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ECONOMIC OBSTACLES FOR DEEP ENERGY RENOVATION OF PUBLIC SECTOR

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Abstract. The biggest challenge of our time is to make energy more secure, sustainable and affordable. The challenges we face are not only related with climate change, but is very sensitive to international political disputes as well. Building sector is the largest energy consumer in EU consuming around 40% of total energy. 12% of these buildings are public buildings and are considered very energy intensive since 30% of them are more than 50 years old and more than 75% of them are considered energy ineffective.

Feasibility studies have been done using both single house mathematical models and city wide models of deep energy renovation effects on energy consumption and economic effects.

Economic benefit of deep energy renovation ranges from less energy consumed to less load to national electricity grid and therefore less transmission losses. There is a need to empower decision making bodies to capitalize energy savings through innovative measures such as innovative financing schemes, ICT solutions and adaptive energy usage and monitoring systems.

Keywords: Deep Energy Renovation, Energy Efficiency, Public Building Renovation, Smart Metering, Economic Benefits of Renovation

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