



Netherlands Enterprise Agency

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**IEA DSM EXCO meeting**  
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Potential new work  
for the IEA DSM  
Agreement  
Impact assessment  
of behavioral base  
energy efficiency  
programmes



# Introduction

- Behavioral based energy efficiency programmes are all based on the idea that consumers will act if the underlying determinants of their behavior change in some way;
- Behavioral base energy efficiency programmes are most common evaluated taken the (measured) energy use before and after the programme as dependent variable. Variation in the impacts among the participants in the programme remain mostly unexplained.
- Savings resulting from behavioral base energy efficiency programmes are general up to 1-3 years. The life time of the savings are strongly correlated to the continuation of stimuli for the behavioral change.
- There is a wide variation in the way that data are collected, structure of questions and the persistence of the savings.



# Needs

- A new tool or tools should be developed to be used to improve consistency of evaluation of behavior based energy programmes. It should visualize the link between an intervention and the change in energy use.
- Energy savings from behavioral based programmes should last longer. The introduction of smart meters provides new opportunities to continue stimuli for behavioral changes.
- Communication on energy use and savings should become a market. App developers should provide the consumers with tools that provide continue personalized feedback
- To ease information collection for impact evaluation.
- These two needs should be seen in combination:
  - develop tool(s) for more consistent data collection and evaluation and
  - ensure that this is used in new and visa versa



# Topics/ Potential subtasks

Subtask 1: Assessment of Current Practise: current studies, current apps

Subtask2: Assessment of Potentials

Subtask 3: Design of instrument(s): tools and metrics for evaluating behavioral based energy saving programmes

Subtask 4: The use of data/information from apps in evaluation

Subtask 5: Test of instruments in combination with apps

Subtask 6: Communication



## *Subtask 1: Assessment of Current Practise: current studies, current apps*

- Assessment of current (best) practices
- Assessment of current evaluation methods and measurements
- Assessment of relevant research in energy world
- Collection of idiosyncracies in relevant scientific fields
- Assessment of energy communication apps and there cultural/society links



## *Subtask 2: Assessment of Potentials*

- Existing behavioral standard
- Existing software standards for apps
- Identification of key gaps
- Identification of needs and potentials for tools



### *Subtask 3: Design of instrument(s): tools and metrics for evaluating behavioral based energy saving programmes*

- Development of a maximum of 3 tools
- Test the most promising tool in (at least) two countries
- Discuss the use of tools in developing and conducting evaluation
- Potential of the tool for international standardization work



## *Subtask 4: The use of data/information from apps in evaluation*

- Discussion with apps developers
- Discussion with relevant stakeholders
- Privacy regulation for data use
- Apps ranking





## *Subtask 5: Test of instruments in combination with apps*

To be decided depending on the outcome of previous subtasks

## *Subtask 6: Communication*



## Next steps

- Exco indicates interest and will provide the foreseen OA with contact information on country experts
- OA will organise discussion with the expert to improve the scoping paper into a draft work plan
- OA will circulate the draft work plan to Exco delegates and others to improve the draft
- A revised draft work plan will be incorporated in the PMD for the October meeting of the Exco
- Exco decision in October to start the work, to revise the work plan or not accept the work plan.



## Questions to be answered

- Is the topic clear?
  - combination: develop tool(s) for more consistent data collection and evaluation and ensure that this is used in new and visa versa
- Are the subtask dealing with the relevant topics?
  - What is missing
  - What is too detailed / not needed
- Is there willingness to go into a draft work plan?