



D10.5

Initial exploitation action plan

Version 2016

SINFONIA

“Smart INitiative of cities Fully cOMmitted to iNvest In Advanced large-scaled energy solutions”

CONTRACT NUMBER	609019	INSTRUMENT	COLLABORATIVE PROJECT
START DATE	01-06-2014	DURATION	60 MONTHS



This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No 609019

Publishable executive summary

Activities related to exploitation are carried out in Work Package 10 and are led by Technofi. These activities consist in the development of the Exploitation Plan for project results, presenting the exploitation strategy of SINFONIA consortium and including:

- The description of all the results produced in the project, and the identification of those with a potential for exploitation, and in particular - but not exclusively - those with commercial or industrial applications, as well as the description of the property rights associated to these results
- The owner of each particular result or element of foreground
- Plans for the further use, dissemination, adoption and/or further development of non-commercial results (for instance methodologies, best practices, etc.) beyond the end of the project
- Strategic plans for the future exploitation of the foreground presenting commercial potential
 - its purpose, how it might be exploited (patent, start-up, direct sale, joint venture, etc. - and corresponding IPR), when and by whom, target market and market positioning, further research required, if any, potential/expected impact
 - the socio-economic impact of the results
 - the target group(s) for exploitation activities
- any contributions to standards or policy developments (if relevant)
- any potential risk associated with the exploitation of the results

Exploitation activities are also an opportunity to go beyond these requirements and investigate more in depth the commercial potential of some of the results and develop business plans when relevant.

The Exploitation Plan is iterated through two deliverables. The development of the Exploitation Plan also encompasses the implementation of exploitation workshops, led by Technofi. The first of these workshops was carried out in Sevilla in June 2016. This deliverable presents the first version of the Exploitation Plan for the SINFONIA project and should be considered as a working document. It focuses on the identification of results, the identification of those with an exploitation potential, and a preliminary review of potential exploitation routes.

The first step of the exploitation activities was to update the list of results. Although most of the solutions demonstrated in SINFONIA are already available commercially, integration and replication are at the heart of the project and a large part of the activities are dedicated to finding innovative way to facilitate the scaling and replication of the solutions for deep refurbishment deployed in the two pilot districts in Innsbruck and Bolzano. Several WPs indeed focus on the development of new methodologies, best practices, software tools and business models to support and accelerate the replication of the approach carried out in Innsbruck and Bolzano.

The identified results are the following:

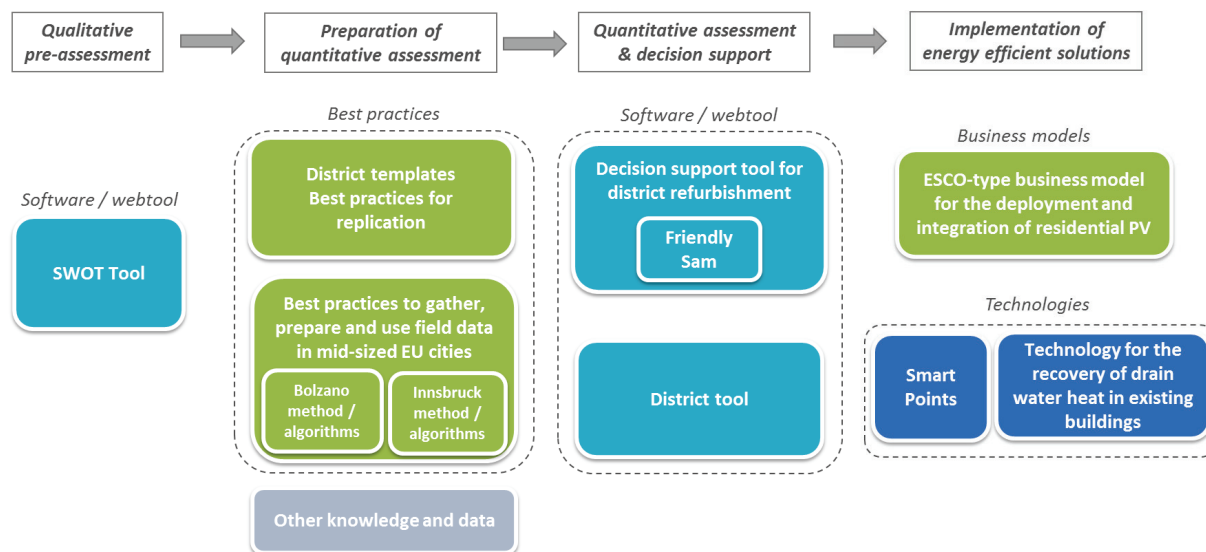
	Result	Owner
1	SWOT Tool - Web platform and associated webservice	EURAC



2	Best practices to gather, prepare and use field data in middle-sized European cities	UIBK+EURAC
2.1	Set of standardised modules for basic data collection, analysis, energy baseline calculation, monitoring and simulate energy systems	UIBK
2.2	Algorithms to process city data and calculate the baseline	EURAC
3	Upgrade of existing module Friendly Sam	SP
4	Decision support tool for district refurbishment	Technofi, CSTB, SP
5	District tool (district energy balance calculation)	PHI
6	Technology for the recovery of drain water heat in existing buildings	UIBK
7	Smart Points	BOZ
8	District templates	Technofi, other partners
9	Method for defining boundary conditions	SP
10	ESCO-type business model for the deployment and integration of residential PV	UIBK
11	Analytical decision support tool for the optimal location of integrated infrastructure	EURAC
12	Set of evaluation modules for the economic analysis of the co-benefits of smart energy city development	EURAC
13	PV hosting capacity of the electrical grid including potential estimation	EURAC
14	Inventory of the multi-functional façade solutions based on customized MFF composition;	EURAC
15	Protocol for the in-house laboratory tests	EURAC
16	Control strategies for the heat storage devices in the district heating network	EURAC
17	Protocols for and set-up and commissioning of the indoor monitoring systems	EURAC
18	Data mining algorithms for indoor and outdoor monitoring system management	EURAC

These results and the way they support replication are illustrated below.





The second step of T10.5, following the identification of the results, was to characterise the exploitable results, and their level of maturity (using either a Technology Readiness Level or a Generic Maturity Level, depending on the nature of the result). Some results were not considered as being directly exploitable, or it was decided that they should be exploited as part of another result: for instance results 2.1 and 2.2 will be exploited in the form of result 2.

The consortium is now working on the definition of value proposition for each result. Although it may sound very ‘business oriented’, the concept of value proposition is also very useful for SINFONIA since it helps determining the ‘unique value’ of the results, i.e. what makes them stand out of what already exists.

In parallel to the work on value proposition, preliminary plans for exploitation have been proposed. These plans will be updated and further detailed once the value propositions and the exploitation ambitions are defined.

General exploitation risks, impacting the future exploitation of the SINFONIA results (e.g. related to management, technical problems, finance, market factors, IPR issues, etc.), have been identified and mitigation measures have been proposed. A risk management plan for the exploitation risks that are specific to certain results will be included in the second version of the Exploitation Plan.

Finally, a preliminary review of market and competition has been undertaken, with a focus on cities as the targeted market. The review will be further detailed in the 2nd version of the Exploitation Plan once the products and services are more accurately defined.



TABLE OF CONTENTS

PUBLISHABLE EXECUTIVE SUMMARY	1
TABLE OF CONTENTS	4
FIGURES	5
1. INTRODUCTION	6
1.1 CONTEXT	6
1.2 OBJECTIVE OF THE EXPLOITATION ACTIVITIES	6
1.3 DEFINITIONS AND APPROACH	7
1.3.1 DEFINITIONS	7
1.3.2 APPROACH	8
1.4 EXPLOITATION GROUP	9
2. IDENTIFICATION OF RESULTS	10
2.1 BACKGROUND	10
2.2 PRESENTATION OF THE RESULTS	10
2.2.1 LIST OF RESULTS AND IDENTIFICATION OF (CO)OWNERS	10
2.2.2 IDENTIFICATION OF THE EXPLOITABLE RESULTS	14
2.2.3 MATURITY OF THE EXPLOITABLE RESULTS	15
3. PLAN FOR THE EXPLOITATION OF RESULTS	16
3.1 FIRST STEPS FOR THE DEFINITION OF VALUE PROPOSITION	16
3.1.1 PEST	17
3.1.2 SWOT	18
3.2 PRELIMINARY REVIEW OF EXPLOITATION OPTIONS FOR THE EXPLOITABLE RESULTS	18
3.2.1 PRELIMINARY PLANS FOR EXPLOITATION	18
4. EXPLOITATION RISKS	28
5. BUSINESS PLANS FOR THE RESULTS WITH A COMMERCIAL POTENTIAL	30
5.1 STRUCTURE OF THE BUSINESS PLAN	30
5.2 PRELIMINARY MARKET AND COMPETITION ANALYSIS	31
5.2.1 POTENTIAL MARKET	31
5.2.2 COMPETITION	35
6. NEXT STEPS: ACTION PLAN UNTIL NOVEMBER 2018	37
ANNEX: DOCUMENT INFORMATION	40



FIGURES

FIGURE 1: WORKPLAN FOR THE DEVELOPMENT OF THE EXPLOITATION PLAN	7
FIGURE 2: THE “INNOVATION CHAIN”, FROM THE DEVELOPMENT TO THE EXPLOITATION AND DISSEMINATION OF PROJECT RESULTS	8
FIGURE 3: EXPLOITATION APPROACH.....	8
FIGURE 4: MAPPING OF THE RESULTS	13
FIGURE 5: CHARACTERISATION OF THE RESULTS.....	14
FIGURE 6: TRL AND GML SCALES. SOURCE: INNOVATIONSEEDS.EU.....	15
FIGURE 7: RISK MATRIX	28
FIGURE 8: OSTERWALDER’S BUSINESS MODEL CANVAS	30
FIGURE 9: CITIES OF EUROPE. SOURCE: EUROSTAT.....	32
FIGURE 10: NUMBER OF EUROPEAN CITIES BY SIZE CLASS (LEFT) AND REGIONAL SPLIT OF THE MID-SIZED EUROPEAN CITIES (RIGHT).....	33
FIGURE 11: DEMO CITIES OF SINFONIA AND EU-GUGLE, AND REPLICATION CLUSTER	35
FIGURE 12: DETAILED WORKPLAN OF TASK 10.5	37

