



SAVING ENERGY, CUTTING CARBON

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Activity acronym: save@work

Activity full name:

The Energy Saving Competition for Public Authorities

save@work Evaluation Report:

Lessons learnt for future sustainable energy projects looking at
changing everyday behaviours

D6.5

SUMMARY FINDINGS

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Introduction

save@work was a European project conceived to help realize the energy saving potential in public buildings and support public employees to change their everyday energy consuming behaviour and practices. Across nine countries, save@work engaged with more than 17,000 public employees in 176 buildings in a 1-year behaviour change programme. With support from the expert partners in each country, local energy teams were formed from the employees in each public building. These teams were then responsible for the planning, implementation and, partly, the evaluation of the energy saving campaign in their building with continued support from the local expert save@work partners.

The save@work Evaluation Report was prepared for three main reasons. First, to present the methodology applied and the achievements reached in nine European countries. Secondly, to describe the evaluation process developed and used in the project, and to share its outcomes. Finally, to propose an improved project methodology including tips and recommendations for implementers of similar projects in the future. Thus, the contents of this report are intended for a rather wide audience: implementers of projects intending to initiate and/or maintain behaviour change initiatives in public offices (as well as other offices, or indeed, households), policy makers and project funders as well as researchers working in the field. In the current document we provide a brief summary of the detailed s@w Evaluation Report¹.

The save@work project was built on a **research-based methodology** that considered the **theory of interpersonal behaviour**, and **combined top-down with bottom-up approaches**. As for the latter, on the one hand, public authorities were invited to be active partners, and the top management or leadership of each public building was asked to commit to participation in the programme thereby ensuring that employees at all levels were supported to engage in save@work activities. On the other hand, Energy Teams, composed of the energy/building manager and interested employees were formed in each building, mostly on a voluntary basis. The project thus intentionally **built on small groups as facilitators and enablers of behaviour change**, and used a variety of means and motivators, in other words tools and materials, simultaneously to cater for the needs of different personality types.

The majority (73%) of the participating buildings did save energy during the project: on average 8% energy was saved. A total of 6.5 GWh of primary energy was saved in the 9 participating countries and 1,783 tons of CO₂ emissions were avoided. However, in addition to the results in energy saving and CO₂ emissions avoided, it is important to expose the role and significance of the project in raising the awareness of employees and establishing new energy efficient behaviour and practices that can serve as **the basis for future sustainable energy activities**. **save@work contributed to developing more knowledgeable and skilful, as well as more cohesive, employee communities** that are ready to focus on making even more energy savings - an outcome that is as important as the savings achieved.

¹ For more details, please consult the full Evaluation Report: Vadovics, E. and Szomor, Sz. (2017) save@work Evaluation Report: Lessons learnt for future energy projects aiming to change everyday behaviour. Deliverable 6.5 of the save@work project, Grant Agreement no. 649660. Available at the save@work website: <http://saveatwork.eu/>



save@work: the evaluation process and its main outcomes

The save@work evaluation process was conceived to (1) support internal learning and evaluation; (2) learn more about the impact of the project; and (3) help identify success factors and barriers in different local settings. It included the following elements:

- 🔌 pre- and post-campaign participant surveys filled in by 2965 (17%) and 2059 (12%) employees respectively;
- 🔌 partner self-evaluation surveys (mid-term and final);
- 🔌 partner interviews and discussions organized partly by a party external to the project consortium; and
- 🔌 best campaign surveys conducted with local implementation teams (i.e. Energy Teams).

The Evaluation Report¹ provides a summary of information and outcomes gained through all these methods, and based on them puts forward recommendations for future projects. Below we outline the main findings.

save@work: successful in changing behaviour and supporting the change

Based on the pre-campaign survey results, **the main reasons for employees to join the project** were an interest in saving energy and other environmental issues and simply wanting to learn more about energy saving. In addition, a lot of respondents selected wanting to be involved in something positive as a reason. In line with this finding and according to the post-campaign survey, the thing employees liked most about save@work was that they became more aware (i.e. learnt new things). They also highlighted the bi-weekly saving tips and teamwork as sources of enjoyment.

Overall, **the project was very successful, it...**

- 🔌 was **appreciated by employees** (66% 'liked it a lot' or 'liked it' while only 6% said they 'did not like it');
- 🔌 **reached its objectives** in that it managed to involve considerably more employees (17,280 compared to 9,000) and only slightly fewer buildings (176 compared to 180) than planned;
- 🔌 **managed to initiate, support and create behaviour change** so that
 - 🔌 all the eight energy saving actions surveyed were performed by a higher regularity by the end of the campaign with the greatest increase observed for turning off computers and laptops when not in use.
 - 🔌 a greater than twofold increase was found for those who performed all the eight surveyed actions regularly (from 6.5% to 14.2% in the whole sample or to as high as 18.9% for those more engaged); and
- 🔌 **increased support for energy saving activities** from the management, IT services and in general from colleagues.
- 🔌 On average, 54% of survey respondents **took up new energy saving actions** in their individual routines, the most often cited actions being turning off equipment when not in use, taking up more efficient lighting practices and creating more rational heating/ventilation practices.
- 🔌 40% said that the management in their building introduced energy efficiency related changes that had not been planned or done beforehand.



It is important to note that save@work **had important spill-over effects** as well: 82% of the respondents were inspired by save@work to engage in activities that were not strictly part of the project, for example, start energy saving activities or invest in energy efficiency in their homes or talk about energy saving to their family or friends.

Finally, and very importantly, on average **86% of survey participants believe that they would be able to continue with energy saving activities in their office**, with the highest percentage for the UK and Hungary (91% and 89% respectively), and only 2% responding with a definite 'no' and 12% being uncertain. About half of the respondents also provided reasons for continuing with energy saving activities, the most often cited being the actions making sense, being beneficial and already become routines.

save@work: some challenges

A successful project does not mean that the consortium did not have to deal with some challenges.

The first important challenge was a general **low level of interest and motivation from public buildings** to engage in and stay active in the campaign. This was due to a number of reasons, but those often cited were employee workload and the fact that energy saving had not yet become an integral part of everyday routines and practices. Both were barriers to engagement in all nine save@work countries.

The **availability and access to energy consumption data** both historical and current also posed a considerable challenge. The save@work project helped participating authorities recognize the inadequacy of data availability as well as the need for setting up data management systems and assigning responsibilities for managing them. The save@work consortium can only hope that this process will continue in the future.

The save@work consortium would have wished to see more improvement in terms of energy saving during the lifetime of the project. However, through participant surveys we observed an increase in the performance of all the energy saving actions, accompanied by an increase in the ratio of participants performing all energy saving actions simultaneously and with high regularity. Whilst it is recognized that there is still room for improvement, the save@work consortium was glad to see that 86% of survey respondents believe they would be able to continue with energy efficiency actions in the office after the campaign.

save@work: reflections on the methodology applied

The **save@work methodology, with an impressive tools, materials and events repository**, was generally found satisfactory by participant groups, and the conclusion of the evaluation activities was that there were no essential or basic tools missing from it. The tools and materials used most as well as found the most useful by most project participant groups (i.e. partners, Energy Teams and employees) were the **energy saving tips**, promotional materials, the information pages on the project website and the measuring devices (e.g. energy meter, thermometer) provided as part of the Starter Kits. Importantly, **energy saving tips** were also identified as the second most important **source of enjoyment** by participants.



Nevertheless, drawing on the outcomes of the varied evaluation processes used in the project, we have identified ways in which the methodology could be enhanced and the repository improved. In the detailed report we propose an improved plan that could be used in future campaigns and would hopefully result in avoiding challenges or responding to them more swiftly.

One of the improvements suggested concerns **better integration of campaign activities and tasks into existing municipal structures and processes through greater engagement of the building management**. This would mean allowing for a longer preparation phase (e.g. at least 6 months). Another proposal concerned improving the effectiveness of the existing tools and materials, for example, the strategic handbook for Energy Teams delivered in modules, thematic tips prepared based on its contents (i.e. tips on team building, management and communication), and more training workshops for employees to assist developing an approach tailored to local needs even easier. Finally, tools that could be added to the save@work repository for an improved methodology include those that encourage the sharing of experience and ideas at all levels and between all project participant groups. Communication tools to facilitate the involvement of management would also be beneficial.

save@work: summary recommendations for future projects

Finally, based on the experience of the save@work project as well as the analysis presented in this report, the **5 most important lessons learnt and recommendations** for future behaviour change projects include:

🔥 **INTEGRATE AND MAKE IT THE NORM:** behaviour (or practice) change related activities work best if they are integrated as much as possible into everyday processes, tasks, job descriptions and strategies. Employees need to see them as part of their job and not have to worry about spending time and effort on it in their free time or taking away time from their 'regular tasks'. This way sustainable energy use behaviour can become the new norm that everyone strives to achieve as part of their work.

Integration, however, should not mean that no special and/or additional activities, training, events, etc. are needed to achieve sustainable energy use.

🔥 **BUILD COHESIVE GROUPS AND EMPLOYEE COMMUNITIES:** both research and practice, including our experience in save@work, point toward the importance of small groups and communities in changing, supporting and maintaining more sustainable (energy use) behaviour and practices as well as being a source of enjoyment, fun and learning. We know, groups do not become cohesive by themselves, therefore, as part of any campaign it is of vital importance to spend time and effort on building cohesive groups and employee communities through specifically focused activities and training as well as through creating opportunities where groups can develop naturally.

🔥 **KNOW WHAT YOU WANT TO CHANGE:** in order to be able to know whether efforts to change energy use behaviour and to reduce consumption are successful, we need access to historical and current energy consumption data. If no data management system exists yet, campaigns like save@work can help with setting up simple processes and establish responsibilities for managing them, which seems to be a general need identified by the project.



Furthermore, data and information are also needed on behaviour, practices, skills, knowledge and infrastructure specific to local contexts, and supporting or hindering sustainable energy use. Uncovering them should constitute an important part of the baseline assessment.

- 🕒 **CHANGE AND LEARNING NEW THINGS CAN BE ENJOYABLE:** changing routine and habitual behaviour and practices poses challenges. Thus, connecting the necessity for change and learning new things with enjoyment, increasing comfort and well-being is important. Participants in the save@work project acknowledged the existence of this connection: learning new things and becoming more aware were important motivations for joining the campaign as well as important sources for enjoyment.
- 🕒 **RECOGNIZE AND BUILD ON DIVERSITY:** in a European campaign it is important to follow a shared timeline, structure and content. However, it is just as important to allow for flexibility thus provide methods and tools tailored to local contexts and circumstances. This should be seen as an opportunity for learning and sharing, and campaigns should include opportunities to reflect and build on the resulting diversity that can help enrich the learning experience of all participants. Self-evaluation methods proved helpful in save@work for recognizing and appreciating diversity.

Practical tips for (behaviour change) project implementers

This section is intended to be a 'storehouse' of ideas and tips as well as serve as a kind of checklist for project implementers. It is based on the experience of the save@work project consortium and the lessons learnt in the project. Thus, it is supported both by practical experience of working with authorities, Energy Teams and public employees and our research into our impact, successes and challenges using a variety of qualitative and quantitative methods. The ideas and tips are grouped into different categories. Neither the order of categories nor the number of tips they contain is indicative of their importance.

Recruitment

- 🕒 **Map recruitment strategies in your consortium** and share ideas and tips for effective and motivating communication strategies. Use the save@work Strategic Handbook as a starting point for this.
- 🕒 **Plan your recruitment process well giving yourself sufficient time:** a lot of things will later be determined by how your recruitment goes (commitment to the project, motivation of participants, understanding of project, etc.).
- 🕒 **Letters of Intent**, signed by the leadership of the public buildings for proposal submission, are important but they are not sufficient for ensuring participation. They need to be confirmed as soon as possible once the project proposal is accepted.
- 🕒 In addition to Letters of Intent it is important to have a **recruitment plan** in place with sufficient time allowed for press releases, face to face meetings, etc.
- 🕒 In order to gain positive commitment from the management include a tool and more strategies to engage them. This is important as later on you will need positive communication from the management to the employees.
- 🕒 Think ahead about your **target group:** what kind of municipalities, departments and buildings do you wish to engage with? Adapt the recruitment method to match the needs of the target group, and fine-tune the method during the recruitment phase.



- 🕒 Once the management is ready to participate, sign **participation and co-operation agreements** with them detailing what both parties need to do to ensure success. Make sure time and resource requirements are clear to the management, and ask them to grant sufficient time for their employees to work on the project.
- 🕒 Discuss how the **project fits into the already existing strategies**, plans, processes, etc. of the municipality and find common goals, processes, etc.

Timing

- 🕒 Your participants, e.g. buildings will progress with project activities and through project steps at their own pace. It is always a challenge to keep to a common timeline between countries but it can be surprisingly difficult to keep to a common timeline between participating buildings within one country. The solution is to allow for flexibility in your plans while you have concrete and well-communicated deadlines for tasks.
- 🕒 Prepare a project timeline for the recruitment stage so that your participants know what they are signing up to. Regularly update this timeline and communicate all updates very clearly to all participant groups.

Communication

- 🕒 Map the different types of communication activities you will need to do (with management, with Energy Teams, with employees, with the media, etc.) and the different tools necessary for their success.
- 🕒 **Do not underestimate the importance of face-to-face communication** at all levels and for all purposes: with management, with Energy Teams and with employees. It is important, effective and enjoyable to meet in person whether that be in meetings, training workshops or larger events.
- 🕒 **Facilitate the exchange of experience**, both good practice and challenges at all levels: local, national and European.
- 🕒 **Establish different channels** for the exchange of experience: online in the form of a blog or closed group, and offline at community events including group discussions.
- 🕒 **Use several communication channels** for communicating the same message: people prefer and respond to different channels, and you do need to **repeat even the simplest message**. Be creative!
- 🕒 Maintain **regular communication** with and provide **feedback** to the important participant groups in the project: to the management (newsletter, Working Group meetings), to Energy Teams (emails, phone calls, events, etc.) as well as employees.
- 🕒 Facilitate the communication of your local participants (i.e. Energy Teams) by providing them with communication tools and ideas: remember, they are not experts! The save@work Strategic Handbook can help with ideas.
- 🕒 Spend enough time and resources on **dissemination**: it is motivating for participants to read and hear about 'their' project in the media.

Events

- 🕒 Events are important and can contribute to the success of your project, so make sure to have them and prepare for them carefully. They are great for: information exchange, providing motivation, networking, dissemination, and if organized well, for team building.



- 🕒 Plan with and **organize different types of events**: local, regional (if relevant), national and in a European project: international as well. Although participants are sometimes challenging to recruit, in the end they always find them motivating.
- 🕒 If your project includes a longer campaign period (9-12 months), plan with Opening, Midterm and Closing events. Use the Midterm event to strengthen motivation, share experience and provide feedback as well as additional input.
- 🕒 Encourage the local teams to **organize various local events**: lunches for employees, talks, quizzes, plant swaps, baking and writing contests, bike to work events, Christmas parties, etc. They all **help build a supportive community, motivate employees** as well as create a sense of enjoyment and positive atmosphere around sustainable energy use - on top of raising the level of awareness.
- 🕒 Entrust participants with presenting their own stories, challenges and achievements even if they seem reluctant at first.
- 🕒 Organize your events in a way that fits the focus of your project. i.e. make sure to **organize 'green' events in a sustainable energy project**.

Creating and training local teams (Energy Teams)

- 🕒 It is much better to **have a local team to implement** a behaviour change campaign than just a single responsible person: in groups responsibility can be shared, more skills are available, they can empower people and individuals do not feel alone with the task.
- 🕒 Allow a sufficient amount of time for the forming of the local team and facilitate the process with training, tips and advice. The save@work Strategic Handbook includes some useful materials for this.
- 🕒 Help select the members of the Energy Team carefully: make sure that different departments are represented, different skills are available, responsibility can be shared, etc. If possible, invite a member of the management and a more technically oriented person (ideally the building or energy manager) to join.
- 🕒 Make sure that the tasks and responsibilities of the local team are clear and the workload is shared as evenly as possible. Ask for a designated point of contact, preferably more than one person in order not to lose contact if someone leaves or is on holiday.
- 🕒 **Train the local teams well**: one training event will probably not be enough. It is important to train them not only in expert matters (i.e. how to save energy, how to collect energy data, how to use the project tools, etc.) but also in management and team building ideas (e.g. how to plan a campaign, how to develop their group and deal with disagreements, etc.).
- 🕒 Besides energy saving tips, also **provide management and team building tips** developed specifically for facilitating the work of the local teams.
- 🕒 **Communicate with your local teams regularly, but also visit them**. It is best to do the baseline assessment and the basics of the action plan for the campaign together with them.
- 🕒 Provide tools and materials to help the work of teams: measuring devices (e.g. energy meter, thermometer), promotional materials (e.g. flyers, stickers, chocolates, textile bags, mugs, etc.), example quizzes are very useful and appreciated. Check the save@work Starter Kits for inspiration.
- 🕒 Allow for and create opportunities as well as tools for local teams to share their experience: through online tools as well as face to face events.



- 🕒 Provide regular feedback to your local teams on their progress: they need constructive feedback on all aspects of their work (energy saving, challenges completed, action plan content, etc.) to be able to stay motivated and focused.
- 🕒 Be prepared that some of your local teams may lose their motivation and focus during the campaign. Share ideas in your project team for getting over them. Here are some from save@work: regular contact, challenges, feedback, events, and sharing between teams.
- 🕒 Reward your local teams: it is useful and can be motivating to have smaller prizes for the best completion of some tasks (e.g. pre-campaign survey, challenges).

Group and community building

- 🕒 Group-based activities as well as **group and community building** are very important in behaviour change programmes for several reasons (e.g. people see that they are not alone, they receive encouragement and motivation, they develop solutions together, etc.), so make sure to include them in your campaign. Building a cohesive employee group is almost a prerequisite for behaviour and practice change based energy saving efforts: cooperation is needed to change automatic unsustainable practices.
- 🕒 In changing behaviour, **creativity, enjoyment and comfort** play a big part: people are more likely to take up a new practice if it not only saves energy but also contributes to their well-being.
- 🕒 Help participants realize that they are not only **part of a local, but also a national and European community**, the members of which want to contribute to more sustainable energy use. This provides motivation as well as the realization that each small step counts if it is carried out by lots of people - their efforts add up.
- 🕒 Having a competition element in campaigns can help provide additional momentum and motivation to change, especially if the competition is organized between groups who otherwise cooperate. Local teams from different buildings will (hopefully) be motivated to do at least as much as teams in other buildings, so make sure to provide feedback to them. Be careful, though, to keep a healthy balance between the collaborative and the competitive aspects of the campaign.

Tools and materials

- 🕒 It is very useful to have centrally developed tools and materials in the context of a European project. However, make sure to **adapt the materials to the local context both in content and time of delivery** (e.g. energy saving tips developed for heating may be needed at different times in Italy and in Sweden). You can find a lot more information and examples of this if you review save@work materials and tools in Chapter 1.2.
- 🕒 Some of your materials may need to be adapted more than others, depending on the local context, and the infrastructure, knowledge and skills available there. For example, if you have automated lighting in a building, your lighting tips will need to be very different to those buildings with no automation. Make sure to introduce and explain the use of tools and materials, giving examples on why and how they are to be used. Remember, the members of the local teams are not experts, thus the reason for having some of the tools or the value of these tools may not be obvious to them.
- 🕒 **Prepare guidebooks to ease the use of your more complicated materials** (e.g. online energy saving tool) or those requiring expert knowledge (e.g. action plan template).



- 🔌 Enable and encourage **local teams to prepare their own materials**, e.g. by providing templates and examples (you may want to get inspiration from the save@work templates provided to Energy Teams). Encourage the sharing of ideas for new materials between the local teams.
- 🔌 If possible, **test and pilot the most important tools** with members of the target group to ensure that they are as user-friendly as possible (e.g. you may want to do this with online tools such as the energy saving tool or the Green Clicks tool in save@work).
- 🔌 **Provide regular feedback from energy consumption tools**: this way you provide reports on progress and also provide an example on how the tool can be used (i.e. your local teams can use it in a similar way when they report to the management and the employees).

Evaluation and data collection

- 🔌 In energy consumption reduction campaigns you will need to have access to reliable data, preferably on historical as well as current consumption. However, **never assume that data is readily available!**
- 🔌 As soon as you start the project, start investigating the availability of data, and **make it a condition for participation** if you can.
- 🔌 If possible, involve the persons with access to energy consumption data as part of the local teams; this will save you a great deal of time and effort.
- 🔌 **Include an evaluation component** in your campaign: if possible both the evaluation of the impact of your campaign (e.g. pre- and post-campaign surveys) and that of your own efforts (i.e. self-evaluation).
- 🔌 Pre- and post-campaign **surveys** - if planned and used well - **can also contribute to the preparation of local action plans** for the campaign and its future in the target group. Well-planned surveys can help make your campaign be even more responsive to the local context.
- 🔌 **Communicate the outcomes of your evaluation** amongst your stakeholders, it is an important part of the feedback that you share with them.

To read the full report, please visit: <https://saveatwork.eu/>



The save@work consortium with the winning teams from each country at the final meeting and Award Ceremony in Brussels



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save@work – The Energy Saving Competition

www.saveatwork.eu

save@work was a year-long energy saving competition for public authorities and their employees between March 2016 and February 2017 in nine European countries:

Partners in the save@work consortium:

Germany (consortium leader):

B.&S.U. Beratungsund Service-Gesellschaft Umwelt mbH - www.bsu-berlin.de

Austria: Grazer ENERGIEAgentur - www.grazer-ea.at

Belgium: Arbeid & Milieu - www.a-m.be

Hungary: GreenDependent Institute - www.intezet.greendependent.org

Italy: Agenzia per l'Energia e lo Sviluppo Sostenibile - www.aess-modena.it

Latvia: Ekodoma - www.ekodoma.lv

Sweden: Energikontor Sydost AB - www.energikontorsydost.se

United Kingdom: Severn Wye Energy Agency - www.severnwe.org.uk

France: Prioriterre

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