

NEW METROPOLITAN PERSPECTIVES 2020

THEMATIC SESSIONS - TS

TS-05

THE MULTIPLE BENEFITS OF SMART ENERGY PROJECTS, COMMUNITIES, DISTRICTS AND TERRITORIES. TOWARDS NEW MODELLING, IMPLEMENTING AND APPRAISAL APPROACHES

Keywords: Multiple Benefits; Smart Energy Transition; Positive Energy Districts; Assessment; Modelling.

"Smart energy communities" are emerging as one key component of the low carbon energy transition. Independently from the scale (ranging from the district to the urban or territorial dimension), they aim to optimize energy systems and improve the inhabitants quality of life. However, a unique and shared definition of smart energy communities is still missing, and there is the risk is to turn it into a meaningless mantra of local energy policies: the panacea to all relevant energy, environmental and social issues affecting our settlements. To ensure smart energy communities trustable interpretation and accurate assessment, we suggest considering the broad spectrum of multiple benefits (not only energy-related) achievable by their successful implementation. Such multiple benefits are likely to emerge in most of the smart development dimensions (i.e. natural and built environment, services, community, governance, economy mobility and connectivity). Examples of such multiple benefits are better job opportunities, improved human well-being, reduction of buildings life cycle costs, reduction of fuel poverty, increase in asset value, enhanced air quality, and many others. Unfortunately, due to their complexity and vastness, they are often analyzed by sectoral studies, lacking of a comprehensive overview. Because a holistic approach requires skills and knowledge coming from many research fields, this session seeks to bring together researchers from different backgrounds, exploring in detail how to recognize, model, measure and assess the multiple benefits (from a single one to specific subsets), with the final aim to provide attendees with a broader view of the topic. Possible topics of interest for this session include the following: • Multiple benefits from energy efficiency / distributed generation / energy communities; • Non-market evaluation techniques applied to multiple benefits; • The value of trust in institutional / stakeholders relationships and social capital creation; • Case studies and approaches from demonstration projects at local or EU level; • Examples of modelling for the energy transition considering the multiple benefits; • Benefits or opportunities: is there a need for additional efforts to really grasp them?

CHAIRS

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Adriano Bisello is Urban Planner and Ph.D. in Real Estate Economics. He is senior researcher in the Urban and Regional Energy Systems group at Eurac Research in Bolzano (Italy). Adriano's activities range from local to European-funded projects in the field of smart cities and energy transition, with a focus on multiple-benefits and energy communities. Actually he is project manager of the EU smart city project STARDUST in the „Lighthouse city“ of Trento. Since 2015, Adriano has managed the international conferences on "Smart and Sustainable Planning for Cities and Regions" –SSPCR– held by Eurac Research (<http://www.sspcr.eurac.edu/>) and his works are published in international books and journals. He is a member of SIEV (Italian Real Estate Appraisal and Investment Decision Society) and of ISOCARP (International Society of City and Regional Planners).

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