**ABSTRACT**

The research focuses on energy consumption modelling based on bottom-up methods to evaluate the current status of energy consumption and different future energy saving scenarios promoting sustainable urban planning. However, the choice among urban energy planning scenarios is extensively based on multi-actors and multi-criteria aspects. For this purpose, stakeholder-oriented approach plays a key role in implementing the effective strategies for urban and regional adaptation. The research, therefore, is also dealing with the integration of participative decisional processes of urban energy planning by organizing different focus groups involving real stakeholders. The talk will illustrate the result of the development of a new Multi-Criteria Spatial Decision Support System (MC-SDSS), which is an interactive energetic plug-in in Geographic Information System (GIS) environment using CommunityViz. The new MC-SDSS is intended to facilitate the decisional process for stakeholders who can ask “what-if” questions and visualize “if-then” scenarios in a real-time.

**BIOGRAPHY**

Sara Torabi Moghadam graduated cum laude from Polytechnic university of Turin in 2014 with a BSc and MSc in sustainable architecture. She is currently a Ph.D. Student in Urban and Regional Development at the Interuniversity Department of Regional & Urban Studies and Planning, where she works in the field of “zero energy buildings in smart urban districts”. Her research focuses on Multi-Criteria Spatial Decision Support System (MC-SDSS) for urban energy planning in the built environment.