

GUIDELINE: HOW TO IMPROVE YOUR SMART ENERGY PROJECT THROUGH CHECK-UPS

Abstract

Good project management includes continuous attention to make sure your project is running well. Implementing a basic check-up process can help you keep your project running smoothly and ensure that small issues get resolved before major problems appear.

Check-ups are less formal and less thorough than evaluations, but might contain similar elements. A major difference is that check-ups are done while your project is still running, while evaluations are often conducted at the end of a project. Check-ups conducted during the project might therefore provide input to a final evaluation.

What is it?

Regular check-ups are valuable instruments for project management to actively guide the project in the right direction, to learn and improve. Check-ups provide a simple way of monitoring project status and compliance with standards and goals while also taking experience from different project-related stakeholders into account. The idea is to define a set of straightforward criteria to check, allocate a limited amount of time to each check-up, and perform them throughout the project. The advice provided in this guideline is based on literature findings as well as actual experience from check-ups in smart grid projects.

When to use?

Most projects can benefit from check-ups. It can especially be of use when you want to:

- Check if the project is on the right track and meets the project objectives;
- Identify possible improvements and future changes to your work;
- Determine what you need to do next with regards to what you have already achieved;
- Identify whether there are unintended outcomes (positive and negative) and what these are.
- Gather information that will help you report to funders, clients and others about the performance and progress of your project and how you have adapted it to changing circumstances.

Check-ups in OfficeWise (SE)

The OfficeWise project has developed and introduced a concept for energy use visualization in a Swedish office workplace. The visualization concept includes a PC application for each office worker, an ambient visualization for the lunch room and a screen in the office reception area.

During the development and trial period, several check-ups have been done to improve the concept and visualization tools. For instance, the first version of the PC application was distributed to a test group of 15 office workers. They were asked to use the app in their daily work during a one week trial period. As a check-up, short interviews were conducted with each person to collect feedback on their experiences connected to usability, design, ambiguities, the information provided, ideas for improvements, possible application in the daily office work etc. The collected material was compiled and used as starting point for the improvement process, resulting in a second iteration of the PC application. (Boork et al. 2015)



Revision of visualisation concept based on the outcome from a check-up within the OfficeWise project

Check-ups focus on *what* is done in a project in relation to goals and results, while a more profound consideration on *how* the work within your project group or business is performed can be provided through for instance self-assessments, see the S3C guideline [Self-assessment to create a reflecting team culture](#). Check-ups are less formal and less thorough than an evaluation, but might more or less contain the same elements. How to evaluate the project can be found in the guidelines [User-centred KPIs for the evaluation of smart grids](#) and [KPIs for energy consumption effects](#). However, while check-ups are done while a project is still running, evaluations are often conducted at the end of a project to systematically describe, analyze and assess results and effects in a more detailed and often more formalized manner. Check-ups conducted during the project might provide input to a final evaluation.

What do you need to do?

Check-ups are project specific, and implementations of this approach will therefore differ from one project or organisation to the next. The aim should be to provide an open and holistic view on project progress in terms of perspectives on success and

needs for improvement, but check-ups can also be applied to limited parts of the project. An example of starting a generic check-up process is described below.

1. Define the scope and timing of the check-up

The first step is defining what criteria should be investigated as part of a check-up. The key is to focus on the aspects that will make the project successful while avoiding too much detail. The list of criteria might include items such as: Is the project reaching milestones and goals? Are intermediate outcomes relevant to the target group? Are status meetings being conducted on a regular basis? Are status reports issued? Are project milestones and spending tracked against budget? Are risks and issues being surfaced and addressed? Is project governance satisfying?

Project management sets the focus and timing for the check-ups, which can be conducted as single occasions or as recurring checks. You can plan for check-ups from the beginning of the project at certain intervals (preferably when reaching a project milestone, pathway or important project event) to assess whether the project is on the right path.

2. Allocate time and resources

Next, it's a matter of allocating resources to the check-up. An outside perspective might be beneficial. If your budget allows it, you could therefore assign an experienced project manager that is not part of the project to perform a check-up. If the project is outside of their area of expertise, he or she must get a thorough orientation to the project and review key deliverables.

3. Gather information

Then it's time to gather information. Make sure to gather information and experience that is relevant to the determined scope and criteria of the check-up. When applicable, collect quantitative and/or measurement data. Sometimes, however, only qualitative data such as customer experience or attitudes are available and relevant to the check-up.

Preferably collect feedback and input from different types of stakeholders (for instance target group representatives, clients, steering group, etc.) by different methods (e.g. interviews, questionnaires, focus group meetings). The questions you ask should be carefully structured to capture what you want to know, and should help to get a sense for how well things are going in terms of the check-up criteria.

4. Analyse the input

After summarizing the findings based on the agreed project check-up criteria, project management reviews the results. By analysing the input and information from different sources, you will be able to clarify the needs to modify your work, method or approach.

5. Take action

If no problems have surfaced in the check-up, you should give recognition for the things that the project team is doing well. Otherwise, you should identify what actions are needed to solve the problems or meet the opportunities for improvements and implement those to your project by e.g. developing an action plan.

Once the action plan is introduced and the new approach has settled, you should preferably conduct another check-up to make sure that the changes are steering your project in the expected direction. This is especially crucial if the changes are substantial.

Over time this practice can become self-reinforcing; as people in the project become more and more familiar with the check-ups, they might start to apply check-up criteria without waiting for an official check-up.

Introducing check-ups in the project UppSol 2020 (SE)

In the Swedish project UppSol 2020, project management wanted to improve their method for stimulating installations of photovoltaics among organizations in the region. To this end, check-ups for reflecting on project development were implemented.

The first step was to determine the focus of the check-ups, which were identified from project goals. Thereafter, input on these aspects was gathered from different sources. As the customer is the main focus of UppSol 2020, input from clients was essential. Their input was collected through interviews and surveys, which indicated that most clients appreciated the method. For many, participation in the project seems to have strengthened general approaches, beliefs and argumentation towards PV installations.

The information from interviews and surveys was thoroughly analysed. In addition, a self-assessment was performed within the project group to pinpoint internal development. At the end of the check-up a joint meeting was held with the project reference group and steering group. It aimed at jointly pointing out the improvements to be implemented, based on the input received in the check-up. As a result of the check-up, the project team's ideas on changing the method and increasing the focus on organisations were reinforced. The team also got some additional inspiration to future exhibitions on PVs in the region, and the content of the check-up was fed into the final evaluation of the project.



Picture from STUNS energy,
<http://www.stunsenergi.se/nyheter.aspx>

More information: <http://www.stunsenergi.se/projekt/uppsol-2020.aspx>

Do's and don'ts

- **Include uncomfortable information.** Make sure to take all relevant information into consideration, including data that might be inconvenient or disagree with the project management point of view or values, to get an open check-up that brings new insights to your project. It also brings credibility for the check-up to the contributing partners.
- **Involve different stakeholders.** Through check-ups, you will be able to critically analyse project activities based on feedback both from inside your project group and from external stakeholders involved in the project. Identify relevant stakeholders involved directly or indirectly in your project and choose appropriate methods for collecting feedback from them.
- **Be transparent.** By making the check-up process and results transparent across the organisation, you can reinforce positive behaviour by raising the awareness among the team members and provide tools for keeping projects on track. This may make check-ups a natural part of the work culture that doesn't need to be imposed from above.
- **Ensure allocation of time and resources.** The level of detail of the check-up can easily be adjusted according to what you want to achieve and according to your available resources. To secure resources and budget, and to facilitate the implementation of the check-ups, you could preferably plan the check-up occasions at certain intervals from the start of your project.
- **Provide feedback to the project team.** The outcome of the check-up, as well as how it will be used and affect your project and organisation, is preferably presented to the project team and other relevant stakeholders. If feedback wouldn't be provided, the willingness to contribute to future check-ups may be reduced.

- **Don't be too general.** Your check-ups should ideally investigate and capture feedback regarding a certain point of interest. Therefore, define check-up criteria and make sure that input match those.
- **Don't treat it like an audit.** The check-up should not be treated like an audit, where findings are regarded negative, but rather as an important recurrent improvement process that raises the level of success for the project.

Further reading

- Uyterlinde, M. et al. (2014). *S3C D3.4: Report on case analyses, success factors and best practices*. Brussels: EC
- Holmer, Jan (2003). *Självvärdering som stöd för personal- och verksamhetsutveckling*. Idéer, exempel, vägledning, forskning. Publication of The department of Work Science, The Faculty of Education, Göteborg University no.1. Only available in Swedish.
- Bellwoar and Martens (2014). *Project check-ups keep your projects healthy*. Project Management Times, accessed 2015-04-30, <http://www.projecttimes.com/articles/project-check-ups-keep-your-projects-healthy.html>
- Boork, M., Gustafsson, A., Dijkhuis, S., Katzeff, C. (2015). *OfficeWise: Energy feedback in office workplaces*. In Proceedings of ECEEE Summer Study 2015, Toulon/Hyères, France, 1-6 June 2015.

This guideline was developed in the S3C project, and is freely available from 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.