of tools and methods for scenario construction, but also for elaboration and detailing future systems, as well as for the design of the stakeholder involvement process.
- **Analytical tools and methods.** This group of tools and methods is meant for assessing scenarios and designs and includes consumer acceptance methods, environmental assessments, and economic analyses. It also includes methods for evaluation of stakeholder interaction and stakeholder analysis.
- **Tools and Methods for management, coordination & communication.** This group consists of methods and tools that are relevant for managing the project and the stakeholder involvement process. It includes the methods, which can be applied for shaping and maintaining stakeholder networks, communication and coordination and is sometimes also referred to as the group of organisational tools.

The framework also distinguishes three types of demands or criteria: (i) normative demands; (ii) process demands; and (iii) knowledge demands. **Normative demands** reflect the goal-related requirements for the future vision, as well as how sustainability is defined in the case under study and how sustainability is turned into principles or criteria that future visions should meet. **Process demands** are requirements with regard to stakeholder involvement and their level of influence in the way issues, problems and potential solutions are framed and resolved in the backcasting study. **Knowledge demands** can be set to distinguish between the scientific and contextual knowledge strived for and how these are valued against each other. Stakeholder knowledge and interdisciplinary knowledge does in general not fully meet regular disciplinary academic standards, but is crucial for both process and content. Most demands need to be specified in the beginning of a backcasting study. This can be done by the organisers, but it may also be the outcome of early stakeholder involvement. It is also possible that demands are partly set by the organisers and are partly based on stakeholder discussions. Due to the trans-disciplinary nature of participatory backcasting it can be seen as cases of co-production of knowledge, in which stakeholders involved not only articulate desires, ideas and expectations on sustainable futures, but also contribute in an active way to generating and integrating knowledge by providing their (contextual) expertise and (contextual) knowledge.

In addition, various goals can be distinguished in backcasting studies, which can be process-related, content-related variables, or knowledge-related. The difference between goals and demands is that goals are about the achievement at the end of the study, whereas demands refer to conditions and criteria for either the future vision or for the backcasting study. In general, multiple goals are set in participatory backcasting, though they are not necessarily all equally important. Possible goals for backcasting studies include:

- Generation of normative options for the future and analysing these on their environmental improvement, opportunities and other consequences (content goal);
- Putting attractive future visions or normative scenarios on the agenda of relevant societal and political arenas (process goal);

- A follow-up agenda containing activities for different groups of stakeholders contributing to bringing about the desirable future (content goal);
- Stakeholder awareness and learning with respect to the options, the consequences and the opinions of other stakeholders (process goal);
- Stakeholder support and commitment with respect to vision, designs, analysis and commitment to the follow-up agenda (process goal).

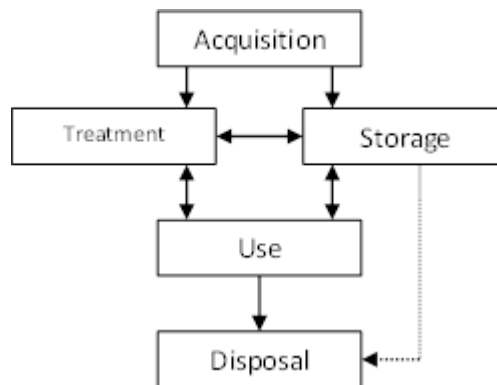


Figure 2.3: Schematic representation of activities in household functions.

2.3 Example: sustainable household food consumption¹

The EU-funded SusHouse (Strategies towards the Sustainable Household, 1998 - 2000) project was concerned with developing and evaluating strategies for transitions to sustainable households. The starting point of the SusHouse project was that a combination of technological, cultural and structural changes is necessary to achieve a Factor 20 environmental gain in the next 50 years through system innovations, taking both consumption and its interconnection with production through products and product usage into account.

One of the cases was Sustainable Household Nutrition (SHN) in the Netherlands, which focused on the food system from a household and consumer perspective. The SHN backcasting experiment in the Netherlands (1998-2000) and involved a broad range of stakeholders from research, business, government and societal groups in two one-day workshops. Results from this case are presented below following the five steps of the backcasting framework presented earlier. Another starting point was that sustainability in household consumption was seen from key activities conducted in the household (see Figure 3). These activities relate both to consumption and to lifestyles.

STEP 1 '**Strategic Problem Orientation**' consisted of analysing the current household food consumption system in the Netherlands and it included a stakeholder analysis, system analysis, and identification of major trends and sustainability issues. The stakeholder analysis covered stakeholders on the demand side, the supply side, research bodies, government and public interest groups. The research included both desk study and interviews with major

¹ Taken from Quist and Vergragt (2006), Quist (2007) and Quist et al (2010)

stakeholders; the interviews were also meant for involvement into the project and raising awareness for the workshop.

In STEP 2 '**Vision Development**' selected stakeholders were invited for a stakeholder creativity workshop aiming to identify sustainable ways of future function fulfilment. Before the workshop, participants received an input document covering the main results of step 1. The workshop results consisted of clusters of ideas for sustainable household food consumption. These were further elaborated by the project researcher who also conducted the initial backcasting analysis, which is STEP 3. In fact, STEP 2 and STEP 3 are closely connected, as the stakeholder workshop included both vision development and backcasting techniques, whereas work after the workshop included further processing of the workshop results leading to further vision elaboration and backcasting. The box below summarises one of the visions and the initial backcasting analysis. Three future visions were developed based on the results of the first stakeholder creativity workshop.

- In the first vision, which was entitled 'Intelligent Cooking & Storing', environmental improvement was based on high-tech and ICT-based solutions facilitating a lifestyle that highly resembles existing urban life styles in developed countries.
- In the second vision, which was called 'Super-Rant', eating out and food shopping were integrated at neighbourhood level, also using more eco-efficient technologies.
- The third vision was called 'Local and Green' and was based on the idea of people growing vegetables themselves and on consumption from local and regional food chains as much as possible.

In STEP 4, three assessments of the future visions were conducted: (i) an environmental assessment using a system approach in combination with indicators; (ii) an economic assessment using a questionnaire to assess each vision on socio-economic variables, and; (iii) a consumer acceptance analysis involving three different consumer focus groups to evaluate the acceptability of the visions to consumers and to identify adopter profiles. The assessments showed that the Intelligent Cooking and Storing vision and the Local and Green vision could reduce the environmental burden considerably. Surprisingly, with regard to the Super-Rant vision it turned out that, on the basis of the energy requirements of restaurants in the late 1990s, the environmental impact could actually increase considerably. Interestingly, the consumer groups liked the Local and Green most, especially because of the rural and suburban living and the houses with gardens. It was not possible to select the single most sustainable future vision, but arguably they depicted more sustainable alternatives to existing ways of living.

Intelligent Cooking and Storing (ICS)

Intelligent Cooking and Storing (ICS) is about a household that can be characterised by high-tech, convenience, do-it-yourself and a fast way of living. Kitchen and food management is optimised with help of intelligent technology, which also organises ordering (electronically), and delivery with help of a so-called Intelligent Front Door. Water and energy are re-used where possible through cascade usage. Meals are either based on a mixture of sustainable ready-made and pre-prepared components (including vegetarian or novel protein foods replacing meat) or ready-made meals containing a microchip communicating cooking instructions with the microwave oven. Packaging is biodegradable and contains a (plastic) microchip with relevant consumer information about origin, treatment and preparation. Proposals included (1) Intelligent kitchen, (2) Biodegradable and intelligent packaging; (3) Sustainable ready-made meals and meal components (4) Food delivery service and intelligent front door (5) Novel Protein Foods from non-animals sources.

Stakeholder panorama

Key stakeholders in this vision are consumers, retailers, food processors, packaging producers, kitchen equipment and appliances producers and government.

Environmental profit stems from:

- Sustainably grown ingredients (inclusive new ingredients take over the function of unsustainable ingredients like novel protein foods).
- System optimisation (through integrated approach to the kitchen, waste reduction).
- Re-use of heat and water (cascade usage) in the household.
- Waste composting and biodegradable packaging.

Necessary changes (preliminary backcasting analysis):

- Technological: novel kitchen technology and appliances (including a huge efficiency increase), new ICT for kitchen systems and production chain management, plastic chips, biodegradable packaging, cascade usage for water and energy, sustainable transportation, distribution and delivery systems.
- Cultural/behavioural: sustainability is taken for granted, further shift towards ready-mades and convenience, acceptance of new technologies, shift towards more sustainable substitutes (e.g. vegetable based Novel Protein Foods instead of meat), shift towards services.
- Structural/Organisational: the role of supermarkets will change due to large-scale delivery and a shift towards food management services, kitchen manufacturers deliver complete automated systems that communicate instead of single kitchens and single appliances, close co-operation and joint management throughout the complete production chain plus making information available to consumers; sustainable food production (regional or efficient large scale production where this can be most environmentally efficient).

Box 2.1: Intelligent Cooking and Storing Vision and initial backcasting analysis (Quist 2007: p136)

In STEP 4 'Elaboration and Agenda' 'further stakeholder involvement took place through a second workshop. In the second stakeholder workshop (i) the backcasting analysis was extended, (ii) the participants evaluated the visions for which a specific evaluation technique was used and (iii) implementation proposals and policy recommendations for each of the three future visions

were developed. The discussions showed that the Intelligent Cooking and Storing vision was seen as the dominant direction, whereas the Super-Rant and Local and Green visions were appreciated because of their community and public values that would be important for a sustainable future too and would require more stimulation than the dominant development direction of high-tech and individualisation.

STEP 5 'Embedding & Implementation' consisted partly of the second stakeholder workshop described previously; the workshop had both the aim of generating content and the aim of stimulating endorsement and embedding. After the workshop (final) reports were written for the case study, while also spin-off meetings and initiatives with smaller groups of stakeholders were organised for developing research and demonstration proposals. For instance, a workshop focusing on domestic appliances for treating meat alternatives at home, which was organised jointly by a research body and a company. After the workshop the organising parties developed a concrete research proposal on optimising kitchen appliances and food supply chains from an environmental point of view, together with other stakeholders from different societal groups. The Dutch research group originally involved in the SusHouse project also developed a programme proposal for a transition towards sustainability in eating-out and the food-service sector. Visions and other results were also used in a related project also dealing with sustainable food consumption. However, it proved hard to get proposals funded, so in this sense the impact was rather limited.

3. GLAMURS backcasting workshop methodology

Jaco Quist (TU Delft)

3.1 Backcasting workshop methodology

3.1.1 Starting points for the GLAMURS backcasting methodology

The starting points discussed below have been discussed with the researchers of GLAMURS and are also the outcomes of discussions organised during partner meetings.

Backcasting as a workshop tool

To start with, in the GLAMURS proposal, as well as in the DOW, T4.3 and T5.3 have been described as Backcasting workshops, not as a full backcasting approach. That means that the emphasis here is on backcasting as a workshop tool in which relevant stakeholders gather. In the first series of workshops (T4.3) visions or normative backcasting scenarios for sustainable lifestyles and a green economy have been developed for each region studied. In the second series of workshops (T5.3) the emphasis has been on assessing and complementing the backcasting scenarios, in addition to define pathways and implementation and follow-up agendas. The latter should in particular lead to plans and agendas for stimulating the lifestyle domains that are studied in a specific region and should include benefits for initiatives, though not necessarily only for the initiatives under study. There seems to be more value to consider initiatives at the regional level as a cluster or a network, rather than as one specific initiative.

Focusing on backcasting as a workshop tool has two implications. The first one is that only qualitative elaboration can take place. As far as any quantification of the scenarios can take place at the regional level, this needs to take place in other work packages on environmental analysis or economic analysis, as also described in the GLAMURS DOW. Second, both series of workshops require preparatory activities and post-workshop activities in order to be able to get all results out of the workshops. For instance, it might be needed to extend the existing actor and stakeholder analysis from T5.1 at the regional level, depending on how much has been done at the regional level, to extend also on major lifestyle and consumption issues in each region before the first workshop, building on the regional analysis. The work done already as part of T5.1 can be used for the backcasting workshops. Furthermore, workshops mainly result in useful but rather fragmented results that need further elaboration by the case study research teams.

Visions of sustainable lifestyles

Another issue is how to generate several sustainable lifestyle visions at the regional level that show on the one hand sufficient diversity for a specific region and that at the other hand provide some similarities across the 7 regions studied in GLAMURS. Therefore, it has been proposed not to work with an entirely free brainstorm around a question like "How can we get a sustainable lifestyle in 2040 in this region" in the first series of workshops, but to use major dimensions that can make up a scenario logic that can be used for all regions and all lifestyle domains. Originally two dimensions have been discussed:

1. **Sufficiency versus green growth & eco-efficiency.** Sufficiency stands for consumption and lifestyles in which the level of material consumption is strongly reduced, and in which quality of life is more determined by wellbeing, social relationships, more quality time, less time pressure. It can also be related to alternative economic models like degrowth, steady state (developed by Herman Daly), and Tim Jacksons (2009) plea for prosperity without growth. By contrast, eco-efficiency in consumption stands here for consumption that relates to green growth and the current discussions on circular economy. Green growth has been described as a path of economic growth that uses natural resources in a sustainable manner. It is used globally to provide an alternative concept to typical industrial economic growth. Circular Economy has been described as an economy producing no waste and extending the lifetime of products and materials before recycling. Key is here reducing environmental impact by technological improvement, without changing our existing lifestyle, way of life, or our economic logic in a fundamental way. Instead, the concept of green growth builds on developing so-called clean-tech industries (e.g. renewable energies, water production, bio-based industries), whereas the concept of circular economy builds on closing material cycles as much as possible through maintain, re-use, retrofit/remanufacture, and recycle products as much as possible.
2. **Collaborative consumption & do-it-yourself versus servicing-out or purchasing products** (the latter building on regular market transactions and traditional business models). On the one hand, this dimension builds on developments in prosumers and collaborative consumption. This includes consumers or communities that increasingly produce services or products themselves and provide them to each other. Good examples can be found in energy (citizen energy cooperatives), mobility (peer-to-peer car sharing), and in Local Social Economies using LETS (local exchange trading systems and local currencies in which services are exchanged and equipment can be borrowed. On the other hand, this is contrasted by regular buying of products and services through individual market transactions. However, a market orientation does not suggest that this cannot be part of a sustainable lifestyle, but that the sustainable lifestyle is based on sustainable products and services that are supplied by either SMEs or larger producers

After some discussions within the GLAMURS project, it was concluded that the first distinction between sufficiency and green growth is more meaningful for stimulating diversity of visions in the backcasting workshops than the second distinction between collaborative consumption versus regular buying of products and services through markets and transactions. Collaborative consumption and a market orientation do not necessarily exclude each other and can be combined in a single vision, whereas that is not the case for sufficiency versus green growth. Nevertheless, an intermediate position of socially embedded growth has been proposed (Smulders 2015), which covers an intermediate position between green growth and sufficiency. Another meaningful distinction emerged after the workshop (see chapter 10) and is about the distinction between rural and urban contexts, as well as government focus versus market orientation (see chapters 3 and 10).

Stakeholder benefits and co-production of knowledge

Furthermore, the two series of workshops also contributes to additional stakeholder benefits and co-production of knowledge in the GLAMURS project through:

- Exchange of experiences and knowledge between initiatives in the case study regions.
- Contributing to region-wide dialogue among relevant stakeholders, in particular stimulating discussion and exchange between bottom-up initiatives, regional authorities and relevant policymakers, as well as other relevant stakeholders in the region.
- contributing to learning among stakeholders and commitment for the outcomes of GLAMURS research at the regional level, including support measures for initiatives in the lifestyle domains studied in a region.
- Contributing to agendas, plans and proposals for diffusing the lifestyle and the topic of the initiative within region, and contributing to creating agency and support for that.
- Exchange of relevant experiences from cases across Europe, e.g. through dissemination at the workshops taking place. This can be done in addition to the stakeholder case study exchange program that is currently being developed within GLAMURS.

The backcasting workshops should also be seen as instruments for co-production of knowledge, as stakeholders have the opportunity not only to contribute through their knowledge and learn from each other, but also to articulate questions and issues that may need further attention in the case studies or elsewhere in the project.

Linking the workshops of T4.3 & T5.3

Another starting point is that the WP4 workshops and the WP5 workshops are connected in a combined backcasting methodology. Moreover, in both workshops there must be time to discuss issues and barriers for initiatives and their lifestyles, in order to generate (sufficient) stakeholder benefits to them, not only between initiatives, but also with other relevant stakeholders (e.g. government officials). So, both backcasting workshops will be organised at the regional level. One additional advantage is that both workshops will have the same target group consisting of key persons on sustainable lifestyles and sustainable consumption in the region (policy makers, researchers) in combination with key people from the initiatives under study as well as related initiatives.

3.1.2 GLAMURS backcasting methodology for sustainable lifestyles and a green economy

Based on the overview in Chapter 2 and the starting points discussed above, T4.3 and T5.3 can be turned into the following backcasting methodology for sustainable lifestyles and a green economy. It consists of a strategic problem orientation that is conducted in T5.1 and a backcasting pathways and implementation workshop that is not further discussed here, but will be reported in D5.2. More details for the sub-tasks and activities for the backcasting vision workshop part of T4.3 can be found in the next section.

STEP 1 Strategic problem orientation	Done as part of T5.1
STEP2 Backcasting vision workshop	T4.3 consisting of: A. Method Development B. Workshop Preparation stage C. Vision Workshop day D. Post workshop activities E. Cross case comparison & preparing D4.3 (TU Delft)
Steps 3-5 Backcasting pathways and implementation workshop	T5.3 consisting of: A. Method Development B. Workshop Preparation stage C. Backcasting Workshop day D. Post workshop activities E. Cross case comparison & preparing D5.2

Table 3.1: Backcasting workshop methodology for the GLAMURS project

3.2 Task 4.3 Backcasting vision workshop guidelines

3.2.1 Overview and introduction

Goals for the first workshop have been:

- Generation of future visions for sustainable lifestyles at the regional level and an inventory of issues and potential solutions for the region.
- Participation of a wide range of stakeholders to not only inform on the development of visions, but also to realise awareness and learning among stakeholders involved with respect to the future vision and other aspects of transitions to sustainable lifestyles.
- Learning and first commitment among participants, as well as exchange of ideas, opinions and extension and broadening of existing networks.
- First ideas on goals and targets related to the changes, policies and activities in achieving the visions.

The table below (Table 3.2) distinguishes tasks A-E as subtasks of T4.3 and mentions activities for each subtask that were needed for preparing and conducting workshops as well as for processing workshop results after the workshop and reporting to participants and within the GLAMURS project.

A. Method Development TU Delft	1. Development of backcasting workshop methodology
B. Workshop Preparation stage all case studies	1. Update regional stakeholder analysis 2. Extension regional analysis focusing on sustainable lifestyle and consumption aspects 3. Stakeholder mobilisation, for instance through a few stakeholder interviews 4. Test workshop

	<ol style="list-style-type: none"> 5. Practical workshop organisation: location & program facilitators script 6. Practical organisation: writing input documents
C. Workshop day all case studies	<ul style="list-style-type: none"> • Welcome, introduction + facts and figures • Issues & concepts session • Vision development & elaboration session • Final discussion and evaluation • Drinks/ informal gathering
D. Post workshop all case studies	<ol style="list-style-type: none"> 1. Evaluation among participants and among organisers (learning) 2. Report in country language 3. Further development of visions 4. Feed relevant results into WP6 & WP7² 5. Summary report in English
E. Cross case TU Delft	<ol style="list-style-type: none"> 1. Comparison of visions in case studies 2. Comparing experiences & learning across cases (among organisers & by participants) 3. Compiling Deliverable

Table 3.2: Backcasting vision workshop sub-tasks and activities for T4.3 workshop

3.2.2 Subtask A: Method Development

The outcome is the current chapter. The proposed time horizon is 2040. Goals have been set for both workshops. Process demands can be defined as giving high levels of influence to the workshop participants. Knowledge demands are not needed in further detail and normative demands need to set criteria for what can be considered as a sustainable lifestyle. For now it is proposed to consider sustainable lifestyles as those lifestyles that are (i) significantly less resource-intensive, (ii) low-carbon, and (iii) allowing for and stimulating a good and meaningful life.

3.2.3 Subtask B: Workshop Preparation stage

B. Workshop Preparation stage all case studies	<ol style="list-style-type: none"> 1. Update regional actor analysis 2. Extension regional analysis focusing on sustainable lifestyle and consumption aspects 3. Stakeholder mobilisation, for instance through a few stakeholder interviews 4. Test workshop 5. Practical workshop organisation: location & program facilitators script 6. Practical organisation: writing input documents
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B1 Update regional actor analysis & adding names

In the actor analysis of T5.1 has been asked to identify relevant actors at the level of the region, where names of relevant people have been added. In addition, working with the initiatives might also have extended our knowledge of relevant actors and persons. The following groups can be distinguished, that had to be adjusted to both the specifics of the region and the specifics of the initiatives:

² It is not clear yet, whether providing inputs to WP6 and WP7 goes directly from the case study teams, or whether aggregation is needed first.

- Key persons of the initiatives under study, as well as lead people from similar initiatives in the region.
- Relevant environmental organisations in the region that also work on sustainable lifestyles and sustainable consumption. Most relevant persons are directors/coordinators, persons working on sustainable lifestyles or sustainable consumption or (senior) staff working on the lifestyle domain.
- Relevant units/departments of regional government or relevant municipalities. Not many governments have special units for sustainable lifestyles or sustainable consumption, but there are units or staff members for sustainable development, or for topics related to the lifestyle categories, e.g. renewable energy, sustainable building, etc.
- Relevant experts in the region on either sustainable lifestyles and consumption or on different lifestyle categories. These are for instance research colleagues, but also visionary and inspiring people in the region. It is interesting to cover expertise on sufficiency, degrowth, as well as on collaborative consumption and services.
- In some regions relevant firms or SMEs connected to the initiative or the lifestyle category were identified as well.

The outcome of the regional actor analysis was an updated list of actors, containing 30-40 names of people, which has been the starting point for engaging persons in the workshop. The update has been done in a case study team meeting, allowing for contributions from all team members. The goal was to get 15-25 participants in each regional workshop.

B2 Update regional analysis focusing on sustainable lifestyle and consumption aspects

The regional analysis provided an overview on its economic sectors and main sustainability problems. The purpose was to extend the original inventory with relevant lifestyle and consumption issues, as well as major social issues in the region. The outcome was a list summarising main economic sectors, main sustainability problems, main lifestyle/consumption issues and main socio-economic issues for society in the region.

B3 Stakeholder mobilisation

Generally, stakeholders do not participate automatically when invited for a workshop. Case study teams needed to engage them in a more active way via personal contacts, or by having a meeting or interview in advance. This has been the case in particular for policy makers or experts at the regional level.

B4 Test workshop

It was recommended to spend a few hours or a case study team meeting to develop a vision for a sustainable lifestyle and to apply the workshop guidelines within a smaller group. This was in particular relevant when having limited experience with facilitating stakeholder workshops.

B5 Practical workshop organisation

A location and room needed to be reserved 4 to 8 weeks before the workshop. The venue could be at the university or institute or outside. It was important that the location allowed both for

plenary sessions for all participants and for working in smaller groups of 4-5 persons. Group work could be both in separate rooms (if available), or in the main room. Obviously, catering (coffee, tea, lunch, drinks after) needed to be organised too. Another important consideration was the preferred positioning of the participants in the location (in a square, or around tables, or regular).

Whereas a program outline is given below, it has been recommended to make a more detailed workshop script of 3-5 pages, which shows the program at the level of quarters of an hour. This detailed script also contained the questions for different parts of the workshop day, as it allowed for focusing on the (social) process of the workshop. The facilitator also included elements like name badges, paper, flip-over (sheets) and other brainstorming material and details about minute taking or recording plenary discussion sessions.

B6 Practical organisation: writing input document

Before the workshop day, information was provided to the participants about practicalities, the program, some information on the project and some initial results (if available). The practicalities also covered a checklist on equipment needed during the workshop, like flip-overs, tape to hang sheets, recording equipment, laptop and beamer.

3.2.4 Subtask C: Workshop Day

C. Workshop day all case studies	<ol style="list-style-type: none"> 1. Welcome, introduction + facts and figures 2. Issues & concepts session 3. Vision development & elaboration session 4. Final discussion and evaluation 5. Drinks/ informal gathering
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C1 Welcome, introduction + facts and figures

The purpose of this part of the workshop was for the participants to get to know each other and the GLAMURS project. The welcome session thus included an introduction round of the participants, a basic introduction on the project, the workshop, and some basic facts on the topics of the case study, complemented with the distinguished strategies of (i) eco-efficiency, (ii) sufficiency (degrowth), (iii) collaborative consumption and Do-It-Yourself, and (iv) greening products & services, as well as on the relevance of bottom-up initiatives as studied in the region.

C2 Issues & concepts session

The purpose of this session was to get a better understanding for the participants about what a sustainable lifestyle is, what key aspects/elements of sustainable lifestyles are, and what currently main issues/problems/barriers for sustainable lifestyles are. This was generally done in smaller groups using brainstorming with post-its, while each smaller group was facilitated by a person from the research team. The following steps in this task could be distinguished:

1. Brainstorm on key aspects/elements of sustainable lifestyles.
2. A: What are main issues/problems/barriers of sustainable lifestyles?
2. B: OPTIONAL Same question as question 2, but then focussing on citizen initiatives (in general, or for the lifestyle categories related to the initiatives).

3. Clustering (grouping together terms that relate to one another) after hanging flip-over sheets on the wall.
4. Set Priorities (participants can stick dots to the ideas/terms they think are most important).
5. Feed main results from each group back in a plenary as input for discussion on the priorities.
- 6.

C3 Vision development & elaboration session

The purpose of this part of the workshop was to generate first drafts of visions for sustainable lifestyles. It has already been mentioned that notes were needed and that groups have been asked to present on a flip-over sheet or in another way. The following steps could be distinguished:

1. Divide participants among smaller groups (ideally 4-5) in a meaningful way.
2. Provide them with the vision "assignment" and/or put it on screen, in particular relevant guiding questions. These include:
 - How can we have a sustainable lifestyle for food in 2050?
 - What are different (consumption) activities for this lifestyle?
 - What are key assumptions for this vision?
 - How do people live in the sustainable lifestyle vision?
 - How do bottom-up initiatives fit in this vision?
 - What products/technologies/services are used?
 - How about new technologies (e.g. ICT) or not?
 - How is culture and behaviour different compared to the present?
 - How can sustainability be enhanced in this vision?
 - Can the lifestyle be extended to another category (mobility, work-leisure, energy, living)?
3. Move to the next phase using backcasting questions:
 - What cultural and behavioural changes are needed for this vision?
 - What institutional and economic changes are needed for this vision?
 - What technological changes are needed for this vision?
 - How can these changes be realised and what activities/actions are needed for this?
 - Who is needed for changes and actions and what do they have to do?
4. Ask groups to make flip-over presentations based on their discussions and notes addressing main categories (vision, assumptions, changes, actions, required stakeholders).
5. Have presentations followed by questions and discussion after each presentation.

C4 Final discussion and evaluation

The official part of the first workshop ended with a final discussion on outcomes, how different visions relate to one another, and where connections or clustering was possible. It was interesting to ask how participants liked the workshop, what they have learned from the workshop, and to let them know how the research teams will proceed with the results.

C5 Drinks & informal gathering

Finally, it was recommended to have an informal gathering and drinks after the formal part of the workshop had ended.

3.2.5 Subtask D: Post-workshop activities

D. Post workshop all case studies	<ol style="list-style-type: none"> 1. Evaluation among organisers (learning) 2. Report in country language 3. Further development of visions 4. Feed relevant results into WP6 & WP7 5. Summary report in English
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D1 Evaluation among organisers, also based on participant feedback.

This was done during case study team meetings after the workshop.

D2 Report in country language

The reports (as presented in a shortened version in chapter 4-9) have first been written in the country language.

D3 Further development of visions

In general, the workshops results were rather fragmented and conceptual and need to be processed and elaborated by the case study teams. This includes combining visions from the workshop or making them more radical to stimulate diversity. Based on discussions among the GLAMURS case study teams, it was suggested to organise the visions around the following dimensions:

1. Core of the vision and assumptions for this vision
2. Lifestyle activities
3. Other actors & organisational aspects

This was extended with dimensions from backcasting aspects like:

- Different types of changes (cultural-behavioural, institutional-economic, technological)
- Activities needed
- Stakeholders needed to conduct the activities

D4 Feed relevant results into WP6 & WP7

This has become a separate activity that will go on after completing this deliverable and will be reported on elsewhere in the project.

D5 Summary report in English

The format is shown in Appendix A. These reports were the main inputs for the chapters in Part 2 Chapters 4-9).

3.2.6 Subtask E: Cross-case comparison

This has been done as part of preparing this deliverable and it consisted of the activities tabulated below.

E. Cross case TU Delft	<ol style="list-style-type: none"> 1. Comparing process (participation, activities, learning across cases) and applied methods and tools and whether that relates to the outcomes. 2. Comparison of visions in case studies and other content results 3. Compiling Deliverable
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E1 Comparing process and methods across cases

Results from all workshops have been compared on the following aspects:

1. preparatory activities,
2. participation and process aspects,
3. applied methods and whether and how this related to the content results,
4. observed learning and reflections.

E2 Comparing visions and content results

Visions have been compared on how they relate to the proposed distinction between (1) sufficiency and green growth and on other dimensions like (2) individual versus community orientation, (3) market versus government orientation, and (4) the extent in which visions were rural or urban, all on a 7 points scale. Whereas first estimates were made by the editors of this report, a check among all workshop organisers was conducted in order to get this confirmed or adjusted using an easy-to-use tool in a spreadsheet program. It needs mentioning here that the sufficiency versus green growth distinction was used as an input to the workshops, whereas the other dimensions emerged from the vision results. They are meaningful, but not considered before the workshops.

E3 Compiling deliverable D4.3

The result is the current report.

3.3 Task 5.3 Backcasting & pathways workshop guidelines

Goals for the second series of workshops include:

- Assessment and further development of future visions for sustainable lifestyle visions at the regional level and an inventory of issues and potential solutions for the region through backcasting techniques.
- Participation of a wide range of stakeholders to not only inform, but build awareness and learning among the stakeholders involved with respect to the future vision, the consequences, the agenda and the views and perspectives of others.
- Learning by stakeholders, through defining pathways and a follow-up agenda of activities for various groups of stakeholders in line with the envisioned desirable future.
- Specific agendas and proposals for the lifestyle domains under study and diffusion of the associated lifestyles.

The table below (Table 3.3) distinguishes subtasks A-E and mentions activities for each subtask that have been conducted for preparing and conducting workshops as well as for processing workshop results after the workshop and reporting to participants as well as within the GLAMURS project. Details for steps and activities can be found in Deliverable D5.2 (Quist and Leising 2016).

A. Method Update - TU Delft	1. Developing methodological updated for T5.3 workshop based on experiences and results of T4.3 workshops
B. Workshop Preparation stage all case studies	2. Additional round of Vision specific stakeholder identification, 3. Stakeholder re-engagement 4. Practical workshop organisation and development workshop program 5. Writing input document
C. Workshop day all case studies	<ul style="list-style-type: none"> • Welcome and introduction • Presentation of visions & other outcomes of 1st workshop • Evaluation of visions & further development of visions session • Development of pathways, agendas and implementation proposals • Subgroup presentations, final discussions and evaluation • Drinks & informal gathering
D. Post workshop all case studies	1. Evaluation among participants and among organisers 2. Report in country language 3. Further elaboration/processing of the visions 4. Summary report in English
E. Cross case TU Delft	1. Comparing process (learning & participation) & applied methods across cases 2. Comparison of workshop backcasting and pathway results in case studies 3. Compiling Deliverable

Table 3.3: Phases, steps and activities for T5.3. Backcasting & pathways workshop.

PART 2: RESULTS OF VISION WORKSHOPS

4. Vision workshop results Austria

Paul Lauer, Ines Omann (UFZ - Helmholtz Centre for Environmental Research)

4.1 Introduction

On 15th of January 2016 the Austrian case study team organised the first back casting workshop of the GLAMURS project. The aims of this workshop were (1) to develop visions on a 'Sustainable Donau Böhmerwald in 2040' as well as (2) concretely describe individual lifestyles in the GLAMURS domains within those visions. Stakeholders from initiatives, the civil society, business, farming, schools and government, who are interested in the given subject, were invited and 18 followed the call. They were partly newcomers to the project, partly already involved in other parts, such as interviews, network analysis or focus groups. The workshop was facilitated by Ines Omann and Wolfgang Mader, with support from Paul Lauer and was held in the Gasthof Haderer in Lembach, which is one of the partner companies of the Bioregion, one of our initiatives.

In this report we outline the activities that we performed in preparation of the workshop, and we present the results that have been achieved with the workshop, which is mainly the consolidated vision in eight lifestyle domains. In section 4.2 we discuss the workshop preparation, discussing how we identified and mobilised stakeholders, as well as the practical organisation of the workshop. In section 4.3 we present the main results of our workshop. This includes the overall programme and the four visions on a sustainable Donau Böhmerwald that resulted from the group work. The vision, which we elaborated after the workshop, is described in section 4.4, followed by some conclusions and reflections in section 4.5.

4.2 Workshop preparation

Updated stakeholder analysis

The stakeholders identified for our workshop are listed in table 4.1. We tried to get a balanced representation from policymakers, knowledge institutions, initiatives and SMEs. The 1st selection of the participants was done by Klaus Diendorfer, manager of the LEADER Region Mühlviertel and then discussed with Ines Omann and Wolfgang Mader, before they have been invited.

Stakeholder category	The participants (organisations)
<i>Initiatives</i>	<ul style="list-style-type: none"> • Youth organisation • Energy initiatives • Organic agriculture initiatives • Women's organisation • Environmental initiatives
<i>Government (and affiliated)</i>	<ul style="list-style-type: none"> • Municipalities in the region • Provincial government • Initiative «BioRegion Mühlviertel» • Initiative «Model region for climate and energy Donau-Böhmerwald»
<i>Knowledge and others</i>	<ul style="list-style-type: none"> • Agricultural school

	<ul style="list-style-type: none"> • Secondary school
<i>Business</i>	<ul style="list-style-type: none"> • Banking («Raiffeisenbank») • Local Industries (Textile, Architecture, Gastronomy) • Waste Management • Organic farmers

Table 4.1: Overview of stakeholder categories identified for workshop

Stakeholder mobilisation

The stakeholders were invited via mail and phone by Klaus Diendorfer, manager of the LEADER region. As many of the stakeholders were interested in taking part right away, the process of mobilisation was rather short.

Test workshop

As the facilitators are trained in visions and backcasting workshops and there was already a strong relation of trust between the LEADER manager, the managers of the initiatives, the stakeholders and the research team, we decided that no test workshop was needed.

Practical Workshop organisation

Ines Omann and Wolfgang Mader started the practical workshop organisation with designing a basic structure on the phone. In a next step they both met with Paul Lauer in the office in Vienna to go through the outline in detail. We structured the workshop as described in the following chapter and agreed on the methodologies (see 4.3.3).

4.3 Workshop results

Overall program & welcome session

The Workshop took place at the “Gasthof Haderer” in Lembach (Mühlviertel), one of the partner SMEs of the ‘Bioregion’, one of our GLAMURS initiatives, on the 15th of January 2016 from 2:30 pm to 7:30 pm. A dinner followed the meeting. We applied different facilitation methods and techniques based on the approach of “Art of Hosting” (www.artofhosting.org). The Art of Hosting is a highly effective way of harnessing the collective wisdom and self-organizing capacity of groups of any size. Based on the assumption that people give their energy and lend their resources to what matters most to them – in work as in life – the Art of Hosting blends a suite of powerful conversational processes to invite people to step in and take charge of the challenges facing them.

Groups and organizations using the Art of Hosting as a working practice report better decision-making, more efficient and effective capacity building and greater ability to quickly respond to opportunity, challenge and change. People who experience the Art of Hosting typically say that they walk away feeling more empowered and able to help guide the meetings and conversations they are part of move towards more effective and desirable outcomes. The Art of Hosting offers a blend of some of the most powerful methods to create open and meaningful conversation that leads to commitment and good results. But this is more than a suite of methods – it is also a practice. *“We call it The Art of Hosting, because it is an art to become skillful at helping ourselves and others work well together, especially in these times of increasing complexity. We talk*

about hosting, because what is offered here is not a typical facilitation or moderated session. It gives attention and care to all aspects of people's work together, intending to host them in being successful, just as any person welcoming guests will make sure they have everything they need to make their visit fruitful" (www.artofhosting.org/what-is-aoh/).

Find the agenda for the workshop below.

- ◆ Address of Welcome
- ◆ Check-in
- ◆ Round of introductions
- ◆ Outline
- ◆ Presentation of a vision for the region
- ◆ Work on Visions – group and individually
- ◆ Group presentations of visions
- ◆ Reflection, conclusion and outlook
- ◆ Dinner

Address of welcome

Klaus Diendorfer, manager of the LEADER Region Donau-Böhmerwald (DBW) welcomes all the participants and appreciates their willingness to take part. He underlines that the reactions to the invitation were quite positive. Most of the participants agreed to take part right away. He is not taking these reactions for granted, but rather considers this readiness as a sign of lively cooperation between the stakeholders of the region. Finally he addresses his special thanks to Ines Omann and Wolfgang Mader for their appreciation towards the region.

Check – in

Wolfgang Mader invites the participants to a first check-in round: Sociometric constellations (spread in the room along a virtual line) on the basis of the following questions:

- How intensely did you already engage in your work with visions and related processes?
- How optimistic/pessimistic do you see the coming development until the year 2040?

These constellations deliver a first insight into the dynamics of the group. The group shows to be rather heterogeneous: only a few have engaged intensely with visions already. Hardly anyone did not engage at all. Most of the participants gather somewhere close to the middle. When asked about their optimistic/pessimistic view a light leaning towards optimism can be noted. In order to get to know each other a last constellation refers to the names of the participants, in alphabetic order. Finally the group gets divided into four sub groups, along the alphabetic order (counting from 1 to 4).

Round of introductions

Ines Omann now asks the participants to shortly introduce themselves by also reflecting on the following questions:

- Which feelings do you bring today to this workshop?

- Which thoughts did appear in your mind while reading the invitation?

The mentioned motives for coming to the workshop can be summarised as follows: On the one side expressions show a strong **wish to be in the know** regarding present challenges and possibilities, getting active and finding solutions, as well as the focus on **cooperative small scale actions** in order to (really) make a difference. On the other side lots of **frustration, insecurity** and expressions of **protest**, more or less triggered by feelings of incapability, are noted.

Outline

Ines Omann gives some main information on the outline and the purpose of this first workshop. Both group and individual exercises will give a frame for creating visions and refining them step by step. The main ambition is to create a vision of a personal and social life in 2040, which each and every one of the participants is willing to work for. In a next step those visions will be merged (by the participants) to a shared vision of the region. This was the main ambition of the second workshop on the 26th of February. Furthermore, the different actors that are needed to realise a vision (politics, economy, initiatives and individuals) and their specific tasks in putting the vision into practice ought to be considered.

Ines Omann continues to shortly present GLAMURS and further elaborates on the purpose of the back casting workshops within the project. In this context Ines Omann, Wolfgang Mader and Paul Lauer are introducing themselves and their roles within GLAMURS.

Introduction to the work on visions

To give the participants some reference points for the process, Wolfgang Mader gives a short introduction to the work on visions. He describes the task of creating a vision as finding a **clear idea of a possible future** in order to convey a promising attitude and motivation. Additionally, the vision can give **orientation** and contribute to a bigger picture of expected developments. Ideally, the vision is going to point out an **attracting image** of future developments, which local actors are able to put into practice for real.

Importantly, Wolfgang Mader made clear, that the already existing ideas and visions of the region are going to build the base for the coming steps. The aim is not to displace any of the former ideas but to elaborate and refine them if necessary. It is in the very interest of the project to pick up on things the region has already worked on. The following eight subject areas (painted on big paper sheets) provide a frame for both the group and the individual work on the visions:

- ◆ Values & Lifestyles
- ◆ New forms of labour
- ◆ Regional resilience: food
- ◆ Regional resilience: energy & housing
- ◆ Sustainable mobility
- ◆ New forms of Education
- ◆ Regional Economy & Consumption
- ◆ Other Ideas / Open Space

Main results lifestyle discussions and vision development session

The four groups work at separate tables. For each of the group one big paper sheet (showing the eight subject areas) is prepared. The groups now start to work independently on their visions, which means that they envisaged an ideal future in the eight areas. The three facilitators (Ines Omann, Wolfgang Mader and Paul Lauer) are ready to support the process whenever needed.

Step 1: (1h) Region in 2040	Participants discuss the following question within their groups: "Imagine it is the year 2040 and the region Donau-Böhmerwald has developed ideally related to sustainability: How do the region and its particular subject areas look like?" Additionally, the groups are asked to 1) highlight three points, which to them seem to have a key role for the process, and 2) find a title for their vision.
Step 2: (45min) Personal lifestyles	The focus turns to the individual dimension of the respective visions. Therefore, to each participant a smaller paper sheet with the same eight subject areas is given. The task now is to approach these areas more personally, led by the question: "It is the year 2040. You are living in the region Donau-Böhmerwald, which has developed according to your vision. How does your very own life(style) look like?"
Step 3: (45min) Merging lifestyles and vision	Participants share their personal visions with their groups and discuss whether these individual dimensions of the visions require changes of the group vision. Changes are made.
Step 4: (20min) Preparation of presentations	In a last step the groups prepare to present their vision to the plenary, including the highlights and titles.

Table 4.2: Steps of the vision creating process

4.4 Elaborated visions

The groups present their visions one after the other (7-10min each). The presentations are structured in highlights and subject areas.

4.4.1 Vision 1 – Pure Living!



Figure 4.1: Voi Lebm

Vision 1	Voi Lebml! (Pure Living!)
Highlights:	<p>Belief: this vision is carried by a strong belief in the own strengths, capacities, possibilities and potentials. Special importance is given to the „effectiveness of the Self“. This belief is also characterised by cooperation and reliance between different generations.</p> <p>Participation: inviting all the people to actively participate in the many different processes (of the transformation) is key. People want to feel part of social movements and they believe in a respectful intercourse.</p> <p>Treasure box of ideas: Since the Mühlviertler is a rather “rooted, stubborn and hostile towards innovations” human being, a treasure box of ideas will be a symbol of openness and flexibility. This new element of the local culture gives more space to creativity.</p>
Values and lifestyles	Democracy, participation and diversity. The belief in the potential of diversity let the people face the many challenges confidently. They have learned to cooperate and take advantage out of the very different skills and weaknesses.
Labour	Meaning of labour changed fundamentally. People have a rather different understanding of working time, retirement and leisure time. More sharing of income between family members and other collectives. A basic income is granted to everyone.
Food and local Production	Focus on local (food) production, strong belief in local resources and self-produced agricultural products. Hence, the local economy got a remarkable boost, whereas the dependence on the global food industry today is much lower. People consume more consciously.
Economy and mobility	The sharing of commodities became a key element. That goes especially for cars and other means of transport.
Education	Not “knowledge” alone is in the focus of interest but the skill to implement this knowledge became more and more important. To participate in processes and to participate in the very activity of learning is seen as the key element of circulation of knowledge and skills. Such an education is considered to be concrete and inviting. Individual potentials get identified, developed and supported in such a way as to enable the individuals and the society to make more use out of special skills.
Housing	Lots of intergenerational projects of housing strengthened the solidarity in general and are considered as a central cause for the healthy team spirit of the region.

Table 4.3: vision 1

4.4.2 Vision 2– What we do is essential

Vision 2	Entscheidend ist unser Tun! (What we do is essential!)
Highlights:	<p>Exchange of capabilities: To provide a social space for learning from each other and for exchanging knowledge, skills and capabilities is the basis for happy, independent and equal lives.</p> <p>Quality of life: The vision considers time for „the living itself“ as the most important ingredient of a high quality of life.</p> <p>Sustainable mobility: The vision establishes a „right to sustainable public transport“.</p>
Values and lifestyles	Accepting the boundaries of (human) life enables the people to turn away from the former principle of «growth at all costs». Tolerance (especially towards other

	cultures) holds the society together.
Labour	There is a bigger range of possible paid activities, whereas the necessity to work decreased.
Food and local Production	Focus on local (food) production, strong belief in local resources and self-produced agricultural products. Since the interconnection between a bad diet and an increasing number of health problems became more and more evident, the region turned to locally produced food production.
Economy	Strong interest in strengthening local value-added chains and preference for local products for many reasons. Support for local businesses also helps the region to act more independently from too big and too powerful companies.
Education	Cooperation is the key element of the vision's new education system. It's all about teaching and learning together and from each other.
Housing and Energy	Also this vision focusses on intergenerational housing projects in order to counteract separation and the loneliness of elderly people. The energy system was entirely changed to a small-scale and decentral one, based on renewable energy.

Table 4.4: vision 2



Figure 4.2: “Entscheidend ist unser Tun!”

4.4.3 Vision 3 – rooted, intrigued and humane

Vision 3	Verwurzelt, neugierig, menschlich (rooted, intrigued and humane)
Highlights:	<p>Accepting boundaries of (human) life: this vision finds the way (back) to higher acceptance of boundaries of (human) life and thereby discovers new potentials within this apparently restricting frame.</p> <p>Sharing: Exchange of commodities and skills is a key element for a frugal but happy life.</p> <p>Land use control: by establishing a kind of account system the extensive use and sealing of land was brought under control. Now it is only possible to cover land with buildings etc. if land gets uncovered elsewhere in return.</p>
Values and lifestyles	The common phrase of „that is not possible“ gets removed from the vocabularies. The people of the region (the „Mühlviertler“) realise their characteristics – rooted, intrigued and humane – as key assets for a transformation.

Food	Local, sustainable and fair produced food is highly appreciated in the entire region.
Economy	Support for local businesses and industries. Region acts more independently. „Naturfaser-Fölser-Jean“ as an example for a particularly successful local business (textile industry), whose production is based on natural fibre.
Education	Boundaries of (human) life (and economic growth) as well as the balance between nature and humans regain a higher priority in education.
Housing & energy	Focus on more controlled land use and local renewable energies.

Table 4.5: vision 3



Figure 4.3: “Verwurzelt. Neugierig. Menschlich”

4.4.4 Vision 4 – Model Region of happiness

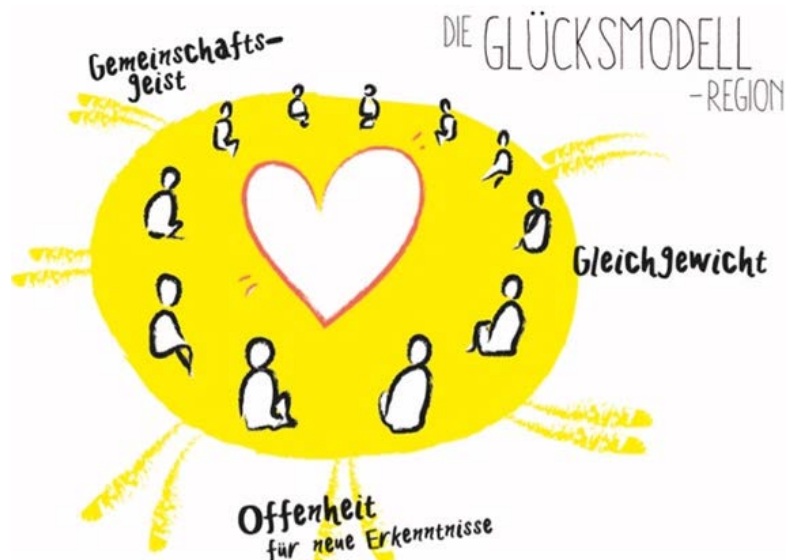


Figure 4.4: “Die GlücksmodeLL-Region”

Vision 4	Glücksmodell-Region (Model region of happiness)
Highlights:	<p>Balance: To regain a balance between economy and ecology is one of the central ambitions of this vision. The first step is to establish and live this balance locally. In this regard the subject areas of building activities, housing and mobility are of special interest.</p> <p>Team spirit: Because the people of the region actively trained their openness, empathy and attention, the team spirit got strengthened massively.</p> <p>Flexibility: Accepting failures and learning from them is considered to be the secret of a profound (social) transformation. It is all about motivating oneself to create a future actively and open hearted.</p>
Values and lifestyles	The awareness, that diversity can be the source of a very fruitful cooperation, builds a strong fundament for a happy living together.
Labour	Longer periods of intermission allow people to do various other activities (hobbies, community service, traveling etc.) already during their working years.
Health	Society is able to deal with deep disagreements and taboo subjects. Therefore, the collective psyche in the region recovered (years without suicides). The health care system shows itself free from scare tactics. Different medical approaches cooperate as far as possible and all in all they are focused on healing instead of „repairing“ our bodies .
Economy	People use (own) resources economically and consume less intensely. Economic growth is not the leading principle anymore.
Education	Accepting and learning from failures. Focus on openness, empathy and attention to the essentials of life.

Table 4.6: vision 4

Main results of final discussion

After the presentations the participants discuss about the **social approach of (personal) problems** and the role of the church in this regard. Some of the participants point out the surprising fact, that there was no specific role given to the church within the vision creating process.

As all the seven model regions of the GLAMURS project develop one to four visions, a main task is to compare and modelling these visions regarding their economic and environmental impacts. Therefore, the different visions get embedded into a socio-economic frame, ranging from a degrowth approach (sufficiency, sharing, more life quality instead of quantity) on the one side to green economy approaches (technical progress and innovations, more effective use of resources, ongoing economic growth) on the other side. In a first short analysis the facilitators of the workshop indicate the **strong tendency of the presented visions to a degrowth approach**. Only some parts of the visions can be attributed to green economy.

Finally, Ines Omann provides a short outlook to the next workshop. There the process is going to be continued by combining the different visions and parts to one shared vision of the region. Elaborating on specific pathways (including actions of the different stakeholders) linked to the subject areas will be the focus of the next workshop.

Post workshop results

After the visioning workshop we elaborated the visions by outlining their core and main assumptions. We then combined the four visions to one common vision in order to set the ground for the participants to elaborate this vision in the second workshop. The common vision of the region Donau-Böhmerwald in 2040 can be summarised as follows:

The region's vision of 2040



Figure 4.5: the four visions combined

Highlights

In 2040 the region is characterised by a special **belief** in own possibilities and strengths. Special importance is attached to the „**effectiveness of the Self**“. Living together in different cultures and generations make people confident to encounter each other **respectfully** and to actively share different skills. By commonly paying attention to our (human) **boundaries** – instead of seeking for more and more – the quality of life has increased tremendously and the people have the impression to be part of „something bigger“. The **team spirit** is a healthy one since life in the region is based on **sharing** instead of possessing. Economy and ecology found a new balance as consumption and the waste of resources declined and the methods of **production turned more regional**. Changes and challenges are faced open-hearted and with the necessary flexibility, in such a way as to enable them to **learn from their failures**. The “treasure box of ideas” has become a symbol of the region's openness and flexibility. New elements of the local culture give more space to **creativity**.

Values & Lifestyles

Democracy, participation and diversity are key elements of the regions everyday life. The awareness, that **diversity** can be the source of a very fruitful cooperation builds a strong fundament for a happy living together. Accepting the **boundaries** of (human) life enables the people to turn away from the former principle of "growth at all costs". Focussing on the essential by living a more frugal life resulted in a much **higher quality of life** since thereby various economic and environmental problems could be tackled. **Tolerance** towards „other cultural influences“ caused a gain of trust in new opportunities. The common phrase of „that is not possible“ was removed from the vocabularies. The people of the region (the „Mühlviertler“) are proud of being known for their „**rooted, intrigued and humane**“ character.



New forms of labour

The social meaning of labour changed fundamentally as it got restructured in the context of current challenges. Nowadays people have a rather different understanding of "working time", "retirement" and "leisure time". There is a **bigger range of possible paid activities**, whereas the necessity of labour decreased. **Longer periods of intermission** allow people to do various other activities (hobbies, community service, traveling etc.) already in between their working years. Also the way people deal with their income changed. More **sharing of income** between family members and other collectives can be noticed. A basic income is granted to everyone.



Regional resilience – food

The region is characterised by a strong belief in local resources and **self-produced agricultural products**. Local, sustainable and fair produced food is highly appreciated in the entire region. Generally, the **attentiveness** towards diets and nutrition increased massively in the last decades. Since the interconnection between a bad diet and an increasing number of health problems became more and more evident, the region turned to **healthy, organic and local food production**. Hence, the local economy got a remarkable boost, whereas the dependence of the global food industry today is much lower.



Regional resilience – housing and energy

Similar to the subject area of food, also in terms of housing and energy supply the region turned towards **small-scale and local solutions**. The energy supply was **decentralised** and is now entirely based on **renewable energy**. On the one hand the overall **consumption of energy is significantly lower** today and on the other hand the remaining use of energy is much more **efficient**. Furthermore, by investing in a local supply the expansive dependence on centralised power systems was left behind. With regard to housing the region succeeded in **protecting the rural areas from being built up**. Building activities today have to follow strict ecological rules and to build with recycled materials is a matter of course. Additionally, lots of **intergenerational projects of housing** strengthened the solidarity in general and this is considered a central cause for the healthy team spirit of the region.



Sustainable mobility

Also, the way the region deals with mobility changed radically. To find a solution for the far distances between living and the working places was the biggest challenge in the beginning. But this problem was gradually tackled by the transformations concerning labour. Long-distance commuting belongs to the past, as people work less in paid jobs and there are more jobs in the region as well as flexible solutions concerning telework. People **share** cars and other means of transport. Today every citizen even has the **right to a sustainable public transport**. All the vehicles run on **renewable energies**.



New forms of education

The education of 2040 is a **holistic** one. It is not „knowledge“ alone, which is in the focus of interest, but the skill to **implement this knowledge** became more and more important. To **participate** in processes and to participate in the very activity of learning is seen as the key element of **circulation** of knowledge and skills. And people prove to be motivated since they feel themselves as **vital parts of education**. Such an education is considered to be concrete and inviting. Individual **potentials** get identified, developed and supported in such a way as to enable the individuals and the society to make more use out of special skills. **Trial and error**, „do it yourself“ and **co-creative** approaches are all together cornerstones of this holistic education.



Regional economy & consumption

The concept of **sharing** is formative for the region in 2040, whereas the concept of property got widely adapted. Compared to the last decades people **use (own) resources economically** and **consume less intensely**. Economic growth is not the leading principle anymore. They are interested in strengthening local value-added chains and prefer local products for many reasons. **Support for local businesses** also helps the region to act more independently from too big and too powerful companies. One example for a particularly successful local business can be found in „Naturfaser-Fölser-Jeans“ (textile industry), whose production is based on natural fibre.



Other Ideas / Open Space

People in „Mühlviertel“ are known for their open mind and open hearts. Going along with all the described transformations, the region confidently faces social challenges. People learned how to trust in a common process of problem solving. The local society is now able to deal with deep disagreements and taboo subjects. Therefore, the collective psyche in the region recovered. The last years were celebrated as years without suicides. The health care system shows itself free from scare tactics. Different medical approaches cooperate as far as possible and all in all they are focused on healing instead of „repairing“ bodies.



4.5 Conclusions & Reflections

Conclusions and reflections on the workshop

All in all we were quite impressed by the positive and optimistic picture the participants had about the future of their region. And we got the feeling that this has to do with their experience that some of the stakeholders successfully worked together in other projects already and they have been seen progress within the last decades. The participants are willing and ambitious to achieve a real transition together and they are also interested in delivering the vision and spread their enthusiasm.

As mentioned in the context of former regional projects, the stakeholders of Donau-Böhmerwald did not have to start from zero. They had already developed a basic vision of the coming development in local agenda processes and, even more importantly, they have had established a rather good communication and cooperation during the last years. For this reason we encountered a high level of awareness regarding impacts of sustainable and unsustainable practices from the very first.

This established collaboration was reflected in already existing ideas and measures. For instance, having a closer look to the visions and their aspects of renewable energies, it becomes obvious to us, that they are rather minor, because measures are already on their way and it is sine qua non for them that the region will be fossil free in about 10-20 years. They had an elaborated plan for a renewable energy transition owing to local initiatives. Therefore, the participants did not have to discuss that point in detail anymore.

Concerning the visions itself it was interesting for us to see how complementary they turned out to be. Some of the groups could have chosen visionary actions towards a green economy rather than pursuing degrowth. The choice was completely theirs and the structure would have provided for both. Nevertheless, all the four visions ended up to be characterised mainly by aspects of degrowth.

Methodological reflections

Regarding the methods we used in our workshop we got the feedback that especially the combination of collective and individual working steps made it easier for the participants to create the visions and think of their lifestyles within those visions. By zooming in and out – seeing the collective picture on the one hand and not losing the personal connection to the vision on the other side – the process of co-creating went rather smoothly. The emphasis on the individual connection prevented the visions from becoming too abstract and impersonal. According to the feedback the different steps were appreciated for seeing the challenges from different angles.

References & Sources

Lauer, P., Omann, I. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Austrian Case Study for GLAMURS.

5. Vision workshop results Germany

Maxie Schulte, Karen Krause, Anke Blöbaum (OVGU), Ines Thronicker, Moritz Petri (UFZ)

5.1 Introduction

On a Wednesday morning at 10 a.m. the first German Backcasting workshop took place in Halle, city of the German case study. All participants were invited to join the workshop at the “Frankesche Stiftungen Halle”, a social and educational foundation situated in the centre of Halle.

5.2 Workshop preparation

Updated stakeholder analysis

In total, 21 participants from 12 different organisations attended the first Backcasting workshop. NGOs and initiatives were especially strongly represented (see table 5.1). Table 5.1 shows the composition of participants from different fields and organisations (the number of participants from each organisation is given in brackets behind the organisations' names).

Stakeholder category	The participants (organisations)
<i>NGOs/civil society/initiatives</i>	<ul style="list-style-type: none"> • ADFC (German cyclists' association) • Greenpeace • GartenWerkStadt (Transition Town gardening) • Halle im Wandel (Chaning Halle) • Peißnitzhaus e.V. • Villa Jühling e.V. (church-run education and project centre)
<i>Research</i>	<ul style="list-style-type: none"> • Martin-Luther-University Halle • Fraunhofer IWMH (research centre working with City of the Future-programme) • Freelance scientist
<i>Government</i>	<ul style="list-style-type: none"> • City Planning Office of Halle • Dienstleistungszentrum Klimaschutz Halle (Service Centre Climate Protection Halle)
<i>Business</i>	<ul style="list-style-type: none"> • HAVAG (public transport company in Halle) • Science2public (science communication company working for City of the Future-programme) • Freelance businessman

Table 5.1: Overview of stakeholder categories identified for workshop

Stakeholder mobilisation

Three different strategies were used for the mobilisation of stakeholders for the first workshop: First, former interview partners were invited to the workshop and additionally used as multipliers to directly contact other relevant people who might be interested. Secondly, we circulated an invitation, using the e-mail list of the Transition Town initiatives in Halle, which has 300 to 400 subscribers. Thirdly, we cooperated with Halle's programme and contribution for a national competition among sustainable cities, called Wettbewerb Zukunftsstadt (City of the Future-Contest). Some organisations involved in Halle's contribution to this contest were also represented

at the workshop, like the Fraunhofer IWMH, the City Planning Office and the company Science2Public. All participants of the first workshop were invited to join the second workshop as well.

Practical Workshop Organisation

The invitation for the workshops was addressed at committed citizens and stakeholders from administration, business, civil society, NGOs, education and policy. In the invitation, we mentioned two specific goals of the workshop: the elaboration of specific stages of action towards sustainable economic and political systems as well as networking / connecting local activists in this field. Prior to the first workshop, the participants received the GLAMURS-flyer for information about the project. For the second workshop, they were sent a summary of the visions developed in the first workshop and a two-pager about commonly proposed strategies for a sustainable future, like green growth or post-growth systems.

The workshops took place in rooms of the Franckesche Stiftungen, a foundation dedicated to creating social innovation and transformation through education. The foundation owns a campus with several buildings for educational purposes in Halle. This was regarded as "neutral ground" by the participants. For the workshops, we were allowed to use multiple rooms what allowed us to also separate groups working on different visions spatially.

5.3 Workshop results

Overall program and welcome session

Participants and stakeholders of the first Backcasting workshop in Halle arrived between 9:30a.m. - 10:00 a.m. at the workshop venue. They had the possibility to enjoy some coffee, tea and snacks. When people entered the workshop area, they walked past a pin board. For an easy check in, participants were asked to write down expectations for the workshop. We asked people to reflect what would need to happen for this event to be (a) a success or (b) a failure.

At 10 a.m., Anke Blöbaum (OvGU) and Ines Thronicker (UFZ) welcomed the participants and started the workshop. The facilitator gave a short 10 minute input about GLAMURS, the Transition Town Halle (German case study) and the potentials of this collaboration. A lot of participants were part of the Transition Town Halle network or were at least well informed already. Additionally, people were assured that data privacy at the workshop was guaranteed at all times. A first quick round of introduction took place. The preliminary expectations of the participants were collected and compared with the program and the day's objectives.

For the next part, participants were asked to take part in a sociometric positioning exercise. Since the participants came from very different backgrounds and did not know each other, this exercise was useful for both participants and facilitators. The facilitator asked three different questions, "How long have you lived in the city of Halle?", "Halle – city of your dreams or daily annoyance?" and "Sustainable City – Is Halle stuck at the beginning of this process or already

a role model for other cities?" Two to three participants answered where and why they positioned themselves and there was room for a short discussion.

After this initial contact with the topic of a sustainable city of Halle, the first content-related group work started. In an introduction, examples were given by the facilitator for sufficiency and green-growth strategies. Additionally, she also gave examples for both concepts and explained the kinds of activities that are related to these concepts. In three groups, participants discussed the objective of a more sustainable Halle, including different lifestyle domains and finding things that actually "show" the sustainability of the city. After a short break, the groups presented their ideas. After hearing the results from all three groups, the whole workshop group decided which three topics they would like to elaborate further using a points-based system.

After the lunch break, the Walt-Disney-Method was demonstrated (three different roles of the vision process: the visionary, the critic and the realist). This was the starting point for the vision development that followed. Again, people split up into three groups. Three different visions were developed based on the selected topics of the morning session. Subsequently, the participants presented their visions to the group. An emphasis was made on the different behaviour categories of GLAMURS (work-leisure-balance, mobility, energy, and consumption), the identification of crucial actors and the future role of the today's sustainability initiatives.

Finally, the results of the first workshop were briefly summarised; and an outlook to the second workshop was given. In a last round of reflection the participants gave a short feedback about the first workshop and had time for an informal gathering afterwards.

Main results lifestyle discussion session

Before starting the discussion we prepared a small input on the topics of sufficiency, green economies and similar related topics. The two different strategies were introduced with short examples (see BC guidelines). Next, we asked people to think of specific activities which are related to a sustainable lifestyle such as energy saving, buying products which are fair, sustainable, organic; to buy and consume less, mobility choices and energy production from renewable sources as well as collective activities like cooking together, as a community.

The lifestyle discussions were done in three groups of seven people each. Every group got their own moderator as well as a person responsible for taking notes and preparing a transcript. We used flipcharts to take notes of the discussed topics. To start off the discussion, we asked them two initial questions: 1) What are the characteristics of a more sustainable Halle, 2) Which lifestyle areas are important to reach this goal? Table 5.2 lists the main topics that were brainstormed in the three groups; a summary of all the ideas is presented later on.

<i>Group 1</i>	<ul style="list-style-type: none"> • quality of life • behaviour – consumption, mobility, pressure/rewards • dialogue between citizens and the city (council) • changes in value, goals • networks of actors, actions
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	<ul style="list-style-type: none"> • to transform fear into potential
<i>Group 2</i>	<ul style="list-style-type: none"> • mobility: changes in behaviour, bike users, e-mobility • energy: renewable sources, science / innovations, water • sustainability in daily life: clothes, food, to share knowledge, wellbeing, networking / dialogue between citizens and politicians, how to afford sustainability in daily life, cross-generational ideas • human-nature - interlinks
<i>Group 3</i>	<ul style="list-style-type: none"> • change management • changes of value • education – schools – teachers and students – learning outside of schools • personal sustainability: internal self-consciousness, behaviour, participation, mobility, food, education, energy • bottom-up • think tanks • “living city”

Table 5.2: Lifestyle discussion session: results from brainstorming

These results from the brainstorming were presented to the other groups. We then summarised the different topics and – together with the participants – created the following list of shared topics:

- quality of life
- sustainable behaviour – mobility, food, consumption
- dialogue/communication
- changes of value
- networks of actors
- networks of engaged people – citizens, politicians, initiatives
- mobility/traffic – energy
- human interaction
- consciousness shift
- participation/networking/citizens – bottom-up
- consolidating – shared knowledge, information platform
- education
- responsibility

The participants chose the three topics they were most interested in. We handed them sticker points so they could place these next to the topic they would like to develop visions on. We then merged overlapping ideas. Finally, the decision was made to create visions on three different topics: 1) mobility – traffic – energy sources, 2) networks – participation and 3) value / consciousness shift.

5.4 Elaborated visions

The vision development session started with a short demonstration of the Walt-Disney-Method. Accordingly, the facilitators role-played three possible characters participants could have in the following discussion. To summarise briefly, the visionary, the critic and the realist all have important parts in the development of new projects and visions. However, the main emphasis in this first phase of vision development is to support creativity to generate new and innovative

ideas. Besides, in this first phase visionaries need to brainstorm as freely as possible and may not be hindered. In a second step, the critic and the realist (practitioners) play important roles in further steps of the Backcasting workshop, when a transfer of future ideas to today's reality needs to be worked out. To support the following group work, participants were offered the take-home-message that different perspectives are important in different stages of projects.

Next, three different groups were formed. The participants grouped themselves according to their interest to one of the selected topics. A short introduction led over to the next phase of the vision development and gave the participants the possibility to ask final questions before starting the intense vision developing process. Afterwards participants began to work on visions focusing on the topics mobility and energy, networks and participation and value change.

Each group was provided with flip chart paper to note down important ideas and was asked to settle itself in one small room for the group work. The question "A sustainable Halle: How does a sustainable lifestyle in 2050 in Halle look like?" was asked as a general guideline. The groups began to discuss the question with respect to the previously chosen topics. The implications for different behavioural fields (mobility, use of energy, consumption) were discussed. In total, the timeslot for the discussion was one hour. After approx. 30 minutes of free brainstorming, the facilitators started to ask questions to elaborate the vision in a deeper manner. One big issue was to name important stakeholders for the envisioned scenarios. Accordingly we asked whether the preconditions of the future vision would be created by policymakers or civil engagement and what kind of structures of decision making would be used. Simultaneously the role of sustainability initiatives (in our case Transition Town Halle) was discussed and elaborated.

Below are tables with the summary of two of the visions, which got further edited by the German GLAMURS team. The visions are summarised and displayed in three categories, core and main assumptions, lifestyle elements and organisation and division of roles:

Vision: Mobility – Traffic – Energy Sources	
Core and main assumptions	<ul style="list-style-type: none"> • <i>Mobility and lifestyle (supply of food etc.) are highly linked</i> • <i>Decentralisation (many urban centres within a city)</i> • <i>(Food) supply is supported by local and small companies</i> • <i>Circular economy on a local level</i> • <i>There is a shared understanding that a sustainable society is desirable and needed ("shared will") and it is the responsibility of everyone to take change into their own hand</i> • <i>It is obvious that action towards a more sustainable society starts with citizens who develop networks and enable politicians to help with the idea of change</i> • <i>The today's usage of spaces in the city (parking lots, shopping centres and so forth) is changed to a more health-supporting and eco-friendly usage</i> • <i>Recreation and health is important (wellbeing) and is strongly supported by areas in the city</i> • <i>Sufficiency is a cornerstone, but is complemented by efficiency (i.e. the same outcome but with less use of resources) and consistency (i.e. there is no waste but only products, which can be recycled, reused, repaired and so forth)</i>
Lifestyles	<ul style="list-style-type: none"> • <i>Organisation of cities in urban centres, which allow short distances in any matter (passenger transport, delivery routes etc.)</i> • <i>The urban centres are self-supplying units. These are supplied with food by</i>

	<p>smaller farming units (“Hofläden” = farm shops, crop plants replace ornamental plants, creation of an “agriculture belt”).</p> <ul style="list-style-type: none"> • Food production is efficient (no overproduction). • Available space is to be unsealed and reutilised. • Urban centres also function as local meeting points to ensure a conscious and fulfilling social life. • Mobility is a shared property (“using instead of owning”, park and ride, public repair places). • Any source of energy needed for mobility is from a renewable source of energy. • Existing structures (i.e. initiatives) are used and improved instead of creating new ones (principle of efficiency, consistency) • Mobility and traffic are limited to commuting from and to work • “Using instead of owning”
Organisation and division of roles	<ul style="list-style-type: none"> • Politicians are maintaining a dialog with citizens and sustainable initiatives. • Responsibilities are shared between citizens, politicians and lobby workers. Synergies are to be used to benefit the community. • Fully-functioning networks which are built by sustainably oriented initiatives are dealing with responsibilities and policy making and they mix with the local community • Degree of autonomy for urban centres.

Table 5.3: Summary of the vision elaborating mobility, traffic, energy sources and supply of food

Vision: Participation and Networks	
Core and main assumptions	<ul style="list-style-type: none"> • it is the responsibility of everyone to take change into their own hand • there is a shared understanding that a sustainable society is desirable and needed (shared will) • Materialism is not a main driver anymore • it is obvious that action towards a more sustainable society starts with citizens who develop networks and enable politicians to help with the idea of change • a high level of participation in local government processes is the basis of the new society • daily life takes place in smaller units (i.e. a “block” of 500 people or a neighbourhood) • Supply of food and energy efficient housing is embedded locally • Economy and finance are locally connected to the society and carried out in a socially responsible manner
Lifestyles	<ul style="list-style-type: none"> • Money as a currency is changed into “time points” as the new currency • There is a strong emphasis on sharing of skills and working hours • Existing structures are used and improved instead of creating new ones (principle of efficiency, consistency) • Citizens do have strong social and sustainable objectives (constantly transforming to reach these goals is the norm) • energy is self-produced and renewable • work becomes much more linked to leisure; working hours can be used for networking activities • Energy-optimised housing and food consumption are organised by elected block leaders • Involvements of citizens and sharing are cornerstones of the new society • Especially small and medium projects with a focus on sustainability and quality of the recreational areas, urban farming etc. are supported • With different projects wellbeing in neighbourhoods is supported • Changing public policy is a transparent and public process

	<ul style="list-style-type: none"> • <i>In order to support a high level of transparency free Wi-Fi-access is available</i> • <i>Daily life takes place in the local areas, but people are connected beyond</i> • <i>Information is available online and the dataflow is structured by professionals in a simple and understandable way</i> • <i>Information about local policy processes is organised and displayed in public spaces</i>
Organisation and division of roles	<ul style="list-style-type: none"> • <i>Large enterprises are not part of this future society</i> • <i>Politicians are maintaining a dialog with citizens and sustainable initiatives.</i> • <i>Actions and decisions by policymakers are transparent and a public issue</i> • <i>Responsibilities are shared between citizens, politicians and initiatives. Synergies are to be used to benefit the community.</i> • <i>Initiatives act as mediators, agents and "lawyers"; they walk the streets and see what needs to be done, "think-tanks" of future development.</i> • <i>a strong emphasis is on networking (efficiency and skill-sharing).</i> • <i>Entrepreneurs are highly integrated (socially and economically) in the local community.</i> • <i>Citizens volunteer for various project in cooperation with administration and experts</i>

Table 5.4: Summary of the vision elaborating participation, networks and distribution of information

Main results of final discussion

After a short break the participants presented their results. People from other groups had the possibility to comment on the developed visions. Then, the facilitator gave a short summary of important and frequently mentioned topics and elements. Following up a reflection took place and the initial expectations - collected before the beginning of the workshop - were compared with the day's results. The facilitator mentioned that two major themes were very present in the group works and in-between a lot of cross-references existed. Next, the date for the second Backcasting workshop was announced, as well as the fact that the protocol would be send out in German to all participants. Finally, a "flashlight"-feedback was performed.

5.4.1 Further development of vision 1: Mobility-Traffic-Energy sources

The core assumptions for this vision are based on the fact that there is a huge potential to minimise the carbon footprint generated by mobility choices, traffic and choice of energy source. The world of this vision is furthermore based on the assumption that people have a strong social cause, and that everybody feels a strong responsibility for changing their local community, transforming it to be more sustainable. While focusing on the above mentioned topics, the underlying ideas of sufficiency, efficiency and consistency were also used as the common ground, or rather the base for any future plans for the area.

Early on, it was decided that the environmental consequences related to mobility choice should be one of the core topics, as well as its relation to the process of supplying oneself, mainly when it comes to food. A change in lifestyle is therefore one of the starting points for reaching this envisioned world. Starting from the present state of a modern city, the vision moved to a new model in which people would try to shorten their ways by creating urban centres. These centres are to be placed all over the area of the city, and are seen as self-supplying units. To go one step

further with the idea of self-supplying, the urban centres' ornamental plants are not used in cities any more, but crop plants instead. The urban centres and farms have an additional value as well because these are used as local gathering places and enable social contacts and exchange. However, the balance between farming and local recreational areas is still maintained. Space that is currently used for parking spaces, houses or shopping centres will be unsealed and reutilised, e.g. for agriculture or farm shops. That way, the principles of sufficiency, efficiency and consistency are brought together – food production will be local, seasonal and efficient (“to grow only as much as is needed”), the amount of traffic will decline drastically (since people won't be forced to travel long ways to buy their food) and resource circles will be closed on a local level as well.

Mobility and traffic – if they are needed at all – are limited to commuting from and to work. Means of transport have become fully reliant on renewable energy sources and are aimed to be fully electric, and therefore clean. For instance, solar bicycle paths were mentioned. In addition, transport is mostly shared or public transport, and, taking the landscape into consideration, mostly carried out via bikes. There is also a “mobility card”, which is a combined tool of payment for every mean of transport, and it is available to everyone. Bike repair workshops are open to everyone as well. Although this wasn't directly addressed, it was a shared understanding that people would try to avoid long-distance trips, since working on and improving their local urban centre should be one of the focus points in life. Individualistic mobility is reduced to a minimum, except all kinds of mobility powered by “human energy” (i.e. walking and cycling).

For organisational and structural questions, it became clear that the developed concepts of how to organise these urban centres are strongly linked to a focus on social commitment. The envisioned society of the future will consist of full-functioning networks which are built from sustainably oriented initiatives that mix with the local community. Governments lose their function as a top-down steering committee and are rather more supported by initiative members, citizens and lobbies. Besides, initiatives are driving the development of future ideas. The idea of a shared responsibility was strongly enforced, both by lobbyists and citizens. This idea was not limited to political questions, quite contrary, the idea of sharing space, manufactured goods, means of transport, food, skills and synergies was one of the main drivers for reaching a sustainable society. “Using instead of owning” is a key phrase here (2000-Watt society).

While this vision had quit a nice focus on the management of these urban centres, we felt like some important topics had not been addressed properly yet. In example, one of the main discussion points for this vision is the fundamental assumption, that the majority of the population is willing to give high priority to the collective interests of the community. While this was common ground within the group, it cannot be seen as the status quo everywhere. So how can this mind-set be shared amongst a lot of people who might not be motivated to engage in sustainable activities today? Another challenge would be to broaden this vision to enclose some other related lifestyle domains in detail, mainly work life (no ideas on work smart concepts, home offices, shared jobs or the general working landscape of 2050 were developed) and other consumption areas (apart from food, what about clothes or technology?). It also remains unclear how these urban centres are actually governed – are there local representatives for each centre who meet up for global discussions regularly? If so, (how) are they elected, is this based on volunteer work as well?

This vision also raises the question whether urban centres will really be able to work self-sufficient – will the local agriculture be enough to ensure a healthy nutrition to all their inhabitants on a sustainable level, will it be necessary to import some goods from outside? Ideas on how to shape the local economy are missing, too. Which industrial concepts would be needed, what kind of technology will be used? Additionally, what will the economy be like? There are small businesses, but how can they be categorised (sufficient vs. eco efficient)?

An additional aspect, which remains still unclear in this vision, is how sustainable electricity is going to be produced. Obviously energy needs to be provided in a sustainable way to enable sustainable mobility at all. But in this vision it was not proposed how sustainable electricity is going to be distributed or on what sources it would be based. We decided to address these questions in the second workshop to give participants a starting point how to enrich the vision even further and how to get started with the actual Backcasting scenario.

5.4.2 Further development of vision 2: Participation – Networks

The world of this vision is based on the core assumption that people have a strong social cause, and that everybody feels a strong responsibility for changing their local community. While focusing on the above mentioned topics, the underlying ideas of sufficiency, efficiency and consistency were used as the common ground, or rather the base for any future plans for the area. One of the first mentioned changes in lifestyle (activities) was connected to the idea of money and possessions. The concept of money will be replaced by a new currency of “time points” – e.g., if you use one hour of your time for improving networks in the area, you can ask someone else for a foot massage or something different. This idea reflects the concept of moving away from a materialistic society more towards a social society and the idea to share. Also, if someone works for the community or related networking processes (e.g. connecting different actor or groups, informing others of planned activities etc.), this time can be counted as working hours and can be compensated from the amount of work piling up in the actual job that someone might have. Networking activities are considered to improve efficiency and skill sharing. As one example, people talked about the idea of building a sustainable house together – volunteers would meet up for planning, providing and purchasing the material and fulfil voluntary working hours on the project as well. That way, commissioned work is transformed into putting more trust and having more confidence in citizens. Not only volunteers should contribute, experts and administration employees should take part in this process as well.

For changes in organisational structures, it was also discussed to appoint “block managers”, two elected individuals who manage ca. 500 people and can speak for them in more global gatherings. They are responsible for organising energy-optimised housing, food consumption, shared activities such as child care etc. These block managers should be networking with initiative members as well as politicians or the government in general. As another method of forming networks between citizens and governments, shared workshops were proposed on a weekly basis. Additionally, not only administration officers should be included here but also lawyers. People should work together for a common goal, not be a hindrance to each other.

Another core assumption for this vision is connected to the economy. Large enterprises are not part of this future society, it is rather planned to have – similar to the before mentioned “blocks” – self-supplying units of ca. 500 people. Local engagement and coordination of interests (i.e. emission of noise of production processes) are an important part of everyday community life. Entrepreneurs do have the freedom to be creative and are able to support the creative design of the city. Alternative and regional banks administer the money and 50% of the taxes stay in the municipality.

To enforce the idea that a city (or district) is once again owned and shared by its inhabitants, it was proposed to give responsibilities for designing and shaping the community into citizen’s hands. To improve the landscape, the concept of some kind of “godparent hood” for plants was proposed. This goes hand in hand with the usage of public spaces for urban gardening. To move further away from a concept of considering these kinds of activities as “work”, it is planned to host fun activities and parties as well that further promote a shared space and the idea of a self-supplying, sustainable and social society.

In accordance with that idea of taking the weight off of these actions, “official” structures will be mixed with “unofficial” ones, such as shared living rooms in each block or similar places that will enable people to get in touch in a more casual way. It will be natural to take care of one’s own neighbourhood. Streets will look different – parking spaces will be reutilised, there will be more green areas and less cars. Public spaces should be colourful and joyful. In each block, there should be houses used as think tanks, they are designed in a special way and can be identified from far away. These places are used to accumulate current needs and ideas and to work on solutions. A virtual map of the city will be publicly accessible and usable, current and upcoming projects can be placed in it and information can be retrieved via public internet access points.

To share skills and knowledge – and as another source of improved networking – the idea of making pupils (11th or 12th grade, adolescents aged 16 – 18) responsible for one district in the school’s neighbourhood was formulated. The pupils would create an overview of existing initiatives or actions and manage them, help to organise them and inform others appropriately. School buildings will be made usable for the public as well – after lessons are finished, people can use the building for activities, meetings, etc.

As another point of changes in the organisational structures, networks and initiatives will be enabled to make decisions on their own to avoid lengthy administration processes. Responsibilities should be made transparent and understandable for everyone. The block structure (see above) is used to come to decisions much more quickly and efficiently. There should be an atmosphere of general appreciation for and respect towards each other.

Political decision making will be made as transparent as possible. It was discussed whether professionals (e.g. well-paid and independent journalists) should filter and reduce the relevant information and thus would simplify the data-flow. It was proposed to have huge screens across the city on which public viewing of governmental meetings is made possible. The power for these public viewing areas is created by sustainable energy sources, i.e. using the technique of a pedal-powered cinema. This would be another way to connect lifestyle activities (political action)

with sustainability (literally producing one's own energy). Political decisions as well as information on upcoming debates or meetings will be displayed all over the city, too – using a system similar to public transport announcement was discussed. Also, the focus will be on “good news”, one idea was to report on one successful project each day, e.g. a new sunflower in front of the repair café – which is also a good way to cherish the work other people did.

In the future, today's sustainability initiatives will become mediators, lawyers, agents and facilitators. They look after the city and notice issues that need to be dealt with. Equally important, they are lobbying for the interest of all citizens, who rely on their work. Additionally to this kind of management tasks, politics and administration contact the initiatives to receive vision for the future (i.e. 2080). Similar to the first vision, there are issues that should be addressed for further elaboration. It would be interesting to know which precise steps are taken in the means of sufficiency, efficiency or consistency when it comes to topics such as energy production, food production and mobility. Additionally, how is a shared world view of sustainable goals achieved?

5.5 Conclusions & Reflections

Every participant and facilitator had the opportunity to give a short and personal feedback at the end of the workshop. Mostly positive feedback was expressed.

Most important positive aspects were (in short):

- the interesting mixture of participants
- new energy generated through all the different opinions
- wide spectrum of ideas
- discussions outside of the own field of interest
- networking with different experts and valuable exchange (science, city, citizens; mentioned very often)
- different topics and starting points to further work on things, new impulses
- constructive contacts
- very creative process
- common ideas and visions formulated
- inspiring

Negative aspects were in short:

- not enough time for group work on visions
- more structured presentation of results would have been desired

Open questions:

- Consolidations of results
- How can the energy (brought in by different people) be used
- How to contact relevant stakeholders (i.e. economy)

The facilitators appreciated the very open atmosphere with no openly visible hierarchies. Very little fundamental discussions took place; instead there was a very productive group work. The focus was on using and improving the already existing structures instead of inventing new ones. Sharing knowledge and networking was a very important issue for almost all participants. The role

of the Transition Town Halle network, however, was never reflected on – even though this was explicitly offered – and it will be interesting to see if that will change with the second workshop. It was very easy for the participants to develop visions and wish for future development. Thus, it will be interesting to see how good the participants of the second workshop are able to see the vision in a more critic and realistic view and to formulate detailed steps.

References & Sources

Schulte, M., Krause, M., Blöbaum, A., Thronicker, I. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the German Case Study for GLAMURS.

6. Vision workshop results Italy

Ambra Brizi, Fridanna Maricchiolo, Giuseppe Carrus & Angelo Panno (Roma TRE University)

6.1 Introduction

The University of Roma Tre organised the backcasting workshop on 17th December 2015. The workshop was facilitated by Ambra Brizi and Fridanna Maricchiolo, with the supervision of Giuseppe Carrus and the support of Angelo Panno. The goal of the workshop was to: 1) explore the opportunities and barriers to sustainable lifestyles and consumption in the Lazio region for the 2040; 2) develop visions for sustainable lifestyle and consumption in the Lazio region; 3) define the role of local entities for a sustainable development.

6.2 Workshop preparation

Stakeholder overview

In table 6.1, the stakeholders identified for the workshop are described. Some of them are representatives of the initiative CoRAgGio included in our case study. They participated in other GLAMURS' activities such as focus groups, net-map networking and interviews. Participants were recruited from various disciplinary fields and expertise areas, such as: professionals in the field of environmental issues (e.g., architects, urban planners, landscape architects, agronomists, environmental psychologists, engineers); academics with strong interest in sustainable lifestyles; representatives of government and affiliates; citizens interested and active in sustainable activities, and members of the local community and civil society.

Category	Examples of potential participants (organisations)
<i>Our case study and affiliates</i>	<ul style="list-style-type: none"> • CoRAgGio • Urban agriculture initiatives • Environmental associations
<i>Government</i>	<ul style="list-style-type: none"> • Municipality of Rome • Responsibles of Environmental Observatory for Climate Change of the Municipality of Rome • Environment commissioners
<i>Academics and professional</i>	<ul style="list-style-type: none"> • Universities • ICT • Self-employed (Architects, Agronomists) • Foundations

Table 6.1. Stakeholder categories

Stakeholder mobilisation

The core group of participants was contacted personally via email and telephone, in order to check the availability and to find a day for the backcasting. Then, we sent out invitations to our workshop the entire pool of potential participants identified. The majority of the stakeholders were contacted by e-mail, while other participants were contacted personally by the Roma Tre team. We asked for confirmation and we sent them a reminder by email few days before the first

backcasting workshop, and an agenda with the programme details. Two participants also forwarded the invitation to others colleagues.

Outcomes/learning test workshop

A week before the workshop, we performed a test workshop. We prepared a presentation about the GLAMURS project (the main goals and the principal results and a brief summary about the workshop day). During the brainstorming, it was clear that it would be necessary to divide the participants in two different rooms because of the possible distractions due to noise and voices. We also organised all the material for the workshop (e.g. coloured post-it, pens, markers, a photo camera), and printed on paper all the necessary material, including the questions to be asked to the participants during each workshop section.

Practical workshop organisation & adjustment to the workshop format

We organised our workshop premises of the Cobragor cooperative farm, which is located in a green area, in the north of Rome. We booked two rooms to separate the participants. We arranged the tables and chairs, and the flip over stands were available in the room. Lunch, breaks were provided by CoBrAgOr with organic food produced by them and cooked by a member of CoRAgGio. Because of the warm temperature, lunch, breaks and part of one plenary discussion were held outside.

6.3 Lifestyle brainstorm and vision development: methods and results

Program and participation

Participants were divided into two groups. Each group had one facilitator (Ambra Brizi and Fridanna Maricchiolo) and Giuseppe Carrus was the main facilitator between the two groups. Angelo Panno checked that each group had the appropriate materials for each discussion; he helped recording the sessions, taking notes and organizing the material emerging from the discussion. In the first part of the brainstorming session, participants of each group were asked this question:

- What are the key aspects and elements of sustainable lifestyles?.

In the second part of this section, participants had to answer to the following question:

- What are main issues, problems and barriers that impede the pursuit of sustainable lifestyles?

Participant wrote down their answers on a post-it and put them on another flip over, and clustered the specific problems identified into more general categories.

Then everyone assigned from 0 to 3 dots to the cluster(s) they considered as a priority on each flip over sheet (blue dots for aspects, red dots for problems). Everyone had in total 6 dots to assign (three blue and three red). We briefly synthesised and described our results in the subgroups and then we discussed the results together in the plenary session.

Main results for the lifestyle aspects brainstorm

In the following table are displayed the main results of the brainstorming, separately for the 2 groups.

Group	Key Lifestyle Aspects	Main Obstacles and Barriers
1	<u>Attention to the territory</u> -Local agriculture -Critical consumption -Knowing the own territory -GAS (joint purchasing group) -Use the abandoned lands	<u>Disinformation</u> -No information about the own town -Lack of information
	<u>Improvement of the needs</u> -All rights to everyone -Better social justice -Have a sustainable life if everyone can have it	<u>Individualism</u> -Lack of common project with other social actors
	<u>Nutrition</u> -Good nutrition -Healthy food	<u>Political Responsibilities</u>
	<u>Technology and Mobility</u> -Healthy mobility -Technology and mobility should work together -Correct recycling -Cycling paths -Energy use reduction	<u>Inadequate Planning Policies</u> -Building houses everywhere -Urban policy consumerist
	<u>Time management</u> -Family time -Time management -Working time -Cohousing -No isolate houses -Living with resilience	<u>Monopolies and monocultures</u> -Globalisation
2	<u>Mobility</u> -Green transports -Public transports -Transports for more people	<u>No infrastructure</u> -Few and uncomfortable buses; No metro; -No Cycling paths; No adequate infrastructure
	<u>Nutrition</u> -Reduce the food waste -KM 0 -Respect the seasonality	<u>High costs</u> It is hard for people to spend so much money for good food; Healthy food and life are expensive
	<u>Time</u> -Free time -Working time -Everyday life	<u>Information</u> Overload information; What is the right information? Is this information correct? No trust in scientific information. No

		enough scientific dissemination
	Welfare -Family support -Culture -Environment concern	<u>Not many political actions for social welfare</u>
	Housing -Life space	<u>Marco-Economic Interests</u> Economic interests of few people
	Behaviours -Being active -Respect the environment -Recycling -Consumption reduction	<u>No civic sensitivity</u> No civic sense neither interest in common things <u>Reduction of the perceived wellbeing</u> Use bicycle is dangerous; use bicycle or foot during rain or it is cold is unhealthy

Table 6.2. Overview of clusters sustainable lifestyles.

For the sustainable behaviours, for the first group, the most important cluster was the active citizenship. Sustainable behaviours were classified as the most important cluster for the second group. For the main obstacles and barriers, for the first group, the most important cluster was Disinformation. For the second group, the most important cluster was the Sustainable behaviours, in particular activism in civic participation and consumption reduction (included recycling). Responsible and sustainable nutrition (good, healthy and local food and no food waste) and mobility (green and active mobility, but also efficient public transport) were also considered as much important for a green lifestyle. For the main obstacles and barriers, the second group, found internal and external barriers; among them, the most important were the internal ones as reduction of perceived wellbeing and lack of civic sense.

Methods and outline vision development session

After the lunch, we left the participants free to choose between the two groups: one on the green growth and the other on the sufficiency topic. Prior to that, Giuseppe Carrus had given a short presentation resuming the basic assumptions of these two concepts.

In the first phase, participants answered to the following questions (around 45 minutes)

- How can we have a sustainable lifestyle for food in 2040?
- What are the different (consumption) activities for this lifestyle?
- What are the key assumptions for this vision?
- How do people live in the sustainable lifestyle vision?
- How do bottom-up initiatives fit in this vision?
- What products/technologies/services are used?
- How about new technologies (e.g. ICT) or not?
- How are these future culture and behaviour different compared to the present?
- How can sustainability be enhanced in this vision?
- Can the lifestyle in this domain be extended to another life domain (e.g., mobility, work-leisure, energy, homes-living)?

In the second phase, participants answered to the following questions (around 45 minutes)

- What cultural and behavioural changes are needed for this vision?
- What institutional and economic changes are needed for this vision?
- What technological changes are needed for this vision?
- How can these changes be realised and what activities/actions are needed for this?
- Who is needed for changes and actions and what do they have to do?

6.4 Elaborated visions

6.4.1 Vision 1: Sufficiency

Core and main assumptions

The core assumptions of the sufficiency vision were the following:

- Sufficiency: development and prosperity without growth
- No new buildings in urban area
- Urban centrality in a multifunctional perspective
- Administrative devolution to small groups or communities
- Active communities system
- No bureaucracy
- Multidisciplinary systematic approaches for production
- Satisfaction of primary needs
- Less hours of work
- More solidarity

For participants, it is essential to stay inside urban areas, avoiding to build new building for residences or offices, but rather to re-structure or develop the already present ones. They considered important to reintegrate urban centrality in a multifunctional perspective, and the parallel elimination of all bureaucracy to improve production efficiency and efficacy. Institutional sufficiency should follow the subsidiarity principle of administrative devolution to group or community level, with a larger system of active communities, and a higher solidarity between communities. The primary needs (food first) of all is people are a priority, also in prevision of the 3-billions world population increase. The decrease of work hours and increase of free time for everyday activities is part of this vision (family, sport, cultural interests, hobbies, etc.), and the expected outcome is an increased public health and wellbeing (e.g., via stress reduction) at the population level and to improve people life (e.g. like in the social welfare democratic model of North Europe).

Lifestyle activities

The main actions necessary to achieve a sufficient future identified by participants are related to research, development, and innovation in different fields, with multidisciplinary approaches: the contribution of technology, economy, institutions, is key for implementing a sufficiency scenario. Likewise, education is needed for promoting cultural and behavioural change

and diffusion of sustainable models, as well as for improving specific competences for the development of new systems. Bottom-up actions are required, especially from communities. The processes involved in these bottom-up actions relate to territorial identities, active citizenship, promotion of resiliency, responsibility, commitment, civic sense, and solidarity among individuals, groups and communities.

The fundamental wish is also a dialogue between institutions and social actors: research institutes with economic production, administrative management, and educational systems.

Core and main assumptions	<ul style="list-style-type: none"> • <i>Development and prosperity without growth</i> • <i>Not build new buildings, but restructuring the already present</i> • <i>Active communities system</i>
Lifestyles	<ul style="list-style-type: none"> • <i>Satisfy primary needs (nourishment first)</i> • <i>Less hours of work for reducing stress and improving everyday life wellbeing</i> • <i>More environmental and social solidarity</i> • <i>Civic sense and empathy</i> • <i>Activism and participation to institutional and political life</i> • <i>Flexibility of social roles (e.g. gender and family roles) to simplify everyday activities</i>
Organisation and division of roles	<ul style="list-style-type: none"> • <i>Administrative devolution to small groups or communities</i> • <i>Institutional sufficiency as principle of subsidiarity (legal and economic support to communities from government)</i> • <i>Elimination of bureaucracy</i> • <i>Multidisciplinary systematic approaches for production</i> • <i>Urban decentralisation in a multifunctional perspective: no city or neighbourhood with single specific functions (e.g. decentralise power and managerial activities)</i>

Table 6.3. Sufficiency Vision Summary

Issues for further elaboration

Participants focus on different vision's problems:

- The prevision of an increase of 3 billion of people for 2040 could make difficult the satisfaction of the primary needs, therefore multifunctional agriculture could be a tool for satisfying nutrition needs;
- In a sufficient society, it is necessary to develop new technologies to improve the sustainability of production, in particular in the agricultural production, through studies and researches for the rescue, recovery, and use of specific seeds, that instead could be lost in the future;
- Many cultural and behavioural changes linked to social and civil motivations are needed;
- Governance systems should implement updated policies for promotion and dissemination sustainable and resilient behavioural models in densely populated urbanised contexts;
- Furthermore, the educational system should be reformed to raise awareness to sustainability issues. Many participants argued that sensitivity to environmental issues and attention to the territory, ecosystems, and climate change must be developed from as early as possible among school pupils;

- It is important to improve the capability of resilience of individuals, groups and communities, as well as larger groups and cities. A resilient city is able to maintain a stability (equilibrium) despite chronic stresses or unexpected difficulties.

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6.4.2 Vision 2: Green growth

Core and main assumptions

In the green growth vision, participants focused the attention on the **individual capacities and personal needs**. They underlined that personal needs usually don't receive the importance they should have. In a green vision the **citizenship has an active role**. Also citizens not only buy, but also search for knowledge and information themselves. This vision focused **the attention on technologies** for their utility (technologies can really help the everyday life) but also for the problems that they can create (e.g. overload information; will technologies really help us?).

Having a green awareness is also another main aspect of this vision. Indeed, participants showed the importance of the experience of the city as a social system. For example, **rediscovering the "Piazza" (square)** as a place to meet and spend time together with others, to be part of the ongoing societal transitions, and eventually try to have a role in it. This concept is also linked with the ideas of leisure and stress reduction (in lifestyle section).

Lifestyle activities

Regarding the possible actions for a Green lifestyle, participants propose that **mobility** should be improved: e.g. minimizing the use of private vehicles and fuels, using electrified transport, creating more bike lanes, providing a relatively high level of services but also attracting people to use the public transport service by creating optimised and user-friendly infrastructures. Also, citizens should be sensitised regarding **saving energy and producing renewable energy** (e.g., using renewable energy and photovoltaic systems). These ideas could be realised only with the support of new technologies. The innovation should be promoted and stimulated, the access to technologies should be facilitated.

The **relationship between Humans and Nature** should be emphasised and should be deeper. People should change their behaviour towards nature, spending more time into urban and peri-urban green spaces, working less in their office and rediscovering a sense of the harmony and connectedness to nature. Also, there should be a redefinition of the **working time and free time management** to pursue a goal of stress reduction and improve personal wellbeing.

Organisations and division of roles

About the re-organisation of the resources, the concept of re-use is prominent. Use recycled materials, use un-inhabited houses and renew abandoned buildings, use and reuse of what is already present and also use more natural materials could permit to reduce the environmental impact and thus contribute to a greener lifestyle. The governments should work to improve the education system and the working condition of youth (e.g. with quicker reforms). At school, the new generation should be made more awareness about environmental issues, for

example starting with a good and healthy diet choice in the school canteens (e.g., more 0-Km and organic food), or practicing and learning the recycling activities.

Another institutional change needed regards social welfare policies for greater assistance and support to families, which would contribute as well to a green growth scenario by facilitating a better work-leisure balance. The role of the stakeholders is important: Professionals should look to the future, being active and not static, and being able to "be protagonists" actors of the ongoing transition. Institutions and local governments should have a more leading role in promoting these changes. As said before, the citizens have to be actively engaged.

Core and main assumptions	<ul style="list-style-type: none"> • <i>Develop the individual capacities and individual needs</i> • <i>Active citizenship: the citizens should not only buy but also know and inform themselves.</i> • <i>Have a green awareness during the entire lifespan.</i> • <i>Technology in everyday life.</i>
Lifestyles	<ul style="list-style-type: none"> • <i>Less work, more free time</i> • <i>More wellbeing</i> • <i>Spending more time in green areas</i> • <i>Better mobility</i> • <i>Saving and producing renewable energy</i> • <i>New technologies</i> • <i>Relation with the Nature</i>
Organisations and division of roles	<ul style="list-style-type: none"> • <i>More social equity</i> • <i>Redistribution of unused resources</i> • <i>Quicker reforms</i> • <i>Better education system</i> • <i>More flexible labour market</i>

Table 6.5. Green Growth Vision Summary

Issues for further elaboration

Participants focus on different vision's problems:

- Overload Information. What is it possible to do? One proposed solution could be to educate people to be able to manage the information. Create a network of "information sharing".
- Inactive and lazy citizenship should be sensitized to be active. Working together is possible to realise a future.
- This vision sees at the future combining elements from the tradition (e.g. rediscovering the Nature, the squares) and elements from innovation (new technologies such as electric cars).

6.5 Conclusions & Reflections

The main reflections came up on the general discontent about the Italian political organisation (both visions) and the generalised political neglect of the personal needs of the citizens (for vision 2, in particular).

- Thinking about the first aspect, regional governments and municipalities are lacking credibility and reliability, and the political organisation is often confused and ambiguous, which leads to low level of trust in public institutions. For the participants, in both visions the citizens have a crucial role, and a productive dialogue among institutions (Academy and research institutes with economic production, administrative management, and educational systems) and civil society is fundamental.
- For the second aspect, participants said that, at the moment, needs are not considered too much, and more attention should be given to social equity issues.
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Methodological reflections

Participants were happy to be involved in this working day and they said that the topics were interesting. The number of participants was good and they participated very actively. We didn't experience special problems about the methods. The brainstorming session worked well and produced useful insights for the following sessions. The time for the second part was sufficient. Planning more time for the vision development could be good, especially with large sub-groups.

The moderation and the management of interpersonal conflicts and different worldviews among the participants was quite easy, probably because of the high interest and personal involvement in these themes of the participants.

References & Sources

Brizi, A., Maricchiolo, F., Carrus, G., Panno, A. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Italian Case Study for GLAMURS.

7. Vision workshop results the Netherlands

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7.1 Introduction

On November 26th, 2015 researchers of TU Delft organised a vision workshop on Sustainable Lifestyles and Citizen Initiatives for the European GLAMURS project. People from citizen initiatives, government and knowledge institutes were invited, based on their interest in sustainable lifestyles, citizen initiatives and related subjects. The workshop was facilitated by Jaco Quist, with support from Wouter Spekkink, Udo Pesch and Eline Leising. The goals of the workshop were to (1) explore opportunities for and barriers to sustainable lifestyles and consumption in the province of Zuid-Holland, (2) develop visions for sustainable lifestyles and consumption in the province of Zuid-Holland for 2040, and (3) to zoom in on the role that local sustainability initiatives can play in the envisioned futures.

7.2 Workshop preparation

Stakeholder overview

The stakeholders we identified for our workshop are listed in table 7.1. We tried to get a balanced representation from civil society, government, and knowledge institutes. We decided not to involve representatives of business for this workshop, because we perceived their link with the subject to be less obvious. In hindsight, it would have been possible to involve business representatives as well. Some of the stakeholders are representatives of the initiatives included in our case study, with whom contact was established during our fieldwork for GLAMURS.

Stakeholder category	Examples of potential participants (organisations)
<i>Civil Society</i>	<ul style="list-style-type: none"> • Repair Cafés • Energy initiatives • Urban agriculture initiatives • Umbrella organisations for bottom-up initiatives • Environmental associations
<i>Government (and affiliated)</i>	<ul style="list-style-type: none"> • Municipalities in the region (e.g., Delft, Rotterdam, The Hague) • Scientific Council for Government Policy • Netherlands Environmental Assessment Agency • Province of Zuid-Holland • Ministry of Infrastructure and the Environment • City Region
<i>Knowledge and others</i>	<ul style="list-style-type: none"> • Universities • Research institutes (e.g., Dutch Research Institute for Transitions, Energy Research Centre for the Netherlands) • Consultancy bureaus (e.g., Duneworks, Asis Research) • Independent researchers

Table 7.1. Examples of potential participants identified for the workshop.

Stakeholder mobilisation

Stakeholder mobilisation took place in two stages. We first identified a core group of people that we wanted to involve in the workshop, and we asked them for their availability during the period in which we wanted the workshop to take place. We set the date for our workshop and we started sending out e-mails with invitations to all the people that we identified as stakeholders. Many of the stakeholders received a general e-mail, and some stakeholders were contacted personally by Jaco Quist. We asked all invitees to send us a confirmation of their participation. A few days before the workshop, we sent out an e-mail to everyone that had confirmed participation, offering details on how to get to the location, and adding the proposed program that we had sent to them earlier.

Outcomes/learning test workshop

A week before the workshop itself took place, we performed a 1.5 hour test workshop in which Eline Leising and Wouter Spekkink (2 co-facilitators) practiced with the brainstorming of the workshop, under the guidance of Jaco Quist. We found that the brainstorming session will probably work best when the participants to the session are standing, because it creates a more active attitude.

Practical workshop organisation & adjustment to the workshop format

The workshop was organised at the Art Centre Delft, which is located in a green area, near the university campus. The Art Centre Delft is a renovated farm where people can organise meetings, visit art expositions, and wander around in the gardens of the centre. We booked a large room where we could host up to 30 people. We arranged the tables and chairs in a square formation, and four flip-over stands were available in the room. An extensive workshop script was developed.

7.3 Lifestyle brainstorm and vision development: methods and results

Program and participation

The overall program of the workshop was divided into two main parts. The first part in the morning focused on a brainstorm session on sustainable lifestyles. The second part in the afternoon involved vision development and a backcasting session. The overall program of our workshop is as follows:

9.00.-9.30	Walking in, coffee and tea
9.30-10.30	Check-in & Introduction to GLAMURS project, and sustainable lifestyles
10.30-11.00	<i>Break: coffee & tea</i>
11.00-12.00	What are sustainable lifestyles (Facilitated brainstorm & clustering in subgroups)
12.00-12.30	Plenary report back & discussion
12.30-13.30	<i>Lunch break</i>
13.30-15.00	Vision development & backcasting session in subgroups & Introduction of program

15.00-15.30	Break: coffee & tea
15.30-16.30	Plenary report-back & discussion on vision results
16.30-17.00	Closing discussion and check-out
17.00-18.00	Drinks

In total, 22 people participated to our workshop, including the 4 (co-)facilitators. There were 9 people that represent civil society, 3 people that represent governmental (or affiliated) organisations, and 6 people that represent knowledge organisations.

Methods lifestyle brainstorm & discussion session

For our brainstorm session on lifestyles we divided the group of participants into 3 subgroups. Each subgroup was facilitated by their own co-facilitator, and Jaco Quist moved back and forth between the different groups, while keeping an eye on the progress and the time. The brainstorm session was divided into three parts, where each part was guided by different questions:

1. *What is (part of) a sustainable lifestyle? What is part of a sustainable lifestyle?*
2. *What are the most important barriers/issues/problems for sustainable lifestyles?*
3. *How can local citizen initiatives contribute to sustainable lifestyles?*

Each point was discussed in turn by the 3 subgroups. After discussing all questions, the members of each subgroup were asked to break up in pairs, and to cluster the results of their discussions. After clustering, everyone was allowed to assign priorities to cluster by sticking dots on the clusters. Everyone received 3 dots for each flip over (9 in total), and they could decide how to distribute them.

Main results lifestyle aspect brainstorm

Table 7.2 shows an overview of the various clusters of aspects of sustainable lifestyles.

Subgroup	Clusters	Example ideas
1	Behaviour (5)	<ul style="list-style-type: none"> • <i>Choices with little impact on environment</i> • <i>Use of few electronic devices</i> • <i>Recycling</i>
	Awareness (9)	<ul style="list-style-type: none"> • <i>Upbringing and norms</i> • <i>Liveable future</i> • <i>Culture of sufficiency</i>
	Technology (2)	<ul style="list-style-type: none"> • <i>Energy-footprint</i> • <i>Solar Panels</i> • <i>Climate adaptation</i>
	Role of government (2)	<ul style="list-style-type: none"> • <i>Sustainable politics</i> • <i>Carbon tax</i> • <i>Role models</i>
2	Behaviour (2)	<ul style="list-style-type: none"> • <i>Reuse</i> • <i>Fewer wastes</i> • <i>Less consumption</i>
	Technology (3)	<ul style="list-style-type: none"> • <i>Sustainable Agriculture</i> • <i>Renewable energy</i> • <i>Use of the bicycle</i>
	Living together (4)	<ul style="list-style-type: none"> • <i>Warm-glow feeling</i> • <i>Attention for others</i>

		<ul style="list-style-type: none"> • <i>Inclusion, instead of unemployment</i>
	Relationship people-environment (6)	<ul style="list-style-type: none"> • <i>Balance between humans and nature</i> • <i>Taking the environment into account</i> • <i>Enjoying life</i>
3	Abstract definitions (9)	<ul style="list-style-type: none"> • <i>A collection of behavioural practices</i> • <i>Closing loops</i> • <i>Wastes are food</i>
	Practical ideas (2)	<ul style="list-style-type: none"> • <i>Cycling</i> • <i>Planting trees</i> • <i>Helping neighbours</i>
	Context (7)	<ul style="list-style-type: none"> • <i>Infrastructure</i> • <i>Social environment</i> • <i>Awareness of consequences of choices</i>

Table 7.2. Overview of clusters sustainable lifestyles. The numbers between parentheses indicate the number of priority dots assigned to the clusters.

Main results barriers to sustainable lifestyle discussion session

Between 5 and 7 clusters of ideas related to barriers to sustainable lifestyles were generated per subgroup. Table 7.3 gives an overview of the clustered ideas about barriers that were identified.

Subgroup	Clusters	Example ideas
1	Time and convenience (5)	<ul style="list-style-type: none"> • <i>Routines</i> • <i>Technology and permits</i> • <i>Efforts it costs to change behaviour</i>
	Money (3)	<ul style="list-style-type: none"> • <i>Having too much money</i> • <i>Rebound effects</i>
	Information (1)	<ul style="list-style-type: none"> • <i>Lack of communication</i> • <i>Lack of information</i> • <i>Too much information</i>
	Status (1)	<ul style="list-style-type: none"> • <i>Fear to be the odd one out</i> • <i>Fear of change</i>
	Vested interests (2)	<ul style="list-style-type: none"> • <i>Business models</i> • <i>Regulation</i>
	Ideology (4)	<ul style="list-style-type: none"> • <i>Growth ideology</i> • <i>Technological optimism</i> • <i>New is always good</i>
	Economic barriers (1)	<ul style="list-style-type: none"> • <i>Free-rider behaviour</i> • <i>International competition</i> • <i>Withdrawing government</i>
2	(lack of) motivation and social pressures (5)	<ul style="list-style-type: none"> • <i>Habits</i> • <i>Other priorities</i> • <i>Sustainability is not cool</i>
	Knowledge and awareness (2)	<ul style="list-style-type: none"> • <i>Ignorance</i> • <i>Lack of awareness</i> • <i>Limited visibility</i>
	Money (1)	<ul style="list-style-type: none"> • <i>Sustainability costs more</i> • <i>Rewards for sustainable behaviour unclear</i>
	System barriers (2)	<ul style="list-style-type: none"> • <i>Role of government and regulation</i> • <i>Greenwashing</i> • <i>Strong focus on economy</i>
	Impotence (5)	<ul style="list-style-type: none"> • <i>What we do is a drop in the ocean</i>

3	Values and norms (4)	<ul style="list-style-type: none"> • <i>Social norms</i> • <i>Personal versus collective interests</i> • <i>Lack of vision on importance sustainability</i>
	Economic thinking (4)	<ul style="list-style-type: none"> • <i>Profit thinking</i> • <i>Going along with delusions of the day</i> • <i>Having too little money</i>
	Fear / Isolated thinking (2)	<ul style="list-style-type: none"> • <i>Vested interests</i> • <i>Rigidity of existing systems</i> • <i>Fear of change</i>
	Role of media (1)	<ul style="list-style-type: none"> • <i>One-side news coverage</i>
	Role of politics (4)	<ul style="list-style-type: none"> • <i>Short-term thinking</i>

Table 7.3. Overview of clustered barriers sustainable lifestyles. The numbers indicate the number of prioritisation dots given to the clusters.

Main results contribution of citizen initiatives

For the contribution of citizen initiatives around 3-6 clusters of ideas were generated by the 3 brain-storm sessions. Table 7.4 gives an overview of the clusters on the contribution of citizen initiatives.

Subgroup	Clusters	Example ideas
1	Relationship citizen initiatives & individuals (9)	<ul style="list-style-type: none"> • <i>Supporting, motivating and inspiring each other</i> • <i>Show models of sustainable lifestyles</i>
	Results (9)	<ul style="list-style-type: none"> • <i>Creating a joint force</i> • <i>Testing new ideas</i> • <i>Communication partner to business and government</i>
	Convenience	<ul style="list-style-type: none"> • <i>Bringing things closer to members</i> • <i>The ease of becoming a member</i> • <i>Providing structure to members' lives</i>
2	Impact on the outside world (3)	<ul style="list-style-type: none"> • <i>Showing alternatives to the outside world</i> • <i>Making connections with other parties</i>
	Internal impact (9)	<ul style="list-style-type: none"> • <i>Achieving more when working together</i> • <i>Snowball effect of initiatives</i> • <i>Increased visibility of alternative practices</i>
	Impact on individuals (3)	<ul style="list-style-type: none"> • <i>Meeting like-minded people</i> • <i>Getting recognition</i> • <i>Joy of being together</i>
3	Psychological effects (3)	<ul style="list-style-type: none"> • <i>Getting a grip on your life</i> • <i>Increasing creativity</i> • <i>Increasing independence</i>
	Mentality (6)	<ul style="list-style-type: none"> • <i>Increased visibility of alternative lifestyles</i> • <i>Increasing awareness</i> • <i>Changing social norms</i>
	Economic effects (3)	<ul style="list-style-type: none"> • <i>Local production</i> • <i>Preserving locality</i> • <i>Giving space to entrepreneurship</i>
	Social effects (1)	<ul style="list-style-type: none"> • <i>Stronger social cohesion</i> • <i>Social contacts</i> • <i>Increased acceptance of sustainable behaviour</i>
	Relationship with the government (4)	<ul style="list-style-type: none"> • <i>Challenging and influencing the government</i>
	Threats (1)	<ul style="list-style-type: none"> • <i>Risk of overestimating the contribution of citizen</i>

		<i>initiatives</i> <ul style="list-style-type: none"> • <i>Risk that government will do less</i>
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Table 7.4. Overview of clusters on contribution of citizen initiatives. The numbers indicate the number of prioritisation dots given to the clusters.

Results of the discussion based on the results are included in 7.5, the section on conclusions and reflections.

Methods and outline vision development session

Our vision session took place after the lunch. It was opened with a presentation on the principles of vision development and backcasting. The principles of Sufficiency and Green Growth were introduced as possible starting points for vision development on sustainable lifestyles. Based on preferences for these principles, 3 groups were formed: One for Sufficiency, one for Green Growth, and one combining the two principles. Each group was asked to develop a vision based on the following visioning questions:

- *How can we live sustainably in 2040 in the urban regions of greater Rotterdam and The Hague?*
- *How do people live in terms of (i) energy, (ii) products & repairing, (iii) nutrition, (iv) mobility, (v) housing/living, and (vi) the work-leisure balance?*
- *How have our culture and lifestyle changed compared with the current situation?*
- *Which technologies are used?*
- *What is the vision on society? What does our society look like?*
- *What role is there for (citizen) initiatives, services and sharing economy platforms?*

Halfway through the discussion, the following backcasting questions were introduced:

- *What are important assumptions/conditions for this vision?*
- *Which changes are needed (in culture, economy, policy, organisation and technology)?*
- *How can the changes be brought about? Which actions and activities are required for this?*
- *Who should carry out these activities?*

After the vision workshop we elaborated the visions by outlining their core and main assumptions, the lifestyle activities envisioned, as well as issues for further elaboration, which are presented in the next section. Discussion of the vision results is integrated in section 7.5.

7.4 Elaborated visions

7.4.1 Vision 1: Sufficiency & Local communities

Core and main assumptions

The first vision that was generated is summarised in table 7.5. The vision is fundamentally rooted in principles of **sufficiency**, that is, the idea that the footprint of our current society is too big, and that in the future we should consume less to prevent that we exceed the **carrying capacity of our planet**. The vision also assumes that we have enough time to realise the transition to a sustainable society, based on sufficiency, by 2040. This transition is envisioned to take the form of a **social tipping point** involving the emergence of a **collective will** to push our society into the direction of an economy based on sufficiency.

The society envisioned combines a strong orientation on **local communities with global connectedness**. The daily life of people generally takes place within their local community. Although the vision is more explicit on the role of local communities, global connectedness was found to be important to ensure harmonious relationships between local communities. The prime responsibilities of supra-local **governments** is to ensure that this harmony exists, as well as to maintain healthy infrastructures at the supra-local level. In general, governments have a facilitative role, instead of engaging in top-down steering, and tend to focus on the creation of boundary conditions that stimulate self-organisation.

Having an economy that is based on principles of sufficiency means that we **consume less** than in our current society, and that there is a stronger emphasis on quality of life, which does not depend on the products that we own and consume. In terms of product manufacturing and use, there is a stronger emphasis on sharing (or joint ownership), repairing and upgrading products. The possibility to upgrade products also means that existing models of products are extended rather than replaced. **Companies** therefore have large departments that are dedicated to repair, customer support and selling functions that products can provide. Many products and services are exchanged in local communities, based on an informal economy. Companies are of a smaller scale, have strong roots in communities and have shareholders with a strong **social orientation**. As a result, companies typically invest revenues back into the communities in which they are based. Knowledge developed by companies is **open source**, which means it easily flows to other communities. People work less days a week, which leaves them time to invest in their community. This is made possible by the fact that many economic tasks are robotised.

The first vision is based on the assumption that people have a strong **social orientation**, and that everybody feels a certain responsibility for his/her local community. This also points to an important **threat** to the envisioned society: The envisioned society can only work if the majority of the population is willing to give high priority to the collective interests of the community.

Lifestyle activities

Food is produced primarily locally, and the consumption of food is seasonally bounded. Meat products and exotic foods are luxurious, and are consumed relatively rarely. Not all types of food can be grown locally, which means that some food products have to be supplied from outside the community. In each community there will be local distribution centres to which products from outside the community are delivered. Products can also be home-delivered, using fully electric means of transport.

In terms of **mobility** the most important change is that transport has become fully electric and clean. In addition, transport is mostly shared or public. In general, there will be less commuting, because people tend to **work** close to their homes, work less days a week, and have excellent possibilities to work from home. International travelling still exists, but is a luxury that people make use of only rarely. People spend most of their **leisure** time within, or near to their local communities, which reduces the need to travel. This requires the quality of the living environment to be very high. It is also possible to make digital trips, based on technologies that make virtual reality indistinguishable from physical reality.

Products have an extended life-time and are designed in a way that makes them easy to repair. Products are also designed in a way that allows people to upgrade their products themselves. If products have reached the end of their lifetime, the materials of which they are made are easily recycled for the production of new products. In general, people care less about owning products, and tend to focus more on the functions that products provide, which entails a shift from purchase of ownership to the purchase of the services that products can provide.

In terms of **work-life balance** it was mentioned that people tend to work fewer days a week, and work has become more flexible. This also leaves people more time to do 'unpaid work' within their local community. Instead of relying on commercial services, people rely mostly on services exchanged on an informal basis within their community. Within the community, specialisations do exist, but the capabilities of people are broad enough to participate in different tasks. Also, it is recognised that not everybody can contribute to the local community equally. The contribution that people can reasonably make to their local community depends on personal circumstances.

Core and main assumptions	<ul style="list-style-type: none"> • <i>Our current footprint is too big.</i> • <i>There is enough time to realise a transition.</i> • <i>The transition will take the form of a social tipping point.</i> • <i>There is a collective willingness and acceptance for this type of society.</i> • <i>Our future society is based on principles of sufficiency.</i> • <i>Our future society is locally rooted, but globally connected.</i> • <i>Everyone is boss of his/her own time.</i> • <i>Our future society is characterised by less consumption and greater quality of life.</i> • <i>There is enough for everyone, and we respect the carrying capacity of our planet.</i>
Lifestyles	<ul style="list-style-type: none"> • <i>Food is locally produced, and meat and exotic products are a luxury.</i> • <i>We only use electric (and primarily shared) means of transport.</i> • <i>Our leisure activities primarily take place at (the boundaries of) our local community, or we travel digitally.</i> • <i>'Enough' is the new norm in the consumption of products.</i> • <i>There is a stronger emphasis sharing, repairing and upgrading products.</i> • <i>We work fewer days a week and we invest time in our local community.</i> • <i>There is specialisation in work in communities, but everyone within the community can help in the performance of a broader range of work.</i> • <i>The quality of the living environment is very high.</i>
Organisation and division of roles	<ul style="list-style-type: none"> • <i>Companies are less driven by profits and invest revenues in local communities</i> • <i>Companies are of a smaller scale.</i> • <i>Knowledge is open source.</i> • <i>Governments focus on creating boundary conditions and facilitation.</i> • <i>Governments at a supra-local level ensure the existence of healthy infrastructures and harmonious relationships between different communities.</i>

Table 7.5. Summary of vision 1: Sufficiency.

In terms of **housing and the living environment** there is also a strong emphasis on the local rootedness of life. People can experience a high quality of life in and around their community, which means that spending time in the community is a rewarding experience (rewarding in an immaterial sense). For the supply of **energy** local communities make use of local production and smart grids.

Issues for further elaboration

- The vision is unclear on the **role of new technologies** in our future society, such as ICT and 3D-printing, although tele-travel is part of the vision. It will be interesting to think about the implications of such technologies for the regional economy as well as for everyday life.
- As the vision includes a shift to stimulating (partial) self-sufficiency of local communities, it has radical implications for **required changes in our current regional economy**, which is strongly driven by globalised markets. The vision is also relatively unclear on **the ways in which local communities are to be organised**. Will they be organised in ways similar to current neighbourhood initiatives, or as a series of initiatives? What is the role of governments in the organisations of local communities?
- It is unclear what the implications of the orientation on local communities will be for **individual freedom** and **tolerance** towards 'outsiders.' To some extent there is a tension between doing things for the local community, and the premise that everybody is boss of his/her own time.
- The assumption on the existence of a **collective will is problematic**, and it is unclear how this collective will is to come about. In the elaboration of the vision it may be helpful to envision an **institutional framework** that ensures that people 'will do their part' for the community, while retaining enough freedom for individuals to be boss of their own time.

7.4.2 Vision 2: Between Sufficiency & Green Growth

Core and main assumptions

The second vision is summarised in table 7.6. The core principle of this vision is that we should strive for **autonomy**, but that we should also **cooperate** and help those in need, where necessary. This approach to combining autonomy with cooperation is itself rooted in the principle of **self-sufficiency**. Individuals are assumed to feel a desire to be independent, and to take matters in their own hands. This is also partly a necessity, because **institutional structures** of our society (e.g., political and social institutions, resource flows) have become **fluid and fragmented**, which creates flexibility, but also **uncertainty**. For example, there will be uncertainty about the duration for which people can keep their job, where they will work in five years, and what the society will look like by that time. This fluid institutional context challenges people to be **independent** and **entrepreneurial**, and discover, develop and use their own **talents**. Nonetheless, this does not mean that people become entirely self-centred. **Social cohesion** at the level of the city is important, and people feel responsibility towards the community members with fewer opportunities to discover their talents by themselves. In addition, the vision assumes that are mechanisms in place to **empower** (people in) neighbourhoods that are traditionally lagging behind. This means that people do not just work for themselves, but also sometimes work for others (those in need). This requires **new reward systems** that facilitate the **exchange of non-commercial services** among people. This may also entail **new approaches to administration** that allow us to keep track of and reward what people do for others on a non-commercial basis.

Core and main assumptions	<ul style="list-style-type: none"> • People strive for autonomy at the individual level & social cohesion at the city level. • Autonomy means self-development, using talents, independence & entrepreneurship. • Social cohesion stands for helping out community members that have less opportunities to depend on their own talents for survival. • Society is flexible (institutional structures are fluid, fragmented), causing uncertainties. • An increasing percentage of the population lives in cities. • The city is energy neutral. • Advanced knowledge exchange and smart innovations ensure a limited footprint.
Lifestyles	<ul style="list-style-type: none"> • People live in smaller residences, and they often relocate in the city, based on changes in other aspects of their lives. • People live close to where they work. • People travel short distances. • Energy is likely to be produced locally, for which commercial as well as local, collective arrangements are possible. • Products, services and food are produced locally, and sometimes on a non-commercial basis (e.g., services to community members in need). • People may change jobs frequently.
Organisation and division of roles	<ul style="list-style-type: none"> • Governance takes place at the level of cities; a small role for 'central government.' • The production of goods and services is organised at the level of the city. • New reward systems to ensure that services provided to others are valued. • A glass bubble approach to the city: Cities are as self-sufficient as possible, and problems are solved as much as possible within the borders of the city.

Table 7.6. Summary of vision 2: Between Sufficiency and Green Growth.

Striving for self-sufficiency does not only apply to individuals, but also to cities: people do have **an eye for the collective interests of their city**, and it is at the level of the city that most **collective systems and services** are organised. As a consequence, our economies have a strong local orientation, which may entail, for example, the use of local currencies. The vision assumes that **steering** takes place primarily at the **level of cities**, and city governments are responsible for a larger geographical area than cities in our current-day society. This also causes a **reduced influence of central governments**.

Another assumption underlying the vision is that cities are energy neutral, or at least have a **limited footprint**. We also need to develop smart solutions for problems such as **spatial pressures** in cities, which are an almost inevitable consequence of the increasing number of people that will **live in cities**, while space is also needed for the production of goods and services. Without making explicit in what specific direction we should look for solutions, there is an assumption that these problems require **advanced exchange of knowledge** and **smart innovations**. This also requires investments in **education**.

Lifestyle activities

The vision is not explicit on activities that take place in different lifestyle domains, with a few exceptions. In general, the assumption is that everyday life takes place in cities. Also, because of the uncertainty of our society, routines can be expected to have a relatively short life-span.

In terms of **housing** it was mentioned that an increasing percentage of our population will live in cities, and that population density will also increase as a result. This means that people will live in smaller residences. As a result of regularly occurring in other aspects of their lives (e.g., changing jobs), people will also relocate relatively often within the borders of the city.

It is likely that **energy** is produced locally, as the vision stresses autonomy, self-sufficiency, and the primacy of city as the domain in which daily life takes place. It is possible to organise this based on commercial arrangements, but as a result of the emphasis on autonomy we can also expect plenty of arrangements in which people organise their energy production in a bottom-up fashion.

Products and services are produced at the local level as well, which may imply that people primarily consume and use locally produced products and **food**. The fact that the vision assumes that people will also exchange non-commercial services implies that our **work-life** doesn't take place entirely in a traditional working environment. The vision also seems to imply that people work where they live, and that they live close to the markets where their services and goods are distributed. There are increased employment opportunities at the level of the city, as a result of the increasing concentration of product and service provision in cities. Also, people can be expected to change jobs frequently, due to the quickly changing circumstances in which they live. This also has consequences for **mobility**. People will have to travel relatively short distances, through a crowded city, which requires smart solutions in terms of infrastructure and/or public transport.

Issues for further elaboration

- The vision is still open on the direction that development of **knowledge and innovation** should take. It could be interesting to extrapolate technological developments that take place presently, and to discuss what role they could play in the future society as envisioned.
- The developers of the vision also indicate that the vision implies a **considerable energy demand**, which cannot be satisfied with our current day systems.
- The question is what will happen to **large-scale industries**, and where **necessary resources** will be drawn from if production and consumption take place primarily at the level of cities. In general, the vision has relatively little to say on **systems that will exist at the supra-local level**, such as large scale industries. Further elaboration of the vision is required here.
- The vision is not yet explicit on the activities that take place in various **lifestyle domains**, although a few implications can be drawn from the underlying assumptions of the vision. Nonetheless, the implications of the vision of activities in different lifestyle domains require further elaboration.
- The vision combines emphasis on the **individualistic tendencies** of people with emphasis on the importance of **social cohesion** in cities. It is not entirely clear yet how this tension is reconciled.

7.4.3 Vision 3: Green growth through innovation and active citizens

Core and main assumptions

The third vision that was developed is summarised in table 7.7. The vision is presented as a **fundamentally optimistic** vision, in the sense that one of its underlying assumptions is that, through **technological innovations and increasing eco-efficiency**, we will be able to solve our environmental problems. The vision is rooted in a strong belief in the **innovative power of companies**, and **motivated citizens**. In several ways, the vision draws inspiration from **ecological modernisation**.

The vision also assumes that **cities have become compact**, without necessarily making use of high-rise buildings. The ecological impacts of our activities are reduced through a combination of **smart planning** and **loop-closing**. Different activities that can easily feed into each other (e.g., reuse of energy and materials) are located close to each other such that loops can be closed efficiently. This means that economic activities are based on principles such as **circular economy** and **cradle-to-cradle**. There will be a significant **'remake-industry,'** where the emphasis is on repairing products and feeding back reusable materials into the economy. In **agriculture**, there is no monoculture production, but mixed production. Agriculture will also be intensive, but at a small scale, and close to our cities, which creates possibilities for loop closing. **Large scale (industrial) users of energy** rely primarily on wind parks at sea, and (bio)gas plants, combined with Carbon Capture and Storage systems. For **smaller (industrial) users of energy** we use technologies such as energy producing greenhouses and cogeneration facilitations. By locating energy users closer to each other, our energy systems are also easier to optimise through loop closing.

As a consequence of the introduction of new business models (e.g. circular economy) the labour market also changes. For example, there will be new types of jobs, such as the chain manager that is responsible for organizing the closing of material and energy loops. The concept of waste has become old-fashioned. Houses are also assumed to be constructed in a way that makes them **fit for all stages of a life course**. Houses and other buildings also serve as **reservoirs for materials**, which means that we know exactly which materials are available in what amount in all our buildings. These materials can be reused if the building is no longer needed and deconstructed. Cities also have an **elaborate infrastructure for public transport and (shared bicycles)**.

Lifestyle activities

The main body of the vision was presented in terms of activities and trends that take place in different lifestyle domains. With regard to **energy**, the vision is that at the local level (energy for citizens) energy production takes place much closer to home (e.g., everybody has green roofs and solar panels). We also make use of smart networks and closed loops. In addition, we take many energy saving measures, which reduces energy demand. Residential buildings should be energy

neutral. In terms of **housing** people are flexible in the sense that they move to a new home relatively easily if they change jobs. Although people may therefore move relatively often, the reasons for moving are mostly unrelated to the life course stage of people (houses specific to certain life stages have disappeared). People make less use of private gardens, and instead make use of public green spaces.

Core and main assumptions	<ul style="list-style-type: none"> • <i>A fundamentally optimistic vision: With the help of technological innovations we will eventually solve our environmental problems.</i> • <i>Trust in the innovative power of companies and in motivated citizens.</i> • <i>Cities are compact.</i> • <i>Sharing and new business models for functionality and results are important.</i> • <i>There is no such thing as wastes.</i>
Lifestyles	<ul style="list-style-type: none"> • <i>Energy for citizens and small industrial users is generated locally, we take energy saving measures, and we make use of smart grids.</i> • <i>We eat insects, locally produced proteins and cultivation products.</i> • <i>People use only electric cars, sharing cars are the new standard</i> • <i>People mainly use public transport and (shared) bicycles</i> • <i>Houses are fit for all life-course stages.</i> • <i>Work-life and private life are intertwined, and social services are part of our work-life.</i>
Organisations and division of roles	<ul style="list-style-type: none"> • <i>Energy for large industrial users is generated sustainably: (Bio)gas&wind parks in sea.</i> • <i>There is a 'remake-industry', where the emphasis is on repairing and feeding back used materials into our circular economy.</i> • <i>As a result of new economic practices (a large remake-industry) new roles also emerge, such as the production chain manager.</i> • <i>The transition is a combination of bottom-up and top-down developments.</i> • <i>There is an elaborate infrastructure for public transport and (shared) bicycles, which make highways largely redundant.</i> • <i>No monoculture production in agriculture, but mixed production.</i> • <i>The energy tax discount for large scale users is abolished.</i> • <i>Buildings also serve as reservoirs for materials.</i> • <i>We have a green tax system (polluters are taxed).</i> • <i>Regulation should offer room for new initiatives and new business models.</i> • <i>We invest heavily in new types of infrastructures.</i>

Table 7.7. Summary of vision 3: Green Growth.

With regard to **product use** there is a stronger emphasis on repairing and reuse. In addition there is a shift in economic models from purchasing to paying for the functions that products provide. With regard to **food** the vision is that our diet has changed. We eat insects, we primarily eat locally produced proteins (meat replacements) and cultivated products. In terms of **mobility** we no longer make use of cars that are powered by engines that use fossil fuels. In public spaces we no longer see parked cars. Cars are electric and can drive autonomously. Also, cars are primarily shared, partly based on commercial services. However, people make more use of public infrastructures and bicycles, for which the supporting infrastructures have been improved. Our **work-life and private life** have become increasingly intertwined, and there is an increased emphasis on the service sector in our economy.

Issues for further elaboration

- The people that developed the vision signalled a few caveats themselves. This includes that it is uncertain whether our **markets** will develop in the direction that is assumed by the vision. **Governments** will also have an important role in this, because they can create **boundary conditions** that make greening our economy more attractive.
- The vision does not explicitly engage with governance in the envisioned society. Like in other visions, this vision seems to be aimed at a rather specific group of people, and it is uncertain what place **other current dominant values** have in the envisioned society.
- The vision is rooted in a **technological optimist worldview**, and does not yet explicitly take into account technological developments that may be undesirable to the envisioned society. The vision still has relatively little to say about the **structure of our society**.

7.5 Conclusions & Reflections

During the different sessions of the workshop and the discussions a few central themes came up. One of the themes concerns the the **definition of a sustainable lifestyle**. We concluded that we have not yet been able to identify what exactly a sustainable lifestyle is. However, we identified a few important dimensions in our thinking on sustainable lifestyles. A lot of the ideas that our participants mentioned in relation to sustainable lifestyles include **behaviour of individuals** on the one hand, and **social factors and external conditions** on the other hand. This distinction reflects the idea that sustainable lifestyles are to some extent determined by the everyday choices that individuals make, but that these choices are also constrained by the social, physical and institutional environment of people. Another interesting topic discussed in relation to sustainable lifestyles is that they might be understood to develop (partially) as a **side-effect or spill-over effect** of choices that people make for reasons not strictly related to environmental sustainability (e.g., health, community spirit).

Another interesting theme that came up is the **role of citizen initiatives** in transitions to sustainable lifestyles. It was emphasised that the role of citizen initiatives should not be overestimated, and that they are **only one among several instruments** required to realise a transition. That being said, **citizen initiatives can play a role** by making sustainable choices more accessible, creating a group feeling and facilitating joint action, as well as providing models for sustainable lifestyles. At the same time, we should **warn against a too instrumental vision** on the role of citizen initiatives. We have to be aware of the fact that citizen initiatives are not in the first place an instrument for transitions, but are driven by motivations and purposes that do not match the ambitions that external parties may ascribe to them. This **mismatch** may be one of the contributors to the lacking connections between citizen initiatives and governments' agendas. It is therefore important to develop some kind of **empathy** for initiatives, allowing to build on their potential for upscaling, without harming their values and motivations.

We also discussed how the visions that we produced during the workshop all have specific **underlying models of human behaviour**. For example, the first vision emphasises the social/

community orientation of people, while the second vision emphasises the desire to be independent. This also raised the question whether the **visions build on a very limited set of values** that may not appeal to many groups in our society. This is something to keep in mind in the further development of the visions.

We also had some discussion on **the boundaries of our planet**, and the extent to which we may already have crossed those boundaries. All the visions assume that we still have time to make our societies sustainable, but we have no guarantees that this is true. It is also possible to give a proper answer to the question how far we might still be removed from our planetary boundaries.

Finally, we had discussion on the tensions that exist between societal and economy dynamics that may occur at **different scales of our society**. Our visions focus on the regional and local scales, and typically ignore the constraints raised by developments at other scales. However, many important developments in technology, energy and governance will unfold at supra-regional level, and it would be interesting to say more about implications of our visions for developments at these other scales.

Methodological reflections

The brainstorm in small groups, on different aspects and barriers of sustainable lifestyles worked really well. One group did their brainstorm while standing, as this would be more activating, and this worked well too. It would have added value if there would have been more time for clustering the results and giving names to the clusters. The brainstorm also provided a good input for the plenary discussion and setting priorities for the afternoon.

For the afternoon part we found that the dichotomy between sufficiency and green growth was very useful for both composing groups and in helping groups to develop diverse visions that build on disparate assumptions. The groups were very capable of building on the principles of sufficiency and green growth, and developing interesting and relevant visions. The sets of questions were helpful for the group work, and the fact that each sub-group had a facilitator contributed positively to the results. The flip-over presentations were useful input for the closing discussion. In our opinion, especially the kinds of societies that exist in the visions are interesting, as well as the different perspectives on the behavioural tendencies of the individual. We think it may be useful to perform a questionnaire among the participants after the second workshop to assess the occurrence of learning effects. One participant mentioned later on that mainly cognitive-oriented facilitation methods were used, and that more intuition-oriented methods could have value for this type of workshops too.

References & Sources

Spekkink, W., Quist, J., Pesch, U. (2015) Verslag van visieworkshop Duurzame Leefstijlen & Burgerinitiatieven – 26 november 2015, Internal document (in Dutch) for the GLAMURS Project.

Spekkink, W. and J. Quist (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Dutch Case Study for GLAMURS.

8. Vision workshop results Romania

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8.1 Introduction

On Friday, the 22nd of January 2016, the Romanian case study team in GLAMURS held the first backcasting workshop, as part of the tasks assigned in Work Package 4 of GLAMURS (i.e. Task 4.3). The workshop's aim was to involve diverse regional stakeholders in the development of sustainable lifestyle visions in the year 2040 through highly interactive, participative methods facilitated by members of the research team.

The backcasting workshop took place in Timișoara, at a local bakery and café named Reciproc. It was facilitated by GLAMURS researchers Irina Macsinga and Vlad Pandur with valuable assistance from doctoral researcher Cristina Măroiu, and was attended by 7 stakeholders with significant professional expertise and personal experience in areas relevant to the topic of our workshop.

8.2 Workshop preparation

Stakeholder analysis

Under this section we have included a rundown of the main stakeholder categories which we have identified as relevant to the focus of our case study in general, and backcasting workshop in particular, as well as several specific examples of stakeholders whom we have taken into consideration as potential participants for our workshop. We have included here only a limited number of stakeholders, based on the ease of access by members of the research team and the probability of arranging for their attendance to the workshop. Obviously, a full list of relevant stakeholders would be much more extensive, however for a large portion participation in the workshop would be too difficult to arrange, therefore we do not mention them here.

Stakeholder category	Examples of potential participants
<i>NGOs / Civil Society Organisations / Grassroots Initiatives</i>	<ul style="list-style-type: none"> • CRIES – NGO focused on projects in the domains of social responsibility, social inclusion, solidarity initiatives, social equity; • ASAT – initiative for community-supported local agriculture, responsible food consumption and production; • ECOSENS Association – social enterprise, promoting responsible consumption and healthy lifestyles; • Transition Town Timisoara; • Members of Stanciova Ecovillage initiative
<i>Knowledge / research / experts</i>	<ul style="list-style-type: none"> • researchers and educators from several departments at The West University of Timisoara (i.e. Dept. of Psychology - The Environmental Psychology Studies Unit; Dept. of Geography; Dept. of Political Science; Dept. of Economy and Business Administration, etc.); • researchers with past experience and involvement in previous FP7 European research projects (e.g. LOCAW)
<i>Government</i>	<ul style="list-style-type: none"> • The National Agency for Preserving the Environment;

	<ul style="list-style-type: none"> • The City Hall of Timisoara's Department of Environment; • Giroc Town Hall's Department of Environment
<i>Business / private companies</i>	<ul style="list-style-type: none"> • management and staff of Reciproc Bakery and Café;

Table 8.1: Relevant stakeholder categories

Stakeholder Mobilisation

Our research team first came into contact with some of the stakeholders (and workshop participants) back in July 2014, during a GLAMURS seminar we had organised at The West University of Timișoara. It was at this seminar we became acquainted with the members of the CRIES and ASAT associations. Our research team kept in touch with the two associations and invited them to various case study-related events in the region over the past years. As such, it was easy to approach them with an invitation to take part in the backcasting workshop.

Researchers with an expertise in issues of sustainability were also relatively accessible to our team, since several such experts are colleagues of ours at the West University. Some of them had previously worked with us on various other research projects and even have some experience working in FP7 European projects.

Our main challenge was that of recruiting workshop participants who were representatives of public administration and governmental institutions. In the end, we did manage to ensure that two employees of The City Hall's Department of Environment in Timișoara attended the workshop, while other intended participants from similar institutions were sadly not available.

Practical workshop organisation

We had begun preparations for the first backcasting workshop during the first weeks of November 2015. We started by making a list of relevant potential stakeholders whom we could invite to the workshop without too much difficulty. In parallel, we had worked on an agenda and an extended script for the workshop.

The venue where the workshop was held is a bakery and café named Reciproc, located in the historical central area of Timișoara. This was considered an appropriate venue for several reasons. Firstly, it is operated and managed by the ECOSENS Association, which shares members with several initiatives we had been collaborating with in our case study, namely CRIES and ASAT. Secondly, since the venue promotes the values of social equity, fair trade, healthy living, social economy and solidarity, it seemed like a good match with the main topics of interest in our workshop. Finally, the venue was considered a much more welcoming and comfortable environment than the rooms available at the University; the availability of high-quality, healthy drinks and snacks without having to resort to an external catering company was also a welcome benefit.

8.3 Workshop methods and results

Overall workshop agenda

The program for the workshop was designed by largely following the structure suggested in the backcasting guidelines and taking into account past discussions in various GLAMURS meetings. The program was comprised of 3 major sections – an introduction round for welcoming the participants, getting acquainted and presenting the project, a discussion session on key aspects of sustainable lifestyles, and a vision development session – interspersed with breaks.

Workshop Agenda:

- 10.00 Welcome, introductions, getting acquainted (35 min)
- 10.35 Issues & concepts session in sub-groups (facilitated) (65 min)
- 11.40 Presentation & discussion of outcomes & conclusions (10 min)
- 11.50 Lunch (30 min)
- 12.20 Vision development & elaboration session (75 min)
- 13.35 coffee break (15 min)
- 13.50 Presentation from each subgroup (max. 40 min)
- 14.30 Final discussion, follow-up and evaluation (check-out) (max. 30 min)
- 15.00 Closing the workshop

Main results of lifestyle discussion session

For the following task, participants were directed to form two sub-groups of 3 and 4 members, respectively. The participants were then informed that they will be given a set of questions related to the characteristics of sustainable lifestyles, which they will have to discuss among themselves in their teams and formulate a collection of key aspects of sustainable lifestyles, as well as obstacles to achieving said lifestyles. The questions given to the participants were phrased as follows:

What are key aspects/elements of sustainable lifestyles?

What are main issues/problems/barriers of sustainable lifestyles?

The table below presents a succinct rundown of each team's responses:

	Key Lifestyle Aspects	Main Obstacles/Barriers
<u>Team 1</u> Mainly focused on two general aspects: health and resources.	<ul style="list-style-type: none"> • A healthy life / healthcare • individual lives having a positive impact on the collective • family-household-community-society synergy • responsible use of physical resources in the earth, air, water; "A healthy physical existence is tied to the resources we have." • rational use of our resources / preventing their irrational waste; "Our grandmothers never wasted anything" • Having such a healthy life that you 	<ul style="list-style-type: none"> • lack of information; • legislation (e.g. complications and restrictions with constructions on inner-city vs. outer-city land plots); • conflicts between neighbours – properties, legal documents; • the influence of large companies, who are not interested in promoting a healthy lifestyle; • small, local producers are not supported; their fees can end up being only 20% of the final prices of their products; • low levels of education;

	will “die in good health”.	<ul style="list-style-type: none"> demographic variables – e.g. low income; harmful beliefs and habits
<u>Team 2</u>	<p>“A sustainable lifestyle means: good health, and durability/resilience so that future generations can also benefit.”</p> <ul style="list-style-type: none"> ‘reinventing’ the rural environment; Alternative, renewable energy; sustainability for rural communities – the right to information, having access to media outlets. 	<ul style="list-style-type: none"> people do not have money; lack of proper instruments for accessing information; lack of market access for producers; intermediaries have more say over deciding prices; globalisation.

Table 8.2: Team's Responses - Key Lifestyle Aspects and Main Barriers

A plenary discussion facilitated by the research team then commenced, during which the two teams’ responses were clustered and reunited on a single flipchart sheet. This resulted in the creation of 6 clusters illustrating key aspects of sustainable lifestyles, and 7 clusters illustrating main obstacles and barriers. The clusters were then prioritised by the participants, by rating each cluster with 1-5 stars. Below we have included a revised list of responses, after clustering and prioritizing:

	Content of Cluster	Priority
Key aspects of sustainable lifestyles	Good health – making an active effort to live a healthy life involves more than avoiding hazards.	10 stars
	Proper, respectful use of available resources / avoiding and/or reducing waste	10 stars
	Social aspects – supporting social equity and participatory development.	6 stars
	Sustainable development (socially, economically, environmentally), using renewable energy	5 stars
	Family-household-community & Rural life	1 star
	(Optimal use of) information sources	0 stars
Main obstacles/ barriers	Education / information / lack of access to information	9 stars
	Economic interests / company monopolies / large-scale pollution and waste generation	8 stars
	lack of market opportunities, outlets	6 stars
	Traditions / culture / (cultural?) inertia / values / attitudes	5 stars
	Legislation	3 stars
	Poverty	3 stars
	Globalisation / Urbanisation	2 stars

Table 8.3: Clusters - Key Lifestyle Aspects and Main Barriers

Main results of vision development session

For the next session, participants were once again directed to form two sub-groups of 3-4 persons, with a different composition than the subgroups in the previous session. The facilitators explained that for the next portion of the workshop, the subgroups will have to work on designing

a vision of what a sustainable lifestyle in the year 2040 will entail. Before getting started, the facilitators briefly but clearly explained the concepts of Degrowth and Green Growth, and asked the teams to choose one as a frame for the vision they will develop. The participants briefly discussed this and quickly reached an agreement, each team settling on one of the two frameworks.

Teams were given the first set of vision development questions and 30 minutes to discuss them and formulate the basic draft of their visions. The first set of questions was phrased as follows:

- *What is a sustainable lifestyle in 2040?*
- *How do people live in the sustainable lifestyle vision? What is their work-leisure balance?*
- *What are key assumptions for this vision?*
- *What are different (consumption) activities for the lifestyle in e.g. mobility, food, energy, living?*
- *What is there (if any) role for bottom-up initiatives in this vision?*
- *How about sharing economy/collaborative consumption?*
- *What products/technologies/services are used?*
- *How about new technologies?*

This was followed by a second set of questions that addressed some preliminary backcasting aspects:

- *What cultural and behavioural changes are needed for this vision?*
- *What institutional and economic changes are needed for this vision?*
- *What technological changes are needed for this vision?*
- *How can these changes be realised and what activities/actions are needed for this?*
- *Who is needed for changes and actions and what do they have to do?*
- *What are drivers and barriers to achieve visions?*

Each subgroup's elected presenter was asked to present to the rest of the group their team's lifestyle vision and the flipchart sheet they've prepared. The remaining time was used for further questions, clarifications and comments from the participants and the researchers.

Following the workshop, the produced visions were further elaborated by the research team, by outlining their core and main assumptions, the lifestyle activities envisioned by the participants, as well as pointing out various issues for further elaboration. Below you can find an overview and brief analysis of the two lifestyle visions produced in the workshop.

8.4 Elaborated visions

8.4.1 Analysis of “Green Growth” vision

Team 1: “Green Growth” Vision

Overall concept: People will be happy. The issue of “stress” will have been overcome.

Assumptions:

- “Green Growth” future: pro-environmental concerns, technological innovations, “green” technologies embedded in everyday life, “green” economy, etc.
- People are willing to share goods and resources;
- People will develop a personal capacity for recycling, saving up, etc.

Aspects of lifestyle:

- improved technology will increase efficiency at work, reducing time spent at work;
- with more free time to spare, people will spend most of their days with their families or pursuing various hobbies, leisure activities or personal enterprises;
- we will have access to various ways of spending our free time in harmony with Nature; people will spend a significant amount of their time in nature – tending to their gardens, hiking/taking walks, meditating in nature, etc.
- environments with adequate ambiance will be created for spending leisure time;
- Recycling will be adopted on a large scale; the environment will be cleaner;
- Co-housing and shared living spaces and appliances – e.g. people will use shared washing machines, thus reducing energy use and water consumption;
- Solar panels, wind power used for renewable energy in every home;
- More bike lanes than roads for cars;
- Living quarters are surrounded by areas for growing vegetables and other food;
- The importance of associative environments – by spending more time close together, people will trust each other more;
- Scientists will develop teleportation devices.

Required changes:

- providing facilities for organic food growth;
- applying harsh fines and coercive measures for those who don’t observe recycling procedures;
- individual change, ultimately leading to societal change;
- change can also occur rapidly by means of a revolution, through the pressures from the civil society;
- solving problems by redistributing resources / reducing inequality, reducing poverty.

Table 8.4: Green Growth Lifestyle vision

The first sustainable lifestyle vision completed and presented in our workshop is one designed in a “green growth”-oriented framework. The underlying concept of this vision is that of maximizing personal wellbeing, which will be achieved by several means, from enhancing everyday sources of wellbeing and improving people’s access to them, to eliminating everyday stressors or at the very least diminishing their harmful impact. This underlying concept is succinctly illustrated by the team with the phrase: “People are happy. The problem of stress has been overcome.”

Core and main assumptions

There is a strong emphasis on pro-environmental concerns, reflected particularly in the direction of technological advancements (notably aimed at reducing waste, reducing harmful emissions, facilitating a “green” lifestyle). As a result, environmentally friendly technology is imagined as easily accessible, affordable and naturally embedded in people’s everyday lives.

People's pro-environmental preoccupations also emerge as a determining factor of their consumption habits and economic approach; self-sufficiency and sharing practices lead to reduced waste, reduced need for spending, and lower dependence on products from outside the community.

This tie in with an additional core assumption, i.e. that people will have developed a greater willingness for sharing goods and resources and for engaging in communal everyday activities and consumption practices, without a sense of compromising their privacy or individuality.

Lifestyle aspects

Technology emerges as a prevalent element in the Green Growth vision, with particular examples including unspecified technological innovations helping to increase efficiency at work, a light-hearted contemplation of the potential conveniences provided by teleportation devices, down to a more freely available and easily implemented version of the equipment used for generating renewable energy (solar panels, windfarms).

Apart from increased prevalence of renewable energy-use, the vision also makes mention of various other environmentally-friendly practices in everyday lifestyle domains.

First among these practices is recycling, which in this particular vision is described as being practiced "on a large scale", enough to produce significant environmental benefits (i.e. the environment will be "cleaner"). Recycling seems to be given such a degree of importance, that one's failure to comply with proper recycling practices or procedures will bring upon them "harsh fines" and other unspecified "coercive measures".

Significant strides towards a "greener" lifestyle will also be realised in the domain of mobility and transportation; unlike today's typical car-intensive transportation habits, the vision's approach to mobility will be much more focused on cycling. In fact, the vision's designers imagine communities where bicycle lanes far outnumber automobile roads, going as far as debating whether cars will even be allowed at all in said communities.

A similar concern for the environment is manifested with regards to housing choices and food – people are imagined to live almost exclusively in vertically-expanding shared housing units, with shared household appliances, thus reducing energy and resource consumption, as well as harmful emissions. At the same time, they will nourish themselves by growing their own organic food in gardens surrounding their households.

This outstanding concern for nature and the welfare of the environment is one of the most consistent underlying elements of this lifestyle vision, and can be distinguished in most of the described domains. An additional area where Nature is ascribed an essential role is that of time-use patterns, particularly leisure choices. The vision emphasises the need for leisure time to be spent in appropriate environments, in harmony with Nature.

With wellbeing as one of the central notions of this vision – as we’ve previously noted – time-use seems to be regarded as a specifically relevant aspect in fostering wellbeing. This is supported by one of the first lifestyle elements described in the vision referring to a reduction in time spent at work with the help of technological advances; this is followed by two consecutive references to free time and leisure time. Although not explicitly stated, we can infer that free time and availability of leisure options are regarded as important sources of personal wellbeing. On the other hand, time spent at work can be inferred to represent a significant everyday stressor, one that this lifestyle vision would see eliminated or diminished, as per the central concept of the vision.

Organisation and division of roles

There is no detailed mention of role distribution and organisational aspects, however individual responsibility for enacting lifestyle changes and for developing sustainable, environmentally friendly skills and attitudes is repeatedly emphasised.

Based on some of the vision’s features, along with our discussions with the workshop participants, we have distinguished several social aspects of the imagined lifestyle that have some implications on role distribution, but these aspects are framed rather as prerequisites for the lifestyle vision, rather than features. As such, we have given more attention to the points below.

Required changes

The Green growth vision makes more or less implicit references to various social variables and processes. A particularly striking example is the notion that people will develop more trusting interpersonal relationships as a consequence of prolonged co-habitation in shared housing units. Tying in with this, significant importance is given to people’s need to develop a greater degree of willingness to share goods, resources, and as suggested by this particular vision, even living quarters.

Redistribution of wealth is presented as a prerequisite for bringing to life this lifestyle vision, on the basis that many societal issues are caused by poverty and social inequity. These notions are rather intriguing, as they closely reflect some wide-spread characteristics of real-life, present day ecovillages and intentional communities. At the same time, in our view, these notions seem slightly out of place in a Green Growth-rooted vision, having a lot more in common with a Degrowth/voluntary simplicity centred lifestyle vision.

It was suggested that such a greater openness towards sharing with others might be difficult for Romanians to develop, for cultural reasons – “stockpiling” behaviours are deeply rooted in Romanian culture, almost to the degree of becoming like a sort of an innate instinct.

Social aspects are also discussed with regards to the changes required to bring about this particular lifestyle vision. One perspective describes wide-scale societal change as a potential outcome of individual-level changes, while another perspective describes more radical, sudden societal transformations brought about by revolutions and sustained pressures from the civil society.

Issues for further elaboration

- The vision is community-focused and very much limited to a local level – the community described by the participants almost comes across as a neighbourhood or a small village at best. More information is needed to describe how such a Green Growth-based community fits in a wider geo-political context – regional, national, European, etc. What are its interactions with other communities and larger cities? Does it function as a suburb or a satellite village?
- Concern for the environment and strong pro-environmental practices constitute a core aspect of the lifestyle vision, but specific examples are only given at the individual or community level (e.g. recycling, using solar panels etc.). It would be important to further discuss how this sort of orientation for environmental care is supported at higher levels, beyond the borders of the community – are there programs for implementing pro-environmental practices? Are there subsidies in this area? How are pro-environmental behaviours supported from a legislative standpoint? etc.
- The vision describes several issues pertaining to infrastructure (e.g. for transportation – bicycle lanes, renewable energy equipment etc.), but it should be further clarified how this infrastructure will be made available and what sort of actors and processes would be involved (e.g. grassroots initiatives, cooperatives, governmental programs?).
- Aside from mentions of recycling and people growing (part of) their own food, there is not a lot of information on people’s consumption patterns. More information would be necessary on this topic, for example to explain what kind of products do people usually purchase and how do they use them in their everyday lives, or where do they acquire the food and products that they don’t produce themselves. What sort of producers provide for them? More discussion could also be worthwhile for exploring how people’s purchase and consumption patterns could be linked to the topic of “green” economy that is often a part of “Green Growth” approaches.
- More details should be provided on how large-scale industry is integrated in the lifestyle vision.
- Since participants include individual and social change as prerequisites for enacting their lifestyle vision, perhaps more attention should be given to prospective educational approaches and how they could support and complement the required societal shifts.
- Participants only briefly mentioned the idea that major paradigm shifts (specifically in terms of people’s typical lifestyles) can occur as a result of pressure from the civil society and even revolutions. In our opinion, this is an interesting theme that warrants further exploration, for example with regards to what segments of the civil society would most likely be engaged in such change-inducing processes, how will such processes specifically unfold, and what other actors (political, institutional, etc.) would be involved.

8.4.2 Analysis of “Sufficiency / Degrowth” vision

Team 2: “Sufficiency” Vision

Overall concept: “a village like a bee-hive”

Core and main assumptions:

- “Sufficiency/Degrowth” future: strong focus on personal wellbeing, emphasis on non-material sources of wellbeing, group cohesion and sense of community, reduced consumption, DIY approach, etc.
- Openness to other cultures and continual learning will facilitate change;
- It’s not a society that leaves progress aside; rather, it uses progress as a driver for something else.
- It must be a society that defines for itself what its basic needs are.
- The more educated people are, the more willing they will be to keep studying.

Lifestyle aspects:

- all the children in the village will study at a single kindergarten; their parents will fill in as teachers, by rotation; for higher education levels, pupils will have to commute, or after a certain age, move to another city to study;
- the village will have a shared kitchen; people can have group meals there with neighbours, friends, family etc. or can cook and eat at home, whichever they prefer; kitchen is staffed by volunteers from community, but anybody can help out;
- decentralised, participatory decision-making system;
- reduced time spent in formal professional roles – people will mostly work part-time jobs, or otherwise work as freelancers or be self-employed; rest of work will be done by rotation, as volunteers for the various duties in the community (e.g. volunteering in schools, gardens, community kitchen, administration etc.)
- gardens surrounding each house, for growing vegetables, flowers and meditation; people will have a lot of time they can invest in growing their own food, or volunteering in the community gardens/greenhouses; also, people can volunteer to help others with their gardening;
- Growing cereals, for consumption in the community, and or trade as well;
- Solar-powered greenhouses;
- Community hospital, providing both allopathic and homeopathic care;
- there will be many co-housing buildings where several families will live together and share various goods and facilities; at the same time, there will also be individual land plots with single houses for people/families who prefer a more private life;
- people will engage in various forms of gift economy and sharing habits – building things for use in the community (e.g. agricultural tools), share their skills and knowledge by teaching others or starting projects;
- Shared storing spaces;
- the village will be connected to a road, but there is little to no actual car use within the village; people will get around by foot or by bicycle; the road will be mainly used by commuters, travellers passing through the village, and the daily school bus;
- All community areas will be connected to a community-owned satellite.

Organisation and division of roles:

- services and facilities within communities will be mostly staffed and operated by volunteering residents, by rotation – e.g. parents will fill in as teachers at the kindergarten, people can volunteer for work at the community kitchen or in the community gardens or as volunteer nurses at the community hospital, etc.
- there is a tendency towards food and energy self-sufficiency – most of it is self-produced, covering the community’s requirements, the surplus is exported in the region;
- there are no ‘institutions’ – the community is a self-governing direct democracy.

Required changes:

- Access to IT services;
- Renewable energy;
- No official institutions;

- decentralised power and decision-making;
- moving decision-making as close as possible to the site of activity;
- a minimum of 12 years of mandatory schooling;

Obstacles:

- real-world resistances can be very strong against those who try to build such communities (see real-life case of Armonia Brassovia community, from the Romanian case study);
- Things that are given for free are generally regarded as worthless.

Table 8.5: Sufficiency Lifestyle Vision

The second lifestyle vision, conceived in a “Sufficiency” or “DeGrowth” focused framework, puts heavy emphasis on a number of different lifestyle aspects when compared to the previous vision, although common elements can be identified between the two visions.

The interpersonal and social characteristics of the lifestyle vision play a central role, and are strongly linked to the notion of “community”. In the participants’ words, their vision describes a future human community akin to a bee hive.

Core and main assumptions

The vision has a strong focus on personal wellbeing and lifestyle satisfaction; this is associated primarily with non-material sources of wellbeing (e.g. family life, leisure time, volunteer work) at the expense of more materialistic pursuits.

Another notable assumption regards people’s concern for reducing unnecessary consumption, most notably engaging in gift economy and DIY practices. Participants argued that for such a society to be viable, its citizens must be strongly self-determined but also highly capable of defining for themselves what their needs are and how or if they are willing to address them. It was argued that this would in turn require a pervasive emphasis on ensuring high quality education, continual learning and promoting openness to other cultures.

The participants also made a point to distance their lifestyle vision from more conventional views of sufficiency-focused lifestyle, illustrated through a stereotypical image of a hippie-like intentional community, located on the top of a hill in the middle of nowhere, living like people from the Middle Ages with no electricity, no technology and no modern services or facilities. Instead, the participants explained that although the people in their vision will strive to avoid reliance on technology and modern conveniences, they will not disregard them altogether; rather, they will be willing to incorporate technology into their daily lives, as long as its use is consistent with the core principles of their lifestyle.

Lifestyle aspects

Particular attention is paid to education, with a series of intriguing peculiarities described in the vision. For starters, there will be a village kindergarten open to all children in the community. However, the kindergarten will not employ any external teachers or other staff. Instead, teaching and other duties will be handled by the children’s’ parents, on the basis of volunteering by rotation. It is noteworthy that although a minimum of 12 years of schooling will be mandatory for

community members, the kindergarten itself will be the only actual educational facility in the village. Rather than receive further education in the village, it is preferred that the children pursue further education in other communities/cities, as this will help develop their curiosity, adaptability and openness. One of the participants explains that in her experience, children (aged 3-6) are usually the most receptive to being taught pro-environmental values, and therefore that is the most important opportunity for education to make a difference and help foster a healthier way of life.

Healthcare services are similarly described as being community-run, with a distinct focus on diversity of services – i.e. the community hospital will provide free services, consisting of both allopathic and homeopathic treatments.

Similarly to the previously described vision, great importance is given to healthy food-related habits and renewable energy. Keeping in line with the vision's emphasis on community centred elements, the participants describe organic vegetables, fruit, and cereals being grown en masse in community-run greenhouses, community crops, but individually-owned gardens as well. As well as providing the basis for a healthy diet for the community residents, in this vision the food grown by the villagers is also intended for trading, providing them with an additional source of income.

There are a few peculiar parallels between the two visions with regards to housing and habitation choices. While in the "Green Growth" vision housing was imagined as restricted to shared living units (although possibly quite spacious, and potentially lavishly furnished), something which one would more readily expect in a "Sufficiency"-centred vision, on the other hand, the actual "Sufficiency" vision produced in our workshop describes the future residents as having the option to choose between co-housing units and private residences, according to their needs and preferences.

Also noteworthy is the surprising importance ascribed to technology in this particular vision. Starting with mention of solar-power facilities and medical facilities, which implies a certain degree of technical equipment being employed, the vision goes so far as to describe a community-wide information network, facilitated by a community-owned orbital satellite with a direct link to all the community's facilities and communal areas.

A possible justification for this peculiar element is one argument described by the participants, explaining that despite being Sufficiency-focused, the society they envisioned is not one that casts aside all notions of progress (i.e. technological innovations and modern conveniences), but rather one that uses progress as a driver to achieve alternative objectives.

Organisation and division of roles

For starters, this results in a completely decentralised and participatory, consensus-based decision making-system. Additionally, this ties in with a rather grass-roots approach to governance, where it is recommended that decisions are to be discussed and agreed to as close as possible to the actual setting they will affect, rather than some far removed centre of power.

Another consequence of this governance approach is the absence of formal institutions. Instead, the community will include several shared public facilities, open for use to all residents and providing basic services (shared kitchen, kindergarten, community hospital, storage spaces).

Required changes

As formulated by the participants, most of the changes required for realising this vision revolve around aspects of governance and decision-making. More specifically, the vision is predicated on a widespread multi-level transition to a decentralised governance and decision-making system. This would most notably involve the near-absence of official institutions at the community-level, with decisional power being concentrated at the local level and implemented in a grassroots approach. The participants also pointed out that the decision-making centres should be as close as possible to the actual sites where people carry out their work and daily activities, again reflecting a rather flattened, decentralised approach to governance.

Technology-related changes are also described, particularly in terms of IT services and equipment for generating renewable energy being made readily available and easily accessible to all citizens. Education will be given great importance, and participants argued that an education system with 12 years of mandatory schooling would be required to produce the kind of citizens that could feasibly enact the lifestyle vision described in the workshop.

Obstacles

For the case study researchers facilitating the workshop, it was very surprising to observe how closely this vision parallels the community vision developed by Romanian ecovillage initiative Armonia Brassovia, one of the initiatives included in the Romanian case study. Unfortunately, these real-life parallels also bring to mind the plethora of real-life obstacles and constraints that such initiatives are consistently confronted with. In brief, such difficulties are linked to legislative ambiguities or restrictions that prevent out-of-city construction projects consistent with intentional community designs and principles, lack of support or ignorance on the part of authorities, and various social difficulties associated with bringing together and coordinating a large community through mostly informal, participatory approaches.

Issues for further elaboration

- The vision is conceptualised as view of a “hive village”, which is to say it is heavily restricted to a localised, community-level. Further elaboration is required to illustrate how this type of community, and its representative lifestyle, is integrated in a wider geographical space – regional, national, European etc.
- It should be clarified whether the type of community described in the vision constitutes the standard or typical community in 2040, or other differently organised communities will still exist, and if so, how the various types of communities interact with one another.
- The vision describes several issues pertaining to infrastructure (e.g. hospitals, gardens, IT facilities), but it should be further clarified how this infrastructure will be made available and what sort of actors and processes would be involved (e.g. grassroots initiatives, cooperatives, governmental programs?).
- Descriptions of people’s daily lifestyle aspects within the vision make reference to various self-sufficiency oriented practices (growing your own food, DIY practices, gift economy), it is

not explained how people cover the full extent of their consumption needs (e.g. vehicles, home appliances, clothing etc.) since there is no mention of industrial production facilities within the community.

- On the topic of industry, it is not clarified how people's sufficiency-based consumption patterns impact their stance on large scale industry and to what extent this area is present outside of the presented community, or in what way it operates.
- The vision regards education as a major element of the described lifestyle, however there is a notable discrepancy evident in the current draft of the vision. Specifically, although the participants had decided on an educational system with a mandatory minimum of 12 years of schooling, the only educational facility in the community is a kindergarten staffed by volunteers. There is no description of other higher learning institutions where the people in this vision would be expected to continue their studies.
- The vision's emphasis on the importance of decentralised governance and decision-making is clearly presented, the participants' statement that "there will be no institutions" is problematic; does this mean that despite the absence of formal, official institutions in the community, there are such institutions outside the community? If so, how is the community associated to these institutions, if at all? Are there no institutions at all in the future? If so, this would have drastic implications that need to be addressed (e.g. taxation, legislation, economy, etc.). Without clarifying such aspects, it is improbable that a lifestyle vision with no institutionalised elements at all would be a viable solution for a thriving society.

8.5 Conclusions & Reflections

Conclusions and reflections on the workshop

All the participants' engagement during the workshop was lively and pertinent, providing valuable contributions. The workshop was also enjoyed by the participants themselves, several of whom expressed related this to the facilitators, as well as expressing gratitude for being invited and an interest in providing further contributions to our research, if needed.

The main focus of our workshop were the two main group-work sessions centred on discussions on key aspects of sustainable lifestyles, and on developing visions of sustainable lifestyles in the year 2040. Over the course of the workshop, the participants constructed **6 clusters describing key aspects of sustainable lifestyles** and **seven clusters describing the main barriers and obstacles preventing people from adopting such lifestyles**. The participants also developed **two visions of future sustainable lifestyles**, based on the principles of Sufficiency/Degrowth and Green Growth, respectively.

It is noteworthy that while initially starting from a clearly defined set of principles (i.e. Green Growth vs. Sufficiency) ultimately neither of the two visions maintained this delimitation, instead incorporating a handful of aspects from both frameworks into a sort of "composite" conceptualisation. This is most strikingly apparent with the co-housing and gift economy elements included in the Green Growth vision on the one hand, and with the references to advanced technological infrastructure and facilities in the Sufficiency vision, on the other.

At the same time, we can make note of several common aspects present in both visions, e.g. the importance of sustainable lifestyle practices in the domains of food (growing your own

food, having a healthy diet), consumption (sharing products and appliances, recycling), energy (renewable energy), mobility (reducing car use in favour of more sustainable alternatives) etc. Another common aspect for both visions is their restricted geographic scope, which only really provides any significant level of detail about lifestyle aspects at the community level and ignores wider contexts (regional, national etc.).

Methodological reflections

In our opinion, the methods we employed during the first workshop proved well suited, effective and fairly easy to facilitate. Despite having fewer participants than initially intended, the low number of people in the work sub-groups did allow for more time to be spent on developing and refining their team presentations and the lifestyle visions, instead of debating things and negotiating a consensus. This was also convenient for the facilitators, making it easier for us to oversee individual participants' level of involvement and active contributions to the group tasks, and more easily intervene to assist them or provide explanations. Each task in the workshop agenda was quickly understood and carried out diligently by the participants. Although some of the produced materials required further elaboration, their contents were considered suitably pertinent for our research interests and for aims of the workshop.

Although the way the first backcasting workshop unfolded was ultimately satisfactory for our interests and for our research purposes, there were several aspects where we deemed improvements were needed in order to ensure an optimal course of development for the upcoming second workshop. First of all, it was imperatively necessary to ensure a larger number of participants, preferably from more diverse stakeholder categories. Secondly, it was essential to pay close attention to the planning stages of the second workshop, and prepare all the details as minutely as possible, so as to avoid any further delays and scheduling issues that could potentially hamper the organisation of the workshop.

References & Sources

Pandur, V., Macinga, I., Dumitru, A. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in Romanian Case Study for GLAMURS

9. Vision workshop results Spain

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9.1 Introduction & process

In December 12th, 2015, the first backcasting Workshop was performed in A Coruña, Spain, by researchers of the University of A Coruña as part of the field work of the GLAMURS Project. The goal of this workshop, the first in a series of two, was to collaboratively develop with a group of relevant stakeholders at the level of our region normative scenarios for sustainable lifestyles in Galicia for 2040. The workshop was attended by 17 stakeholders recruited on the basis of their proven theoretical and practical knowledge on sustainable lifestyles in Galicia. Diversity of those attending was achieved and their profiles vary from key members of the initiatives under study in GLAMURS, to activists from environmental organisations in Galicia, regional and local government staff and researchers from other knowledge institutions among others.

For this workshop all the facilitation work was intended for (1) generating detailed normative visions for sustainable lifestyles in Galicia (2) the elaboration of an inventory of issues and potential solutions for Galicia and (3) exploring the barriers and drivers of sustainable lifestyles at the regional level, focussing on the role attributed to citizen initiatives in the transition towards a more sustainable region for 2040 and the upscaling of the regional formulas of sustainability and transformative practices.

9.2 Workshop preparation

Stakeholder mobilisation

When updating the stakeholder analysis, our attempt was to have a wide array of actors that are or were well-known because of their work towards sustainability in Galicia. Some of the actors invited had been first contacted in other activities within GLAMURS or where already known by the UDC team members because previous research collaborations or because their involvement in different activities, social economy fairs, conferences or congresses where different members of the UDC team were also involved.

17 attendees participated to our workshop, together with 6 facilitators from UDC. 8 of our guests came from civil society organisations or platforms, 4 people worked or had done so in a government (or affiliated) organisations and the remaining 5 people were linked to knowledge organisations.

Stakeholder mobilisation took place from mid-November to mid-December. The first step was to select the target organisations and names we wanted to invite to our workshop. The political affiliation of participants, when known, was also taken into account to avoid over representing any of them. More than 80 invitations had been sent by the beginning of December.

The workshop invitation was a general e-mail with the venue and workshop details accompanied by one personalised invitation letter and one information sheet about the aims of

the project, the backcasting methodology, and the reason why each specific person was invited. In every e-mail we included a final sentence inviting all the people declining to attend to give us a couple of names within their organisation who we could invite instead. This snow-ball technique was fruitful and enabled us to ensure that most of the target organisations we had identified at first would be represented in the workshop. Some of our guests were contacted by phone also, especially those in positions of responsibility. All our participants were asked to send confirmation of their participation. One week before the workshop took place, a reminder e-mail was sent to all the confirmed attendees, with the final agenda attached.

Outcomes/learning test workshop

The 9th of December, 2015, we conducted a test workshop coordinated by Adina Dumitru. All the facilitators involved during the workshop attended. The detailed script and detailed guidelines had been previously distributed among the team and we focused on the resolution of doubts and collective review of each of the steps in the workshop. Some of the decisions taken during the test were related with the type of visuals and materials we needed to present as input and guidance for the debates during the workshop. We decided also to determine the composition of the 4 groups in which we would split the attendees and we added also to the script a couple of modifications in the small group presentations sessions.

Practical workshop organisation & adjustment to the workshop format

The 1st workshop took place at the Luis Seoane's Foundation, a private museum of contemporary art, sited in the Old Town of Coruna. The room we booked was a diaphanous and large exhibition room which allowed us to work comfortably and organise 4 tables for the work in groups, had access to an outdoors space and was close to some restaurants where we could go and have lunch together. Apart from meals and drinks offered during the day, we prepared for each attendee a 40€ voucher to thank the participation during the workshop. The UDC team worked during the weeks before the workshop preparing all the materials and the extended script of it, including the power point presentations to start the workshop, the roles and different responsibilities of facilitators. The previous days to the workshop we prepared one folder for each of the participants with their name badges, a copy of the final agenda, one GLAMURS flyer, informed consent and some extra paper sheets for their notes.

9.3 Workshop results

Program

The overall program of our workshop on December, the 12th, was as follows:

- 8:00 Arrival People Environment Research Group,
- 10.00-10:30 Check-in, coffee and welcome.
- 10.30-11:00 Presentation and introduction to Glamurs (Ricardo García Mira)
- 11.00-11:30 Method Explanation: generating backcasting scenarios (Adina Dumitru).
- 11:30-12:30 Sustainable lifestyles: concept elaboration and identification of barriers.
- 12.30-12:45 Break
- 12.45-13:15 Conclusions and discussion of results

13:15-14:45 Lunch

14.45-15:30 Towards sustainable lifestyles in 2040 Galicia. Vision development.

15.30-16:20 Future vision elaboration.

16:20-16:50 Coffee Break.

16.50-17:45 Plenary discussion.

17.45-18:15 Recap, follow-up and assessment.

18.15-19:30 Closing, informal chatting and drinks.

Ricardo García Mira opened the workshop welcoming the attendees, introducing the People Environment Research Group and presenting the team members. Afterwards, Adina Dumitru took the floor and described the structure and goals for the workshop and invited participants to introduce themselves. The participants started then the introductory round, saying their name, their organisation and what they considered to be the most interesting topic regarding future sustainability in Galicia.

Main results lifestyle discussion session

Our issues and concept session came next and focused on making participants get a better understanding of what a sustainable lifestyle was and to identify the main barriers and issues towards them. We divided the group in 4 small groups, each of which had a facilitator. The 4 groups worked separately for the next 40 minutes and then the facilitators asked them to start discussing the different answers given, clustering them for each question and setting the most relevant answers (priorities) with dots. A summary of the clusters and priorities identified is presented in the next sections. The questions we used for this session were:

- *What is a sustainable lifestyle? What are key aspects/elements of sustainable lifestyles?*
- *What are main problems and barriers of sustainable lifestyles (5 min)?*
- *What are main barriers of sustainable mobility (2 groups) and sustainable food consumption (2 groups)?*

Main results brainstorm discussions on sustainable lifestyles

First of all it was agreed that sustainable lifestyles entail **responsible consumption practices and a low-carbon model of mobility**. The **role of citizens** in promoting these alternative lifestyles was seen as key and the **awareness towards sustainability** among population would ensure a balanced and responsible use of resources and territory, including the generation of much lower levels of waste. Everyday life would develop mainly within **communities and at this level the livelihoods of population would be managed** and needs met. These **small territorial units**, communities, city districts or neighbourhoods, would have high levels of autonomy and would be the main responsible for the redistribution of wealth and resources among population. Society would **inclusive and conscious** and the **culture would be free and accessible for all citizens**. The **ecological footprint** of the region would be **small** mainly due to the local and renewable energy-based system.

Main results barriers to sustainable lifestyle discussion session

As regards barriers for sustainable lifestyles, 4 main were discussed. First, the **hegemonic economic model**, capitalism, and those stakeholders benefited by it are defined as the main obstacle towards change. Second, a **conservative and individualist culture** spread across society hinders the capacity of citizens to challenge the status quo and maintains the levels of political participation low. Such culture of political disaffection disempowers people as makes them to perceive the change towards sustainability as something external and that surpasses them. In turn and third, even though some positive actions are taken towards sustainability, these were referred as disconnected. **There is no global and coherent strategy for the sustainable development of our region.** Fourth and last, the **local and global consequences of the environmental crisis** make the overwhelming of the unsustainable lifestyles increasingly difficult.

Methods and outline vision development session

Focussing on the barriers for sustainable food consumption, the **globalised supply chains functioning, lack of land planning regulations in Galicia and consumerism** were agreed as the main. The envisioned food system within a sustainable model was defined as a **Food Sovereignty model**. Finally, the discussions ended referring to barriers for sustainable mobility. The **territorial design model and dispersed distribution of population** in Galicia were highlighted. Moreover, the **dependence of the model on fossil energies, the lack of institutional promotion of collective and public transport and an individualist culture** among population were also pointed out.

9.4 Elaborated visions

After lunch, we resumed work and started to elaborate the visions. We decided to maintain the same 4 groups. The groups worked for almost a couple of hours on their visions and the results were: **Two visions focused on sufficiency, another on eco-efficiency and the last one proposed a model of community-led sustainability.** We elaborated the 4 different visions obtained and decided to mix the two on sufficiency developed during the workshop. The 3 final elaborated visions that resulted from the workshop are summarised next. We named them:

- Vision 1: Eco efficiency. Collaborative consumption & green growth for sustainable cities in 2040.
- Vision 2: Sufficiency. Human scale territories
- Vision 3: Socially Embedded Growth. Returning to community life in the Galician rural areas as a driver for sustainability and wellbeing.

9.4.1 Vision 1: Eco efficiency. Collaborative consumption & green growth for sustainable cities in 2040

Core and main assumptions

The vision is focused on the **green improvement of technologies and shift in consumption patterns** as the two main drivers that would lead Galicia to have a much lower ecological footprint in 2040. The greening process entails that the economic activity and technologies used have a

minimal impact on the environment and are low carbon intensive but also means that the working conditions are decent.

The **new circular economic model** enables a drastic reduction of waste and keeps the aggregate production and demand levels low. This is a result on the one hand of the generalisation of recycling and reuse of products and materials, and on the other a direct result of the new forms of collaborative consumption and sharing of goods and services, very common.

Lifestyle activities

The shortening of working hours allows **a balance between leisure and work**. For large sections of the population there is a standard working day of 8 hours with possibilities for teleworking. There is flexibility in the negotiation of labour conditions and this allows the reconciliation between working life and family. At the aggregate level people work fewer hours, which leaves more free time to people.

The **building and urban planning model** generates the very least ecological impact and is committed to the creation of new public and meeting spaces. As for house building, bio-constructions techniques are the usual ones and many materials are reused, prioritising the restoration of buildings over the construction of new ones.

Less time is spent on mobility. Commuting times between homes and workplaces were reduced thanks to an efficient public transportation system and improved technologies. Teleworking reduces the number of daily trips between the residential areas and working centres. Private cars are shared often and their use is decreasing.

Regarding the **consumption of food and manufactured products** the new model maximises the reuse of goods and products. Self-consumption and shared consumption are common. The most of the food consumed comes from near environments. Most of the self-consumption comes from urban gardens that exist and are productive in all Galician cities

Organisation and division of roles

Active citizenship is ultimately responsible for the maintenance and adjustments in the model and their agency in the design of the socio-economic model is high. Population is greatly concerned about sustainability and many people engage in organisations and take part in the deliberative processes opened by institutions. There is still a welfare state model.

Necessary changes occurred

Sustainability in 2040 is explained by two major structural changes: the generalisation of collaborative consumption and the commitment and development of green technologies more environmentally- friendly. Many material goods before associated private use and benefit are shared in 2050. This implies there are lower consumption of material goods and a higher

consumption of services, that satisfy the demand for repair and maintenance services of appliances, clothes and other consumables.

The educational model was extended to a multitude of stakeholders and society advanced towards a learning community. The initiatives of non-formal education have been largely responsible for the population's awareness on environmental issues and social, which are part today of the popular culture. From the academic biased educational model in past, there has been progress towards a new model which seeks to prepare population for a full life in society.

The technological greening process looked back. New technological innovations were developed, including new services, applications and devices but also the use of old technologies, more "green" and adapted to the local environment were recovered. In addition, a democratisation process regarding access and use of technologies took place.

Core and main assumptions	<ul style="list-style-type: none"> • <i>Galicia is eco-efficient and the ecological footprint of the territory was strongly reduced and now is low.</i> • <i>Most of the technologies used are green; don't harm the environment and these companies offer good working conditions to workers.</i> • <i>There is a strong social commitment and awareness towards sustainability.</i> • <i>More stakeholders are involved in the education system.</i> • <i>Political institutions are open and include participative mechanisms.</i> • <i>Guaranteeing equal opportunities and wellbeing to citizens is a priority in society.</i> • <i>Welfare State with participative mechanisms</i>
Lifestyles	<ul style="list-style-type: none"> • <i>The working hours are reduced and allow a work-leisure balance.</i> • <i>New building model has a minimal impact and more green spaces.</i> • <i>Less time spent on mobility.</i> • <i>The consumption of manufactured goods and food is sustainable.</i>
Organisation and division of roles	<ul style="list-style-type: none"> • <i>Civil society initiatives are key for the promotion of sustainable lifestyles and diffusion of new participation form</i>
Necessary changes occurred	<ul style="list-style-type: none"> • <i>New consumption patterns are responsible for the shift of the economic model.</i> • <i>Generalisation of collaborative consumption.</i> • <i>Most technologies are green.</i> • <i>Lower aggregate consumption levels and spreading of reusing, repair and recycling practices</i> • <i>More stakeholders involved in the education system. The model is close to a learning community one and edutainment spread</i> • <i>Technology innovation processes recovered traditional knowledge adapted to the local natural and cultural environment.</i>

Table 9.4: Summary of vision 1: Eco-efficiency

9.4.2 Vision 2: Sufficiency. Human scale territories

Core and main assumptions

In 2040 Galicia is a resilient and sustainable territory mainly because a **sharp decrease in the aggregate levels of demand and supply**. The needs and available resources are well balanced and the welfare of the population is very high, ensured by an efficient system of wealth distribution, policies of gender equality, the promotion of both intercultural and diversity and the consolidation of the process of progressive re-location of production, consumption and distribution chains. **Sufficiency is the main pathway towards sustainability.**

The administrative organisation and the geographical dimension of everyday life are done at a small-scale. Cities are organised in neighbourhoods and districts. Villages are organised in parishes. People make their living in small territorial units, within which they have all the necessary services (education, hospitals). The resources of each administrative unit are self-managed, generating much diversity between them. There are services that are jointly managed, as waste treatment. Local water management occurs in the smaller population centres. The welfare state still exists and includes a wide range of participatory mechanisms. The development of the territory is integrally promoted, including rural and urban areas, which are both dynamic in 2040. The supply and energy production system are based on local and renewable resources. The energy sector is owned by citizens, which allows direct control over it for the benefit of all citizens. Energy sources used are wind, photovoltaic, solar, geothermal and tidal.

Education for Citizens' Empowerment emerged. There is a community education system, interdisciplinary and in which family, school and society, as well as formal and non-formal organisations contribute under the goals of promoting critical thinking.

Lifestyle activities

Fair distribution of wealth is reinforced with measures of responsible consumption and responsible use of resources. Recycling, reuse of goods and collective use of services are strongly promoted. The population is committed to the model.

The consumption of food and manufactured products is conscientious. In 2040 the productive structure basically consists of SME's. Proximity is sought by consumers when making a purchase, which is in interest of small producers and generates working places. Importations are low but if produced, are conditioned upon compliance with some social responsibility criteria decided by society by the foreign company and human rights. Suppliers offer information about quality, origin and properties of their products.

There are many cases in which, as **consumers and producers agree the levels of supply and demand**, which reduces the use of energy resources and time invested in the distribution and sale / purchase. Many companies share equipment and services.

Work is adapted to individual needs and not vice versa. People can adapt the working hours according to their needs. Wages are decent and generally cover the needs of the population. Working from home is common. There are real possibilities for reconciling family life and work. People have more free time. Part of it is devoted to collaborative consumption and exchange activities.

The organisation of housing and urbanism promotes community life and greater contact with nature. People live to workplaces, in low-storey that allow the use of natural light. Washing machines, Wi-Fi networks, heating systems and cars are shared. Cities are replete with community gardens and in rural areas the communal woodlands are jointly used.

Transport offer is adapted to real demand and guaranteed. The population live close from work. A comprehensive plan for rural-urban mobility was developed and has allowed the existence of a public transport network that efficiently links villages, cities and towns. Public transport uses renewable energy. The train is the main means of transport and the connections are facilitated by interchangers. Mobility by bike and on foot is fostered as a way to discover the own geography. New pedestrian paths connecting natural areas are opened. Even though a big effort has been made in interconnecting the whole region the public transport network still does not reach all parts of the countryside.

A process of recovery and enhancement of Galician culture and heritage took place. Two languages are spoken, Spanish and Galician. Citizenship is proud of Galician identity and cultural and architectural heritage.

Environmental protection is a cross-cutting pillar in all the policy design and is granted. There is a plurality of landscapes and agriculture is diverse.

Measures of **technological literacy** have been developed as a guarantee of equal opportunities for accessing the online participatory processes. The free software development is fostered and 3-D printers are commonly used, as a solution to home repairs.

In 2040 there are still barriers to sustainability. The legacy of the previous bad practices is the main. Deforestation and the ageing population are very difficult to overcome. Educational barriers, the lack of socio-political consensus, short-termism and the imposition of icons and models by the media slow the transition towards sustainability.

Organisation and division of roles

The degree of citizen involvement in public life is very high. The technology and some digital platforms approach policy decision to population by electronic voting and facilitate the direct and agile channelling of social demands.

On the other hand the territory is divided into local assemblies. This leads to a deeper knowledge of reality and social problems, and makes residents and neighbours get to know each other. **The economic structure is composed basically by SME's.**

Necessary changes occurred

Worsening effects from climate change are perceived in Galicia. Transition towards sustainability was a slow process. Strategies of both sufficiency and eco-efficiency were combined, with greater emphasis on sufficiency. Key to initiate that process was the diagnosis on what had been done wrong as a society, process which pointed out the runaway consumerism.

The sustainability of the territory is based firstly on the changes occurred in the **energy system**. The second pillar that makes possible Galicia sustainable is the integral change of the education model that occurred in the last 25 years.

The model of territorial and administrative organisation changed and the value of the public goods and cooperation was recovered. The levels of distrust and political disaffection were reduced, as well as levels of abstention. The political culture and knowledge by citizens is high and increasing.

People live less stressed. The working hours are shorter and more efficient than in 2015.

Rural exodus has stopped and rural areas currently attract new population through the enhancement of rural ways of life and the institutional boosting of economic activities there.

In 2040 the idea of having sustainable **knowledge and skills must be retrieved from past** especially those that have to do with the connection with the environment, is widely accepted. The dependence and consumption of new technologies, however, has decreased.

The **aggregate level of energy consumption decreased largely**. The population has learned to live with less and makes responsible use of energy resources, respecting the environment, sharing resources and assets, and with a very large increase in recycling practices. There are major and new forms of collaborative consumption, cooperatives and the exchange of knowledge and services, such as time banks. Less meat is consumed and products have less packaging and labels.

The dependence on transport decreased. The ecological footprint of mobility has been reduced consequently as many workers are allowed to work from home, even though the population structure still geographically dispersed. Localisms applied to mobility disappeared and there is only one big airport in Galicia.

Core and main assumptions	<ul style="list-style-type: none"> • <i>Galicia is a sustainable region with a high level of welfare for population.</i> • <i>The wealth distribution system is very efficient.</i> • <i>Rural areas are dynamic and attract population.</i> • <i>The energy system is regional and renewable-energy based.</i> • <i>The educational model looks for the students' empowerment.</i> • <i>The administrative and geographical organisation of daily life is at the level of the region.</i> • <i>There are real control mechanisms over governments.</i> • <i>Process of re-appraising of Galician heritage.</i>
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	<ul style="list-style-type: none"> • Environmental protection is a cross-cutting pillar in all the policies applied. • Equal society is guaranteed with measures of responsible consumption and use of resources
Lifestyles	<ul style="list-style-type: none"> • Jobs are adapted to individual needs and not vice versa. • Urban planning model promotes community life and closer contact with nature. • Transport offer is adapted to real demand and is guaranteed. • There are more opportunities for sustainable mobility, secure use of bicycles and walking. • Both the consumption of manufactures and food is conscious and based in small producers. • The importations are low but if produced, are conditioned upon the compliance by the foreign company of some social responsibility criteria decided by society and human rights. • Suppliers offer information about quality, origin and properties of their products. • The levels of supply and demand are often agreed by suppliers and consumers, which keeps low the levels of waste generated. • Access to culture is democratic and the use of free software and 3-D printers for self-repairing and improving the own goods is common. • There are still barriers towards sustainability, mainly because the inheritance of bad practices from the past and at the cultural level.
Organisation and division of roles	<ul style="list-style-type: none"> • The economic structure is composed basically by SME's. • Citizens' involvement in public life is high. • The territory is politically organised in local assemblies where common problems and needs are discussed.
Necessary changes occurred	<ul style="list-style-type: none"> • Worsening effects from climate change. • Transition towards sustainability was a slow process. • Sustainability of Galicia is mainly explained by the changes occurred in the energy sector and on the change on the education system in second place. • The model of territorial and institutional organisation has changed and helped the participation levels to increase. • People are less stressed. Working hours are shortened. • The loss of rural population was stopped and now there are measures for the promotion of rural settlement and the dynamisation of the economic activities there. • It's socially accepted that knowledge from past had to be recovered in order to be sustainable. • The aggregate level of energy consumption decreased largely. • Collaborative consumption, cooperatives and exchange formulas of knowledge and services are widespread. • The ecological footprint of mobility has been reduced as many workers are allowed to work from home. • Localisms applied to mobility disappeared and there is only one big airport in Galicia.

Table 9.5: Summary of vision 2: Sufficiency. Human scale territories

9.4.3 Vision 3: Socially Embedded Growth. Returning to community life in Galician rural areas as a driver for sustainability and wellbeing

Core and main assumptions

The economic and social models are oriented toward the generation of a common good, defined within each community. There are local economies and networking between them, not global or large-scale ones. The market and transactions between local economies exist but the use of local resources, the distribution and provision of services work mainly at local level. The role of the State is very small, questioned and its reformulation is at the heart of the public debate.

There was a significant **decrease in the levels of consumption and production of material resources.** Assets are now shared and existing services and business are mostly cooperatives. Most of consumption is collaborative and the population has sufficient skills and knowledge as to ensure the degree of self-sufficiency at the local level is high.

People and their environment are understood as a comprehensive system that should be able to meet the needs of the community, at the economic, cultural and social level. To avoid waste generation communities do not produce beyond their needs.

Worsening effects from climate change leads Galicia to start receiving climate immigrants. In 2040 Spain is clearly affected by climate change and environmental problems associated with it, such as water scarcity, desertification, or an increase in temperature, which turns southern and eastern regions of the State in less liveable areas.

Most of people live in rural areas. There, innovative projects are developed based on strengthening local resources, the production of organic of food and sustainable goods and the creation of short marketing circuits. A diversification of the productive activity took place.

The **primary sector recovered importance and the whole economic system is oriented towards food sovereignty.** Local and sustainable production leads to a reduction in the ecological footprint. The activities within the primary sector are diversified. Fishing is mostly artisanal, and favours the conservation of resources and protection of estuaries and seas.

Efforts are made toward a **"culturally free Galicia"**. This free knowledge model relies on networks to share wisdom and resources and promotes the diversity among local cultures, fostering the development of projects and community life.

In 2040 **collective responsibility** is prioritised versus individual rights and group interests. There is a greater awareness on the impact of personal decisions. There are narrow interrelations between producers and consumers. A policy of rural defence and dignity, argues people in rural areas take care of a collective good, the environment, without being acknowledged or compensated.

Society is inclusive; everybody is welcome and cared, including the disadvantaged and the elderly.

Lifestyle activities

There are new work-culture relationships. Work is part also of a way of understanding life and not just a means for need fulfilment necessities but a source of satisfaction, empowerment, learning, culture, exchange and participation in the community. The difference between work and leisure is minimised.

Galician society has a low ecological footprint and effects of the peak oil are felt. Access to fossil energy resources is very expensive. This favours local economies and the emergence less-energy intensive sectors. Most of the energy consumption comes from renewable sources. On the other hand, economies incorporate the environmental costs of production and a social redistribution of environmental costs takes place.

There is a joint planning and rationalisation of demand and supply. Reduction of the surpluses is sought. Consumers are organised in networks at regional level, used for the agreement of prices and production levels. Time margins from when food is harvested until it is consumed are reduced to a minimum, betting on the consumption of fresh produce. There are new and participative ways of commercialisation and labelling. When a product has a harmful ingredient, producers are forced to indicate it.

A **technological development process** is taking place linked to the spread of recycling, reuse and repair activities. There are very common spaces such as *Bricolabs* for the collective construction of new open technologies such as free software and hardware.

Organisation and division of roles

Environment and people relate differently as they did in 2015. The environment is understood as a living space, of cultural and human interaction.

Society is organised according to a **new model of governance** based on shared responsibility and participation in decision-making. Citizens are actively involved in the management of the community. They are co responsible, and make decisions with great levels of autonomy.

There was a renewal of the institutions and new ex-titutions emerged. New institutions emerged and others, whose functions were obsolete, were removed. Among the new institutions, some emerged from either local or regional scope among those innovative initiatives of recognised reputation and social impact, which assumed management responsibilities in public where they have previous experience.

Necessary changes occurred

There was a movement of the local and immigrant population to the countryside. Rural areas in 2040 are much different from 2015. Resettlement brought a new vision of communities, people and local development. Social Innovation processes happened, stemming from a greater range of expertise and collective imagination.

Society is now used to cooperate with others and work collectively. The political sovereignty "returned to the people" and now municipalities, institutions and extitutions develop innovative processes of empowerment. There was a change in thinking, surpassing the "individualist" and "no real demands " society of 2015. Society is now used to work in community, thinking of the public interest.

The economic system experienced a drastic shift through the dissemination of cooperatives, collectivisation of goods in the search of happiness and self-realisation of people, linked to the experience of community life and generation of ties process. **The "Inditex" model of uniformity and globalised distribution** of manufactured goods has been overcome. Production is mainly local.

Public institutions have changed and a process of de-centralisation of political competences has taken place. The Provincial Councils were eliminated and the regional government redesigned. Certain services management is already decentralised, leading local institutions to assume greater responsibilities.

Change was not radical nor imposed, but favoured by institutions. The change from 2015 is seen as an "ethical change" model of consumption, education, ways of living, the radical individualism to cooperation. Much of society assumed that governance is not always positive if you do not count with citizenship or is replacing an action they have been carrying efficiently communities.

The **consumption and energy production was sharply reduced** because of fossil fuels crisis and the rising costs of transportation and distribution.

<p>Core and main assumptions</p>	<ul style="list-style-type: none"> • <i>Both the economic and social systems are oriented towards the generation of a common good, defined by each community.</i> • <i>Big decrease in the levels of material consumption and production of goods. Generalisation of collaborative ways of consumption.</i> • <i>Very low ecological footprint because the change in the economic structure and replacement of fossil-energy intensive sectors.</i> • <i>Villages and natural environments are seen as a part of an integral system that must be able for the meeting of social, economic and cultural needs of the population.</i> • <i>Worsening effects from climate change leads Galicia to start receiving climate immigrants.</i> • <i>Most Galician people live in rural areas.</i>
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	<ul style="list-style-type: none"> • Primary sector recovers its importance and the economic system is focused on building food sovereignty. • Efforts had been made to ensure the dissemination of free culture across Galicia. • Social responsibility is given preference over individual or group rights or interests. • Society is inclusive. • The State model is questioned and its reformulation is at the heart of the public debate.
Lifestyles	<ul style="list-style-type: none"> • There are new links between work and culture. Working has to fulfil a social function but has to contribute also to the worker's self-realisation. • There is a joint planning and rationalisation of supply and demand. • The "Inditex" model of uniformity and globalised distribution of manufactured goods has been overcome. Production is mainly local. • There are new and participative ways of commercialisation and labelling. When a product has a harmful ingredient, producers are forced to indicate it. • A technological development process is taken place linked to the spread of recycling, reuse and repair activities.
Organisations and division of roles	<ul style="list-style-type: none"> • People and their environments have a different relationship in 2040. The natural environment is seen as a living space, of cultural and human interaction. • There is a new governance model based on the co responsibility and collective decision making in issues of common interest. • New institutions emerged from social initiatives good practices and other disappeared, as the Provincial Councils.
Necessary changes occurred	<ul style="list-style-type: none"> • A population movement to rural areas took place. • A culture of radical cooperation has been spread across rural areas • The unreal needs have been gradually disappeared. • Society is now used to cooperate with others and work collectively. • The economic system experienced a drastic shift through the dissemination of cooperatives, collectivisation of goods in the search of happiness and self-realisation of people. • The public institutions have changed and a process of de-centralisation of political competences has taken place. • Levels of consumption and generation of energy decreased because of the increase in fuel prices and consequently in transport and distribution costs.

Table 9.6: Summary of vision 3: Socially Embedded Growth

9.4.4 General issues for further elaboration

The vision could include more detail on what the **political system and the governance model** would be like. Some elements in the three visions suggest that superordinate institutional structures or common agreements beyond the regional level would be necessary to guarantee sustainability implementation at the local level.

It is not clear how the **redistribution of wealth mechanisms**, present in all the three visions would work. Neither is it how the distribution and the assignment of resources would be guaranteed.

Each of the visions is **focused either on rural or urban environments**, involving different future scenarios. This variable, the territorial one is in this sense defined as key by our participants and shows a perceived rural-urban gap. It would be interesting to complete the visions focused connections between rural and urban areas.

Every vision mentions the need to recover old technologies and knowledge to meet needs in 2040. It is not yet fully clear whether this heritage would be adapted to the economic structure of 2040. Except from the 3rd vision, which suggests a process of “primarisation” of the economy, we are not clear about which would be the **main economic sectors in the Galician economy in 2040**.

None of the visions addresses how the **demographic crisis** in Galicia would be tackled.

All the three visions involve a **decline in economic activity made compatible with the existence of more interventionist measures that ensure the wellbeing of the citizens**. It would be interesting to investigate this topic and include in the visions elements as the tax system and the process of devolution of competences to the local level.

Linked to the previous, the three visions include **a new renewable-based energy system** but reaching it would require huge investments in the sector. Would this process be led by civil society and energy cooperatives or would the state be responsible for it?

There is still work to be done on what’s the **tipping point** that triggers the start of the transition processes towards each of the visions. Social identity re-appraisal processes are mentioned in all the three visions, with strong **golden age nostalgia**, but are weak in the details and it is unclear what the expected impact of them is.

The three visions refer to the idea that living sustainably would imply the **reduction of some created needs**³ we have today. There is no clarity regarding how and when these simplification processes are started.

Regarding actors, **civil society** is in general attributed a watchdog role regarding sustainability and **big businesses** dominance is pointed to be the main obstacle towards sustainability. It is interesting see that consumers, prior not organised actors, are seen as the drivers of real change. The importance attributed to civil society in fostering sustainable lifestyles can be partially explained because the majority of our guests came from civil society organisations.

³ Here the concept needs is used in a colloquial sense and refers to ways to meet desires, what Max Neef defines as “wants”.

9.5 Conclusions & Reflections

The visions are complex and place emphasis on **structural elements required for sustainable lifestyles** to become real. It would be interesting to further investigate how everyday practices would change for people in these envisioned and sustainable scenarios. In this sense, **little information was collected in regard with lifestyle activities** and when speaking about changes in the envisioned futures, we perceived participants had trouble when trying to explain them in terms of their everyday practices and always did it in structural terms.

Throughout the workshop we perceived that possibilities for sustainable lifestyles to be spread in 2040 in Galicia are seen with **optimistic eyes**. Participants were in favour of any of the three visions proposed and saw themselves as **potential agents of change** towards sustainability in 25 years' time. Despite this, they also discussed about their own behaviour as being **part of the obstacles** towards sustainability. Going more in-depth into the analysis of ways to overcoming this duality would be extremely interesting in future work. Sustainable lifestyles are perceived to be spread in certain areas of Galicia, but adequate diffusion, and upscaling mechanisms are missing, including those for making them visible and framed positively in the region.

Making lives simpler in this envisioned future was a shared element in the visions. Visions were strong on the need for decreasing the levels of consumption and waste generation, especially in the energy domain. The need for a review process of our needs came out repeatedly, and the idea that we need less and we can share more was shared.

Change in consumption patterns would give more autonomy to the region. There would be more collaborative and responsible consumption practices. Key sectors of the economy will be managed at the regional and local level. Most consumption will be local and self-sufficiency for basic needs and services will be almost total.

Models of localised systems of production/consumption and local governance models would lead to a more involved and direct management of everyday life which can potentially be empowering to citizens. The shortening of distribution and production chains but also the micro level organisation of cities and villages would gradually come to understand and intervene to change their near environment.

Active citizenship is needed and sought by institutions but not instrumentalised. Their main role is to exert pressure to ensure sustainability is improved and the system meets the needs of the citizenship. Civil society would be the driver of the transition towards sustainability.

The nature of sources of prosperity was discussed. While in current market economies prosperity is based on material goods and productivity, within the visions prosperity would be based on immaterial assets, such as culture, cooperation or community life. Decent living standards would be also guaranteed by either local communities or the State and access to basic goods and services would be prioritised over property.

The need for an integrated system and ethical shift in society is foretold. The values of trust, promotion of cultural and material environment and respect each would spread and the rural-urban gap will disappear. All the activities organised at the societal level will be in accordance with ethical exigency of respect and care for the life and integrity of territory. Labour market as we know it in western societies and the relationship of people with work would completely change. Working would be a self-realisation activity, with greater flexibility and less dedication in hours.

A hedonistic yet responsible society would emerge in a sustainable future. There would be greater availability and autonomy in the use of time. The differences between work and leisure would disappear and activities would very much be oriented to the enjoyment and care of people.

Knowledge and mutual support networks will be given greater weight. There would be a new model of governance that would place responsibility on the networks, betting on autonomy. The institutions would be revised accordingly. There would be a popular appropriation of technologies and research and bet on technology and open knowledge.

Finally, **attachment to the local community, including natural spaces, social connections and cultural features** is considered an important element for future sustainability. A need for the re-valorisation of Galician culture appeared in all the 3 visions and pointed to the actual perceived lack of knowledge of Galician heritage, history and culture in general. **Rural concerns** came up constantly during discussions and can be explained because a drastic process of rural depopulation currently taken place in Galicia.

9.5.1 Methodological reflections

After the workshop, on the 14th of December, 2015, the UDC team met to exchange impressions on the development of it, things that worked well and what was to be improved. The overall feelings were positive among the facilitator team; we enjoyed the workshop and agreed that the organisation efforts and intensive recruitment process bore fruits. As to avoid repeating things for improvement detected by attendees all their comments were taken into account and we decided to organise the Second Workshop in two half-day sessions and invite people to stay overnight, so all of us could have more time for informal chatting among us.

In general the 4 groups developed the visions focusing on the axis of different pathways to sustainability without trouble. Having groups of 5 to 6 people plus one facilitator in each of them was an effective way of organising work. We printed the sets of questions and charts and distributed them among the groups, which also helped participants. The most difficult thing to achieve for facilitators was that sustainability was to be defined in terms of lifestyle, a difficult concept to apply and a relatively new one for many of the attendees. In this sense discussions on the macro magnitudes of sustainability had to be put back on track continuously. Even though the methodology and structure of the workshop was found very useful and worked for the collective definition of visions on sustainable lifestyles, more time would be needed in order to be able to collect further information and be more specific about how sustainability could be achieved for the 6 different domains in GLAMURS.

References & Sources

Martínez, H., Dumitru, A., Lema Blanco, I. Díaz Ayude, A., García Mira, R. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Spanish Case Study for GLAMURS.

PART 3: CROSS-CASE COMPARISON OF VISION WORKSHOP RESULTS

10. Cross-case comparison of vision workshop results

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In this chapter both the process results and the actual contents of the visions developed during the first backcasting workshops in the different GLAMURS regions will be analysed. For the process the workshops will be compared on (i) conducted (preparatory) activities, (ii) participation aspects (iii) applied methods at the workshop and whether that can be related to the vision results and (iv) observed learning among either organisers or participants, and whether. The content of the visions will not only be compared on (1) how they relate to the proposed distinction between sufficiency and green growth, but also on (2) community versus individual orientation, and (3) government/public orientation versus market orientation, and (4) urban versus rural orientation.

As explained previously, this deliverable does not include a backcasting vision workshop from Scotland. In Scotland existing visions were used as inputs to the second workshop on pathways and implementation. A vision workshop was thus not necessary. The data underlying this analysis are based on the summary reports that are included in chapters 4 to 9 of this report.

10.1 Vision workshops process results and methods

10.1.1 Preparatory activities

Three main preparatory activities can be discerned as indicated in Table 10.1 These activities cover the activities focused on preparing the contents of the vision workshop. Practicalities like arranging the materials and the location are not taken into account in this comparative analysis.

For the first category of stakeholder mobilisation it can be noted that different strategies were used by the different case study teams. All case study teams reached out in their network, but they did this to a different extent and with a focus on different stakeholder groups (see also 10.1.2 for more information of the involved stakeholder groups per region). Except for the Austrian workshop, the researchers involved in the GLAMURS project mobilised the stakeholders themselves based on the contacts gained via the case studies in GLAMURS and their professional academic networks. The Italian and Dutch teams moreover involved the core stakeholders in setting the date for the workshop. Email lists and personal contacts were used to actually invite all selected stakeholders. The Spanish team most explicitly dealt with the selection of stakeholders from target organisations based on five different criteria: (1) stakeholder category, (2) lifestyle domain they represented, (3) geo-graphical distribution – urban/rural, (4) political affiliation, (5) gender. This team also applied a useful method to make sure that all these target organisations were represented at the actual workshop: whenever someone declined, they asked this person to appoint another relevant person to be invited instead. This is called the snow-ball technique that proved to be fruitful.

The preparatory activity of the test workshop was performed in Italy, the Netherlands and Spain. During these test workshops facilitation methods were tested by the participants and agendas and scripts were further refined. In Austria and Romania no test workshops were performed due to consequently extensive facilitation experience and limited time availability. When comparing the other activities performed, it can be noted that these mainly include the preparation of the workshop design/facilitators script, the final agenda and some other practicalities. In Spain the case study team managed to arrange vouchers as gifts for all the participants to thank them.

Country	Preparatory activities		
	Stakeholder mobilisation	Test workshop	Other activities
Austria	Outsourced to the manager of the LEADER region Donau Böhmerwald. He knows the network and could get participants interested easily.	No test workshop	Workshop design in collaboration between the involved researchers.
Germany	Based on three strategies: (1) invite former interview partners and use them as multipliers, (2) invitation via the email list of the Transition Town initiatives, (3) cooperation with City of the Future Contest.	No test workshop	Prior to the first workshop, the participants received the GLAMURS-flyer for information about the project and a facilitation script was developed.
Italy	Based on two main steps: (1) core group of people involved in setting the date for the workshop, (2) inviting all stakeholders by email and some personal invitations.	Test workshop	Preparing the script for the workshop and hanging a poster for a resilient strategy against urban climate change that was recently presented on a conference.
The Netherlands	Based on two main steps: (1) core group of people involved in setting the date for the workshop, (2) inviting all 63 stakeholders both from network and newly mobilised contacts by email and some personal invitations.	Yes: duration of 1,5 hours	Preparing an extensive workshop script.
Romania	Based on two main networks: (1) associations acquainted via a GLAMURS seminar, (2) researchers with an expertise in sustainability.	No test workshop	Preparing workshop script and agenda, deciding on location.
Spain	Criteria for mobilisation used: (1) stakeholder category, (2) lifestyle domain they represented, (3) geographical distribution – urban/rural, (4) political affiliation, (5) gender. Next over 80 stakeholders were invited by email stating the reason for selecting them and using the snowball technique to get representatives from all target organisations.	Yes: duration of 2,5 hours	Acquiring vouchers as a gift for the participants. Preparing the extended workshop scrip, presentations and a checklist.

Table10.1: Overview of preparatory activities per case study.

Stakeholder mobilisation for the workshop took place through contacts with the initiatives, existing networks of the case study teams, and newly gained contacts due to attending meetings for the GLAMURS project. In all countries a significantly larger number of invitations was sent out in order to get the number of participants aimed for.

10.1.2 Process and participation

The following table (Table 10.2) shows some details on the process and stakeholder participation in the first vision workshop round in all seven case study regions:

	Austria	Germany	Italy	NL	Romania	Spain
Nr. of participants	18	21	19	22	7	17
Business	5/18	4/21	0/19	0/22	0/7	0/17
Civil society	2/18	10/21	9/19	9/22	2/7	8/17
Government	9/18	2/21	3/19	2/22	2/7	4/17
Knowledge	2/18	4/21	7/19	10/22	3/7	5/17
Other	0/18	1/21	0/19	1/22	0/7	0/17
Gender: Male	13/18	12/21	13/19	15/22	1/7	7/17
Gender: Female	5/18	9/21	6/19	7/22	6/7	6/17
Date WS1	15-01-'16	25-11-'15	17-12-'15	26-11-'15	22-01-'16	12-12-'15
Location WS1	Lembach	Halle	Rome	Delft	Timisoara	A Coruña
Location type WS1	Gasthaus (inn)	Social and educational foundation	Farm	Art centre outside town	Bakery/ café	Museum
Duration WS1	5 hours	8 hours	9 hours	8 hours	5 hours	9,5 hours
Nr. of facilitators	3	6	4	4	3	6

Table 10.2: Overview of workshop preparation.

Looking at stakeholder participation, Table 10.2 shows that in all vision workshops around 20 participants were involved, except for the Romanian workshop, where 7 attendees were present. The lower number of participants in the Romanian workshop was due to a considerable number of last minute cancellations, which was out of reach of the organisers. A comparison of the different stakeholder categories shows that only in Austria and Germany representatives from business were involved. In Austria this was due to the strong business involvement of the initiative. The Austrian workshop also had a stronger focus on government that can mostly be explained by the governmental nature of the Austrian initiatives under study. In Germany, Italy, Spain and the Netherlands civil society was the largest group present, which again relates to the more bottom-up nature of the selected initiatives in these countries for the GLAMURS project. In Italy, Romania and the Netherlands a relatively large percentage of the participants come from a research and knowledge background. A comparison for gender division shows that in Austria, Italy and the Netherlands a vast majority of the participants were males. In Romania the opposite was achieved with almost only women participating. In Spain the most equal gender division was realised.

The workshops were all organised between the end of November 2015 and the end of January 2016. All locations were close to the research institutes involved in the GLAMURS project, except from the Austrian initiative. The type of locations can all be described as ‘neutral’ and inspiring for the participants in either their leisure function (e.g. bakery) or more educational purpose (museum). The workshops differ in their duration, also depending on the types of activities connected to the workshop. In Spain and Austria for instance a dinner was offered to participants, whereas other workshops were ended with drinks and informal discussions. All workshops made use of facilitators that mainly consisted of the researchers involved in the GLAMURS project.

10.1.3 Applied methods

The methods applied during the workshop in the different regions are presented in Table 10.3, divided into four main parts of the workshop: (1) introduction, (2) discussion on the definition of sustainable lifestyles and barriers to sustainable lifestyles, (3) the discussion and development of the actual visions, and (4) the final discussion.

Country	Applied workshop methods			
	Introduction	Lifestyle discussion	Vision discussion	Final discussion
AT	1. Sociometric constellations based on: <ul style="list-style-type: none"> - visioning experience - optimistic/pessimistic attitude, - names 2. Introduction of participants based on feelings and thoughts 3. Presentation on the context and purpose of the workshop	Not applied separately, but as part of the vision discussion.	1. Imagining the region in 2040 in 4 groups in 8 thematic dimensions. 2. Individual brainstorm on personal lifestyle in 2040. 3. Merging individual lifestyle with vision. 4. (Preparing the) presentation of the vision.	Group reflection led by facilitators.
GE	1. Making expectations explicit: what is success /failure of workshop? 2. Presentation on context of the workshop. 3. Sociometric constellations based on: <ul style="list-style-type: none"> - time lived in region - city attractiveness - process towards a sustainable city. 	1. Brainstorm in 3 groups based on: <ul style="list-style-type: none"> - Characteristics of a more sustainable city - Most important lifestyle areas for a more sustainable city 2. Summarising the shared topics. 3. Prioritising the shared topics via dots.	1. Explaining the Walt Disney method where the importance of the visionary, the critic and the realist is stressed. 2. Brainstorming in 3 groups. 3. Presentation of visions.	Summary and outlook to the next workshop.
IT	1. Presentation on context and purpose of the workshop. 2. Introduction of participants.	1. Brainstorm on drivers and barriers for sustainable lifestyles in 2 groups.	1. Introduction on sufficiency and green growth scenarios. 2. Brainstorm in two groups, one focussing in green growth and one on sufficiency. 3. Presentation of 2 visions.	Plenary discussion.

NL	1. Introduction of participants. 2. Presentation on context and purpose of the workshop.	1. Facilitated brainstorm in 3 groups on: - definition of sustainable lifestyle. - barriers for sustainable lifestyles. - role of initiatives. 2. Clustering the ideas. 3. Prioritising with dots 4. Plenary discussion and feedback.	1. Introduction on backcasting, sufficiency and green growth. 2. Facilitated discussion on vision in 3 groups. 3. Facilitated discussion on backcasting in 3 groups using guiding questions. 4. (Preparing) a flip-over presentation.	Final discussion and outlook to the next workshop.
RO	1. Presentation on context and purpose of the workshop. 2. Introduction of participants.	1. Brainstorm in 2 groups on: - elements of sustainable lifestyles. - barriers for sustainable lifestyles. 2. Plenary clustering 3. Plenary prioritising the ideas with dots. 4. Plenary presentation and discussion	1. Briefing on degrowth vs. green growth. 2. Discussion on vision in 2 groups. 3. Discussion on backcasting in 2 groups using guiding questions. 4. (Preparing) flip-over presentation.	Final discussion, follow-up and evaluation.
SP	1. Dividing participants in prepared groups. 2. Presentation on context and purpose of workshop. 3. Introduction of participants based on most important topics for sustainability in the region.	1. Brainstorm in 4 groups on: - definition of sustainable lifestyles. - barriers for sustainable lifestyles. - barriers for mobility and food consumption. 2. Clustering in groups 3. Prioritising the ideas with dots in groups. 4. Plenary discussion.	1. Division in 2 groups for mobility and 2 for consumption. 2. Discussion on vision in 4 groups. 3. Discussion on backcasting in 4 groups using guiding questions. 4. (Preparing) flip-over presentation.	Recap, follow-up and assessment.

Table 10.3: Overview of applied workshop methods.

Chapter 3 describes the workshop-based GLAMURS backcasting methodology and includes guidelines and methods for the workshop day. However, it has also been mentioned that program, tools and methods could be adjusted to local customs and preferences and expertise of local organisers as long as workshop goals would be met in terms of content and process results aimed for. An overview of applied methods is shown in Table 10.3; the following observations can be made.

- The discussions and brainstorms on sustainable lifestyles were in most workshops used as a preparation for developing future visions on sustainable lifestyles.
- All workshops had a check-in and a check-out. The check-in was meant to make participants at ease and get them familiar among each other and with the goals, scope and focus for the day, and the check-out was meant to get feedback and evaluative remarks from the participants as well as making a connection to next steps and the second workshop.
- However, check-in and check-out were done in different ways allowing for local flavour and making use of preferences and expertise of local organisers and facilitators. For instance, in Germany a socio-metric positioning exercise was conducted in order to make participants acquainted with each other and providing a first idea of diversity and group dynamics to the facilitators using exploratory questions like “How long have you lived in

the city of Halle?”, “Halle – city of your dreams or daily annoyance?” and “Sustainable City – Is Halle stuck at the beginning or already an illuminating example?”. In Austria the methods of facilitation are building on the well-known “Art of Hosting” approach that also has a strong focus on the group dynamics and feelings of participants in workshop facilitation.

- Most workshops followed the set of proposed guiding questions for developing visions, whereas different methods were applied in Germany and Austria. In Germany the Walt-Disney method was applied for vision development. This method was developed by Robert Dilts in 1994 as a complex creativity strategy in which a group uses several perspectives or thinking styles sequentially and is quite popular in Germany. This method involves parallel thinking using building on four thinking styles including outsiders, dreamers, realisers and critics. In Austria a combination of group discussion and individual brainstorming and exchanging individual visions was applied.
- In nearly all workshops the distinction between sufficiency and green growth was used as an input to the visioning session in order to stimulate diversity. However, in Germany participants preferred to work on different varieties of sufficiency, and in Austria it was decided to let the 4 visions (they worked in 4 groups independently) emerge without giving a frame of growth and degrowth. The only constraint was that the four visions built on existing visions. This led to four partial visions generated by different sub-groups, which were integrated into a single overall vision for the region. This was possible as they were very close and used mainly degrowth and sufficiency as a frame.
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10.1.4 Observed learning

In the reflections on the results and methods applied in the first workshop, some initial learning can be observed. These learning aspects are summarised for the different regions in Table 10.4.

When comparing the learning processes with regard to the content or result of the visions developed, in some regions (e.g. Austria and Spain) participants were mostly positive towards future developments, whereas in Italy for example participants are rather pessimistic about the role of government. The different teams also learned that the dichotomy between green growth and sufficiency worked well, but that the final result was a more balanced perspective, where elements of the two principles were mixed. Another theme that emerged was the difficulty of collecting information on the level of lifestyle practices as part of the vision. The latter links to methodological aspects where the Austrian approach with a combination of collective and individual steps made it possible to actually arrive at more concrete visions. Methodologically, a common reflection was a lack of time. Apart from that, the different case study teams learned from the methods used and reflected on the improvements for the second vision workshop. These improvements relate to planning and mobilising stakeholders on the one hand and to (more intuitive and lifestyle focused) facilitation methods on the other hand.

Country	Learning
Austria	<ul style="list-style-type: none"> • Content of vision: impressed by the positive and optimistic picture the participants had about the future of their region. • Methodological: the combination of collective and individual working steps made it easier for the participants to create concrete visions and preventing them to become too abstract and impersonal
Germany	<ul style="list-style-type: none"> • Content of vision: appreciated the open atmosphere, productive group work; the vision is based on already existing infrastructures. • Methodological: methods were easy to understand and worked well; they however did not provide enough time for group work on visions.
Italy	<ul style="list-style-type: none"> • Content of vision: the vision shows that currently, the political organisation is often confused and ambiguous, which leads to a lack of trust in public institutions.
The Netherlands	<ul style="list-style-type: none"> • Content of vision: the different visions are all based on specific underlying models of human behaviour. The visions moreover focus on the regional scale and ignore con-straints raised by developments at other scales. However, many important developments will unfold at supra-regional level, and it would be interesting to say more about implications of our visions for developments at these other scales. • Methodological: For the vision development, the dichotomy between sufficiency and green growth was very useful. Mainly cognitive oriented methods were used and intuition oriented methods could have value too. The lifestyle discussion in the morning provided a good starting point for vision development, while in particular the plenary discussions after groupwork and brainstorming proved to be most valuable in terms of opinions and critical thinking on topics relevant to the workshop.
Romania	<ul style="list-style-type: none"> • Content of vision: it is noteworthy that while initially starting from a clearly defined set of principles (i.e. Green Growth vs. Sufficiency) ultimately neither of the two visions maintained this delimitation, instead incorporating a handful of aspects from both frameworks into a sort of “composite” conceptualisation. • Methodological: Methods proved well suited, effective and easy to facilitate. It is essential to pay close attention to the planning stages of the workshop and prepare all the details as minutely as possible, so as to avoid delays and scheduling issues.
Spain	<ul style="list-style-type: none"> • Content of vision: little information was collected regarding lifestyle activities. It was perceived that possibilities for sustainable lifestyles are seen with optimistic eyes. Rural concerns came up constantly during discussions and can be explained because a drastic process of rural depopulation currently takes place in Galicia. • Methodological: even though the methodology was found to be very useful, more time would have been needed in order to be able to collect further information and be more specific. This also relates to the difficulty to achieve working groups to define sustainability in terms of lifestyle, a relatively new concept for many of the attendees.

Table 10.4: Overview of observed learning.

In terms of learning among workshop participants it can be mentioned that this has not been intensively evaluated, but from the final responses and feedback of participants it can be noticed that most participants were on average very positive and enthusiastic about the atmosphere and the results of the workshop. Many participants also pointed to the usefulness of the comprehensive level of the workshop, combining sustainable lifestyles and the role bottom-up initiatives can have in transitions to sustainable lifestyles. This points clearly to learning, even to so-called higher order learning, but this has not been further investigated.

10.2 Vision workshop content results

10.2.1 Results on sustainable lifestyles

In almost all regions the active part of the workshop started with a brainstorm on sustainable lifestyles. In Austria this discussion was integrated in the workshop as a whole. The team used existing strategies that have been developed in visioning processes in the region and suggested seven key aspects plus an open field. A summary of the most important aspects of sustainable lifestyles that came up during the workshop in all different regions is presented in Table 10.5 below.

Country	Key aspects of sustainable lifestyles
Austria	<ul style="list-style-type: none"> • Values and lifestyles • New forms of labour • Regional resilience – food • Regional resilience – housing and energy • Sustainable mobility • New forms of education • Regional economy & consumption • Other ideas / open space
Germany	Prioritised shared topics: <ul style="list-style-type: none"> • Consciousness shift, changes of value • Participation, networking, citizens – bottom-up • Networks of engaged people – citizens, politicians, initiatives • Mobility, traffic, energy sources
Italy	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Active citizenship • Sustainable behaviour (incl. recycling, reducing consumption) • Improvement of needs (incl. social justice) • Attention to the territory (incl. local agriculture, critical consumption) • Time management • Technology and mobility • Nutrition
The Netherlands	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Awareness (incl. culture of sufficiency, upbringing and norms) • Abstract definitions (incl. closing loops, a collection of behavioural practices) • Context (incl. infrastructure and social environment) • Relationship people-environment (enjoying life, balance with nature) • Behaviour (incl. choices with little impact, recycling)
Romania	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Good health – living a healthy life involves more than avoiding hazards • Proper, respectful use of available resources, avoiding and/or reducing waste • Social aspects – supporting social equity and participatory development • Sustainable development (social, economic, environmental), using renewable energy
Spain	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Local development, involvement of population and integration of territory • Collective transport • Decrease in levels of consumption and change in consumption patterns • Community life. Close people-environment relationship • Social over individual responsibility • Wealth distribution

Table 10.5: Overview of sustainable lifestyle discussion results.

When comparing the key aspects in the different regions, many overlapping themes can be found. Awareness, consciousness and changing values and norms among citizens are clusters that are named often. Related to this is participatory development or active citizenship. Behavioural aspects related to a decrease in levels of consumption moreover are named in almost all regions. This is often coupled to local development, the relationship people-environment or attention to the territory. Finally some more specific GLAMURS domains are named as key aspects. These include for instance mobility, energy and consumption/nutrition.

The next step in the lifestyle brainstorm focused on an identification of issues and barriers. This aspect was part of the workshops in Italy, the Netherlands, Romania and Spain. A summary of barriers that came up during the workshops in these regions is given in Table 10.6.

Country	Issues and barriers
Italy	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Disinformation • Monopolies and monocultures • Individualism • Political responsibilities • Inadequate planning policies
The Netherlands	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Time and convenience (including routines, technology and permits) • (Lack of) motivation and social pressures • Impotence / what we do is a drop in the ocean • Role of politics based on short-term thinking • Economic thinking based on profits and delusions of the day • Values and norms based on personal interests and a lack of a sustainable vision
Romania	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Education, information, lack of access to information • Economic interests, company monopolies, large scale pollution and waste generation • Lack of market opportunities, outlets • Traditions, culture, (cultural) inertia, values, attitudes
Spain	Clusters of ideas that were prioritised by the participants: <ul style="list-style-type: none"> • Lobbying of big companies and normative protecting their interests • Lack of collaboration culture among society • Spread of capitalism production models and ideology • Lack of awareness regarding sustainability • Inertia and lack of information about advances in sustainability • Lack of education policies promoting new lifestyles • Climate change and loss of biodiversity and cultural heritage

Table 10.6: Main issues and barriers for achieving sustainable lifestyles

Some issues and barriers named are lacking key aspects (see Table 10.4). This considers for instance a lack of awareness or our current culture based on personal interests that can hinder collaboration. Related to the lack of awareness are disinformation and lacking educational policies that are also named as barriers in several regions. Another shared main barrier is our current economic model based on capitalists ideas specified with additional issues like lobby power, monopolies, monocultures and profit maximisation. A final barrier that has been named often

relates to the role of politics based on short term thinking, ineffective policies and limited responsibilities.

In sum the aggregated and combined results from all the workshops provide quite a complete picture of relevant aspects, issues and barriers, and proved to be a useful preparation for the vision development sessions.

10.2.2 Vision results

The main characteristics of the visions developed in the first workshops in the different regions are presented in Table 10.7 on the next page. In most of the regions, the distinction between sufficiency and green growth can be seen. Results presented in this section are extracted from the specific summary reports of the different regions as also presented in part 2 of this deliverable.

For a comparison of the visions several aspects are used. The visions are plotted on a scale between sufficiency and green growth. This distinction is firstly plotted against the scale between community focus and individual focus in Figure 10.1. Figure 10.2 plots the visions on the scale between private centred and public centred. Finally Figure 10.3 uses the scale between urban and rural focus. For this scoring, excel files were used where the visions per region could be scored on a 7 point scale between either sufficiency and green growth and the other aspects that will be explained in the next section. An overview of these scorings per vision can be found in Appendix B.

Country	Visions created	Key characteristics
Austria (AT)	1. Integrated vision of 4 visions	<ul style="list-style-type: none"> • Sharing • Balancing economy and ecology • Regional sufficiency
Germany (GER)	1. Sustainable mobility – traffic – energy sources	<ul style="list-style-type: none"> • Decentralisation; circular economy on a local level • Based on responsible citizens • Sufficiency, complemented by efficiency & consistency
	2. Increased participation and bottom-up networks	<ul style="list-style-type: none"> • Based on responsible citizens • High level of participation in local government • Local embedding/connection of economy to society
Italy (ITA)	1. Sufficiency vision	<ul style="list-style-type: none"> • Sufficiency: development without growth • Active communities system • Decentralised executive activities • More solidarity
	2. Green growth vision	<ul style="list-style-type: none"> • Develop individual capacities, understand individual needs • Think global and local • Technology and information sharing
The Netherlands (NL)	1. Sufficiency & local communities	<ul style="list-style-type: none"> • Collective willingness • Sufficiency: less consumption and greater quality of life • Society is locally rooted, but globally connected • Respecting the carrying capacity of our planet
	2. Between sufficiency & green growth	<ul style="list-style-type: none"> • Autonomy at the individual level; cohesion at city level • Society is flexible, causing uncertainties • Advanced knowledge exchange and smart innovations
	3. Green growth through innovation & active citizens	<ul style="list-style-type: none"> • Technology, firms & motivated citizens enable green growth • Sharing and new business models • Waste will not exist anymore (circular economy model)
Romania (RO)	1. Sufficiency vision	<ul style="list-style-type: none"> • Focus on personal (non-materials sources of) wellbeing • Group cohesion and sense of community • Openness to other cultures and continual learning
	2. Green growth vision	<ul style="list-style-type: none"> • Green economy; enabled by technological innovations • People are willing to share goods and resources
Spain (SP)	1. Eco-efficiency: collaborative consumption & green growth for sustainable cities	<ul style="list-style-type: none"> • Greening of consumption and technologies • Urban vision • Welfare state with participative mechanisms
	2. Sufficiency: human scale territories	<ul style="list-style-type: none"> • Decrease of consumption, supply and demand levels • Rural and urban vision • Redistribution of wealth mechanisms • Welfare state with participative mechanisms
	3. Socially embedded growth: returning to community life	<ul style="list-style-type: none"> • Decrease of consumption, supply and demand levels • Rural vision • Collectivisation of goods and means of production • Small & self-sufficient community living

Table 10.7: Overview of vision results. Colours and abbreviations of the countries are used in Figure 10.1 – 10.3.

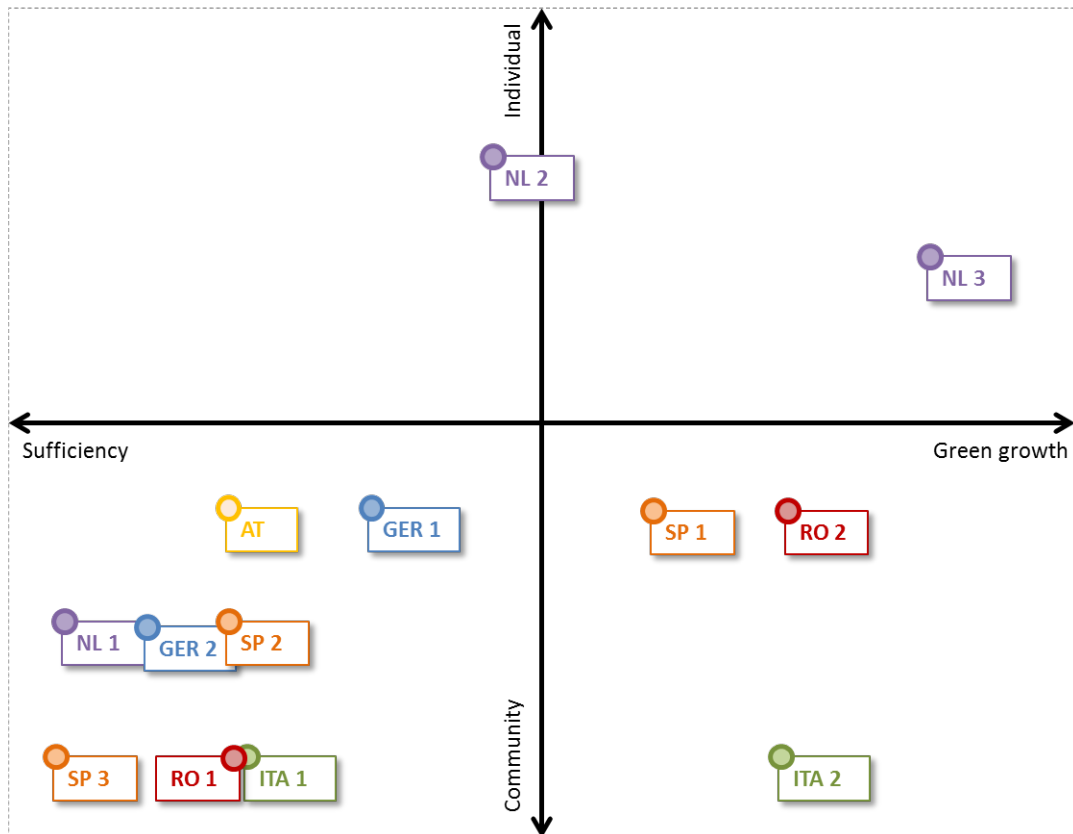


Figure 10.1: Visions plotted according to Sufficiency-Green Growth versus Community-Individual orientation.

Figure 10.1 shows that the majority of the visions can be characterised as being community focused and driven by principles of sufficiency. This reveals a scenario that is rather the opposite of our current development path driven by a focus on the individual and (economic) growth. The focus on individual values can be discerned in only two visions plotted in Figure 10.1: the Dutch Green Growth vision and the Dutch vision in between sufficiency and green growth. Interestingly, in the countries where 3 visions were generated (Spain and the Netherlands) it led to an attempt to develop a vision that either combined elements from both contraries (Netherlands) or to explore an intermediate position that has been labelled as socially embedded growth as proposed by Smulders (2015). The first Spanish vision and the green growth visions developed in Romania and Italy combine the green growth principles of eco-efficiency with a focus on the community and participative mechanisms. It must be realised that the visions reflect the preferences and desires of the participants and are indeed quite contrary to current developments and many existing so-called Business-As-Usual (BAU) scenarios. On the other hand the combination of community orientation and green growth points to another alternative scenario in which greening through innovation, the rise of circular and bio-based economy is combined with growing community involvement and decreasing individualisation, which might be an attractive alternative to a large group of citizens and policy makers.

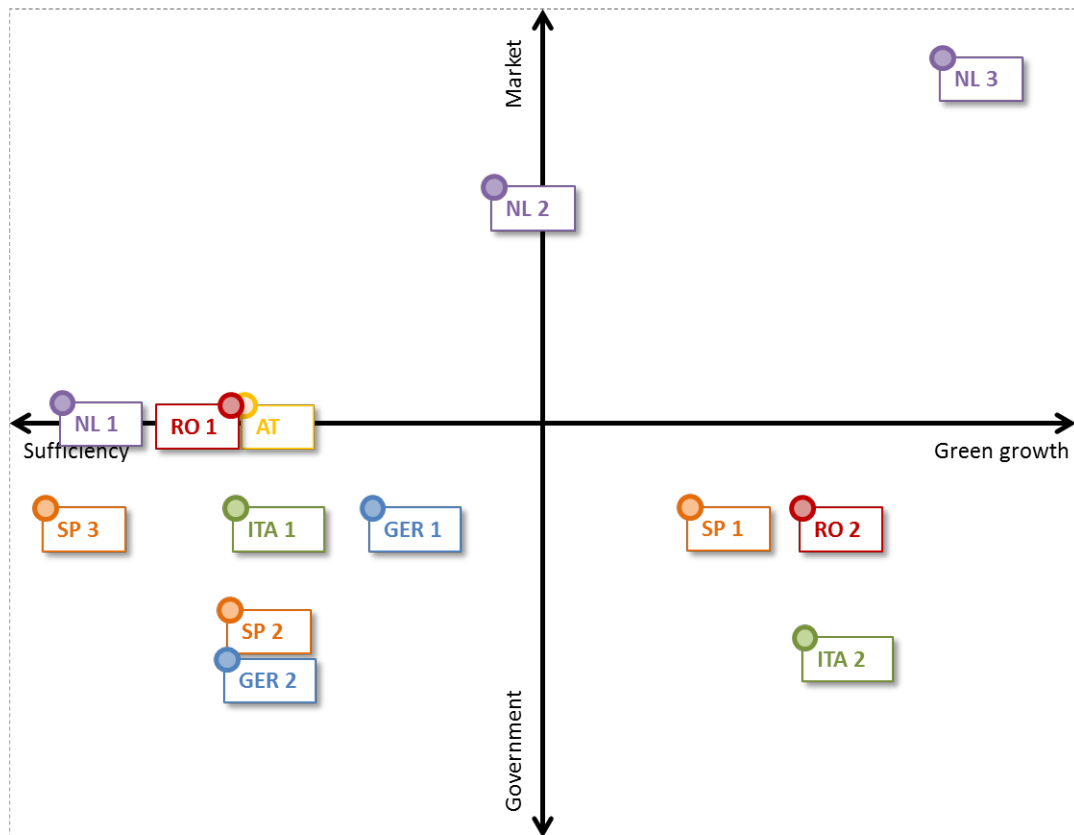


Figure 10.2: Visions plotted according to Sufficiency- Green Growth versus Government-Market coordination.

Figure 10.2 shows that the plots on the scales sufficiency-degrowth versus public-private are more scattered than those in Figure 10.1. This also shows that many options are still possible here: the transition towards a green growth or sufficiency oriented vision can be coordinated both from government side and via market coordination. It needs to be mentioned that when there is a strong market orientation in the sense of solving societal and environmental problems and stimulating transitions to sustainability through market mechanisms, this still requires strong regulatory frameworks enabling this. On the other hand when the government is the main driver for transitions to sustainability there will still be markets and market mechanisms at play. So, visions may show three different possibilities, namely a preference for solving issues through market mechanisms, a preference to do this through regulation and government measures or thirdly for a combination of these approaches. This also explains why many visions are in the middle of the government versus market orientation axis. Some of the sufficiency visions assume that decentralisation comes not only along via decreasing governmental influence and increasing community empowerment, but also with a changing market orientation. This market orientation is more based on local markets and production rather than the globalising markets of current times.

In Figure 10.3 finally the urban versus the rural focus of the visions is added to the plot on sufficiency versus degrowth. This figure shows that all the green growth visions are based on a focus on the urban life. The sufficiency visions are positioned on a scale between urban and rural, mainly because they assume a vast amount of local food production which combines the rural and

urban focus on a local scale. Especially the third Spanish vision on sufficiency (called Human scale territories) has a strong focus on the rural aspect. This vision assumes that rural areas are dynamic and attract population. A strong point of the results is that the vision workshops in the regions studied in GLAMURS resulted both in rural visions and urban visions. So together they provide a more comprehensive outlook on futures for sustainable lifestyles and green economy.

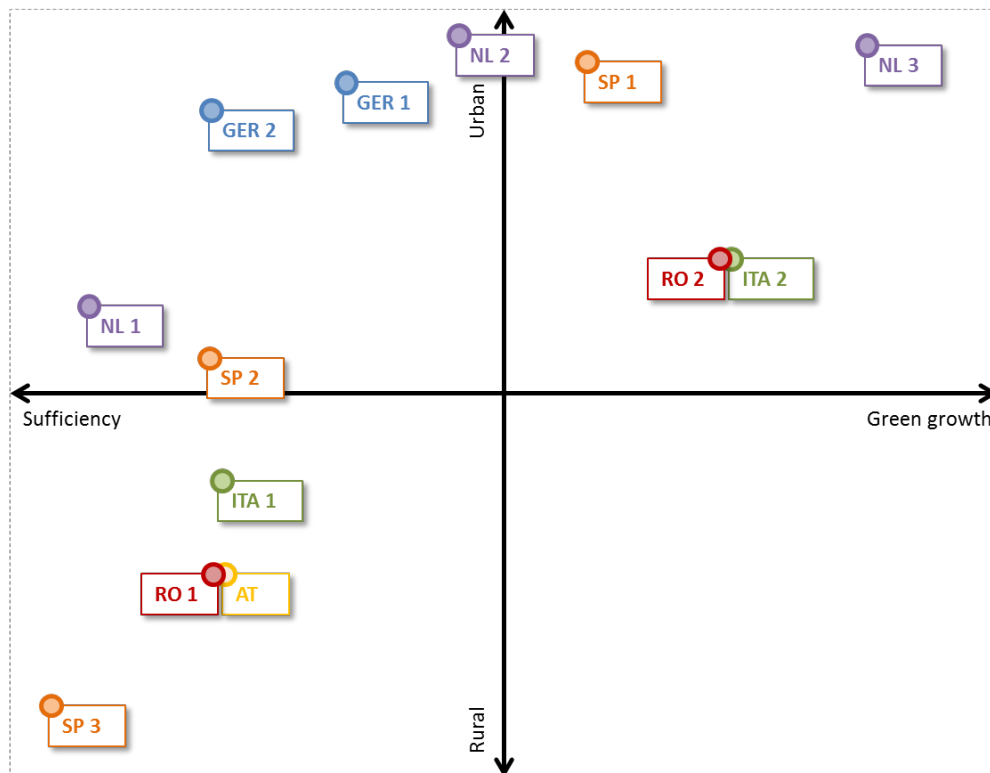


Figure 10.3: Visions plotted according to Sufficiency- Green Growth versus Rural-Urban.

In the next step, all the different visions are compared based on their lifestyle activities (Table 10.8). A shared lifestyle activity in many visions is a reduction of labour or the amount of time spent in formal professional roles. This is mainly related to the visions oriented on sufficiency, but also in some of the green growth visions this activity can be detected. Local food production is another lifestyle activity that can be found in almost all visions – both the sufficiency and green growth oriented ones. The difference in local food production in the dichotomy sufficiency-green growth is mainly in the implementation: whereas the sufficiency based visions assume sustainable agricultural production and urban farming, the green growth visions also include the usage and development of new technologies for sustainable and efficient food production. A reduction in consumption can mainly be found in the sufficiency visions.

Solutions for mobility that can be found in multiple visions entail sustainable public transport, shared means of transport, only short distance travelling and increased usage of electric vehicles and bikes. In the energy domain, renewable energy usage is assumed; either produced by local communities or in a more central way. Other lifestyle activities that are named relate to a more sustainable educational system, housing system and reuse, repair and recycling technologies.

10.2.3 Discussion of content results

It can be concluded that both the lifestyle discussions and the vision development sessions have led to a diverse and rich picture of aspects and options for future sustainable lifestyles. In that sense workshops and the developed methodology have enabled to reach the goals set. The distinction between sufficiency and green growth has contributed strongly to articulating different kinds of economic models for future sustainable societies, but this needs further elaboration taking place in other parts of the GLAMURS project. This would be a valuable extension since it could enhance legitimacy to the visions.

Moreover, the visions mainly reveal the core and main assumptions and values of future societies. They do not present complete lifestyles at the level of activities in our daily lives, nor comprehensive overview of roles and contributions of different stakeholder groups. This still needs further development in the second workshop round. In fact, in all visions issues for further elaboration could be identified, which makes sense as every workshop always has to reach its goals within limited time and depends on the contributions of the participants. Given these limitations the future vision workshops in the GLAMURS project have provided good results.

11. Conclusions and Highlights

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11.1 Conclusions

Within the GLAMURS project a backcasting workshop methodology has been developed for generating future visions for sustainable lifestyles and a green economy. In six regions studied in the GLAMURS project, a series of backcasting vision workshops have been successfully conducted involving a broad range of relevant stakeholders. In all workshops at least one vision on sustainable lifestyles has been generated and in most regions more than one. Most of these visions are based on the dichotomy between sufficiency and green growth that clearly reflects different future economic models and show also both urban and rural futures for sustainable lifestyles and a green economy.

What can be noted from the results of this first vision workshop is that most visions (eight out of a total of thirteen visions) is based on principles of sufficiency or degrowth. These visions can be characterised as mainly community oriented, rooted in decentralised societal systems also pointing to lower levels of government steering and less emphasis on market mechanisms. They can also both be embedded in a rural or urban environment according to the participants of this first series of workshops.

Five out of the thirteen visions are based on the green growth concept. These visions are mostly oriented on a more individualistic view upon human nature. They assume inclusive technology will solve current societal and environmental problems. These technologies can also be applied on large scales. In this way these visions are linked to concepts like circular economy and the sharing economy. The developed green growth vision shows a preference for the urban context. However it needs to be mentioned that not all green growth visions have only an individualist orientation. Some of them combine green growth principles with a stronger community orientation than is currently the case. That points to an additional way of development that may be attractive to both larger groups of citizens and policy makers in current societies and seems to be an interesting way to explore further.

In two countries (Spain and the Netherlands) three visions have been developed, which were motivated by a preference to combine sufficiency and green growth (Netherlands) or to address what has been defined as socially embedded growth (see Smulders 2015). Furthermore, issues for further elaboration were identified for all visions, can be fed into the second series of workshops that focus on further development of the visions as well as the necessary changes that are needed as a starting point for defining pathways towards developed visions. This is reported upon in Deliverable 5.2 (Quist and Leising 2016).

Finally, it can be concluded that the developed backcasting framework and the way it has been applied in the 6 workshops of the GLAMURS project across Europe have been appropriate for developing the visions based on the workshops. The intended flexibility for local flavour as well as making use of local expertise and methods added to this and have also extended the methodological repertoire available for participatory backcasting and stakeholder visioning

workshops. Furthermore, the workshops have led to considerable learning both among organisers and among participants. There are indications of even higher order learning among participant, but further analysis would be needed to get a more comprehensive picture of this. Finally, no evidence has been found on whether the applied methods and how these have been applied would explain differences in results. It can only be concluded that the framework, the methods and how these have been applied were appropriate for meeting goals and generating relevant and useful results in the sense of future visions for sustainable lifestyles and a green economy in combination with learning results among participants and organisers.

11.2 Highlights & key points

- An overview of developments in backcasting has been given in Chapter 2, focussing on the recent developments and attention to apply participatory backcasting on sustainable consumption, sustainable lifestyles and communities
- A participatory backcasting methodology has been developed for the GLAMURS project, entitled participatory backcasting for sustainable lifestyles and a green economy. It consists of two stakeholder workshops; a first workshop for problem exploration and development of visions for sustainable lifestyle and a green economy followed by a second workshop focussing on pathways and implementation.
- In six regions studied in the GLAMURS project vision workshops have been successfully executed using the developed format and guidelines with the flexibility to adjust to local aspects and available expertise in the organising teams.
- In order to get sufficient diversity in the generated visions, the distinction between on the one hand a sufficiency society based on degrowth and moderation of consumption and on the other hand a green growth society based on solving sustainability problems via environmental innovation and a circular economy has been used as an input for the vision workshops.
- All workshops attracted on average 15-20 participants from civil society and bottom-up initiatives, government, and knowledge organisations, whereas the presence of business was lower.
- Thirteen visions have been generated. In the Netherlands and Spain three visions were generated, in Austria partial visions were integrated into one overall vision, while in Germany, Italy, and Romania two visions were developed. In all workshops it was needed to process workshop results further and to elaborate the visions more, thereby identifying issues for further elaboration.
- Visions have been compared on several dimensions including (1) sufficiency versus green growth, (2) individual versus community orientation, (3) governance by government or market, and (4) urban versus rural focus.
- The first and fourth dimension appeared most useful to show diversity in the set of visions and is most appropriate for defining clusters of visions.
- A range of methods have been applied during the backcasting vision workshops, which all contributed reaching the goals as set.
- Considerable learning has taken place among both participants and local case study team organisers.

- Visions have been fed into a second series of backcasting pathway workshops on which is reported elsewhere (Quist and Leising 2016).

References

- Brizi, A., Maricchiolo, F., Carrus, G., Panno, A. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Italian Case Study for GLAMURS.
- Brown, H. S., Vergragt, P., Green, K., Berchicci, L. (2003) Learning for Sustainability Transition through Bounded Socio-technical Experiments in Personal Mobility. *Technology Analysis & Strategic Management*, 15(3) 291-315.
- Carlsson-Kanyama, A., Dreborg, K.H., Moll, H.C. & Padovan, D. (2007) Participatory backcasting: a tool for involving stakeholders in local sustainability planning. *Futures*, 2008 (40) 34-36.
- Carlsson-Kanyama, H. Carlsen, K.H. Dreborg, (2013) Barriers in municipal climate change adaptation: Results from case studies using backcasting, *Futures*, 49 (9-21).
- Davies, A.R. (2015) Co-creating sustainable eating futures: Technology, ICT and citizen-consumer ambivalence, *Futures* (2015), in press.
- Doyle, R. and A. R. Davies (2013) Towards sustainable household consumption: exploring a practice oriented, participatory backcasting approach for sustainable home heating practices in Ireland. *Journal of Cleaner Production* 48(0): 260-271.
- Dreborg, K.H. (1996) Essence of backcasting, *Futures* 28 (9): 813-828.
- Dumitru, A., Garcia-Mira, R., Diaz-Ayude, A., Macinga, I., Pandur, V., & Craig, T. (2016). GLAMURS Deliverable 4.2, Report on the interactions between patterns of time-use and consumption of goods, including trade-offs and spill-over, with the identification of main obstacles to and opportunities for change. GLAMURS: EU SSH.2013.2.1-1. Grant agreement no:613169
- Dumitru, A. et al. (2013) Pathways to sustainable change in organizations in: Quist, J., Wittmayer, J., Umpfenbach, K. and Bauler, T. (eds) *Pathways, Transitions and Backcasting for Low-Carbon and Sustainable Lifestyles*, Sustainable Consumption Transitions Series, Issue 3, Proceedings of SCORAI Europe & InContext Workshop, 7-8 October 2013, Rotterdam. The Netherlands, pp 236-250, <http://scorai.org/rotterdam-workshop-2013/>
- Eames, M. and J. Egmore (2011) Community foresight for urban sustainability: Insights from the Citizens Science for Sustainability (SuScit) project. *Technological Forecasting and Social Change*, 2011. 78(5): p. 769-784.
- Frantzeskaki, N., and H. de Haan, (2009), *Transitions: Two steps from theory to policy*, *Futures*, Vol.41, pp.593-606.
- Garmendia, E. and S. Stagl (2010) Public Participation for Sustainability and Social Learning: concepts and lessons from three case studies in Europe, *Ecological Economics* (69): 1712-1222.
- Giddens, A. (2009) *The politics of climate change*, Polity Press, Cambridge UK.
- Green K. and P. Vergragt (2002) Towards sustainable households: a methodology for developing sustainable technological and social innovations, *Futures* 34: 381-400.
- Grin, J., Rotmans, J., Schot, J.W. (2010) *Transitions To Sustainable Development – Part 1. New Directions in the Study of Long Term Transformative Change.*, New York: Routledge Taylor and Francis Group.
- Guillen, G., Nicolau, M., Hicks, C. (Reviewer) (2013) BIG 2050 – Because living sustainably today is possible! in: Quist, J., Wittmayer, J., Umpfenbach, K. and Bauler, T. (eds) *Pathways, Transitions and Backcasting for Low-Carbon and Sustainable Lifestyles*, Sustainable Consumption Transitions Series, Issue 3, Proceedings of SCORAI Europe & InContext Workshop, 7-8 October 2013, Rotterdam. The Netherlands, pp 15-32, <http://scorai.org/rotterdam-workshop-2013/>
- Höjer, M., Gullberg, A., Pettersson, R. (2011) Backcasting images of the future city-Time and space for sustainable development in Stockholm. *Technological Forecasting and Social Change* 78(5): 819-834.
- Holmberg, J. (1998) Backcasting: a natural step in operationalising sustainable development, *Greener Management International* 23: 30-51.
- Iacovidou, E., and W. Wehrmeyer (2014). Making sense of the future: visions and transition pathways of laypeople and professionals from six EU countries. *Global Bioethics*, 25(4) 211-225.
- Jackson, T. (2009) *Prosperity without growth*. Earthscan, London/Sterling.
- Kok, K., Patel, M., Rothman, D. S., Quaranta, G. (2006) Multi-scale narratives from an IA perspective: Part II. Participatory local scenario development. *Futures*, 2006. 38(3): p. 285-311.

- Kok K., van Vliet, M., Bärlund, I., Dubel, A., Sendzimir, J. (2011) Combining participative backcasting and exploratory scenario development: Experiences from the SCENES project. *Technological Forecasting and Social Change*, 78(5): p. 835-851.
- Lauer, P., Omann, I. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Austrian Case Study for GLAMURS.
- Loorbach, D. (2007) *Transition Management: New Mode of Governance for Sustainable Development*. Utrecht: International Books.
- Loorbach, D. (2010) Transition Management for Sustainable Development: a perspective, complexity based governance network, *Governance*, 23 (1): 161-183.
- Lovins, A.B. (1977) *Soft energy paths: toward a durable peace*, Friends of the Earth Int / Ballinger Publishing Company, Cambridge MA.
- Martínez, H., Dumitru, A., Lema Blanco, I. Díaz Ayude, A., García Mira, R. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Spanish Case Study for GLAMURS.
- Max-Neef, M. (1991) *Human scale development: conception, application and further reflections*, The Apex Press, London, New York.
- Milestad R., Svenfelt, T., Dreborg, K.H. (2014) Developing integrated explorative and normative scenarios: The case of future land use in a climate-neutral Sweden, *Futures*, 60 (2014) 59-71.
- Mont O., Neuvonen, A., Lähteenoja, S. (2014) Sustainable lifestyles 2050: Stakeholder visions, emerging practices and future research, *Journal of Cleaner Production*, 63 (2014) 24-32
- Neuvonen A., Kaskinen, T., Leppänen, J., Lähteenoja, S., Mokka, R. Ritola, M. (2014) Low-carbon futures and sustainable lifestyles: A backcasting scenario approach, *Futures*, 58 (2014) 66-76.
- Nevens, F., Frantzeskaki, N., Gorissen, L., Loorbach, D. (2013) Urban Transition Labs: Co-creating transformative action for sustainable cities *Journal of Cleaner Production* 50, 111-122.
- Omann, I. et al. (2015) Deliverable 5.1: Report on sustainable lifestyle initiatives in 7 case studies, GLAMURS: EU SSH.2013.2.1-1. Grant agreement no:613169.
- Pandur, V., Macsinga, I., Dumitru, A. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in Romanian Case Study for GLAMURS.
- Quist, J. (2016) *Backcasting, in: Foresight in Organizations: Methods and Tools*, editor, Patrick van der Duin, Routhledge, London, pp 125 143.
- Quist J. (2007) *Backcasting for a sustainable future: the impact after ten years*, Eburon Publishers, Delft NL, ISBN 978-90-5972-175-3.
- Quist J, Leising E (2016) Deliverable 5.2: Report on future lifestyle pathways, GLAMURS: EU SSH.2013.2.1-1. Grant agreement no:613169.
- Quist, J., Tukker, A. (2013) Knowledge Collaboration and Learning for Sustainable Innovation and Consumption: overview and introduction to the special issue, *Journal of Cleaner Production* 48, 167-175,
- Quist, J., Pesch, U. (2015) Policy and governance theories for sustainability transitions, in: Deliverable 3.2: Report on the relationships among psychological, economic, and political/policy factors determining lifestyle change and transitions to alternative consumption-production systems in a green economy, chapter 5, pp 62-78.
- Quist, J. and P. Vergragt (2006) Past and future of backcasting: the shift to stakeholder participation and a proposal for a methodological framework, *Futures* 38(9): 1027-1045.
- Quist, J., Knot, M., Young, W., Green, K., Vergragt, P. (2001) Strategies towards sustainable households using stakeholder workshops and scenarios, *Int J of Sustainable Development (IJSD)* 4(1): 75-89.
- Quist, J., Thissen, W., Vergragt, P. (2011) The impact and spin-off of participatory backcasting: From vision to niche. *Technological Forecasting and Social Change*. 78(5): p. 883-897
- Quist, J., Wittmayer, J., van Steenberg, F., Loorbach, D. (2013) Combining backcasting and transition management in the community arena, in: Quist, J., Wittmayer, J., Umpfenbach, K. and Bauler, T. (eds) *Pathways, Transitions and Backcasting for Low-Carbon and Sustainable Lifestyles*, Sustainable Consumption Transitions Series, Issue 3, Proceedings of SCORAI Europe & InContext Workshop, 7-8 October 2013, Rotterdam. The Netherlands, pp 33-54, <http://scorai.org/rotterdam-workshop-2013/>

- Robinson, J. (1990) Futures under glass: a recipe for people who hate to predict, *Futures* 22: 820-843.
- Robinson, J. (2003) Future subjunctive: backcasting as social learning, *Futures* 35: 839-856.
- Robinson J., S. Burch, S. Talwar, M. O'Shea and M. Walsh, (2011) Envisioning sustainability: Recent progress in the use of participatory backcasting approaches for sustainability research. *Technological Forecasting and Social Change*. 78(5): p. 756-768.
- Rotmans, J., Kemp, R. & M. van Asselt (2001). More evolution than revolution. *Transition management in public policy*. *Foresight*, Vol. 3, No. 1: 15-31
- Schulte, M., Krause, M., Blöbaum, A., Thronicker, I. (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the German Case Study for GLAMURS.
- Smulders, S. (2015) The macro-economics of sustainable lifestyles: the framework for Glamurs, internal discussion paper of the Glamurs project.
- Sondeijker, S. (2009). Imagining Sustainability. Methodological Building Blocks for Transition Scenarios. PhD Thesis. Erasmus University Rotterdam. (Downloadable here: <http://repub.eur.nl/res/pub/17462/Saartje%20Sondeijker.pdf>)
- Spekkink, W., Quist, J., Pesch, U. (2015) Verslag van visieworkshop Duurzame Leefstijlen & Burgerinitiatieven – 26 november 2015, Internal document (in Dutch) for the GLAMURS Project.
- Spekkink, W. and J. Quist (2016) WP4, Task 4.3 – Summary report of First Backcasting Workshop (Vision Development) in the Dutch Case Study for GLAMURS.
- Van de Kerkhof, M., Hisschemoller, M., Spanjersberg, M. (2003) Shaping diversity in participatory foresight studies: experiences with interactive backcasting on long-term climate policy in the Netherlands, *Greener Management International* 37: 85-99.
- Vergragt, P. and J. Quist, (2011) Backcasting for sustainability: Introduction to the special issue. *Technological Forecasting and Social Change*. 78(5): p. 747-755.
- Wangel, J., (2011) Exploring social structures and agency in backcasting studies for sustainable development. *Technological Forecasting and Social Change*. 78(5): p. 872-882.
- Wehrmeyer, W., Iacovidou, E., Coke, A. (2013) Transition Pathways Towards a Sustainable, Low Carbon Europe Across 6 EU Countries, in: Quist, J., Wittmayer, J., Umpfenbach, K. and Bauler, T. (eds) *Pathways, Transitions and Backcasting for Low-Carbon and Sustainable Lifestyles, Sustainable Consumption Transitions Series, Issue 3, Proceedings of SCORAI Europe & InContext Workshop, 7-8 October 2013, Rotterdam. The Netherlands*, pp 172-186, <http://scorai.org/rotterdam-workshop-2013/>
- Weaver, P., Jansen, L., Van Grootveld, G., van Spiegel, E, Vergragt, P. (2000) *Sustainable technology development*, Greenleaf Publishers, Sheffield UK.
- Wittmayer, J., Van Steenberg, F., Quist, J., Looibach, D. & C. Hoogland (2011a) Deliverable 4.1. The Community Arena: A co-creation tool for sustainable behaviour by local communities. Methodological guidelines InContext, 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.
- Wittmayer, J.M., N. Schöpke, F. van Steenberg, I. Omann (2014) Making sense of sustainability transitions locally: how action research contributes to addressing societal challenges, *Critical Policy Studies*, 8 (2014) 465-485.

Appendix A: the format of the summary reports

The size of the summary report is 15-20 pages main text following the subtasks of T4.3. It follows the structure of the subtasks. The overall format is as follows:

1. Introduction
 2. Workshop Preparation consisting of:
 - 2.1: Updating stakeholder analysis
 - 2.2: Updating regional analysis with regard to sustainable lifestyle and consumption aspects
 - 2.3: Stakeholder mobilisation
 - 2.4: Test workshop
 - 2.5: Practical Workshop organisation
 3. Workshop Results (relates to subtask T4.3C)
 - 3.1: Overall program & welcome session
 - 3.2: Main results lifestyle discussion session
 - 3.3: Main results vision development session
 - 3.4: Main results of final discussion
 4. Post workshop results (relates to subtask 4.3D)
 - D1-2-3: Further development of visions
 5. Conclusions & reflections
- References (if needed)

Appendices can be added if needed:

Appendix 1: List of participants (names, organisation, type of organisation)

Appendix 2: Workshop facilitation script (extended program)

Appendix 3: Pictures/visuals

Appendix B: Scoring of the visions

Instruction for scoring the visions:

Please use this sheet to score your visions on the different dimensions on which we would like to compare them for D4.3. Use the dropdown-menus to select one of the possible scores. The definition of each dimension can be found below to aid in their interpretation when assigning scores.

Definition dimension green growth-sufficiency:

This dimension indicates whether the degree to which the vision builds on principles of sufficiency/degrowth versus green growth.

Definition dimension individual-community:

This dimension indicates the degree to which the vision leans on individualist tendencies in human behaviour versus social/collective tendencies in human behaviour.

Definition dimension government-market:

This dimension indicates the degree to which governance of the societal transition is primarily in the hands of government versus market forces.

Definition dimension urban-rural:

This dimension indicates the degree to which the vision focuses on urban life versus rural life.

Vision	Vision title	Sufficiency-green growth	Individual - community	Government - market	Urban - rural
<i>Austria 1</i>	1 Integrated vision of 4 visions	2 sufficiency	1 community	neutral	2 rural
<i>Germany 1</i>	mobility – traffic – energy sources	1 sufficiency	1 community	1 government	3 urban
<i>Germany 2</i>	participation & bottom-up networks	2 sufficiency	2 community	2 government	2,5 urban
<i>Italy 1</i>	Sufficiency vision	2 sufficiency	3 community	1 government	1 rural
<i>Italy 2</i>	Green growth vision	2 green growth	3 community	2 government	1 urban
<i>Netherlands 1</i>	Sufficiency & local communities	3 sufficiency	2 community	neutral	1 urban
<i>Netherlands 2</i>	Between sufficiency & green growth	neutral	2 individual	2 market	3 urban
<i>Netherlands 3</i>	Green growth vision	3 green growth	1 individual	3 market	3 urban
<i>Romania 1</i>	Sufficiency vision	2 sufficiency	3 community	neutral	2 rural
<i>Romania 2</i>	Green growth vision	2 green growth	1 community	1 government	1 urban
<i>Spain 1</i>	Eco-efficiency	1 green growth	1 community	1 government	3 urban
<i>Spain 2</i>	Sufficiency: human scale territories	2 sufficiency	2 community	2 government	neutral
<i>Spain 3</i>	Socially embedded growth	3 sufficiency	3 community	1 government	3 rural