

SHORT TERM SCIENTIFIC MISSION (STSM) – SCIENTIFIC REPORT

The STSM applicant submits this report for approval to the STSM coordinator

Action number: CA 16232

STSM title: Energy Poverty as Urban Security Challenge

STSM start and end date: 02/04/2018 to 11/04/2018

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PURPOSE OF THE STSM/

(max.500 words)

The main objective of the COST Action “European Energy Poverty: Agenda Co-Creation and Knowledge Innovation” (ENGAGER 2017-2021) is to engender transformational change in the level of scientific knowledge on the investigation and amelioration of household-level energy poverty (EP) in Europe, while leading to the development of comprehensive, innovative and evidence-based policy frameworks. Energy poverty – defined as a household’s inability to secure socially and materially necessitated levels of energy service in the home - presents one of the most serious threats to security of city dwellers. Although it is recognized across Europe, and it is identified as a policy priority by a number of EU institutions, there has been a chronic lack of integrated discussion and interpretation of the problem within relevant scientific and policy communities. Bearing this in mind, the purpose of the Short-Term Scientific Mission (STSM) was to explore the Energy Poverty from security perspective, bring new light on this serious problem in the urban environment and contribute to the overall knowledge in the field of urban security. The conducting of this STSM included critical evaluation of several issues: existing research practice on the Energy Poverty, conceptual and operational definitions, objective and subjective indices related to Energy Poverty, applied methodological approaches, manifestation and consequences of the Energy Poverty in urban environment, as well as exploration of security dimension of the Energy Poverty. Also, one of the objectives of the STSM was to determine whether the Energy Poverty is related to other urban security challenges like exclusion, segregation, pollution, crime etc.

Due to complexity of the life in the city, reflected in the extensive research practice, political and social life, it is of the great importance to scientifically shed light on interrelated and diverse security issues in contemporary cities, in developed, transitioning and developing countries. In this sense, STSM enabled me to spend time in environment where I had a chance to consult relevant scholars from different fields of urban research and practice and introduce with the state-of-the-art in urban studies. As a final result, this STSM produced a set of scientific, methodological and practical recommendations, which should broaden the overall picture of the Energy Poverty, but also help me place it within urban security research agenda.

DESCRIPTION OF WORK CARRIED OUT DURING THE STSMS

(max.500 words)

The first phase of my research was aimed at gaining insights about the phenomenon of the Energy Poverty. First, I found and explored all the research literature relevant for the topic of the Energy Poverty, and how Energy Poverty is related to other urban security problems like poverty in general, exclusion, environment and health safety etc. Completed projects of the Manchester Urban Institute (MUI) were a good basis for describing the problem of Energy Poverty, finding the potential unanswered questions and observing the Energy Poverty from security perspective.

In the second phase of the research, and based on the review of relevant literature, I was able to build up a set of questions for the Energy Poverty scholars. Semi-structured interviews were conducted with several researchers engaged in the Manchester Urban Institute (MUI), as well as with PhD students whose theses are related to the topic of Energy Poverty. Issues of conceptual and operational definitions of Energy Poverty, methodological practice in recent research, manifestation of Energy Poverty in different political, social and cultural contexts, specificities of Energy Poverty in urban environment and security consequences of Energy Poverty were tackled in the interviews. Discussion with the experts helped in addressing some existing challenges in investigating energy poverty from various perspectives, and relevant scientific as well as practical problems related to this phenomenon.

After review of relevant literature and conversations with experts, I explored existing methods and techniques for the Energy Poverty measurement that were applied in the work of the researchers from the University of Manchester. Quantitative, qualitative as well as mixed-methods approach were critically examined in order to evaluate their appropriateness for energy poverty research. Potentials of these methods and techniques as well as their limitations will further broaden the existing knowledge about the Energy Poverty, but also could be a roadmap for addressing and exploring other urban security threats and challenges.

DESCRIPTION OF THE MAIN RESULTS OBTAINED

(max. 500 words)

In relation to conceptual definition of the Energy Poverty (EP), we should bear in mind that it is determined by a combination of factors beyond low income. This phenomenon is multidimensional, and researchers should try to examine not just how EP is manifested, but also how it is experienced and perceived; what are the wider effects of EP in a given context. Energy Poverty is relational and its exploration must include diverse collective, as well as individual circumstances. In investigating EP objective and subjective indicators could be developed. Objective indicators tend to be more quantifiable (energy prices, building performances, household income etc.), while subjective indicators relate to peoples` needs, feelings and perception of quality of life.

Besides theoretical dilemmas, one of the aims of the STSM was to assess existing methodological approaches applied in EP research. In the Energy Poverty research practice, both quantitative and qualitative methods were applied. Quantitative methods enable following general trends and distribution of attitudes about different aspects of EP, but due to the complexity of the phenomenon (it is a private problem; it is not easily visible etc.), application of qualitative methods could give more nuanced results. However, researchers should be careful when conducting qualitative research as well. Although Area Based Research could help in gaining some significant insights about Energy Poverty, this approach could also lead to further stigmatization of `specific neighborhoods`. In doing area study research some households that are not commonly recognized as vulnerable could be missed (`vertical segregation instead of horizontal segregation`). Qualitative research requires longer time to prepare and conduct, and

researcher needs to be well skilled, flexible and experienced.

Another goal of the STSM was to explore the Energy Poverty in urban environment and to determine whether it represents a challenge to urban security. Manifestation of Energy Poverty is different in urban and rural environments. While the main problem in rural areas is the access to what we understand as modern forms of energy, in the urban areas one of the challenges is energy affordability. Energy Poverty is also more visible in rural areas, while it can be well hidden in urban environment. However, the situation tends to be more complex in the peri-urban areas. As a security challenge Energy Poverty endangers individuals, as well as their households; undermines their livelihoods and overall quality of life. Energy Poverty threatens not only personal security, but could also undermine community productivity. The problem of Energy Poverty is related to other security challenges in the city, like poverty, discrimination, economic safety, and health and environment protection.

Although its consequences for overall security of city residents could be easily recognized, research on energy poverty as an urban security challenge is still lacking. Observing energy poverty together with set of socio-demographic and economic variables, as well as with other security issues could help in understanding this complex phenomenon, but also could help to discover best strategies and practices for its amelioration. This would help in developing comprehensive and scientifically based policy frameworks.

FUTURE COLLABORATIONS (if applicable)

(max.500 words)

The next phase of my engagement in the Cost Action CA16232 requires (if possible) a conduction of research of Energy Poverty in Serbia. The focus would be on the Serbian capital city – Belgrade – and how energy poverty is manifested in a post-socialist city. I will explore the security dimension of this complex phenomenon and how it threatens the city residents` personal safety and well-being, but also how it affects the perception and image of certain urban neighbourhoods described as energy poor (are energy poor neighbourhoods perceived as safe/unsafe). In developing a set of indices for Serbian/Belgrade context, I will need to consult experts that were/are involved in the Energy Poverty research and policy in countries of similar political, economic and cultural background (transitioning countries, Balkan peninsula countries, post-socialist countries...). This will contribute to the overall objective of the COST Action CA16232 goals – transformation of the extent and depth of scientific knowledge about the Energy Poverty in Europe, but it will also further the multidisciplinary collaboration at the nexus of several domains in which EP has been treated separately to date.