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|  | **GILDED:** Governance, Infrastructure, Lifestyle Dynamics and Energy Demand: European Post-Carbon Communities  **Ongoing project: Policy Brief 2** |
|  | **SUMMARY** |
| **Objectives of**  **the research** | Individuals and households impact on CO2 emissions directly through product and service demands. This research identifies governance structures (local, regional, national and European policies and institutional practices) which impact on household energy consumption, and relates these to how people in Eastern and Western Europe perceive their own energy consumption and role in addressing climate change. |
| **Scientific approach /**  **methodology** | This policy brief is based on analysis of government documents and key informant interviews with 75 government and civil society representatives. These represented five cities, their functionally associated rural areas, and the state in which they were located (UK, the Netherlands, Germany, Hungary and the Czech Republic.) These are compared to findings from over 200 qualitative interviews with citizens in the same locations, and early results from an extensive questionnaire survey. |
| **New knowledge and/or**  **European added value** | This research identifies a possible disconnect between the level of public awareness and concern relating to climate change combined with limited belief in their ability to affect change, and the degree of impact that those responsible for policy implementation believe that they need to have in changing societal behaviour. Current structures limit the ability of local government to address household energy consumption. |
| **Key messages for**  **policy-makers,**  **businesses,**  **trade unions and**  **civil society actors** | Citizens clearly view climate change as a global issue, requiring response primarily at government and international level. Policies must be consistent across sectors, and must address:   1. The information needs of stakeholders and the public. These require clear and consistent advice, easy access to relevant and accurate information relating to different scales (e.g. household, community, region) and feedback on the impact that the collective action is making. It is important that this information relates directly to energy consumption, as this appears to be a more tangible goal for citizens than addressing climate change as a whole, with all of its inherent complexities. 2. Many of the factors impacting on household energy consumption are not within the legislative authority of local governments. Housing standards, transportation and food policies are typically set at regional or national levels and therefore require a co-ordinated effort with local governments to address regional needs. 3. Government at multiple levels can lead by demonstrating best practice, allowing public bodies and stakeholder partnerships to demonstrate the benefits of CO2 reduction by examples relating to, for instance, infrastructure, transport and energy planning. |

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| **Objectives of**  **the research** | GILDED addresses socio-economic, cultural and political influences on individual and household energy consumption, in order to develop policy recommendations for moving towards a post-carbon society. Findings presented here evaluate the governance structures of the case-study areas, addressing how both current assets and future developments might facilitate reductions in carbon-intensive energy use. To do so we need to understand the economic, social and political interests of the relevant actors and their power relationships within the case-study areas. The research also seeks to identify opportunities for tailoring policy-making to local governance structures, and ways to overcome constraints imposed by existing resource distribution and by those governance structures. |
| **Scientific approach /**  **Methodology** | GILDED takes a mixed methods approach, combining qualitative and quantitative techniques, focusing on field research but also including literature reviews, agent-based modelling and theoretical work. Findings presented in this policy brief are based primarily on reviews of government documentation, and key informant interviews with approximately 75 government and civil society representatives. Of particular interest were issues relating to how different governance types might influence policy related to household energy consumption and carbon emissions.  The data on governance types are drawn from the five case study areas, with interviewees drawn from a city and associated rural area, these being: Aberdeen, Aberdeenshire, (Scotland, UK); Assen, Assen Municipality (the Netherlands); Potsdam and Potsdam-Mittelmark (Germany); Debrecen and Hajdú-Bihar (Hungary); České Budějovice and České Krumlov district (the Czech Republic). This resulted in approximately 15 interviews per country.  Interviews were undertaken from June – August 2009. Interview respondents were drawn from elected members (councillors) of local authorities, individuals within local authority departments, local energy related NGO’s, community leaders and other stakeholders where relevant. Panel discussions or semi-structured interviews were used as appropriate and transcribed for analysis. Interviews followed a question guide developed jointly by the team covering issues relating to their awareness and understanding of regional resources, infrastructure, policy and governance.  The data drawn from these interviews is compared with that from approximately 200 qualitative interviews with members of the public, selected to give the widest possible range of interviewees, and from early results of an extensive questionnaire survey, with just over 3,000 respondents. Analysis of both the interviews and the questionnaire responses is continuing. |

**New knowledge and**

**European added value**

Recent decades have seen a transition from ‘government’ to ‘governance’ – a blurring of boundaries between public and private sector actors and actions. This means that there are a growing number of actors who influence the resources households have access to, in order to meet their energy needs. The change from (top-down) government to (new) governance is extensively developed in all the project countries; a multitude of new actors, with diversified networks and interests, have appeared in energy governance. This may reflect the expressed need for individual households to shift their responsibilities to the political level (both local and national) in order for them to engage in actions that are believed only to be effective if applied en masse.

**Table 1: Governance models**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Legitimacy,  source of power | | Power relations | | General patterns of decision-making | | Territorial dimension |
| Election of leader | The source of their power | Role of leader | Involved stakeholders | Nature | Methods |
| Non-local hierarchical model | Nominated | Central state, laws | Autocratic leader | None | Vertical | Instructions | Supra-national |
| Local hierarchical model | Elected | Local elections, administrative system | Autocratic leader / Facilitator | None | Vertical | Instructions, negotiations | National/ local |
| Formal democratic decision-making model | Elected | Local elections, administrative system | Management, Facilitator | Civic organisations, entrepreneurs | Vertical/ Horizontal | Negotiations | Local/ national |
| Local partnership model | Elected | Institutions, negotiations | Management, Facilitator | Other local governments; civic organisations, entrepreneurs | Horizontal | Negotiations, agreements | Local |
| Independent authorities | Nominated | Central state, law | Civic servant | - | Vertical | Instructions, decrees, statements, central decisions, | Cross-territorial |
| Self-regulated cooperation. | Self-organised | Local networks, personal relationship | Management, Facilitator | Non-governmental organisations, local governments | Horizontal | negotiations, agreements, community forum | Local |

The comparison of the case study areas has found three energy governance models which show relevant differences and, at the same time, general consistency in terms of energy-saving policy.

The *local hierarchical model.*

The *formal democratic decision-making model.*

The *local partnership model.*

None of the three models (from a set described in Table 1) has an advantage over the others in terms of designing or implementing effective energy-saving policy, or the influence on household behaviour. Thus, successful governance is not dependent on the model adopted.

The role of local governments and municipalities in promoting energy-saving is limited, because of the lack of legal power and finances. Municipalities have limited powers to influence households’ energy consumption, as national governments determine the laws and regulations for the whole country (e.g. in relation to transportation infrastructure, food regulations, housing standards). The role of local government therefore tends to focus on motivation, demonstration or information provision.

Central governments have enough power and financial resources to promote subsidy programmes; subsidies are defined by central governments in Hungary, the Netherlands and the Czech Republic; in Scotland both the UK and Scottish governments are involved. As Germany is a federal state thus local governments have more space to provide energy saving programs.

Many tasks of energy governance (including education and training) are delegated to short-term special-purpose institutions, working under the hierarchical model, and project proliferation has changed power structures. In particular, the emphasis on public/private partnership in many initiatives has given rise to professional mediators of these relationships, and increased the role of non-profit organisations. This emergent activity of civil associations managing ‘green issues’ in collaboration with entrepreneurs is a common if not necessary condition for addressing carbon emissions.

There are significant differences in the use of renewable energy across Europe, with renewable energy sources more widely available in Western Europe; however, there were multiple possible resources for low-carbon energy provision in all five study states. This access to renewable energy does not reflect the model of governance currently in place in those countries.

Initial findings from the qualitative interviews indicate that climate change and energy consumption are viewed as global issues, requiring a clear response primarily at government level. Individuals do not believe their personal actions can impact on climate change *if no societal change takes place at the same time*, although energy consumption in general is believed to be linked to climate change. First results from the questionnaire survey suggest some refinements to these findings: asked a straightforward question, a clear majority of respondents said that they did believe they could contribute to tackling climate change by reducing their energy use (see table 2). However, the qualitative interviews indicate that most would consider (correctly) that they alone could do little, and many would not try to reduce their own use without being convinced others were also doing so.

**Table 2: Beliefs about the efficacy of energy saving (3,036 respondents)**

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| --- | --- | --- | --- |
|  | **I think I can contribute to tackling climate change by saving energy** | **I think it is useful to save energy to tackle climate change** | **It is pointless to save energy to tackle climate change** |
| **strongly disagree** | **2.0%** | **2.2%** | **22.1%** |
| **disagree** | **10.5%** | **9.9%** | **49.3%** |
| **not agree not disagree** | **21.1%** | **23.8%** | **14.7%** |
| **agree** | **52.0%** | **50.2%** | **9.8%** |
| **strongly agree** | **11.9%** | **11.4%** | **1.9%** |
| **Total** | **97.6%** | **97.5%** | **97.8%** |
| **Did not answer** | **2.4%** | **2.5%** | **2.2%** |

Early results from the questionnaire survey also provide information on what people in the case study areas say would lead them to reduce their own household energy consumption, as shown in table 3 below. This suggests that a variety of approaches would be likely to have some success (provided people’s answers on such matters are reasonably reliable), but indicate that the single approach currently most favoured is that of subsidising the purchase of more energy-efficient appliances – something which unfortunately is not generally within the power of local government due to lack of the necessary finance and legal authority.

**Table 3: I would reduce my household’s current energy consumption… (3,036 respondents)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | If I received detailed **personal advice** on methods of energy reduction | If energy use became **more expensive** | If I had detailed **general information** on methods of energy reduction | If there existed an official **Product-Carbon-Label** informing about products with low emissions | If I had **more money** to buy appliances with lower energy demand | If the use of high energy-consumption would be **restricted by rules** | If I obtained for **subsidies** for purchasing more energy efficient appliances |
| ***Average*** | ***3.2*** | ***3.3*** | ***3.2*** | ***3.2*** | ***3.7*** | ***3.2*** | ***3.8*** |
| **not at all** | **6.0%** | **8.0%** | **5.7%** | **6.0%** | **6.0%** | **9.3%** | **3.2%** |
| **hardly** | **16.9%** | **15.3%** | **15.2%** | **15.6%** | **11.8%** | **17.7%** | **7.7%** |
| **slightly** | **33.6%** | **28.5%** | **37.9%** | **36.3%** | **17.6%** | **26.1%** | **20.2%** |
| **considerably** | **30.2%** | **29.9%** | **30.5%** | **29.1%** | **34.7%** | **29.5%** | **42.1%** |
| **substantially** | **10.2%** | **14.7%** | **7.8%** | **8.4%** | **27.4%** | **13.8%** | **24.2%** |
| **Total** | **96.9%** | **96.5%** | **97.1%** | **95.4%** | **97.4%** | **96.4%** | **97.5%** |
| **Did not answer** | **3.1%** | **3.5%** | **2.9%** | **4.6%** | **2.6%** | **3.6%** | **2.5%** |

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| **Key messages for**  **policy-makers,**  **businesses,**  **trade unions and**  **civil society actors** | | The importance of partnerships and networks as principal tools of coordination has led to the growing significance of new stakeholders who mediate between individual and their communities and regional authorities. Such actors are powerful stakeholders as they mediate between households and those implementing policy at different levels, thereby having leverage on the degree of impact policies have on household CO2 emissions. Their role needs to be recognised and addressed in structuring interventions.  Combinations of strengths and weaknesses are present in each of the energy-governance models exhibited in our pan-European case studies, and no single one should be appointed as an ideal.  Policy needs to facilitate improvement of new governance methods to balance civil-association activity with local government planning legislation and regulation. There is a need for ‘joined up’ approaches, to make access to subsidies and project funding simple.  Context dependent policy tools such as financial incentives, regulatory elements and awareness raising need to be considered in order to encourage households to reduce their GHG emissions. Well-targeted subsidies for the purchase of energy-efficient appliances may be of particular importance.  Public and private bodies need to engage in network building, showcasing examples of good practice, and improving the transmission of information and skills. This includes identification of local stakeholders who may become drivers of energy savings and awareness raising, and whose economic interests and moral commitments are associated with energy saving and use of renewable sources.  EU, state and local government participation in education relating to environmental issues related to CO2 emissions (not just climate change), should be enhanced.  Viable sources of alternative energy are present in all our case study areas and presumably in most if not all EU regions: they should be promoted alongside the means for individuals and communities to access and benefit from such developments.  Policies should enable implementation in cooperation with local businesses and communities.  Local stakeholders understand the need for the support and encouragement of willing individuals as key to initiating local engagement. Legislation at the national level needs to provide both incentives and regulation if local government, agencies and individuals are to affect widespread, meaningful change.  Exogenous factors might act as opportunities for such change: one that has been suggested by interviewees is the combination of the global recession and fuel prices rises, given the common belief that energy efficiency related behavioural change is likely to occur as a result of economic reasons, as shown in table 3.  A common view among both stakeholders and citizens is that information and advice have a vital role to play (see table 3), but  They need to be clear, consistent,, and linked to feedback on the impact that the collective action is making. It is important that this information relate directly to energy consumption, as this is a more tangible goal for citizens than mitigating climate change.  In all case study areas there appears to be a diversity of funding sources and options for engagement but this diversity can result in confusion, delays and disappointments on behalf of keen stakeholders. It is vital that these be overcome.  Many of the factors impacting on household energy consumption are not within the legislative authority of local governments. Housing standards, transportation and food policies are typically set at regional or national levels and therefore require a co-ordinated effort with local governments to address regional needs. However, the evidence from the qualitative interviews in particular that individuals consider that governments must take a lead on energy and climate change suggests that government at multiple levels need to demonstrate best practice, allowing public bodies and stakeholder partnerships to demonstrate the benefits of CO2 reduction by examples relating to, for instance, infrastructure, transport and energy planning. |
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| **Website** | www.gildedeu.org | |
| **Further reading** |  | |
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