

20150410 Press release YEM

Consumer pilot 'Your Energy Moment' in Breda proves:

## Energy consumer can and wants to contribute to energy transition

**Households can change their energy behaviour and shift their energy consumption to more favourable times of the day. Households also quickly get used to the new situation, which means that the change in behaviour is permanent even after the novelty has worn off. And consumers are also quite willing to help make a positive contribution to the energy transition expected from households. However, this all depends upon the market developing accessible technological products and services that are intuitive and easy to use and that also satisfy the need of households to manage their energy consumption.**

These are the most important conclusions of the two-year research pilot 'Your Energy Moment' (YEM) carried out by grid operator Enexis with the participation of 178 households in Breda. Residents of the newly built neighbourhoods Meulenspie and Easy Street were able to benefit from variable electricity rates and smart resources such as a smart washing machine, solar panels, and a wall display, enabling them to vary the time of the day when they consumed the most energy. The underlying research question was, "In view of the fact that sustainable energy sources such as wind and solar power cannot be managed as a function of time, what needs to be done to convince consumers to deal more flexibly with their energy consumption?"

This research pilot, the results of which were presented yesterday, has made a contribution to science and sustainability. The research study was carried out by researchers from TU Delft and TU Eindhoven. A total of 15 students completed their dissertations on this topic, and 14 scientific articles were published in the literature as a result.

### Results

85% of the participants indicate that they are already saving energy, and the display seems to have an impact on this behaviour. An easily accessible display with a user-friendly design has a positive impact on frequency of use and the ability to deal with energy consumption in a flexible manner. In the Meulenspie neighbourhood, with an average participant age of 42 years, the display was consulted an average of 5x per day, in particular by male participants. In Easy Street, with an average age of 30 years, the display was consulted less frequently but more often by women.

82% of the participants say that their participation in the pilot has given them more control over their energy consumption. In addition, 82% say that they use their self-generated energy more efficiently. The predictions regarding their own energy production in combination with the variable energy rates often resulted in different patterns of consumption being chosen. The solar panels and the heat pump, which was introduced later, improve the energy yield and also make it more interesting for consumers to take control of and manage consumption. The ability to use their own self-generated energy also seems to play a role. For example, the participants with a more individual energy supply (Meulenspie) are more interested in their own energy consumption than the participants with a collective energy supply (Easy Street).

85% had a positive opinion of the research pilot. The participants say that shifting energy consumption to the most favourable time of the day, which was measured for the washing

machine, is a strategy they also wish to use for their dryer and dishwasher. The study advises the market to deal with this topic proactively and energetically.

The research pilot ‘Your Energy Moment’ is part of the Enexis pilot programme aimed at transitioning to a more sustainable society by a more efficient use of the grid. The development towards a Smart Grid would make it possible for the grid to successfully cope with the future increase and changes in electricity consumption via smart innovations without the need to increase grid capacity.

**About Enexis**

*Enexis is the distribution system operator in the Dutch provinces Groningen, Friesland, Drenthe, Flevoland (Noordoostpolder), Overijssel, Noord-Brabant and Limburg. Enexis is responsible for the development and installation of energy distribution grids (gas and electricity), as well as for the maintenance and management of these grids. As the link between the customer and the energy supplier, Enexis is responsible for the energy supply of more than 2.7 million customers. Enexis has 4,300 employees. [www.enexis.nl](http://www.enexis.nl)*