

**PHD position: 'Saving energy when others pay the bill: A field experimental approach to behavioral aspects of energy conservation.'**

The chairgroup Economics of Consumers and Households at Wageningen University is looking for a PhD student to carry out a research project on 'Saving energy when others pay the bill: A field experimental approach to behavioral aspects of energy conservation'. The PhD project is financed by Climate-KIC, an EIT (European Institute of Innovation and Technology) Knowledge and Innovation Community (KIC).

In many climate related policy interventions saving energy to save money is a central argument to convince citizens to take action. However, for many segments of energy consumption, monetary savings are irrelevant. This project focuses on situations in which the energy bill is not directly paid by the individuals who use the energy (eg., all-inclusive housing, hotels) and a different approach to encouraging energy conservation is required. In such situations, the costs for the individual (eg., a change in routine behavior, less comfort) are immediate and salient, whereas the potential benefits (decrease in CO<sub>2</sub> emissions, future reductions in rent due to lower energy consumption) are very distant in both time and relevance. Thus, the temptation to defect (i.e., not conserving energy) instead of cooperating (conserving energy) is very strong. When financial incentives are not practical, other approaches offer a promising alternative approach to motivating energy conservation. Examples of such alternatives are feedback about one's own behavior and the behavior of others, norms of reciprocity, nudges and technological interventions, which all can be used to stimulate pro-environmental behavior.

This PhD project has two aims:

1. Improve theoretical knowledge about stimulating cooperative behavior in situations in which financial incentives are not relevant.
2. To translate this research into functioning interventions in practice.

Getting people to save energy in these settings is not just a matter of changing motivation and behavior to conserve energy, but also heavily depends on the response to technical interventions for saving energy. A tension exists between tenants' and hotel guests' feelings of entitlement to a comfortable environment and energy conservation. Therefore, this research project also investigates how people respond to technical interventions aimed at saving energy, such as water-saving shower heads, pre-set air-conditioning, etc.

We work closely with a chain of hotels in the Netherlands and Belgium: the Student Hotel. The Student Hotel allows us to involve their guests as participants in a long term set of field studies aimed at experimentally testing interventions for energy conservation. For this purpose several of the hotels have been set up with state-of-the-art measurements for electricity, heating, cooling and (warm) water use, which will allow us to precisely monitor effects of our interventions at an individual level and with a very high data density (minute to minute). The guests of the hotel constitute a mix of students who stay for a semester and regular hotel guests, thus allowing us to study both short and longer term interventions. From a scientific perspective this is an extremely interesting opportunity, because such a setup allows for running multiple field experiments with actual field participants on a fairly large scale (each of the hotels contains several hundred rooms), and with precise energy measurements. This allows for both the testing of theories and for using theoretical

knowledge to improve field interventions. Besides these field studies, lab experiments and surveys will also be used.

The project will be under supervision of Dr. Michel Handgraaf (daily supervisor and co-promotor) and Prof. Gerrit Antonides (promotor). The PhD student will be based at the chairgroup Economics of Consumers and Households and will be a member of the Wageningen School of Social Sciences (WASS).

### **We ask**

We seek a candidate with a Master's degree in a field related to Social Psychology, Economic Psychology, Behavioral Economics or Environmental Psychology, and with a keen interest in both fundamental research and the application of behavioral theories to practice. He/she should be familiar with experimental research and/or surveys, and preferably have a background in quantitative research methods. Fluency in English and good communication and organization skills are essential.

### **We offer**

We offer a PhD position for 4 years (with interim evaluation after 18 months). Gross salary will increase from 2083 euro in the first year up to 2664 euro in the last year based on a full-time appointment (38 hours per week). In addition we offer a holiday bonus of 8% and an end-of-the-year bonus of 8.3% of your annual salary.

Please apply online by uploading your CV and letter of motivation before 24th August 2014 at [www.wageningenur.nl/en/Jobs/Vacancies.htm](http://www.wageningenur.nl/en/Jobs/Vacancies.htm)

### **More information**

Additional information about the content of the project can be obtained from:

Dr. Michel Handgraaf ([michel.handgraaf@wur.nl](mailto:michel.handgraaf@wur.nl)).

### **The organization**

#### **Wageningen University & Research centre**

Delivering a substantial contribution to the quality of life. That's our focus - each and every day. Within our domain, healthy food and living environment, we search for answers to issues affecting society - such as sustainable food production, climate change and alternative energy. Of course, we don't do this alone. Every day, 6,500 people work on 'the quality of life', turning ideas into reality, on a global scale.

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#### **Economics of Consumers and Households (ECH)**

The standard approach in economic research comprises a limited model in which the actors react to stimuli (i.e., prices), aimed at reaching particular goals. It is assumed that empirically observed behavioural relationships can be derived from a trade-off between (perceptions of)

costs and benefits by rational intelligent actors. By studying the psychology of decision making, Behavioral Economics has enriched theorising on consumer, household and managerial decision making. Most research activities of ECH are conducted within the area of Behavioural Economics. Behaviour with respect to judgment, choice and social decision making is studied taking into account subjective factors, context and (expected) consequences of behaviour. This type of economic research has many applications, including the Wageningen themes of food, environment and households.

For further information about working at Wageningen UR, take a look at <http://www.wageningenur.nl/en/Jobs.htm>.