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Monitoring the progress towards energy efficient cities - Performance of Danish municipalities and what they can do about it

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Energy is a key issue for sustainable urban development. Despite agendas set on national and international level, local authorities are the key actors in this transformation (Lewis et al. 2013). European initiatives as the Covenant of Mayors or Energy Cities are closely following this development and supporting local authorities in their actions. Still, a general benchmarking of states and efforts is still missing which could however **increase the use of good practice and enforce discussions in lagging cities**.

Against this background, a model was developed in the ongoing EU-FP7 project PLEEC to measure the energy situation in cities, compiling 50 energy-related indicators. In this paper we discuss the progress towards more energy efficient cities in Denmark, by analysing **selected key-indicators across all 98 municipalities and their development in the recent 10 years**. This allows a unique perspective on the state of energy use in an advanced economy as well as its transition towards more sustainable energy patterns.

An important question in this context is how cities (i.e. municipalities) actually can work towards being more energy efficient. Many municipalities have an increasing focus on sustainable and efficient use of resources and energy as well as renewable energy production. However, **the role and potential contribution of municipalities to this transition is still unclear** as many aspects of energy generation, distribution and use are going far beyond municipal competences (Rutherford & Coutard 2014). Based on the indicators we will discuss potential fields of action from the perspective of Danish municipalities.

Keywords: energy transition, sustainable urban development, resource efficient cities, indicators, role of municipalities

References:

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Rutherford, J., & Coutard, O. (2014). Urban Energy Transitions: Places, Processes and Politics of Socio-technical Change. *Urban Studies*, 51(7), 1353-1377.

See also EU-FP7 project PLEEC - Planning for energy efficient cities (2013-2016). www.pleecproject.eu