Published resources to help energy polices consider social sciences and humanities

In new polices of modern energy the end consumer, namely citizen is placed in the center of the development of the sector. Energy chain beginning with generation, passing through many stages of the process, comes to an end at the place of final consumer, the last situated element, but not by importance. In order to achieve launched targets towards building up of new low-carbon society through measures taken in energy transition, Social Sciences and Humanities (SSH) plays a crucial role in the sense of bringing of messages from policymakers to society. As well as, decision makers in the scope to elaborate energy polices at higher performance level should have a maximum visible landscape of understanding provided by research conducted in the frame of SSH, and which must to serve as an input data in their activity. The SHAPE ENERGY Platform, created in the frame of the Project funded by Horizon 2020 programme of European Union, offers a rich collection of resources aimed to develop advanced European practices towards awareness of wide public concerning energy transition. For policymakers a Platform provides 3 key resources: 1) SHAPE ENERGY city workshops; 2) Storytelling for effective multi-stakeholder working and 3) SHAPE ENERGY Call for Evidence. A short description of each resource in part will follow below.

1)SHAPE ENERGY city workshops is the first key resource in the frame of energy policymaking activities. And how was appreciate latter by authors of resources, it was the central component of the Platform. During the Project development, in the period 2017-2018 seventeen city workshops across European cities have been organized.



The main goal was to get knowledge and practice in the sense of how SSH could support promotion of research in social sphere to face relevant energy challenges at the local level. Topics of different character were treated at these workshops, but all of them are well known as actual and common for the Europe continent and worldwide. Most of them could be placed into issues "Energy efficiency and using less", "Competitive, secure, low-carbon energy supply", "Energy system optimization and smart technologies" and "Transport sector decarburization". For authorities of cities an interesting set of themes has been provided, which could be attributed to six areas: Changing energy behaviors; Energy education and engagement; Vision; Inclusivity and fairness in energy matters; Energy collaboration and partnerships; Creating alternative systems and timescales of energy systems. Also workshops have identified seven groups of SSH priorities: Education and awareness raising; Understanding change: from behaviors to citizenship to broader processes; Policymaking, governance, city planning, legal frameworks; Economy, jobs, poverty and inclusion; Communication, stakeholder dialogue processes, navigating conflict; Data, research design and integration of SSH into energy projects; and Cultures, philosophies and histories of energy. One of examples of such workshops dedicated to the seeking of needed solutions of energy supply in cities was organized in Chisinau, Moldova in March 2018. Representatives from Agency of Energy Efficiency, Association of Energy Consumers in Moldova, ESCO Moldova, Institute of Public Polices, National Agency for Regulation in Energy, State Energy Inspectorate, Technical University of Moldova, many of the most relevant national

energy companies, other stakeholders have been invited. The topic under discussion was, which solutions for district heating in Chisinau city are more efficient and with low impact to the environment. Discussing benefits and disadvantages of individual thermal units in comparison with centralized heating system, participants have identified that worth to maintain and develop central system, because of its higher energy efficiency indices, that come from the operation based on cogeneration. Also, participant supported the utility of SSH theoretical research and practical activities in achieving a goal of formulated needs. Links between policy makers, local researchers and end consumers of thermal energy offered by application of SSH will contribute to better understanding of benefits of implementing step-by-step transition towards central autonomy heating by implementing innovative technologies of Individual Thermal Points (ITP) in buildings, also of Demand-Side-Management (DSM) to increase the level of performance of the system.

2) Storytelling for effective multi-stakeholder working is the next important key resource in this set. Storytelling is an innovative method. It helps participants to workshops to incorporate their relevant subjects into real life stories, and as a result, to facilitate identification of the needed instruments or solutions of the problems.



It contributes through the effective communication process to formulate problems and solutions. As well as, storytelling can be treated as an able way to include human participation in energy transition. Undoubtedly, subjects discussed in different places might differ quite, but the instrument is the same. Storytelling helps to know what is the most appropriate way, to whom is addressed and in what manner could be the problems solved. In the frame of the Project SHAPE ENERGY have been elaborated a special guide with support from Anglia Ruskin University with templates on how can we prepare to run this session. Up to four phases are included in this exercise: 1) Setting the story scene (creating an atmosphere); 2) Inviting diversity (welcome stories presented by participants on the base of their experience); 3) Envisioning (individual work or in groups) and 4) Recording storytelling videos (audios, other written materials). After sessions participants are welcomed to say some words about their impression concerning the utility of the meeting in the goal to discuss relevant problems for energy sector's actual state and how could be chosen the most successful solutions. All these information is available on the web page of the SHAPE ENERGY Project.

3)SHAPE ENERGY Call for Evidence is the last key resource in this work which contributes to understand how research in energy field is interact with other domains in European area. It is very important to know the in-depth character of relationships between energy-related Social Sciences and Humanities with Psychology, Sociology, Political Science, Human Geography, Philosophy, History, Law and even Theology. In this scope has been elaborated a questionnaire (Call for Evidence) which included four questions: 1) The relationship between energy - SSH and policy priorities; 2) a) and b) How energy - SSH could be:



better supported and used; 3) Future energy research funding priorities; and 4) Organisations that may be interested in engaging with SHAPE ENERGY. In this context were interviewed 204 responders. All responses were analysed. Reflections herein will provide inspiration for the SHAPE ENERGY Research and Innovation Area view for the future energy – SSH projects in further programme in 2020-2030. On the web page of the SHAPE ENERGY Project is open a file where consortium collects signatures which will be submitted to European Commission to support the RIA. Questionnaires were disseminated between members of actual Project, in the frame of some events and using other links established in previous research programs, between Horizon 2020 coordinators and other interested persons being in collaboration with Project and others. The core of the report is represented by twelve headline Reflections resulting from mentioned above four questions, the content of which comprises a list of the most relevant issues of socio-energy research. For instance, one can find here an idea that low-carbon emission will require a social awareness. Without consumer's acknowledgment it is impossible to ensure energy transition toward consumption. Energy SSH – research provides another point of view then technological or engineering fields and analyses interactions of different aspects of society regarding energy, offering by this an enlarged angle of study of the needs of stakeholders. Taking into account its importance in the deal of large scale energy transition, responders had stated that SSH - energy has been underfunded or not being sensitive to cutting-edge energy - SSH debates. In relation with economic aspects appeared opinions that policies are often justified in the base of costs and benefits. And that's why costs-benefits issues overlooks many important questions in relation with socio-energy aspects. In this context, responders proposed to divide Economics, as a driver of the development of society, from SSH research. Energy – SSH mostly adopts particular problems that particular disciplinary approach. Once energy – SSH researchers are specialists in wide interdisciplinary matter, responders proposed to encourage interdisciplinary cross-sector activity, and not to limit to the centrally individual nuances or societal interactions. Another reflection treats the question, even many of issues were focused on academic debates and concerns, it is important to recognise many aspects of non-academic nature of energy – SSH, which appears more practical, taking into account different languages or variety of groups which face energy challenges. During the process of collection of answers researchers asked themselves how to label disciplines, especially for non-academic responders, for whom concept of discipline may be not relevant. On the other side, were persons who provided a long list of disciplines, up to 10. So, it should be acknowledged that these discipline aspects are not consigned just to energy - SSH. And the last Reflection deals with the large list of suggestions on the definition of energy - SSH and how it can contribute to elaboration of energy polices by stakeholders. Some responders stated that it should be given simple answer to politicians, others proposed to embrace all complexity of the problems, beyond linearity. There are no right and wrong suggestions. All of them have built up a total landscape of the diverse character of energy - SSH research, which should serve a rich volume of input information for SSH researchers in the activity of development of further agenda of investigations in the field of energy transition towards low-carbon society.