

## GUIDELINE: CHOOSING FROM DIFFERENT TYPES OF NON-MONETARY INCENTIVES

### Abstract

This is a sub-guideline to the main guideline on incentives that looks into the choice of and combination options for monetary- and non-monetary incentive. This sub-guideline on different types of non-monetary incentives is also written for RD&D project designers as well as for innovation managers and product developers in utilities. While the main guideline renders theoretical backgrounds, decision making aids and do's and don'ts, this guideline contains an overview of the different types non-monetary incentives that can trigger motivation in customers.

### What is it?

This guideline renders an overview over the non-monetary incentives at your disposal to motivate your customers. This is a sub-guideline to [Choosing and combining monetary and non-monetary incentives](#). In order to receive more detailed information on the factors influencing the choices regarding incentives, to learn about how to set up a general incentive scheme and to find out about do's and don'ts, please have a look at the main guideline.

Non-monetary incentives cover a whole array of possibilities in different fields. While they are already frequently used to leverage the best performance of employees in personnel management (to learn more about the perks of non-monetary incentives in other fields, watch the TED Talk by Daniel Pink in the references), their possibilities to encourage smart energy behavior are only tested to a little degree.

However, first studies and experiences suggest different options to make use of non-monetary-incentives (links to more detailed studies and theoretical background reads can be found in the references section). Some studies and trials indicate that non-monetary incentives are especially useful to overcome the first inattentiveness of consumers before they are willing to join a rollout or a demonstration project. The appeal to social norms can help to get over the first barriers, leading to interest and an information process. That was particularly used by the BENEnergy platform OSCAR (see Best Practice example below) and in the approach used by one of strongest market powers in customer engagement, OPower.

Other pilots analysed and surveyed by S3C suggest a different approach of using non-monetary incentives building on the psychological insights that everyday decisions are often made on the basis of people wanting to do the right thing

(whether that be sticking to low price periods or to environmentally friendly periods). In fact, social comparisons, goal setting and other options can be used throughout a project or rollout to induce the intended behavior.

However, the impact of non-monetary incentives is very difficult to measure (especially when they are implemented in combination with monetary incentives) and first trials comparing the impact the impact of monetary and non-monetary incentives show that while non-monetary incentives trigger a high participation in the beginning, they can fail to encourage stable behavioural change over a longer period of time. In other cases, they were key in unlocking a long-term engagement of customers. Commonly used non-monetary incentives are either information appealing to gather attention, appeal to social norms or educate the consumer in general. In general, non-monetary incentives appeal to intrinsic, rather than extrinsic motivation (read more on the differences in the main guideline [Choosing and combining monetary and non-monetary incentives](#)). In fact, a thorough knowledge of your target group (are they responding more to extrinsic or intrinsic motivation) is key to decide on whether to and how to use non-monetary incentives, see also the S3C guideline [Learning about target groups](#).

One difference to monetary-incentives is that non-monetary incentives appealing to the intrinsic motivation of consumers are usually very open to use in any project phase (see Figure 1). Fostering a sense of achievement and rendering participation fun are of specific importance, once the project goes into implementation in order to keep up engagement. However, other monetary and non-monetary incentives can be used throughout an entire project's lifespan or innovation introduction.

Furthermore, monetary and non-monetary incentives can be differentiated on another level. Non-monetary incentives are not established by themselves, but through other items, processes etc., e.g. the incentive of increasing social prestige can be created by including a social comparison component on a utility bill. So whereas it is also crucial to think about the costs, it is difficult to attribute definitive costs to putting in place non-monetary incentives.

The costs as explained in the main guideline strongly depend on the way the incentives are implemented. All of the non-monetary incentives explained in the following are linked to guidelines that explain one type of implementation for the specific incentive and give you less abstract and more practical overview of how exactly you can put the chosen non-monetary incentive into force.

In this sub-guideline, we will, however, match up the different types of users as defined by S3C with how they would archetypically respond well, a little or not at all to this specific incentive.

The three idealtypical user groups according to the S3C project are:

- the Smart Consumer The smart consumer represents the most passive role and end-user could take up in future smart grid functioning. This end-user is mostly interested in lowering his/her energy bill, having stable or predictable energy bills over time and keeping comfort levels of energy services on an equal level,
- the Smart Customer takes up a more active role in future smart grid functioning. This end-user follows "I-centred" needs and motivations, e.g. conformity, image, popularity or financial success and
- the Smart Citizen values the development of smart grids as an opportunity to realise "We-centred" needs or motivations, e.g. affiliation, self-acceptance or community.

### Type 1: Positive Self-Image

A non-monetary incentive appealing to the positive, intrinsic motivation of a consumer is constituted by the promise of a positive self-image. This can be attained during the process of a trial, rollout or by learning about a new product and service of a utility. The guideline [How personal goals can motivate behavioural change](#) elaborates on this possibility and offers examples and instructions for design and implementation.

In this guideline, you can find ideas for implementing goal setting by default options after an annual bill has arrived or a new retailer contract has been closed. Essentially striving for and achieving a goal with regards to their own consumption, can boost people's motivation and avoids pressures and negative feelings related to the use of other incentives. Since we attribute I-centred motivations to the Smart Consumer and Smart Customer and relate the Smart Citizen to rather we-driven motives, we suggest to expose customers rather linked to the ideal-types of the Smart Consumer and the Smart Customer to this incentive.



Relevant for...		
...Smart Consumer	...Smart Customer	...Smart Citizen
✓	✓	

## Type 2: Sense of achievement

Goal setting can also foster “sense of achievement”, which is again key to intrinsic, positive motivation in a person and closely related to a positive self-image. This non-monetary incentive can also be coupled with some of the monetary rewards discussed in the sub-guideline “monetary incentives”, especially those with a high trophy value<sup>1</sup>. A sense of achievement develops in a person, if they have reached a goal, target or fare best in a trial or project within a given time-frame and receives an awards. The gift or award received for the positive performance acts as a reminder of this success and positive feeling and can thus foster the new behaviour acquired within the project or through the new product.

Furthermore, bonus-malus-point system as described in the main guideline or the dedicated guideline on this topic [Bonus & malus – Changing behaviour with rewards and penalties](#) can create this motivation, too, as thresholds unlocking new rewards etc. can be attained, so that the customer can materialize their abstract learning curve.



Generally, a sense of achievement can be enjoyed by all participants, if the field trials are coupled e.g. with quizzes or competitions. These can be developed in numerous ways for numerous target groups. They can also be applied to include previously inactive end user groups such as children into the trial. This non-monetary incentive is closely related to the motivations of “having fun” and “community dynamics”.

As for the different archetypical user groups defined by S3C, this incentive can reach any of them. Depending on the way the incentive is set up, it can target a we-centred or I-centred audience.

Relevant for...		
...Smart Consumer	...Smart Customer	...Smart Citizen
✓	✓	✓

## Type 3: Social prestige

One powerful option to positive intrinsic and extrinsic motivations alike is to appeal to people’s social prestige. Knowing how you are doing in a field trial relative to the performance of others or the average can be a much more powerful information than to simply be aware of your own consumption patterns. The guideline [Motivating](#)

<sup>1</sup> For an explanation of trophy value, please have a look at the main guideline on incentives.

[consumers with social comparison and competition](#) renders the details on how to create and foster this feeling in consumers.

It is important to note that social prestige can also be powerful in the beginning of a project. First participants can become “brand ambassadors” for a rollout or a project. Information mailings nudging the addressees by implying that various households in their neighbourhoods/city/region/etc. are already on board can be beneficial as well. The community-driven Smart Citizen is not as likely to react to this incentive, as the Smart Consumer and Smart Customer who are mostly orienting for self-optimisation or self-sufficiency. However, regionally oriented projects or product can aggregate data on higher level and appeal to the regional focus of Smart Citizens as well.

Relevant for...		
...Smart Consumer	...Smart Customer	...Smart Citizen
✓	✓	

### Regional energy saving game OSCAR (BKW Energie & BENEnergy, CH)

S3C’s partner project OSCAR is carried out by the Swiss utility BKW and the ETH-Zurich spin-off BENEnergy that applies psychological and social science insights to energy efficiency programmes and smart technology rollouts for utilities. Utilizing a playful, non-intrusive, low-tech approach, the OSCAR platform managed to attract more than 10.000 customers of the BKW utility within a short time frame. The user number have steadily increased since then (24.000 participants at the time of the S3C analysis). On the portal called “OSCAR’s world for saving energy”, customers are invited to enter their metering data manually into an online platform on a weekly basis and learn about their own consumption and conservation possibilities in a playful manner.

The participating users receive information on their consumption via this web portal – also relative to other customers that signed up for the platform- and are also offered a forum and an email contact as a feedback channel where they can voice their wishes and concerns. Through challenges and assignments that the participants could take up, the project staff obtained a lot of information about the participants by making the survey a part of the game. To guarantee privacy and tackle ethical challenges, the users of course are not compared to the actual data of their neighbours, but to a statistical average for a similar household in the same region.

Furthermore, the project is drawing on the known imagery of the energy efficiency scale and ranks consumers efforts according to it. Thus, their energy performance becomes less abstract and relative to other efforts. In order, to use the dynamics created by the social comparison and sense of achievement the platform can create in users, it also offers seasonal and customised energy saving tips the customers can implement right away.

For more information on the project OSCAR or on BENEnergy in general, please visit: [www.ben-energy.com](http://www.ben-energy.com) or <https://oscar.bkw-fmb.ch/de/>.

### Type 3: Be a part of something big / community dynamics

From an S3C point of view, this is a typical “Smart Citizen” motivation. A rollout, product innovation or with a smart marketing campaign and trustworthy regional partners can create the feeling that the energy innovation people should learn about and implement is not just for their own or the utility’s sake, but for a greater good in the community/region/city.

Many S3C partner projects have shown that the creation of a sound narrative and the local roots of a project should be pronounced and fostered, in order to gain trust and increase the benefits the project/rollout has to offer.



The consumers can get a sense of “togetherness” and of not only working and changing for themselves but for the entire community. The community-building can be triggered by applying a strong regional integration of the project, by including entire neighborhoods, introducing actual or virtual regulars table (user-blogs) or various other options, see guidelines [How to identify regional stakeholders](#) and [How to gather community support for your smart grid..](#)

[your smart grid..](#)

#### Relevant for...

...Smart Consumer	...Smart Customer	...Smart Citizen
		✓

### Type 4: Have Fun

Similar to the Best Practice example above, a smart grid project does not necessarily have to impose on the end users. By applying gamification, projects can be developed in a way that it is fun for the consumers. Having fun instead of feeling imposed on and constrained in everyday-routines can foster participation and maintain people’s interest without receiving further incentives.

The guideline [Gamification – making energy fun](#) includes further information on the theories behind gamification, possible implementation strategies and best practice examples.

#### Relevant for...

...Smart Consumer	...Smart Customer	...Smart Citizen
✓	✓	✓

## Learning about energy (InovGrid Initiative, PT)

EDP Distribuição developed a gamification initiative based on this guideline. Due to a tight relationship with the community in Alcochete the project team was able to involve the main institutions and local communities. A living lab to process mutual learning and to promote more energy efficiency consumption habits through an educational platform was established. In close cooperation with this living lab, a gamification approach was initiated. Within the region, special events to support the launch of the game were organised to ensure a high level of participation. Dissemination materials such as flyers and posters were developed in order to engage the local students and families to participate in the contest and specific events to launch the communication for the game were promoted in Alcochete Schools, with the sponsoring of the School Community and Alcochete Municipality involvement.

The gamers were motivated with rewards for correct answers in three quizzes related to energy savings and sustainable behavior and could share their points and general ranking on Facebook to compete with other players. Launched under the S3C activities, the game started in April and was live until 30<sup>th</sup> July with more than 100 gamers from the municipality of Alcochete. The participants needed to have an electricity supply contract with EDP and a computer or mobile device to use the online game and interface (see Figure 1). Younger children could also participate if supervised by their parents. This quiz, funded under the S3C project, had more than 100 participants, mostly young students and parents. The contest aimed on the one hand to promote the knowledge about smart grids and responsible electricity consumption. On the other hand the game aimed to foster energy savings by receiving points for energy savings.



**Figure 1: Screenshots of the game. Every week the consumption was compared to the same week of 2014. For those who reduced consumption, points were gained**

The game used a combined point system consisting of the answers to the questions of the quiz and the reduction of the energy consumption. For the tracking of the energy savings per household the energy consumption was compared to the consumption of the same week one year ago. The players received a feedback about their energy savings on the web portal.

An additional incentive for saving energy was given by the prizes for the winners: The 1<sup>st</sup> prize is electrical bicycle, the 2<sup>nd</sup> prize a laptop and the 3<sup>rd</sup> prize an iPad.

Video about the project: <https://www.youtube.com/watch?v=f-avZ4XNCyY>

More information: <http://www.quiz-s3c.com/>

### Further reading

- McMakin, A., Malone, E. and R Lundgren (2002). *Motivating residents to conserve energy without financial incentives*, Environment and Behaviour, Vol. 34 (6): 848-863.
- Alcott, H. (2009): *Social Norms and Energy Conservation*. Paper of the Center for Energy and Environmental Policy Research at the Massachusetts Institute for Technology. October 2009. Available at: [http://opower.com/uploads/library/file/1/hunt\\_allcott\\_june\\_2010\\_-\\_social\\_norms\\_and\\_energy\\_conservation.pdf](http://opower.com/uploads/library/file/1/hunt_allcott_june_2010_-_social_norms_and_energy_conservation.pdf)
- Alcott, Hunt and Sendhill, Mullainathan (2010). *Behavioral Science and Energy Conservation*, Science Magazine Vol. 327(2): 1204-1205.
- Pink, D. (2009): TED talk on the perks of non-monetary incentives. Available at: [http://www.ted.com/talks/dan\\_pink\\_on\\_motivation](http://www.ted.com/talks/dan_pink_on_motivation).

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This guideline was developed in the S3C project, and is freely available from [www.smartgrid-engagement-toolkit.eu](http://www.smartgrid-engagement-toolkit.eu).

S3C paves the way for successful long-term end user engagement, by acknowledging that the "one" smart consumer does not exist and uniform solutions are not applicable when human nature is involved. Beyond acting as a passive consumer of energy, end users can take on different positions with respective responsibilities and opportunities. In order to promote cooperation between end users and the energy utility of the future, S3C addresses the end user on three roles. The *smart consumer* is mostly interested in lowering his/her energy bill, having stable or predictable energy bills over time and keeping comfort levels of energy services on an equal level. The *smart customer* takes up a more active role in future smart grid functioning, e.g. by becoming a producer of energy or a provider of energy services. The *smart citizen* values the development of smart grids as an opportunity to realise "we-centred" needs or motivations, e.g. affiliation, self-acceptance or community.

S3C (2012-2015) performed an extensive literature review and in-depth case study research on end user engagement in smart grids, resulting in the identification of best practices, success factors and pitfalls. The analysis of collected data and experiences led to the development of a new, optimised set of tools and guidelines to be used for the successful engagement of either Smart Consumers, Smart Customers or Smart Citizens. The S3C guidelines and tools aim to provide support to utilities in the design of an engagement strategy for both household consumers and SMEs. The collection of guidelines and tools describe the various aspects that should be taken into account when engaging with consumers, customers and citizens. More information about S3C, as well as all project deliverables, can be found at [www.s3c-project.eu](http://www.s3c-project.eu).