PEAKapp targets the development of an unprecedented ICT-to-Human ecosystem to trigger lasting energy savings through behavioural change and continuous engagement, to enable increased consumption of clean and low-priced electricity from the spot market for household customers, to connect them to social networks, to motivate them through serious gaming, and to boost the efficacy of Smart Home building energy management systems by integrating their functionalities into the PEAKapp solution. With this first close-to-market-ready attempt to provide households with a dynamic electricity tariff in the EU, the door is opened for the most significant impact on the household electricity market since its liberalisation. The ICT ecosystem will be designed to require smart meters as only hardware with respect to in-house equipment, such that the system can be implemented almost immediately, given the EU targets for smart meter roll-out. These low hardware requirements allow for a fast market uptake, and thus a noticeable impact on EU energy consumption can be experienced with almost no delay and without the need of having to equip the 230mio dwellings in the EU with any extra efficiency hardware. Validation of the ICT ecosystem under real life conditions in the publicly owned social housing sector will be carried out in Austria, Estonia, Sweden and Finland, and analyses of the collected data will allow for ground-breaking insights into consumer behaviour, while outstanding EU energy market analyses will derive implications for regulatory practice to better support energy efficiency goals. An outstanding market uptake strategy makes electricity utilities ready-to-sign the implementation of the ICT-system, advises the European social housing sector about its benefits, and fosters European and international market uptake by distinguished exploitation activities, where the leading US stakeholder EPRI takes responsibility without funding. DTU-MAN Focus WP4: Customer engagement analysis and savings impact assessment Task 4.1 Modelling consumer behaviour through econometric time-series analysis (8 mm) WP5: Market Uptake and Transformation, Privacy and Regulatory Framework Task 5.2 Market transformation through dynamic electricity prices - assess effects of the market price and distribution costs of electricity from consumer load shifting via PEAKapp (7 mm) Task 5.3 Regulatory framework (2 mm) - analyse and develop regulatory framework necessary to enable full exploitation of the PEAKapp.

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