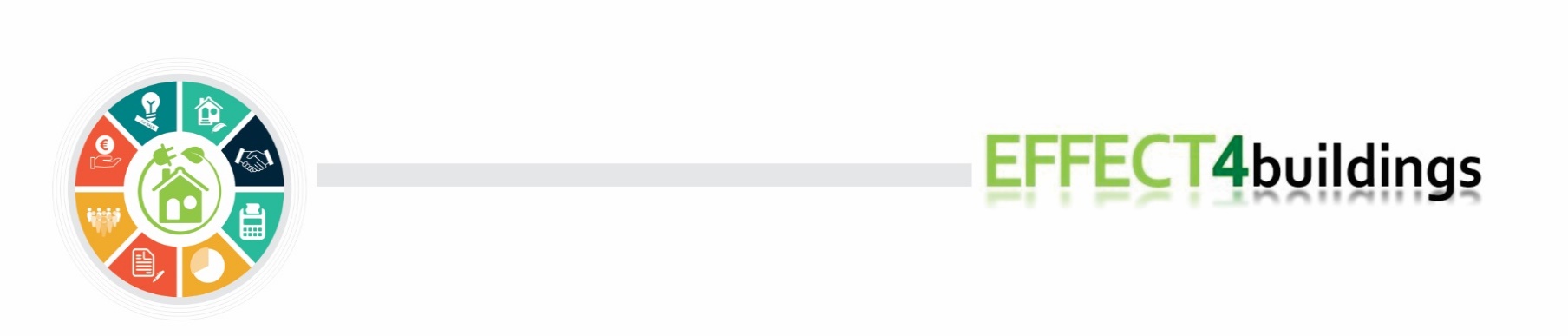




**Questionnaire for users on energy and indoor climate**

**- Template example**

**EFFECT4buildings Toolbox:**Multi Service Contracting; Annex 4.3



The project “Effective Financing Tools for implementing Energy Efficiency in Buildings” (EFFECT4buildings) develops in collaboration with public building managers a comprehensive decision-making support toolbox with a set of financial instruments: **Financial calculation tools**; **Bundling**; **Funding**; **Convincing decision makers**; **Energy Performance Contract**; **Multi Service Contract**; **Green Lease Contract**; **Prosumerism**. The tools and instruments chosen by the project has the biggest potential to help building managers to overcome financial barriers, based on nearly 40 interviews with the target group. The project improves these tools through different real cases.

To make sure building managers invest in the best available solutions, more knowledge on different possibilities is needed as well as confirmation from colleagues that the solutions performs well. EFFECT4buildings mapped **technological solutions** for energy efficiency in buildings with the aim to share knowledge and experiences of energy efficiency solutions among building managers in the Baltic Sea Region.

This document is a part of the Multi Service Contracting (MSC) toolbox within the group of tool 4, “mapping and analysis tools for different services*”*. It presents a survey template developed by Dansk Energi Management and tested in relation to the EFFECT4uildings’ MSC case in Egedal Municipality, Denmark.

EFFECT4buildings project is implemented with the support from the EU funding Programme Interreg Baltic Sea Region (European Regional Development Fund) and Norwegian national funding. The aim of the project is to improve the capacity of public building managers in the Baltic Sea Region by providing them a comprehensive decision-making support toolbox with a set of financial instruments to unlock the investments and lower the risks of implementing energy efficiency measures in buildings owned by public stakeholders. More information: <http://www.effect4buildings.se/>



**Partners**

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# Introduction to survey template

In phase 0 and phase 1 of the MSC process the building owner defines objectives together with the MSC supplier. In these phases it is important to map the condition of the buildings to assess which parameters to include in the MSC.

A survey can be a part of the mapping and identify areas of attention that should be examined further. With more knowledge gained on actual needs for improvements decision makers can prioritise objectives. After the renovation one can redo the mapping to follow up on whether the intended effect has been achieved and the satisfaction with the building’s performance has increased.

This survey is developed especially for a school and should be adjusted to the context and specific project. This survey is targeted at technical staff, management and adult users of the school. The section for technical staff and management can favorably be carried out as interviews. The questionnaire for all users can be carried out online or as a handout.

Make sure that the one conducting the survey have experience in the field and the survey is customised to the MSC project both in content and target group.

# Survey template

**1. Which staff category do you belong to?**

Employee

Management

Technical staff

**2. Which property are you affiliated with (listed in alphabetical order)?**

## Technical staff

*The questions 3 to 11 are targeted the technical staff. If you are not in this staff category, please go to section 2 (question 12 – 21).*

As the technician responsible for the property in question, additional technical information will be required to provide the basis for the subsequent technical mapping of the property.

**3. Please specify the property's general usage time.**

Also enter hours per day.

Monday – Tuesday – Wednesday – Thursday – Friday – Saturday – Sunday

**AFTER A RENOVATION: Have the usage patterns changed since the first user survey?**

**4. Is the energy consumption visible to employees and users of the property?**Yes/No

**5. Have information screens been installed, which may for example be used for information on energy consumption?**

Yes/No

**6. Please describe the heating installation.**

**Inspiration for answers:**  
What type of heating does the property have?  
What is the typical age of the installations?  
How is the maintenance condition of installations?  
Have repairs recently been carried out, replacements, etc. on the installations?  
Is there any planned work, changes, etc.?

**7. Please describe the installation for the domestic hot water.**

**Inspiration for answers:**  
What type of hot water production does the property have (central or decentralised)?  
Are there any decentralised electric water heaters?  
Does the building have circulation of the domestic hot water?  
What is the typical age of the installations?  
Are there water-saving washbasin mixers and users?  
How is the maintenance condition of installations?  
Have repairs recently been carried out, replacements, etc. on the installations?  
Is there any planned work, changes, etc.?

**8. Please describe the ventilation system.**

**Inspiration for answers:**  
How many ventilation systems are there on the premises, and what areas do they cover?  
What is the typical age of the ventilation systems?  
Are there any plants without heat recovery?  
Are there rooms with only air heating – i.e. heating is achieved via the ventilation system?  
How is the maintenance condition of installations?  
Have repairs recently been carried out, replacements, etc. on the installations?  
Is there any planned work, changes, etc.?

**9. Please describe the lighting system.**

**Inspiration for answers:**  
Have any fixtures recently been replaced on a larger scale?  
Have all incandescent bulbs and halogen bulbs been switched to CFLs or LED?  
Have motion sensors been installed?  
Has a replacement of lighting systems been planned?

**10. Please describe CTS/automation.**

**Inspiration for answers:**  
Does the property have CTS installations or other automation?  
Which installations are connected to CTS or any other automation?

**11. Please describe the meters.**

**Inspiration for answers:**  
Which billing meters are there on the premises – and how many?  
Enter any meter numbers for heat and electricity meters.

## Assessment of indoor climate – All users

*The questions 12 to 21 are targeted all users incl. the technical staff.*

**12. Satisfaction**

**What do you think of the air quality in the building?**Very unsatisfactory   
Unsatisfactory  
Neutral  
Satisfactory  
Very satisfactory

Enter any comments [Text box]

**What do you think about the indoor climate in the building in terms of temperature?**Very unsatisfactory   
Unsatisfactory  
Neutral  
Satisfactory  
Very satisfactory

Enter any comments [Text box]

**What do you think about the indoor climate in the building in terms of drafts?**Very unsatisfactory   
Unsatisfactory  
Neutral  
Satisfactory  
Very satisfactory

Enter any comments [Text box]

**What do you think about the acoustics on the premises?**Very unsatisfactory   
Unsatisfactory  
Neutral  
Satisfactory  
Very satisfactory

Enter any comments [Text box]

**13. Frequency**

**Do you, at intervals, experience that parts of the buildings feel stuffy?**Always  
Often  
Now and then  
Rarely  
Never  
Don't know

**Do you, at intervals, experience an unpleasant smell from e.g. fixtures, the building or surroundings?**Always  
Often  
Now and then  
Rarely  
Never  
Don't know

**Do you, at intervals, experience unpleasant drafts?**Always  
Often  
Now and then  
Rarely  
Never  
Don't know

**If so, where in the building?**

**Do you, at intervals, experience unsatisfactory, varying temperatures?**Always  
Often  
Now and then  
Rarely  
Never  
  
**If so, where in the building?**

**Do you, at intervals, feel that it is uncomfortably cold?**Always  
Often  
Now and then  
Rarely  
Never  
Don't know

**If so, where in the building?**

**Do you, at intervals, feel that it is uncomfortably hot?**Always  
Often  
Now and then  
Rarely  
Never  
Don't know

**If so, where in the building?**

Enter any comments [Text box]

***To what extent do you agree or disagree with the following statements in question 14-16?***

**14. I think I have the knowledge to save on electricity and heat consumption in everyday life.**

Not at all  
To a small extent   
To some extent   
To a very large extent   
Don't know

**15. I think that we are motivated to save on electricity and heat consumption in the workplace.**Not at all  
To a small extent   
To some extent   
To a very large extent   
Don't know

**16. I feel that we think about saving on electricity and heat consumption in the workplace.**

Not at all   
To a small extent   
To some extent   
To a very large extent   
Don't know

**17. Can you perhaps suggest activities or actions that can help support a desire for greater energy savings?**[Text box]

**18. What can motivate you to save energy?**[Text box]

**19. Do you know who to contact, if problems with the technical installations arise?**[Text box]

**20. How many hours are you in the building?**

0-10 hours per week  
11-20 hours per week  
21-30 hours per week  
31-40 hours per week  
Over 41 hours per week

**AFTER RENOVATION: Has this changed since the previous user survey?**

**21. How long have you been employed in and/or affiliated with the current building?**0-2 years  
3-10 years  
10-20 years  
Over 20 years

Nederst på formularen

## Additional questions for management

As management for the property in question, additional information is required that can form the basis for the subsequent technical mapping of the property.

**Is an effort made to communicate to and inform employees and users about energy savings and energy efficiency?**

If so, how?

**Are there barriers that you think prevent energy-saving behaviour in the building?**

If so, which ones?

**Do you have suggestions for initiatives/activities that could promote more energy-efficient behaviour among building users?**

If so, which ones?

**Do administrative instructions for staff and users on energy behaviour exist?**

If so, which ones?

**Will there be times when it will not be possible for contractors to work?**

If so, when?

**Are there special considerations to make towards the users of the building when choosing solutions for optimising the technical solutions?**

If so, which ones?

**Are you getting fewer or more reports from the users of the building on how they experience the indoor climate? Have the reports changed in nature?**







