



**SMARTER  
TOGETHER**

Smart and Inclusive  
Solutions for a Better  
Life in Urban Districts

# Evaluation templates

Deliverable D.6.1.2

Version 1.0



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## AUTHORS, REVISION CHART AND HISTORY LOG

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## SMARTER TOGETHER BENEFICIARIES

N°	Organisation name	Short name	Country
1	Lyon Confluence	SPL	France
2	Lyon Metropolis	GLY	France
3	HESPUL Association	HES	France
4	Toshiba	TSF	France
5	Electricité Réseau Distribution France	ERDF	France
6	Enertech	ETC	France
7	City of Munich	MUC	Germany
8	Bettervest	BET	Germany
9	G5-Partners	G5	Germany
10	Siemens Germany	SIDE	Germany
11	Spectrum Mobil	STA	Germany
12	Securitas	SCU	Germany
13	City of Vienna	VIE	Austria
14	BWS Gemeinnutzige	BWSG	Austria
15	Wiener Stadtwerke	WSTW	Austria
16	Kelag Wärme	KWG	Austria
17	Siemens Austria	SIAT	Austria
18	Sycube Informationstechnologie	SYC	Austria
19	Austrian Post	POST	Austria
20	Fraunhofer	FHG	Germany
21	Austrian Institute of Technology	AIT	Austria
22	Energy Cities	ENC	France
23	Gopa COM	GPC	Belgium
24	University of St Gallen	UNISG	Switzerland
25	Technical University of Munich	TUM	Germany
26	Deutsches Institut fuer Normung	DIN	Germany
27	Algoé	ALG	France
28	City of Santiago de Compostela	STC	Spain
29	City of Sofia	SOF	Bulgaria
30	City of Venice	VEN	Italy

## EXECUTIVE SUMMARY

This deliverable provides several sheets for data collection and evaluation that will be used during the lifetime of the Smarter Together project. These include an analog data form for data collection, a data fault report sheet for the technical monitoring, a process evaluation sheet, which will be used for the process evaluation in T6.5, and a process evaluation questionnaire, also to be used in T6.5. Additional templates will be provided as the project progresses.

## 1. Introduction

### 1.1 Purpose and target group

Monitoring the impacts of the SMARTER TOGETHER project requires different kind of data, and various data collection methods.

Some of the data will be collected automatically via sensors and stored in data bases. Other data needs to be collected manually, which requires evaluation sheets. Potential fields of data collection are:

- Data fault reporting
- Process monitoring, i.e. documenting the quality of the implementation process
- Stocktaking of the measures that are being implemented
- Counting the number of participants in workshops, collecting additional demographic data and capture the feedback of participants on the results.

This deliverable provides several sheets for data collection and evaluation that can be used during the lifetime of the Smarter Together project. Additional sheets may be added later, if needed.

Target group of D6.1.2 is the project team.

### 1.2 Drafting process and contributions of partners

D6.1.1 was drafted by the team of the task leader from AIT in close collaboration with the team of Fraunhofer IAO. The latter is leader of the task 6.5 on process evaluation. Additional input from other partners was integrated, where needed.

### 1.3 Baseline

Deliverable D6.1.2 has to be seen in the context of the expected impact of the project, which was described in the project proposal, and in the context of WP6 “Monitoring and evaluation”

#### 1.3.1 The expected impact of the Smarter Together Project

The expected impact section of the proposal gives a first overview on the expected impacts across the Lighthouse cities and the indicators that were expected be used to assess them in WP6 Monitoring and Evaluation. It also presented a preliminary list of quantitative indicators, which will be followed up in the monitoring process to identify

the key expected impacts of each Lighthouse city. Please note that each expected impact will be assessed using multiple indicators to capture the different dimensions.

In joint efforts and a holistic approach, SMARTER TOGETHER delivers 5 clusters of co-created and replicable integrated smart solutions: (1) Living labs for citizen engagement, (2) District heating and renewable energies for low energy districts, (3) Holistic refurbishment for low energy districts addressing public as well as private housing, (4) Smart Data management platform and smart services for integrated infrastructures and (5) E-mobility solutions for sustainable mobility.

The demonstrations in the three lighthouse cities are accompanied by local Urban Living Labs and are embedded in substantial collective cross-cities and cross-party development, learning and improving as well as intensive replication and dissemination to maximise the project's impacts.

The proposed solutions are expected to result e.g. in:

- 151 800 m<sup>2</sup> of refurbished housing estate, mostly social housing, with an energy and CO<sub>2</sub> reduction of > 50%;
- 14,6 MW of newly installed renewable capacity in the districts;
- 10 to 15 new e-mobility solutions – for passengers as well as freight;
- An overall CO<sub>2</sub> reduction of > 60 %;
- 130 million EUR investments in the Lighthouse areas creating 1,400 new jobs only from the investments in the buildings sector.

All deployed with support of integrated ICT solutions and in dialogue with the tenants and residents.

### 1.3.2 WP6 Monitoring and evaluation

While the expected impact section describes what the project aims to achieve, WP6 “Monitoring and evaluation” develops the methods for assessing the impact the project will achieve in reality.

To be as objective as possible, the evaluation methodology to has to be defined at the very beginning of the project. Only if the steps of first gathering data and then deriving key performance indicators from the data are predefined and properly documented, presenting the project outcome in raw numbers is meaningful. This makes sure that at the end the numbers cannot be fixed to hide possible failure to deliver to the expected results.

### 1.3.3 T6.1 Specification of the monitoring methodology

This methodology has now been developed in T6.1. In this task, the measures intended by the city were screened to arrive at a consistent methodology for calculating the project impact.

T6.1 produced two deliverables:

- Deliverable 6.1.1 “Monitoring and evaluation manual”, which contains an indicator list and calculation standards for the monitoring and the evaluation and
- **This Deliverable D6.1.2**, which provides templates supporting the monitoring and the evaluation.

## 2. Evaluation Templates

This deliverable provides four templates for different purposes:

- An analog data form, which will be used for manual data collection
- A data fault report sheet, which will be used in the technical monitoring to report on the technical monitoring
- A process evaluation sheet, which will be used for the process evaluation in T6.5
- A Process Evaluation Questionnaire

Additional templates will be provided as the project progresses.







## 2.3 Process evaluation sheet

The aim of the process evaluation is to give a clear view on the implementation processes and influential factors such as stakeholder involvement, the administrative context and legal issues. A process evaluation lays an emphasis on the processes of planning, implementation and operation that led to the expected project results rather than on the project's results themselves. The process evaluation task will gather information on and enhance findings about factors of success and potential strategies to overcome possible problems or barriers during the planning, implementation and operation phase of projects implemented in the SMARTER TOGETHER context. For this purpose, several projects in each city were chosen as focus projects. This will help all involved actors to detect and understand emerging drivers and barriers during the different phases of the project and enable the task leader to propose recommendations for process amendments that are then enacted by the project leaders in the SMARTER TOGETHER Lighthouse Cities. To ensure comparable results of the city project evaluation, task 6.5 has prepared a process evaluation form that will be completed for each of the projects semi-annually. This was done in cooperation with the responsible persons for evaluation and monitoring in the Lighthouse Cities, who will ensure that this additional data is collected for the focus projects in the process of the common project reporting.

### 2.3.1 Part A General administrative information

#### 2.3.1.1 A1. Project details

- Please fill in the required project details in the table below.
- You can take these information from the Local Implementation Plan and the WP2 progress reporting documents.
- If there are no changes compared with the previous reporting period you can just copy and paste the information.

Project	City	Project L leaders	Compiler of the process evaluation Form

### 2.3.1.2 A2. General content information

What are the main objectives of the project?

- Please describe the overall objective, the purpose and the output of the project.
- You can take these information from the Local Implementation Plan and the WP2 progress reporting documents (copy & paste).
- If there are no changes compared with the previous reporting period you can just copy and paste the objectives.

Objectives of the project	Description of objectives
<p><b>Overall Objective</b></p> <p>Please describe the overall objective of the project in one or two sentences. You should refer here to the latest version of the objective. An example is to reduce Greenhouse Gas emissions.</p>	
<p><b>Output</b></p> <p>Please describe the output of the measure in one or two sentences. You should refer here to the latest version of the output. The project's outputs are the direct / tangible results (goods and services) that the project management should be able to guarantee. An example is to deliver mobility stations and to offer car / bike pool programs.</p>	

### 2.3.1.3 A3. Project partners

Who are the project partners and what is their level of activity in the project?

- Please indicate the project partners in the table below and specify, if the partner is the project leader, a principal project participant (formally involved in the project) or an occasional participant (not formally involved in the project).
- Please tick the relevant boxes (only one answer per item).
- You can take these information from the Local Implementation Plan and the WP2 progress reporting documents (copy & paste).
- If there are no changes compared with the previous reporting period you can just copy and paste the answers.

### Project partner 1

Name

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Type of organization

Level of activity

1	City	1	Leading role
2	Public transport company	2	Principle participant
3	Energy supplier	3	Occasional participant
4	Knowledge institution (e.g. universities)		
5	Non-Governmental Organization		
6	Private company		
7	Other, please describe!		

### Project partner 2

Name

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Type of organization

Level of activity

1	City	1	Leading role
2	Public transport company	2	Principle participant
3	Energy supplier	3	Occasional participant
4	Knowledge institution (e.g. universities)		
5	Non-Governmental Organization		
6	Private company		
7	Other, please describe!		

### Project partner 3

Name

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Type of organization

Level of activity

1	City	1	Leading role
2	Public transport company	2	Principle participant
3	Energy supplier	3	Occasional participant
4	Knowledge institution (e.g. universities)		
5	Non-Governmental Organization		
6	Private company		
7	Other, please describe!		

## Part B. Specific process related information

### 2.3.1.4 B1. Project phase

What stage has the project now reached?

- There are three project phases
  - Planning phase: the project is developed in detail. In this phase all planning details are fixed, including the definition of processes and responsibilities as well as all other relevant preconditions for the implementation phase.
  - Implementation phase: the project will be implemented in real life. The phase consists in the operationalization of all planned activities. It is also related to the management of actual problems and the organization of corrective measures as circumstances may change during the implementation.
  - Operation phase: the project is now open to the end-users.
- Please tick the relevant boxes (only one answer per item)

No	Phase	(X)
1	Planning phase	<input type="checkbox"/>
2	Implementation phase	<input type="checkbox"/>
3	Operation phase	<input type="checkbox"/>
4	Transition from preparation phase to implementation phase	<input type="checkbox"/>
5	Transition from implementation phase to operation phase	<input type="checkbox"/>

### 2.3.1.5 B2. Improvements

Main improvements achieved during the current reporting period.

- Please tick the appropriate boxes

No	Examples of improvements	(X)
1	Commitment from all levels of the project was reinforced	<input type="checkbox"/>
2	An action plan was set up to address occurring problems	<input type="checkbox"/>
3	Reorganization of parts of the project structure and the project governance to better support the implementation activities	<input type="checkbox"/>
4	Corrective or preventive actions were implemented / -Quality improvements activities were taken	<input type="checkbox"/>
5	The engagement and leadership of the project's top management was reinforced	<input type="checkbox"/>
12	Other?	<input type="checkbox"/>

### 2.3.1.6 B3. Process drivers

Process drivers are events or activities that support and stimulate the project processes. The table below illustrates potential driver fields and examples for drivers that were relevant during this reporting period.

- Please tick the appropriate boxes.

No	Driver field	Examples of drivers	(X)
1	Political / strategic	Strong commitment of the key stakeholders, supporting political and strategic interests, shared smart city agenda or vision on the city level, positive consequences of a local election, cooperation between the key (policy) actors based on a shared understanding and believes in the objectives, purposes and outputs of the projects, shared understanding for and interests in the project's solution	<input type="checkbox"/>
2	Institutional	Facilitating administrative structures, processes and procedures, management beyond the silo structure of the public administrations, facilitating legislation including laws, rules, regulations as well as their application in the framework of the project, facilitating organization and project structure	<input type="checkbox"/>

3	Involvement, communication	Constructive and open involvement of key stakeholders whenever necessary, constructive and open consultation and involvement of citizens or potential end-users
4	Cultural	Cultural circumstances and life style patterns are addressed in thought-through and structured manner
5	Problem related	Shared understanding regarding urgent problems, prioritisation of problems, shared sense with regard to the project's objectives
6	Positional	The project is in line with the city's smart city agenda and the smart city objectives followed in other projects, there is an agreement on a shared smart city vision, exchange of experiences and lessons learned with other projects or cities, replicability of the projects procedures and processes
7	Planning	Sound administrative and technical planning, comprehensive analysis and interpretation of requirements for the project implementation, clearly defined roles and responsibilities, constant monitoring of available and needed resources, appropriate economic planning and market analysis, in-depth understanding and continuous refinement / validation of user and data requirements, clear governance structure
8	Organizational	Constructive partnerships, strong management and leadership, motivated and skilled project staff, strong commitment and support by the project's key staff, all partners are acting in accordance with the predefined governance structure and management procedures
9	Financial	Sound use of public funding, strong involvement of the business community, valid business models, continuous analysis of exploitation strategies
10	Technological	Clearly defined technological requirements, continuous adaption of the requirements list, newly developed technology, strong commitment of project staff to solve technological problems
11	Spatial	Available construction permits, exploration of new spaces for the physical projects, experimentation zones
12	Other	?



What are the three most important drivers encountered during the reporting period?

- Please refer to the number of the driver field and indicate the most important drivers in the table below.
- Please provide a short description of the driver to make the barrier more comprehensive.
- Please answer the following questions:
  - When and why did the barrier occur?
  - What was the impact of the barrier on the project processes?

No	Description of the driver (max one sentence)	Importance of the driver
		1 Most important driver
		2 Second most important driver
		3 Third most important driver

### 2.3.1.7 B4. Process barriers

Process barriers are events or activities that can jeopardize the project's success and the achievement of its objectives. The table below illustrates potential barrier fields and examples for barriers that you might have encountered during this reporting period.

- Please tick the appropriate boxes.

No	Barrier field	Examples of barriers	(X)
1	Political / strategic	Strong opposition of key actors due to political or strategic motives, lack of a common agenda or shared vision for the development projects, changes after legislative periods, impacts of a local election, conflict between key (policy)stakeholders due to conflicting interests and diverging believes with regard to the direction of the concrete solution or project	
2	Institutional	Siloed administrative structures, procedures and processes, impeding legal restrictions, laws, rules and regulations that are applied in the hierarchical structure of the organizations and projects	

3	Involvement, communication	Lack of communication between partners (e.g. management and operational partners, suppliers), lack of stakeholder engagement, insufficient consultation of end-users
4	Cultural	Impeding cultural circumstances and life style patterns
5	Problem related	High complexity of the problems that need to be solved, lack of shared sense with regard to the complexity of different problems between the key stakeholders, lack of shared sense regarding the project's key aims
6	Positional	Isolation of project within the city administration, lack of exchange with other projects or cities
7	Planning	Insufficient administrative and technological planning, insufficient analysis of the requirements for the project implementation, missing definition and clarification of roles and responsibilities, lack of economic planning and market analysis to determine requirements for the project implementation, insufficient user and data requirements as well as needs analysis, missing or limited understanding of user and data requirements
8	Organizational	Missing or failing partnership arrangements, lack of leadership and project management, insufficient individual motivation and know-how of project staff regarding the project, unclear governance structure
9	Financial	Strong dependency on public funds, no involvement of the business community, invalid business models
10	Technological	Additional technological requirements, technology not available yet, technological problems
11	Spatial	No construction permissions
12	Other	?

What are the three most important barriers you encountered during the reporting period?

- Please refer to the number of the barrier field and indicate the most important barriers in the table below.
- Please provide a short description of the barrier to make the barrier more comprehensive.

- Please answer the following questions:
  - When and why did the barrier occur?
  - What was the impact of the barrier on the project processes

No	Description of the barrier (max one sentence)	Importance of the barrier
		1 Most important barrier
		2 Second most important barrier
		3 Third most important barrier

### 2.3.1.8 B5. Corrective actions

Actions that are taken by the project partners to handle the barriers or to make use of the drivers to reach the project's objectives. The following checklist contains examples of possible activities that are taken to overcome the barriers and support potential drivers.

- Please tick the appropriate boxes.

No	Activity field	Examples of activities	(X)
1	Political / strategic	Co-creation of a smart city vision and agenda. Co-development of a concrete program towards smart city development, consultation, engagement and discourse with the (political, business and scientific) key stakeholders smart city requirements and interests	
2	Institutional	Analysis of and/or proposals to change impeding rules, structures, legislation, organisational structures etc.	
3	Involvement, communication	Continuous consultation and engagement of the target groups by workshops, focus groups, roadshows, conferences, design meetings, design competitions, face to face interviews, questionnaires or web-based cooperation platforms, public awareness rising and awareness campaigns for the project and the problems the project is trying to solve, bringing together key stakeholders to reflect on problems and co-create parts of the projects, support the sharing of different points of view, (social)media campaigning, continuous reporting to and involvement of key policy stakeholders	
4	Cultural	Identify and analyse cultural circumstances and life style patterns that affect the successful implementation of the	

		project, continuous definition and redefinition of the target group of the projects, adaption of the project's implementation to the needs of diverging target groups	
5	Problem related	Thoroughly analysis of project related problems, prioritize problems and risks, trigger problem-solving activities, express an communicate problems and emerging risk to all project participants, discuss problems and risks with the key stakeholders	
6	Positional	Activities to exchange experiences and lessons learnt with other smart city projects and cities through conferences, workshops or meetings, redefinition of project activities in line with the smart city vision and agenda,	
7	Planning	Amendment of the project's schedule, reallocation of financial and personnel resources, revisit and change the technical and economic project planning, renewal of the requirements analysis to validate the requirements for the project, conduct market and user requirements analysis to better understand the end-user needs	
8	Organizational	Build stable partnerships through constant involvement and consultations of key project partners, raise the competences of project staff of the project partners through special workshops and courses, replace project staff, raise the motivation and commitment of project staff of the project partners laying an emphasis on their benefits	
9	Financial	Develop a context that is attractive for the business community, identify and compare appropriate business models, raise public funding	
10	Technological	Allocate additional technical staff, raise additional technical financial and personnel resources, other actions to solve technological problems (e.g. regarding software implementation, hardware, etc.)	
11	Spatial	Get building permissions, explore new space, create experimentation zones, corridors within the city	
12	Other	?	

What are the three most important activities you have taken to respond to the barriers and support the drivers?

- Please refer to the number of the activity field and indicate the most important activities in the table below.
- Please provide a short description of the activity and link it to the concrete barriers and drivers to make the activity more comprehensive.
- Please answer the following questions:
  - When and why was the action taken?
  - What was the impact of the action on the project processes?

No	Description of the activity (max one sentence)	No	Importance of the activity
		1	Most important activity
		2	Second most important activity
		3	Third most important activity

### 2.3.1.9 B5.Risks

Thinking about the barriers, drivers and activities elaborated in the previous sections, how do you see the risk for reaching the project's overall objective, purpose and output?

- Please tick the relevant boxes (one answer per item)

Objectives of the project	Level	Risk	(X)
<b>Overall Objective</b>	1	Very low risk	<input type="checkbox"/>
	2	Low risk	<input type="checkbox"/>
	3	Moderate risk	<input type="checkbox"/>
	4	High risk	<input type="checkbox"/>
	5	Very high risk	<input type="checkbox"/>
<b>Output</b>	1	Very low risk	<input type="checkbox"/>
	2	Low risk	<input type="checkbox"/>

3	Moderate risk
4	High risk
5	Very high risk

### 2.3.2 Part C. Deviations from the original plan

- Please indicate the most relevant deviations from the original plan in the reporting period in the box below.

Deviation Description	No	Importance of the deviation
		Most relevant deviation
		Second most important deviation
		Third most important deviation

- Please provide feedback on the process evaluation form or highlight important points that are not yet covered by the evaluation form.

**Any other comments**

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## 2.4 Process Evaluation Questionnaire Findings

The following template will be used to analyse the information gathered in the questionnaires. It summarizes the main improvements, drivers and barriers. Furthermore, it will give an overview of the main corrective activities as well as risks identified during the reporting period. The table will be filled in by the task leader with support of the involved project partners.

Objectives of the project	No	Description	Associated Recommendation
<b>Improvements</b>	1		
	2		
	3		
<b>Drivers</b>	1		
	2		
	3		
<b>Barriers</b>	1		
	2		
	3		
<b>Corrective Activities</b>	1		
	2		
	3		
<b>Deviations from the original plan</b>	1		
	2		
	3		