


ENERGISE

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AND INNOVATION FOR SUSTAINABLE ENERGY 

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IDENTIFICATION OF KEY SUCCESS FACTORS AND RELATED INDICATORS

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EXECUTIVE SUMMARY

This document provides a background-report on the process of identifying key success factors and related indicators for existing Sustainable Energy Consumption Initiatives (SECIs) across Europe. The report provides a detailed account of the three phases of data collection that have been purposefully designed in WP2 to carefully identify and assess relevant dynamics of SECIs pertinent to the understanding of the individual, collective, organisational and institutional aspects of consumption change. The criteria-guided data collection process is demonstrated through a thorough description and explanation of the categories that have been developed for empirical enquiry. Examples of the relevance of the categories are given throughout the report.

The data assessment that has been conducted through the categories of all three phases is important, not only to the objectives of WP2, but also in relation to designing future SECIs (WP3 and 4) and in relation to analysing the role of social-cultural conditions of SECIs; to capture intra- and cross-national differences and similarities between SECIs; to understand interactions between collective conventions and regulatory frameworks; and infrastructural conditions related to energy consumption (WP5). Equally they help the identification of policy measures required; to reduce energy consumption; to promote energy 'prosumership'; as well as to enable diverse configurations of actors needed to obtain this (WP6).

The report is a deliverable (D2.2) of ENERGISE and is publically available.

1 SUMMARY OF ENERGISE

ENERGISE is an innovative pan-European research initiative to achieve a greater scientific understanding of the social and cultural influences on energy consumption. Funded under the EU Horizon 2020 program for three years (2016-2019), ENERGISE develops, tests and assesses options for a bottom-up transformation of energy use in households and communities across Europe. ENERGISE adopts a Living Labs approach to directly observe existing practices and cultures related to energy consumption in a real-world setting and to test both household and community-level initiatives to reduce energy consumption. A comprehensive review and classification of household and community energy initiatives from 30 European countries provides the foundation for the development of two prototype 'ENERGISE Living Labs' designed to capture dynamics of individual and collective energy consumption. Data collection before, during and after the roll-out of 16 living labs to eight partner countries will be instrumental in contributing to the design and assessment of future energy consumption initiatives across Europe.

1.2 SUMMARY OF OBJECTIVES

ENERGISE's primary objectives are to

- Move beyond existing sustainable consumption research by developing an innovative theoretical framework that fuses social practice theory and energy cultures approaches,
- Assess and compare the impact of European energy consumption reduction initiatives,
- Advance the use of Living Lab approaches for researching and transforming energy cultures,
- Produce new research-led insights into the role of routines and ruptures in shifting energy use towards greater sustainability,
- Enhance multi-way engagement with actors from society, politics and industry and effectively transfer ENERGISE's outputs to further the implementation of the European Energy Union.

The ENERGISE consortium includes ten research partners (universities, research institutes, enterprises and NGOs) from Bulgaria, Denmark, Finland, Germany, Hungary, Ireland, Slovenia, Switzerland, the Netherlands and the United Kingdom.

2 INTRODUCTION TO DELIVERABLE D2.2

This document (D2.2) provides a background-report on the process of identifying key success factors and related indicators for Sustainable Energy Consumption Initiatives (SECIs) across Europe, for use in WP3 and subsequent testing in WP4 and analysis in WP5. This document is thus a background report on the process of data collection that has been undertaken as part of Task 2.1: Cataloguing Energy Initiatives in 30 Countries, in WP2 of ENERGISE. In order to collect data on SECIs within and across 30 European countries (see full list of 1067 SECIs in the ENERGISE D2.1 Report), WP2 includes an extensive data collection process, that has been theoretically and methodologically guided, inspired by theories of social practice and related socio-material concepts. This report presents the data collection process as well as the theoretical and methodological underpinnings.

Before presenting the research-design for the WP2 data collection in section 3, a short introduction to WP2 and its' objectives is given below.

2.1 WP2: TYPOLOGIES OF ENERGY INITIATIVES

ENERGISE WP2 is a systematic criteria-guided review and classification of existing sustainable energy consumption initiatives from 30 European countries (EU-28, Switzerland, and Norway), which will provide a comprehensive European database of energy initiatives involving households, and a subsequent development of typologies of sustainable energy consumption initiatives. This extensive synthesising work will guide the selection of Living Lab design elements for ENERGISE and future energy consumption research, policy and practice.

This is done in order to

- Construct innovative typologies of sustainable energy consumption initiatives that can inform further research and action.
- Identify key success factors and related indicators, focusing on individual-level, collective, organizational, institutional and societal aspects of energy consumption, which will inform subsequent WP 3 (Designing Living Labs), WP 4 (ENERGISE Living Labs) and WP 5 (Capturing Energy Cultures).
- Progress the goals of the European Energy Union by providing solid baseline data corresponding to the 5 key dimensions¹ of the Union and creating a publicly archived open access dataset of sustainable energy initiatives across 30 countries in Europe.

¹ The 5 Key Dimensions of the Union are: 1) Energy Security, solidarity and trust, 2) Fully integrated European energy market, 3) Energy Efficiency contributing to moderation of energy demand, 4) Decarbonising the economy and 5) Research, Innovation and competitiveness

2.2 SUSTAINABLE ENERGY CONSUMPTION INITIATIVES (SECIS)

In ENERGISe, ‘sustainable energy consumption initiatives’ (SECIs) are defined as activities that deal with reducing energy related CO₂ emissions from households. This can either be in terms of

- 1) reducing the actual energy consumption,
- 2) substituting fossil fuels with renewable energy sources.

The SECIs mapped, generally include an element of *active involvement of households*. This is due to the fact that the data collected has to inspire the development of Living Labs involving households. The definition of a SECI is intentionally kept broad in order to make room for empirical enquiry, such as a large variety in empirical examples seeking to achieve the same goals. However, a few guidelines have been developed in order to identify what a SECI *cannot* be as well as what a SECI *can* be.

SECIs collected by ENERGISe *are not* initiatives that solely deal with reductions in energy demand or carbon emissions within companies or at the energy suppliers themselves, even if those initiatives contribute to reductions in energy use within households as a result of buying the products or services (e.g. oil, gas, electricity, food, ICT etc). Initiatives led by companies or energy suppliers that actively target and mobilize households may, however, be included.

SECIs collected by ENERGISe *can* include households as actors in a number of different ways. The households may be viewed as consumers (by buying products and services); prosumers (for instance by (co-)producing renewable energy); innovators (by using products in innovative ways creating other/new kinds of energy demand), and/or they can be viewed as active participants in various groups relating to sustainable energy consumption (e.g. through Facebook groups or NGOs). Households may also be investors in sustainable consumption initiatives and renewable energy schemes. Households play different roles depending on the different practices they engage in, and a number of different roles may be relevant for ENERGISe.

For the ENERGISe Living Labs (ELLs), the differences between individual and collective aspects of initiatives are particularly important. In looking for examples of collective agency in SECIs, initiatives that have been promoted as part of a spatial community or a community of interest have been of importance in this respect.

The research-design for identifying existing SECIs and collecting data on success factors and related indicators will be presented in the following section 3.

3 IDENTIFYING KEY SUCCESS FACTORS AND RELATED INDICATORS FOR SECIS

ENERGISE WP2 data collection has been divided into a number of research-phases by design. In order to identify and assess existing Sustainable Energy Consumption Initiatives (SECIs) and details about their scope, methods and outputs, three phases of data collection have been designed and undertaken, for all of which templates were designed and developed. The development of the templates has been led by AAU, but has been extensively based on iterative and inclusive discussions and feedback processes between all partners of ENERGISE.

In order to undertake an overall identification and assessment of European SECIs, a grid template was developed through which specific aspects of each SECI could be explored and described. The full list of the identified SECIs is provided in the ENERGISE D2.1 Report. The categories included in the grid template have been established on the basis of the ENERGISE conceptual framework, as well as extensive feedback cycles among all ENERGISE partners, ensuring that the diverse experience and expertise of the ENERGISE Consortium was built upon and utilised. ENERGISE employs a practice-theoretical understanding of energy consumption and change, and aims to identify and describe different dynamics and trajectories of change, as well as outline opportunities for practice theoretical and culturally sensitive forms of social enquiry to provide a detailed account of how practices and their cultural shaping and spatio-temporal configurations influence household energy use (ENERGISE D1.1 Report). The grid template was therefore developed with a view to exploring similarities and differences in objectives, scale, methods for intervention, methods for evaluation, target groups, actor-involvement and outcomes across practice-configurations, cultures and countries. Furthermore, types- and targets of intervention, such as potential changes in consumption, targeted consumption areas and potential rebound effects have been explored.

Categories pertinent to abovementioned aspects have thus been defined to explore the SECIs in terms of whether and how they take social practices as targets for intervention for sustainability rather than individual behaviour, 'choice' or technical innovation alone (Shove 2010, Spurling et al 2013, Shove and Walker 2014). In order to further analyse this, the categories included in the grid also enable an exploration of 'the theories of change' that the initiators and other involved actors (including potential funders) of the SECIs might operate within. 'Theory of change' is here understood to be what the SECI (initiator and other key actors) understands to be the basis for change. This includes the expectations and assumptions that involved actors hold about expected outcomes, based on 'context', target group and intervention methods (Heiskanen et al, forthcoming).

Exploring peoples theories of change may help an understanding of whether a SECI understands changes in energy use as going beyond individual behavior change, by letting social practices take centre stage of analysis and intervention, or whether a SECI assumes attitudes, choices or technological optimization as the target for intervention.

All categories related to the Grid are presented and explained further in section 3.1.

After identifying 1000+ SECIs, a second phase of exploring a selection of SECIs was undertaken. The second phase of data collection went into details with material, discursive and social aspects of the selected SECIs. SECIs selected for further description were selected based on two primary criteria;

- 1) The objectives of WP2 are concerned with providing a catalogue of *diverse* examples of sustainable energy consumption initiatives that include examples of individual- as well as community related initiatives, and which provide examples of *creative* interventions that can be used for inspiration in WP3.
- 2) ENERGISe's focus on *interventions in practices*, inspired by Spurling et al's (2013) three conceptual frameworks for types of intervention in practice(s); Re-Crafting Practices, Substituting Practices and Changing how Practices Interlock.

The SECIs included for further descriptions were selected based on nominations, discussions and feedback sessions between all ENERGISe partners.

Categories for exploring the material, discursive and social aspects of each SECI were defined, as well as categories for exploring in more detail the aspects of location, targets of intervention, methods of intervention, type of intervention and the corresponding role of the households. The categories included in the description template have been established with reference to the ENERGISe conceptual framework, as well as on the basis of feedback cycles among all ENERGISe partners, ensuring that the diverse experience and expertise of the ENERGISe Consortium was built upon and utilised.

All categories defined for further description are presented and explained in section 3.2.

Lastly, a complementary analysis of national conditions for the 8 ENERGISe Living Lab countries have been undertaken, to support analysis of appropriate design-elements to include in the ENERGISe Living Lab design. This analysis includes an overview of national energy policies, energy markets, demography, energy mix strategies, energy supply systems, actors involved in SECIs as well as specific cultural aspects of energy use, for the 8 ELL countries. These national files feed into the subsequent analysis of national and cultural aspects of (potential) differences in local configurations of practices that result in particular

patterns of energy demand. The categories included in the template for the national context file have been prepared in relation to objectives of WP2 and WP3, and built on feedback cycles between all ENERGISE partners.

All categories defined for the 8 national context files are presented and explained in section 3.3.

In presenting the data collection phases in more detail in the following, the focus will be on describing the categories used to explore each SECI, and *why and how* these categories represent factors or dynamics relevant for assessing socio-material and cultural aspects of SECIs. The process descriptions will be complemented with a few empirical examples from the data collected.

3.1 IDENTIFYING AND ASSESSING 1000+ SECIS - THE GRID

The grid template (developed for identifying and assessing SECIs across 30 European countries) is comprised of 30 categories, besides title and national origin, all of which enables exploration of factors and dynamics related to the scope, content, methods and outputs of each SECI. For most of the categories, a dropdown menu was provided with examples to chose from, but in all cases it was possible to chose 'other' and add another example if needed. The development of the grid template and its categories was led by WP2 lead AAU, but the template has gone through several feedback cycles and revisions based on the feedback provided by the ENERGISE partners. The 30 categories are presented and briefly explained below:

1. Scale of the Initiative

It is relevant to know whether a SECI is locally situated, regional, national or cross-national. The size and general location of a SECI is interesting to compare with (other) national or cross-national trends in intervening in energy consumption, as it may help explain the SECIs objectives, methods of intervention as well as (elements of) the outputs. There may for instance be a qualitative and quantitative difference between a SECI that has developed locally and a SECI that is targeting and implemented on a larger scale nationally. Equally it is interesting to know if a SECI is cross-national, and thus what countries it is developed for and implemented within. It is interesting to explore potential differences between outputs of such initiatives across countries or cultures.

2. Brief Description

A brief description is required to get a sense of the scope and aim of the SECI. The descriptions provided in the grid are based on the way that initiators or other involved

actors are presenting the SECI (mostly through archival material), thus providing some insights into what the initiator and other actors involved in the SECI aim to intervene in, as well as why and how the aim to intervene.

3. Objectives

The objectives of the SECI are (often) linked to the description (category 2) of the SECI. Explicitly observing and stating the objectives of the SECI, as presented by the initiator or other key actors involved in the SECI, provides information about what the aim and intention of the SECI is, and how the SECI planned to obtain certain changes.

4. Target Group

Identifying the target group of the SECI helps exploring whom the SECI envisages to be a key group to work with, when it comes to reducing energy consumption. Exploring this helps develop an understanding of the aspects of the means through which the SECI-initiator believes sustainable energy consumption to come about. It may thus reveal certain assumptions of the SECI-initiator in terms of which conditions have to be present in order for sustainable energy consumption to come about. As an example, for several SECIs identified, children or young people are targeted, indicating that the initiator potentially expects that changes in young people's practices or changes in their behavior related to energy use will have a certain influence on their future life or an influence on parents and family members. In other cases, families are targeted, often implying that social dynamics within the family may help changes in behaviors related to energy use or even changes in certain energy intensive practices that are shared between family members.

5. Target Residential Building Type

This category enquires about the type of residential building that is targeted which also helps explore some of the (implicit) assumptions behind a SECI. Targeting single-family houses (semi-detached or detached) and households versus targeting people in apartment buildings may imply different assumptions about different aspects of agency. There seem to be a tendency to set goals such as 'self-sufficiency', 'energy efficient buildings' and 'sustainable citizenship' for SECIs targeting (semi-) detached houses, where as there seem to be a tendency to set goals such as 'changes in energy-use', 'changes in behaviours', 'promotion of co-ownership', 'reducing costs' and 'empowerment' across SECIs that target apartments and apartmentblocks.

6. Target Ownership Status

As with exploring the targeted residential building type (category 5) and targeted household type (category 4), it is interesting to explore the targeted ownership status. Whether a SECI targets tenants or homeowners may reflect specific ownership patterns in the specific country, but it may also reflect different assumptions of the

types of change that can come about (as also briefly mentioned above). For example, several initiatives led by Dutch municipalities target low-income households, particularly tenants, by providing easy easy-fix and free energy efficiency equipment, such as energy efficient lightbulbs or insulation tape, that tenants are allowed to install in their homes without altering the building and thus complying with rent acts. This seems to reveal an assumption that changes in tenants energy use should/could only come from the individual tenants.

7. Target Area

It may be important to know whether the SECI is targeting and/or implemented within a rural or an urban context (or both), as the material, social and discursive conditions for the SECI can be expected to be somewhat different depending on whether a rural or urban backdrop is present.

8. Target number of households

The number of households targeted can say something about the aims and scope of the SECI, including whether tapping into the aspects of social organisation is an explicit part of the initiative. This can say something about the theories of change employed by the initiator and other involved actors. The number can also be a requirement from an external funder (revealing certain, potentially conflicting, assumptions of the funder).

However, in order to explore to what extent social organisation is explicitly part of the SECI, the targeted number of households have to be compared to the scale and the objectives of the SECI. As an example, a Danish initiative, initiated by one of the energy providers in Denmark, seeks to reach many households, but plays on the social aspects of sharing information, experiences and perhaps social pressures, via social methods. Another Danish SECI seeks to target households all over Denmark, by targeting several communities (such as housing associations). In contrast, other Danish SECIs target many households by promoting energy-related renovations, but do not necessarily tap into aspects of social organisation or matters of locality. Danish SECIs that target smaller numbers of households tend to recognise the importance of social aspects of change.

9. Actual scale (in terms of households involved)

Investigating how many households have actually been involved in a SECI compared to the targeted number of households, reveals certain aspects about whether the SECI has been successful in recruiting households to take part in the SECI. If the actual number of households involved is much smaller or larger than the targeted number, further investigation may provide interesting conclusions. For instance, potential problems regarding recruitment and how they have been overcome are particularly

interesting for WP4 of ENERGISE, which will lead the implementation of 16 ENERGISE Living Labs across 8 countries.

10. Funding allocated

Knowledge about the amount and type of funding is relevant in terms of assessing the (local) conditions for the SECI; whether it is general or relatively unique (is the funding unique/rare), who the initiator(s) is/are. Potentially this insight can support an understanding of what the aim and objectives are. If the SECI is funded by a municipality or a local organisation, it may suggest that the SECI is relatively locally oriented and may have a broader set of objectives regarding sustainability and consumption. In contrast, if the SECI is funded by an energy supplier or a national government, the SECI may target a regional or national context, but may also have more narrow sets of objectives related directly to energy use. For example, the Energy Team (energieteam) Heerlen initiative funded by the Dutch municipality Heerlen involved twenty volunteer energy coaches on unemployment benefits and aimed at reducing household energy use as well as re-integration into the labour market. In comparison, The Dutch Perspective (Perspektief) Project, which was funded by the national ministry, very specifically addressed household energy use as a target of intervention.

The amount and source of funding also suggests whether the SECI is 'easily replicable' in terms of the money put into the SECI; If the SECI requires a lot of funding, certain actors may not be able to run a similar SECI.

11. Primary funding source

Enquires about the primary funding source are directly related to category 10. It is interesting to know what the primary funding source is and whether it is the only funding source, which may contribute to an understanding of the primary motivations behind the SECI.

12. Other funding sources

Enquires about other funding sources are directly related to categories 10 and 11.

13. Outputs

The outputs of the SECI and the way that the outputs are described by the initiator and other involved actors, and potentially in what way the outputs are measured or sought verified are interesting to explore. There can be a variety of outputs: more energy efficient buildings; an increase in energy efficient appliances; more energy-efficient use of appliances; changes in consumption patterns, etc. Exploring what kinds of outputs that are promoted and reported on may provide insights into the SECIs (and the involved actors as well as the funders') theories of change.

14. If outputs were measured

If the outputs are measured, it is relevant to explore how they are measured. This is related to category 13.

15. Indication of type of output

If the outputs are measured, it is interesting to explore in what way they are reported on. If the outputs are measured in monetary values it may suggest that people are defined as rational decision makers driven by monetary incentives. If the outputs are measured in changes in use, it may suggest that the initiator values changes in routines and habits as crucial for sustainable transition. Enquiries about type of output are directly related to category 13 and 14 and may offer an insight into the way in which the initiator frames the SECI and understands changes in energy demand.

16. Timeline

Knowledge about the timeline for the SECI provides not only insights into the length of the SECI but potentially also the extent and orientation of the SECI; Was the SECI a one-off event, or is it ongoing?; did the SECI contain multiple timeframes for active involvement of the householders?; when did the SECI take place (i.e. what is the historical context)? etc. As the timeline may have been defined by the funder and not necessarily the SECI initiator, it is interesting to explore whether there are any conflicts between two different proposed timelines, and what those differences may entail.

17. Duration of households (active) involvement as well as type of involvement

Exploring the duration, type and extent of the active involvement of the households provides insights into dynamics that might have led to changes in consumption patterns, but it also lends inspiration to the development of future SECIs.

18. Resources committed to by householders

Exploring to what extent the households are committing to make available certain resources is interesting and relevant for the development of other SECIs but also for assessing the 'accessibility' and aim of the SECI. If the households are required to commit to spending money as part of the involvement in the SECI this may have an impact on the quantity and quality of the participation compared to SECIs where households are required to commit time as part of the involvement.

19. Type of Initiator

Assessing the type of initiator is an important part of assessing the broader motivation and objectives of the SECI and potentially the outputs. It may make a difference if the SECI is initiated and run by a local person/organisation compared to if the SECI is initiated and run by the national government. It is interesting to assess what the initiator brings to the SECI in terms of power, legitimisation, material and social conditions for

change. Further, considering this in relation to categories about types of funding (10, 11 and 12) may reveal how successful an initiator and other involved actors have been in securing (long-term) support.

20. Type of consumption targeted

Assessing the type of consumption targeted provides insights into what the initiator and other involved actors, including the supporting funder, think that *energy is for*, i.e. whether the initiator understands energy as a means for obtaining and performing certain standards and routines of daily life, and thus that it is the performance of practices (e.g. showering and cooking) that are meaningful to people, or whether the initiator, and other involved funders, including the supporting funder, understands the process of using energy in and of itself to be meaningful. Such enquiries thus help explore the involved actors' theories of change as well. This category is closely related to category 3, 13, 14 and 15.

21. Consumption change

Closely related to category 20, it is relevant to assess what type of change the initiator and other involved actors, including the funder, is promoting, and thus what the initiator takes to be the target of intervention. This category assesses whether the type of consumption change can be characterised as 'using greener products' (a greening of existing consumption patterns) or as 'sharing products', 'repairing products' or 'using less products' (a change in the configuration of the consumption pattern). This category is also interesting in relation to category 22 (below) addressing evaluation methods; how change is understood also depends on how it is measured and vice versa.

22. Evaluation methods

Related to category 13, 14, 15 and 20, it is relevant to assess how the intervention is designed and evaluated, as this can help develop an understanding of the theories of change at play in the SECI. It is interesting to assess what is set up as requirements for a 'successful' SECI by the SECI initiator(s), and the other involved actors as well as the funder. For instance there may be qualitative and quantitative differences in outcomes in simply measuring and evaluating outputs in terms of kWh's saved, versus measuring changes in habits and routines, or in reports that reports on discursive, social and/or material changes. A Danish example shows, that those families involved in the SECI who mainly participated in the SECI to save money, left the initiative when the set goal (in terms of savings in kWh) was met, whereas families who were more actively engaged in broader changes in lifestyles stayed with the initiative for a longer period and also took part in co-developing the initiative's scope and aim further.

23. Indication of whether initiator has found initiative to be successful

It is relevant to assess whether the SECI is regarded as successful by the initiator; this relates to categories 3, 13, 14, 15, 20, 21 and 22. Assessing whether the initiator considers the SECI to be successful or not, and comparing that to the objectives, outputs and changes in consumption gives an indication of the theories of change within which the initiator might be operating (potentially compared to other involved actors' theories of change).

24. Method of intervention

The ways through which the goals and objectives of the SECI are sought to be delivered, is interesting on a practical level as well as on an analytical level. Methods of intervention could be campaigns, peer-to-peer learning, various types of community-building (e.g. community of practice), training, experimentation, monetary incentives and/or (governmental) legislation. Insights into the type(s) of method/methods of intervention may equally provide insights into the initiator's and other involved actors' theories of change; what the intervention is targeting, and through what means and purposes. SECIs that focus on social aspects of consumption, and thus may employ community, experimentation or peer-to-peer learning methods might have different objectives and outputs than SECIs that primarily draw on legislation, or defines motivations for change purely as a matter of monetary incentives. This category relates to category 3, 13, 15, 20 and 21.

25. Type of Change

In assessing type of change, it is primarily the intention to identify whether SECIs seem to assume social practices as targets of intervention, or whether SECIs considers attitudes, consumer choices or technological innovation as the target of intervention (Shove 2010, Spurling et al 2013). The difference between these two ways of understanding and targeting energy consumption is significant – targeting social practices means employing an understanding of energy consumption as dependent on understanding the timing, location, context, materiality and performance of a range of interconnected social practices, such as the practices that people perform in their homes and as part of their everyday lives, including heating, cleaning, cooking and driving.

Assuming technological innovation or consumer choices to be the target for intervention often presumes behaviours to be an outcome of (individuals') attitudes and values, and thus that changes related to energy consumption is primarily a matter of (individual) attitude and choice (Spurling et al 2013).

Comparing any indications of type of changes with findings for categories 3, 13, 14, 15, 20, 21 and 22 may provide insights into the initiator's and other involved actors' theories of change as well as insights into the configuration of the (potential) change that has come about, which is important for ENERGISE's further work on contributing to the design and assessment of future SECIs.

26. Is the initiative community-related?

Whether the SECI assumes certain aspects of community, in terms of assessing any potential, explicit considerations about the sociology of consumption is important to assess. Enquires about this is useful in terms of informing design and analyses in other ENERGISE workpackages. For example, an initiative in the neighbourhood Fatima in the Dutch city Tilburg has been initiated by one of the residents and strives to involve and ever-increasing number of neighbours living in the same type of energy-inefficient dwelling built in the 1930ies. The declared goal is to enroll people to collectively invest time and money in energy efficiency, renewable energy and sharing social tasks and responsibilities, thereby making sustainable ways of more approachable and more affordable for all.

27. Information or interaction based?

As with category 26, explicitly exploring whether methods of intervention are information-or interaction-based might help an understanding of whether any social aspects of change is considered and explicitly addressed in the SECI.

28. Incentives

It is relevant to assess whether any kinds of incentives were included in the SECI, and if so, which type of incentive. This is interesting as part of understanding the configuration of the SECI but also interesting in terms of future designs of SECIs, and is interesting to relate to categories 13 and 21.

29. Rebound effects

Where rebound-effects seem to occur, it is interesting to explore the nature, extent and potential reason for it. If a SECI focusing on promoting the use of greener technologies also result in an increased use of technologies (or other products), and thus reducing the or even outweighing the expected reduction in energy demand, it is relevant to include this in the assessment. Relating potential rebound effects with data corresponding to category 13, 21 and 24 will provide insights into what types of rebound effects might happen depending on what way consumption is targeted.

30. Spin-offs

In order to explore whether and how the outputs of a SECI is dynamically embedded in wider systems of practices, enquires are made as to whether any explicit and potentially unintended changes (positive or negative) have happened as a result of the SECI. This could for instance be examples of other people, who were not directly part of the SECI, organising themselves differently, as a result of the SECI. Data on potential spin-offs can be compared with data from categories 21 and 24.

3.1.1 SELECTING SECIS FOR FURTHER INVESTIGATION

1000+ SECIs have been identified and assessed, all of which provides broad and extensive picture of SECIs across Europe, including a vast variety in scope, methods and goals. As mentioned earlier in section 3, a selection of the identified SECIs have been explored and assessed in more detail. 80+ SECIs have been selected for further exploration, based on a number of different aspects. Each ENERGISE partner has nominated initiatives for further exploration, based on experience and expertise, and in accordance to ENERGISE and WP2s objectives. In making these nominations and the final selection, the findings particularly related to categories 3, 13, 14, 15, 17, 19, 20, 21 22, 24 and 25 were assessed. Further, a balance between SECIs that varied in terms of categories 1, 4, 7, 19 and 26 were ensured. SECIs that in particular seemed to employ a type of intervention that represents what Spurling et al (2013) have characterised as Re-Crafting Practices, Substituting Practices and Changing how Practices Interlock, have been included for further description. SECIs that employ these types of interventions are of particular interest to the ENERGISE project. The SECIs that have been selected thus includes aspects of these three types of intervention. However, it should be noted that the SECI and its initiator may not themselves have framed methods-, types- and targets of intervention in this way. Nevertheless it is interesting to learn from SECIs that seem to have promoted certain kinds of changes in practices, or that seem to have employed a certain understanding on the social, material, infrastructural and cultural aspects of energy consumption.

The SECIs that have been selected for further studies are presented in the below table:

Bulgaria: "Warmth for the Children"
Bulgaria: "European Citizens Climate Cup (ECCC)"
Bulgaria: "Family Intelligent Energy Saving Targeted Action (FIESTA)"
Bulgaria: "Action in Low Income Households to Improve Energy Efficiency through Visits and Energy Diagnosis (ACHIEVE)"
Denmark: "Svanholm"
Denmark: "Project Zero"
Denmark: "Munksogaard"
Denmark: "Model Sopassagen"
Denmark: "Klimafamilier Ballerup"
Finland: "Smart Kalasatama and Hima application"
Finland: "Future Household"
Finland: "Energy Expert"
Finland: "ECOHOME"
Germany: "Energiesuffizienz"
Germany: "KlimaAlltag – Leben in der NullEmissionsStadt"
Germany: "Energiewende Oberland (EWO)"
Germany: "Klima-Coach"
Great Britain: "BedZed"
Great Britain: "Ashton Hayes"
Great Britain: "Bristol 3e- Houses"
Great Britain: "Kingston Upon Thames"
Great Britain: "Totnes TT Streets"
Hungary: "Biomass Briquettes"
Hungary: "Small Footprints"
Hungary: "Godollo Climate Cup"

Hungary: "Wekerle Energy Brigade"
Hungary: "EnergyNeighbourhoods"
Ireland: Home Energy Saving Kits
Ireland: "EPLACE"
Ireland: "DaysE"
Ireland: "SHARE"
Ireland: "Power of One Street Campaign"
Netherlands: "Prospective Project"
Netherlands: "LESS Fatima"
Netherlands: "EnergyTeamHeerlen"
Netherlands: "Student Energy Race"
Slovenia: "Reduce energy use and change habits (REACH)"
Slovenia: "OPANK"
Slovenia: "Planina Kranj"
Slovenia: "EnergyNeighbourhoods 2"
Schweizerland: "Energy Observatory"
Schweizerland: "Social Power Project"
Schweizerland: "Pumpipumpe"
Schweizerland: "Bike4Car"
Schweizerland: "Energy cooperative - Geranium campaign"
Austria: "The Repair and Service Centre (R.U.S.Z.)"
Austria: "Restoration of a Residential House on Johann-Böhm-Strasse in Kapfenberg"
Belgium: "Rues en Transition"
Belgium: "Energy Challenge"
Croatia: SUSTANICO
Croatia: "Family Intelligent Energy Saving Targeted Action (FIESTA)"
Cyprus: "Eco Village Tris Elies"
Cyprus: "Students Achieving Valuable Energy Savings (SAVES)"
Cyprus: "Family Intelligent Energy Saving Targeted Action (FIESTA)"
Czech Republic: "Energising Faith Communities (SPIRIT)"
Czech Republic: "Green Household"
Estonia: "Mountain RES/RUE"
France: "Loos Rehab"
France: "Famille à Energie Positive"
Greece: "Residential Monitoring to Decrease Energy Use and Carbon Emissions in Europe (REMODECE)"
Italy: "Mobistyle"
Italy: "Initiative State General of Energy Efficiency"
Latvia: "Renovation impact on climate change and energy efficiency habits of residents"
Latvia: Save your bUildiNg by SavINg Energy (The SUNShINE)"
Lithuania: "Taupukas residential awareness campaign"
Luxembourg: "Assistance aux ménages en précarité énergétique"
Luxembourg: "Energyhesper"
Malta: "DAWL – Energy, Employment, Empowerment"
Malta: "European Citizens Climate Cup (ECCC)"
Norway: "Evaluation of Energy Behavioral Change Programmes (BEHAVE)"
Norway: "HURDALSJØEN ecovillage"
Poland: "Local energy production in Kisielice"
Portugal: "Conversas com Ambiente & EcoFamílias da Póvoa"
Portugal: "Ecocomunidades, Iniciativas de Transição para Sociedades Sustentáveis"
Romania: "Light for Romania"
Slovakia: "Creative Competition and Mobile Exhibition on Public Transport by children in Žilina"
Slovakia: "EPORE - Energy Poverty Reduction in Eastern Europe"
Spain: "Santa Coloma in Transition"
Spain: "Cardedeu in Transition"
Spain: "Granada in Transition"
Sweden: "Swedish largest energy saving experiment"

Figure 1 List of SECIs selected for further study. For more information on the SECIs please see D2.1.

In the following section 3.2, the categories for exploring material, discursive and social aspects of a selection of the SECIs, as well as the types of intervention that these SECIs represent, are presented and explained.

3.2 EXPLORING MATERIAL, DISCURSIVE AND SOCIAL ASPECTS OF SECIS AS WELL AS TYPES OF INTERVENTIONS – THE DESCRIPTIONS

In order to facilitate further exploration of the selected 80+ SECIs, a description template was developed. The development of the description template and its categories was led by WP2 lead AAU, but the template has gone through several feedback cycles and revisions based on the feedback provided by the ENERGISE partners. The description template was used to provide basis for further qualitative descriptions of the shortlisted 80+ SECIs, from which we can learn about social, material, institutional, cultural and geographical dimensions of energy consumption and sustainable energy consumption initiatives. The description template has two parts, where the first part mainly facilitates a descriptive assessment of the SECI (including a contextualising introduction, methods, steps of implementations and results). The second part facilitates reflections about the SECI in terms of discourses, levels of shared understandings between actors involved in the SECI, material conditions, aspects of locality and targets of intervention. The second part of the template is theoretically inspired, drawing on theories of social practice as presented by Spurling et al (2013) and Kemmis et al (2014). The template has facilitated an extended assessment of the SECIs, that equally can help informing the design of future, experimental ENERGISE Living Labs (in terms of methods, the role of the householder, and steps of implementations).

The theoretical orientation of the template has assumed a working definition of the concept of (social) practice, inspired by the work of Spurling et al 2013:

Working definition of practices (extracted from Spurling et al 2013).

“Individual behaviors are, primarily, performances of social practices. Rather than being the expression of an individual’s values and attitudes, behavior is the observable expression of social phenomenon (socially shared tastes and meanings, knowledge and skills, and materials and infrastructure). As such ‘behavior’ is just the tip of the iceberg, and the effects of intervening in behavior are limited accordingly. It is the practice entity—the socially embedded underpinning of behavior—which forms a better target for sustainability policy.

Socially acceptable individual behavior—or the successful performance of a social practice—thus rests upon the use of objects, tools and infrastructures, of knowledge and skills and of cultural conventions, expectations, and socially shared tastes and meanings. These are the elements that compose social practices.”

In the following, the categories developed and included in the description template are presented and explained.

Besides an introductory paragraph exploring the context of the SECI, in terms of the historical and local conditions underpinning the initiative, as well as re-stating the aims and objectives of the SECI, 10 categories guided the analytical description and assessment of the selected SECIs:

1. Methods for intervention

This category has been included to further explore the details of methods of intervention incorporated in the SECI, such as whether the methods were built on information, competition, visioning process, subsidy or co-creation. Further this category explores whether the methods employed in the SECI represents other nationally popular methods for intervention, or whether the SECI seems unique.

2. Steps of implementation

This category is tied to category 1, but explores the details of how different methods have been utilised and implemented. This section considers questions such as; How did the SECI start, how were householders enrolled, what happened and when? What kinds of events were organised when in relation to the initiative? When did changes in energy consumption start happening (if they did)? What seemed to have led to these changes and what did the intervention and implementation cost?

3. Results/outcomes

The results and outcomes of the SECI (intended as well as unintended) are further explored in this category. Several questions are asked to interrogate the type and extent of the outcomes, such as whether any measured reductions in energy consumption or emission reductions have come about and what has been done to obtain these reductions. Additionally, 'norms of reporting' are further explored as well as whether any examples of changes in representations of everyday life can be identified, e.g. whether householders are doing things differently. Questions like the following have been asked; Do the householders shower differently (less often or in different ways?) Do they cook differently? If so, what has changed in the householders' everyday lives that have led to lower energy consumption? This is explored in order to get a more detailed account of any potential changes in practices as a result of the SECI.

4. The role of the households

The role of the households involved is important to consider, in terms of learning from the SECI process when designing and developing future SECIs, but also in terms of understanding what role the members of the households are 'given' (or perceived to have) by the SECI and its' initiator. This category explores how the households have

been enrolled in the SECI, and to what extent they have been involved; for example if they have taken part in designing the SECI, and whether and how they have been engaged in one or more activities. The category explores the details of the households' participation, both in terms of how and when they have been involved, but also in terms of whether there are any examples of households starting to perform certain practices differently, or if they have entirely defected from certain practices or been recruited by other less resource intensive practices.

5. Location

This category explores details of the locality of the SECI. Under this category a number of additional questions about the role of the locality are explored, such as; are there any significant features about the locality of the initiative? Where does the initiative take place? Why has the initiative been introduced to this particular area and to these particular people/householders? Are the households in this initiative selected because of a certain sense of community, or because they are located in the same place (purely geographical reasons)? Are there spillover effects of the initiative into wider (local) society? E.g., did the SECI focus on lowering energy consumption in relation to washing and dishwashing, but did this then result in changes in the way people cook, or drive or share things with each other locally?

6. Was/is the initiative successful?

It is important to explore any further details about whether the SECI is regarded as 'successful' by the initiator or not, based on their own definitions of change. This may help a more detailed account of the theories of change at play in the SECI.

The following categories are more distinctively theoretically guided, and ask more detailed questions related to a practice theoretical understanding of what may be at play in processes of change toward more sustainable energy consumption. These categories explore discursive, socio-political and material arrangements that transcends and (re)-order the practices that are being (intentionally or unintentionally) intervened in. The categories are inspired by the theoretical understanding of practice configurations as presented by Kemmis et al (2013). The categories are now presented and explained through the sets of questions asked in investigating these aspects of each of the the SECI, and are complemented with examples;

7. The textual and communicative aspects of initiative

This category explores the cultural-discursive arrangements or the 'semantic space' of the SECI, by posing a set of distinctive questions:

What seems to be the general framing of the initiative; how is energy consumption framed as a problem? What do initiators say or write about the problems they aim to solve with the initiative? Does it correspond to the way that householders talk about the

problem? As changes in energy consumption is normally (politically) and narrowly assigned to changes in individual actions, it is interesting if the initiative reflects any other ways of addressing energy consumption. Is there any indication that the initiative differs from the norm, and treats energy consumption as a result of social organisation rather than as a result of individual actions? With what words are the outcomes/results (if any) described? In what way is the role of the household framed and communicated? (eg. as people living everyday lives, or as rational consumers who like to save money, placing responsibility on either individuals, groups, or society?)

The discursive aspects of the SECI is important to assess in order to understand the cultural and social underpinning of what is being said and written, in relation to the development and unfolding of the SECI. Understanding the cultural and social underpinning helps an understanding of the prevailing configuration of practices at play as well as aspects of theories of change at play.

An interesting example can be found in the Finnish SECI, EcoHome, as it illustrates potentially conflicting discursive aspects of 'obtaining energy efficiency' tied to the initiative. Initially the project initiators assumed an understanding that mere provision of information is insufficient without interpretation, social support and new systems of provision. However, they also expressed an underlying belief that households would engage with sustainability issues via calculations, metering and monitoring data, and that households are motivated by environmental concern. The experiences in the project seem to support that some of the initial assumptions of what would be meaningful to the households were correct, while underlying communicative methods and related discourses on sustainability engagement as a matter of metering and monitoring were contested. For example, the eco-monitoring and tailored advice project highlighted the need for interpretation of the metered consumption data. The partners found that households struggled to engage with the monitoring data without discussions with the advisor. The differences in communicative aspects and discourses related to the SECI are reflected in the conflicting understandings of how to obtain sustainability.

8. The physical/technological aspects of the initiative

This category explores the material and technological arrangements that are part of the SECI, posing a set of distinctive questions:

What kinds of activities are made possible/not made possible in the physical conditions of the initiative? Are technologies introduced to households, which enable different ways of using energy or different ways of cooking, showering, cleaning, etc.? Are householders asked to stop using certain technologies/products or to start sharing certain technologies/products? Is the size of the houses targeted? Is the amount of products that householders used targeted? Is there a certain physical layout that

enables, for instance, sharing and repairing of products?

As an example, the physical layout of a Danish Ecological community enables a certain sense of community, ways of living, growing own crops, repairing and sharing. It also limits the use of cars, due to the low number of car-parking spaces.

Making enquires about the material and technological aspects of the SECI assists in the understanding of parts of the infrastructural underpinning (or condition) of the SECI. Are the material and infrastructural aspects being challenged by the SECI, or does the SECI seek to make changes independent of the material and technological setting related to the site of the SECI? Will changes happen to the material and technological arrangements in any case?

As an example, an Irish initiative enables people to donate (a part of) their energy savings to social enterprises (DaysE). DaysE teamed up with a Camphill Communities in Ireland and several other actors to facilitate the material upgrading of households connected to the Camphill Communities. Energy use was not targeted per say, but energy become something commoditised and tradeable, as well as flexible, which became evident in the way that new technologies for energy production were installed, eg. wood-boilers. The communities focus on communal living which facilitates the use of the wood gasification boiler. Certain technological and material aspects of the SECI are facilitated by the social aspects of the SECI (and vice versa), which not only resonate with the site's (the communities) emphasis on sustainable living but also its focus on 'life-sharing' between its' residents (who have interlectual disabilities), by including an aspect of developing new skills and practices around timber and timber processing (for the wood-boiler).

9. Shared understandings related to the initiative

Special attention is paid to aspects of shared understandings related to the SECI. The socio-political arrangements, or social spaces, through which solidarity and power can be explored, are investigated by considering a set of distinctive questions:

Are there shared understandings of what energy is used for between initiators/initiative and householders? Is there a shared understanding of the role of consumption between householders/people involved in initiative? What is perceived to be the 'normal' or 'appropriate' way to save energy? How are shared understandings reached and agreed upon? As an example, in several of the Danish ecological communities, there is a shared understanding that material consumption should have less priority than spending time together, spirituality, eating together, etc. In some of the more technically oriented SECIs, the underlying reasons for consuming does not seem targeted or challenged as such, rather the initiatives seek to optimize or increase efficiency relating to existing ways of living and using energy.

Investigating aspects of solidarity, socially shared understandings and power is important in order to assess particular aspects of the configuration of the SECI. It is interesting to know if the initiator and the householders involved in the SECI share an understanding of what needs to be changed, or not. It is interesting to explore potential connections between outcomes of the SECI and aspects of shared understandings (or lack thereof) as well as aspects of power and legitimacy.

Another example is a Swiss SECI called Energy Observatory, which illustrates examples of a shared understanding of 'people as actors' across people involved in the SECI. People are not merely passive consumers, but actors with agency to alter material and technological (and social) aspects. The SECI seeks to demonstrate that technology, such as energy efficient buildings cannot on its own ensure low levels of energy consumption, but that the lives that people live within the building significantly influences the energy consumption levels tied to the building. The shared understanding of users as actors creates possibilities to act, individually and collectively, but it also confines agency to the extent of the community which results in fairly closed-off systems of e.g. food-production and consumption in general.

10. Problem Framing and Target of Intervention

Finally, a more detailed assessment of the type of intervention related to the SECI is explored and assessed. ENERGISE seeks to explore socio-material similarities and differences between SECIs that seems to target practices as a method of intervention. Therefore, the selected SECIs are assessed in relation to Problem Framing and Target of Intervention as described by Spurling et al (2013). ENERGISE is looking for inspiration from SECIs that are primarily part of problem-framing 4-6 in the table below. It is important to note that SECIs that share problem framings with the below problem framings 4-6 may include elements from those of problem-framings 1-3, so the different problem-framings should not be regarded as mutually exclusive.

Problem Framing	Target of Intervention
<i>Common framings in current policy interventions</i>	
1. Innovating technology	E.g. initiatives that focus in optimizing products that people use and/or solely technical aspects of retrofitting
2. Shifting Consumer Choices	E.g. Initiatives that focus on informing householders about choosing energy efficient products.
3. Changing Behavior	E.g. Initiatives that focus on <i>nudging</i> householders to do something differently (primarily optimising existing patterns of everyday life).
<i>Framings drawing on a practice perspective</i>	
4. re-crafting Practices	E.g. Initiatives that introduce interventions in several elements of practice be it in terms of material changes, changes in competences or changes in socially shared

	images and meanings. It can be initiatives that uses various outlets for promoting change, like the New Nordic Diet that challenges the material element of a diet (food), the competences required to prepare certain meals (new cook-books) as well as socially shared meanings attached to 'good food' (making Nordic meals trendy).
5. Substituting Practices	E.g. Initiatives that recognize that performances of practices requires space and time, and therefore practices compete for time and space. Practices of commuter driving and commuter cycling compete. If a practice of commuter cycling is to disperse, interventions should focus on making time and room for such a practice; e.g. making more room for bikes on the road, create facilities for showering at destinations, maintenance possibilities, and help advocating for a socially shared acceptance of biking to work (including spending the time needed to bike rather than driving. The aim would be for people to defect from a practice of commuter driving and to be recruited to a practice of commuter cycling.
6. Changing how Practices Interlock	E.g. Initiatives that challenge the sequence of practices or the organization and institutionalisation of everyday live. It could be initiatives that promote working closer to home and maybe in hub-offices that would encourage people to meet across lines of work (decreasing the need for mobility, and maybe encouraging people to socialise differently and eat together, changing configurations or practices of eating, working and socialising)

Table 1 adapted from Spurling et al 2013

Exploring SECIs through these sets of categories allows for an assessment of key success factors and related indicators of SECIs that are pertinent for use and analyses in subsequent workpackages of ENERGISE. In particular, these categories are important in relation to designing future SECIs (WP3 and 4) and in relation to analysing the role of social-cultural conditions of SECIs; to capture intra- and cross-national differences and similarities between SECIs; to understand interactions between collective conventions and regulatory frameworks; and infrastructural conditions related to energy consumption (WP5). Equally they help the identification of policy measures required to reduce energy consumption; promote cases of energy 'prosumership'; as well as enable diverse configurations of actors needed to obtain this (WP6).

To further aid the analyses of particularly cultural similarities and differences between SECIs, as well as relations between regulatory frameworks, aspects of power and legitimacy and collective conventions related to energy consumption, a template for exploring broader demographic aspects, energy supply, prosumership and pertinent actor-configurations, has been developed. This assessment is conducted for the 8 ENERGISE Living Lab countries,

and the assessment will not only contribute to the analyses of the SECIs in general, but it will also aid the design of the ENERGISE Living Labs.

The framework and template for this assessment is described and explained in section 3.3.

3.3 THE NATIONAL COMPLEMENTARY DOCUMENTS

A framework for exploring the broader demographic aspects of each country, as well as market trends, trends in initiatives (inspired/based on the Grid) and visions for energy supply, has been developed in a template, through which the 8 ELL countries are explored. The development of the template and its categories has been lead by AAU, but the template has gone through feedback cycles and has been revised accordingly to include all feedback from ENERGISE partners. The questions in the document are meant to support further the analysis in WP2, as well as the work in WP3, WP5 and WP6.

The template is divided into two parts; a set of questions around quantifiable aspects of broader demographic aspects of each country, as well as a set of questions around qualitative aspects of market trends, certain cultural signifiers related to energy consumption, policies for energy supply and demand, national visions for energy efficiency, prosumership, as well as actor-relations pertinent to identified SECIs.

The questions used to explores these factors and dynamics are presented below, and they relate specifically to objectives of WP3, WP5 and WP6 of ENERGISE.

Quantifiable estimations:

- What is the national demography, in relation to
Total population:
Age profile:
Gender profile:
Educational profile (Secondary, Tertiary (higher), Vocational):
- Urban/rural ratio: please indicate population densities on different areas to illustrate where people are living.
Urban: _%
Rural: _%
A brief description of what comprises 'urban' and 'rural' in each country is provided.
- Climate and climate zones – what is the climate like, how does it change throughout the year and does the country include several climate zones (tropical, sub-tropical, temperate, polar...)
- Share of home ownership and rental accommodation in your country?

Ownership: _%

Rental: _%

- Energy prices (electricity prices per kWh, district heating prices KWh, oil prices (average prices)) including taxes – how are different kinds of fuels taxed?
Natural gas:
Oil:
Electricity:
District heating:
Coal:
Solar:
Wind:
Etc.
- CO2/capita:
- Electricity consumption/capita:
- Description of share of household energy use per usage (heating, lighting, etc.) - If available, present more details (share of cooking, freezing, washing, entertainment, etc.)
- Energy sources used for space heating but also for cooking (wood, gas, electricity?) and hot water (share if available (chart) or norms of use).
- Market trends/shares: here, current trends in heating and electricity (for private households) for each country are briefly stated in terms of shares (heating pumps, district heating, furnaces, solar panels, solar cells, oil, and gas).

Qualitative estimations:

- What is the current focus in national policy, in terms of energy? (This includes a timeline indicating changes in national policy focus over the last 10-20 years).
For example, is the national policy focused on
 - Smart Energy Systems (Smart Grids)?
 - Smart Cities? (smaller scale than SES)
 - Energy efficiency?
 - Energy community?
 - Refurbishment of buildings?
 - What kinds of monetary incentives are given (has been given)?

- What is the energy mix strategy or focus? From what energy sources? (E.g. nuclear program, “clean” coal program, Renewable Energy transition / autonomy program, etc.)
- Which type of energy system does the country have (e.g. National, regional, local or municipal grids)? For which type of energy (e.g. national power grid for electricity but local biomass district heating)? And what system of energy governance/ownership is in place? (Public, private, mix; local, regional, national; monopoly, citizen, municipality owned)
- Is there a national goal to achieve (global) leadership in renewables and boost their uptake across sectors? If so, briefly describe.
- What are the dominant trends in national energy campaigns? What is primarily being targeted? (is it primarily lowering heating consumption, turning off lights (or other appliances) when not used, are refurbishments promoted, or other things)
- How are citizens defined in relation to energy use? Are there visions for citizens becoming prosumers (e.g. producing energy by solar cells, storing energy in private batteries) or visions for citizens to become investor consumers (people investing in initiatives where savings are turned into investments for new initiatives), or a combination of these (Active Consumers in general)? Are there any national plans for empowering and/or protecting citizens through (new) policies and visions related to energy provision and consumption? Or are citizens primarily seen as consumer capitalists that act as rational actors? Or something else?
- Are there cultural household-energy uses or energy consumption norms that are specific to the country? (norms around cleanliness, cooking, mobility, leisure, etc.)? (Examples include: the heating of saunas in Finland represents 5 % of household energy house; the adage “clean and in order” in Western Switzerland which reflects a culture of cleanliness and orderliness.)
- Please indicate overall trends in the configuration of actors that are key in current trends/initiatives (eg Government, NGOs, community actors). Have the configuration of actors involved changed over the last 10 years? (eg in the Netherlands, community initiatives are prominent and growing in numbers, seemingly through the receipt of increased structural policy support and attention).

4 SUMMARY

This report (D2.2) has provided a background-report on the process of identifying key success factors and related indicators for Sustainable Energy Consumption Initiatives (SECIs) across Europe, for use in WP3 and subsequent testing in WP4 and analysis in WP5. The report has provided a detailed account of the three phases of datacollection that have been purposefully designed in WP2 to carefully identify and assess relevant dynamics of SECIs pertinent to the understanding of the individual, collective, organisational and institutional aspects of consumption change. The criteria-guided data collection process has been demonstrated through a thorough description and explanation of the categories developed for empirical enquiry. Examples of the relevance of categories are given throughout the report. The assessment that has been conducted through the categories of all three phases is important, not only to the objectives of WP2, but also in relation to designing future SECIs (WP3 and 4) and in relation to analysing the role of social-cultural conditions of SECIs; to capture intra- and cross-national differences and similarities between SECIs; to understand interactions between collective conventions and regulatory frameworks; and infrastructural conditions related to energy consumption (WP5). Equally they help the identification of policy measures required to; reduce energy consumption; potentially promote energy 'prosumership'; as well as enable diverse configurations of actors needed to obtain this (WP6).

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