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DELIVERABLE

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Behavioral Factsheet

Authors:

Pr. Frans Coenen (University of Twente)

Pr. Thomas Hoppe (University of Delft)

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The REScoop PLUS project looked at the drivers of Energy Efficiency with the cooperative members. In this academic process, two separate studies were conducted by our academic partner, the University of Twente. Supported by the cooperatives of the consortium, the University team collected input from cooperative members from all over Europe. The two studies' results were collected in two effectiveness report (read here effectiveness of the best practices).

Effectiveness Report 1

This report presents the results of the first analysis on the effectiveness of activities of energy supplying European REScoops (Renewable Energy Sources Cooperatives) to influence and help their members to save energy and to invest in renewable energy.

Results on energy savings

Nearly half of the respondents indicate to consume less energy since they became REScoop members. Of those who are aware of actual (measured) energy consumption and savings 40% indicates to have saved at least 10% over 2015-2016. Longitudinal time series studies by TUC (2017) revealed that by joining a REScoop one lowers 20% in energy demand on average, and by becoming a prosumer one lowers electricity consumption by more than 45%.

Respondents indicate to undertake many (individual) energy savings actions. Only, a portion of them indicates that this can attributed to a REScoop, though. The longer respondents indicate to be REScoop members the more they engage in energy savings actions, and the more they indicate to have saved energy. The majority of respondents indicate that energy savings have become more important to them, and to have increased their knowledge level on energy issues since becoming a REScoop member. The far majority of respondents indicates overall satisfaction with REScoop energy service delivery, and state this to be better than energy service delivery by conventional energy suppliers.

A number of specific energy measures and tools implemented by REScoops (i.e. Dr. Watt training sessions, personal advice, or Energy ID) were found to significantly and positively correlate to energy savings (since becoming a REScoop member). Moreover, users were generally satisfied with them. However, only a relatively small portion of the respondents indicate to have actually used these measures. In a particular case – i.e. Dr. Watt training sessions by Enercoop – a measure implemented by a REScoop was found to result in no less than 60% reduction in energy consumption among users.

Rival factors found to statistically correlate to energy savings (and related operationalisations) concern: motivational factors, behavioural factors (e.g., goal-setting, intention), social factor (in particular social network), knowledge level, demographics and household characteristics. Although factors mentioned here are classified as 'rival' some of them can in fact be influenced by REScoop tools and measures, and contribute to energy savings; i.e. motivational factors, behavioural factors, social network and knowledge level. This is more difficult for structural factors like demographics and household characteristics.

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Results on investment in renewable energy

Whereas 21% of the respondents indicated to already made invests in renewable energy prior to becoming a REScoop member, 24% has made investments since becoming a REScoop member, and 27% indicates to invest in renewable energy in the near future. The longer respondents are REScoop members the more willing they become to invest. Investment size is rather small on average, though: between 500 and 2500 euros. REScoop members and consumers consider financial-economic return on investment of less importance than production and consumption of renewable ('clean') energy.

There is a significant difference in willingness to invest in renewable energy (future investments) between REScoop members and non-members. REScoop member indicate higher willingness to invest. Members of immature REScoops (i.e. 'young' REScoops) were found more willing to make more future investments in renewable energy technology than members of mature REScoops.

Rival factors found to statistically correlate with investments in renewable energy (and related operationalisations) concern: behaviour, social factors (in particular social network), knowledge level, (some) demographics and (some) household characteristics. Although many factors are classified as 'rival' some of them can in fact be influenced by REScoop tools and measures (excluding demographics and household characteristics), and contribute to energy savings; i.e. motivational factors, behavioural factors, social network and knowledge level.

In 2018 a follow up survey will be conducted among REScoops as part of Work Package 3 task 3.3. This is done to analyse the long-term impact and effects of REScoop measures.

Effectiveness Report 2

This report presents the results of the analysis on the effectiveness of activities of energy supplying European REScoops (Renewable Energy Cooperatives) to influence and help their members to save energy and to invest in renewable energy.

The main conclusions of both the survey analysis are presented below. First, in part 1 results are presented on the analysis regarding energy savings. Second, in part 2 this is done for the results regarding the analysis of investments in renewable energy technology.

Results on energy savings

A large majority of respondents indicates to engage in behavioural action to lower energy consumption. This applies to both energy curtailment and energy efficiency behaviour. When asked whether to have saved energy since obtaining REScoop membership 40%-65% of respondents among REScoop argues to do so. Of those who measured their energy consumption 21-22% indicate to use at least 10% less energy, and between 9-10 % indicates to have saved at least 20% energy. On average REScoop members in the 2018 survey save 4-6% on energy consumption since obtaining REScoop membership. REScoops standing out in terms of members reporting energy savings are EBO, Enercoop and Ecopower. These are all REScoops that can be considered rather mature.

Energy saving behaviours are undertaken by the majority of respondents, only a minority claims that these behaviours can be attributed to REScoops. For energy curtailment this is considerably less (15-17%) than for energy efficiency behaviours (20-30%), though there is a variation between REScoops.

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The majority of respondents indicate that energy savings have become more important to them since becoming a REScoop member. They also indicate a higher knowledge level on energy issues. Respondents also indicate to have undertaken more (individual) energy savings actions since becoming a REScoop member or customer of energy supplied by REScoops. In both the 2017 and 2018 survey nearly half of the respondents indicated to consume less energy since they became REScoop members. General factors related to REScoop positively, significantly statistically related to energy savings (and intention to save energy) are: attending meetings organised by REScoops, length of REScoop membership in years, experiencing trust among REScoop members, specific actions implemented by REScoops, in particular EnergieID, Dr Watt, InfoEnergia, and personal advice. Moreover, users were generally satisfied with these. However, only a relatively small - but growing - portion of the respondents indicate to have engaged with these actions.

Rival factors found to have a statistical significant relation to energy savings concern: motivational factors, behavioural factors (e.g., goal-setting, intention), social factors (in particular social network), knowledge level, demographics and household characteristics. Although factors mentioned here are classified as 'rival' some of them can in fact be influenced by REScoop tools and measures, and contribute to energy savings; i.e. motivational factors, behavioural factors, social network and knowledge level. This is more difficult for structural factors like demographics and household characteristics.

In sum, it looks like there are three forms of REScoop engagement to members (i.e, membership itself, engagement activities, and the use of specific measures), that all have the potential to contribute in a positive way to REScoop members' energy savings intention, energy saving behaviours and in the end saving energy itself. The best results will arguably be met when these conditions are all at play and complement each other, in a way to trigger energy saving behaviours among REScoop members.

Results on investment in renewable energy

The 2017 survey revealed that half of the REScoop members indicate not to have invested in renewable energy technology since becoming a REScoop member. 24% indicates to have made investments since becoming a REScoop member. 27% indicates wanting to invest in the next few years. Investments are on average in the range of 500-2500 euros. The 2018 survey results confirm these results, but also revealed variation in investments across REScoops, with Enostra members investing most and other REScoops having members that hardly invest at all.

There is a small difference in willingness to investment prior to becoming a REScoop member and after having become a REScoop member. The longer respondents are REScoop members the more willing they become to invest. Moreover, REScoop members and consumers consider financial-economic return on investment of less importance than production and consumption of renewable ('clean') energy. The 2018 survey revealed that REScoop members indicate a payback period of between four and five years as acceptable. REScoop members indicate willing to invest significantly more than respondents who are not REScoop members (confirmed in both the 2017 and 2018 surveys).

An important result of the survey is the social environment REScoops have to offer to their members. The 2018 SOM Energia survey showed that the more often one visits REScoop meetings, the more one identifies oneself with SOM Energia, and the more one experiences interpersonal trust between REScoop members, the more willing one becomes to invest. The 2018 survey results showed a number significant statistical relationships between social factors (among which social norms) and

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investments. This was observed among EBO, SOM Energia, and Enostra. Persons who like to be seen as using energy efficiently or consuming energy efficiently showed significant statistical relationships to investment in renewable energy. In addition, this applies to cases in which friends and family also adhere to these values, or are also REScoop members.

In sum, becoming a member of a REScoop can be argued to contribute to making investments in renewable energy technology. It looks like the social environment the REScoop offers – a high trust community with many enticing social meetings with people having pro-environmental and pro-conservation mind sets – appeal to people and trigger them to invest in renewable energy technology. Moreover, in common with energy savings, the longer one is a REScoop member the more one becomes willing to invest. In sum, both membership, engagement activities, and (some, but limited) specific measures were found to have positively influenced investment in renewable energy technology.

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