

**Memorandum o suglasnosti  
(tj. „Savez zgrada”)**

U vezi sa zgradom pod nazivom ..... (dodati naziv ako postoji) ..... koja se nalazi na adresi ..... (unijeti punu adresu, uključujući broj ulice, poštanskog sandučića, grad)) ..... i koja je u lokalnom katastru / registru zgrada utvrđena

kako slijedi: ..... (unijeti potpune koordinate zgrade, ako su dostupne) .....

dalje u tekstu označena kako slijedi: Zgrada

**navodi se kako slijedi:**

- a) Prethodno navedene stranke surađuju u kontekstu Interreg CE projekta TOGETHER koji financira EU, ugovor br. 51 (dalje u tekstu: (projekt) i u trajanju od 36 mjeseci, počevši od lipnja 2016. do svibnja 2019.;
- b) Zgrada koja je prethodno utvrđena kao ciljana zgrada ovog Saveza zgrada (*pripada / još mu ne pripada*) nizu zgrada projekta TOGETHER od datuma potpisivanja ovog sporazuma;
- c) Cilj je projekta povećati energetske učinkovitost i osigurati ulaganja u javne zgrade putem kombinacija tehničkih i financijskih te alata za upravljanje potražnjom koje su najprimjerenije za poboljšanje energetske učinkovitosti postojećih infrastruktura u 8 regionalnih pilot-mjera obuhvaća ukupno 85 zgrada;
- d) Pilot-mjere trebaju se aktivirati od rujna 2017. do prosinca 2018. te ispitati i pokazati učinak objedinjenih mjera za upravljanje energijom usmjereno poboljšanju energetske učinkovitosti zgrada te ponašanja i svijesti korisnika, što čini inovativni aspekt mjera
- e) Tipologija pilot-mjera koja se mogu provesti na razini pojedinačne zgrade jedne od triju vrsta:
  - a. kombinacije sustava upravljanja svakodnevnom energijom s pomoću mjera DSM-a koje su razvijene: **OSNOVNI PRISTUP**
  - b. unaprjeđenje već postojećih mjera uključivanja korisnika novim alatima DSM-a: **PRISTUP UNAPRJEĐENJA**
  - c. primjena integriranih alata razvijenih u sklopu RP T2, uključujući unaprijeđeni sustav upravljanja energijom, financijske, tehničke, ugovorne i DSM alate: **EVOLUCIJSKI PRISTUP**
- f) Razina i složenost kombinacija uvjetovana je razinom zrelosti javne uprave, razinom uključenog rizika i njihovom voljom da riskiraju, utirući tako put inovaciji umjesto putovanju utabanim stazama. Neovisno o izboru, pilot-mjerama žele se u kontekstu barem njihovih zgrada barem uvesti mjere takozvanog upravljanja potražnjom koje podrazumijevaju mjere usmjerene na educiranje korisnika i poticanje pojedinačnog sudjelovanja kako bi se postigle uštede energije.
- g) Prethodno navedene stranke koje žele, zajedno ili usporedno jedna s drugom, preuzeti nekoliko obveza i poduzeti nekoliko obveza i svrsihodnih mjera u okviru vremenskog roka Projekta, s namjerom dijeljenja rezultirajućih financijskih koristi u pogledu smanjenja troška energetske računa Zgrade;
- h) Svrha je ovog Saveza definirati pojedinosti obveza i djelovanja svake strane kao i uvesti nekoliko prihvaćenih kriterija, pravila i postupaka za mjerenje i distribuciju financijskih koristi;

**Stoga je propisano i obostrano usuglašeno kako slijedi:**

1.1.1 „Pregovarački odbor”

Delegacija svih ključnih dionika Zgrade koja se sastoji od sljedećih osoba (*slobodno izuzeti ili dodati imena - ovo nisu nužno iste osobe kao one koje su potpisale Memorandum o suglasnosti*):

- Ime i prezime, u svojstvu zastupnika vlasnika zgrade, adresa e-pošte: .....

- .....;
- Ime i prezime, u svojstvu zastupnika upravitelja zgradom, adresa e-pošte: .....
- .....;
- Ime i prezime, u svojstvu zastupnika stanovnika zgrade, adresa e-pošte: .....
- .....;
- Ime i prezime, u svojstvu zastupnika partnera projekta TOGETHER, adresa e-pošte .....
- .....;
- Ime i prezime, u svojstvu zastupnika ....., adresa e-pošte .....
- .....

#### 1.1.2. „Pametni mjerač”

Elektronički uređaj koji bilježi i prikazuje potrošnju struje ili goriva u zgradi.

#### 1.1.3. „Energetska revizija”

Tehnička procjena energetske potreba i učinkovitosti zgrade.

#### 1.1.4. „Upravljanje potražnjom (DSM)”

Komplet metoda i alata usmjerenih promjeni potražnje stanovnika zgradom za energijom.

#### 1.1.5. „DSM alati projekta TOGETHER”

Komplet alata koji je formalno razvijen u projektu TOGETHER i koji su predstavljeni kao primjeri u rezultatu D.T2.3.3., „Alati DSM-a”;

#### 1.1.6. „Mjere DSM-a”

Komplet inicijativa za promicanje promjena u ponašanju korisnika zgradom koji su popisani u Prilogu 2. ovoj ispravi;

#### 1.1.7. „Financijske mjere”

Komplet inicijativa za poboljšanje energetske učinkovitosti zainteresirane zgrade oslanjanjem na financijsku i/ili ugovornu shemu kao što je Ugovor o energetske rezultata koji je potrebno odobriti / usvojiti / pokrenuti najkasnije prije zatvaranja pilot-mjere, do prosinca 2018.

#### 1.1.8. „Tehničke mjere”

Komplet inicijativa za poboljšanje energetske učinkovitosti zainteresirane zgrade oslanjanjem na dodatnu ulaganje koje je potrebno odobriti / usvojiti / pokrenuti najkasnije prije zatvaranja pilot-mjere, do prosinca 2018.

#### 1.1.9. „Sustav upravljanja energijom”

Komplet inicijativa za poboljšanje energetske učinkovitosti zainteresirane zgrade oslanjanjem na nadograđen sustav upravljanja energijom koji je potrebno odobriti / usvojiti / pokrenuti najkasnije prije zatvaranja pilot-mjere, do prosinca 2018.

[nešto drugo - slobodno dodati]

## 1. članak Svrha Saveza zgrada

### 1.1. Ciljevi koje treba poboljšati (dodati / promijeniti / obrisati)

1.1.1. Kad je riječ o zgradi, stranke, koje su prethodno utvrđene, zajednički usuglašavaju sljedeće mjerljive ciljeve poboljšanja koje treba postići unutar razdoblja provedbe eksperimenta:

- a) postavljanje NN pametnih mjerača u sljedeća područja zgrade: ..... (proširiti) .....
  - b) realizacija energetske revizije zgrade usmjerene razjašnjavanju točaka glavnog interesa za provedbu mjera DSM-a;
  - c) provedba sljedećih dodatnih ulaganja: ..... (npr. postavljanje televizijskog seta koji će se upotrebljavati za prikaz informacija u javnim područjima zgrade)
  - d) potpuno ostvarivanje odobrenog akcijskog plana koji je priložen ovom dokumentu povezanog s uvođenjem mjera biheavioralnog DSM-a kombinaciji s dodatnim aktivnostima povezanim s financijskim / ugovornim / poljem upravljanja energijom;
  - e) smanjenje potrošnje struje u zgradi za XX % (odnosno, od ... do ... kw godišnje), generirano zahvaljujući uvođenju mjera DSM-a provedenih od rujna 2017. do prosinca 2018.;
  - f) smanjenje potrošnje goriva zgrade za YY % (odnosno, od ... do ... godišnje), generirano zahvaljujući uvođenju mjera DSM-a provedenih od rujna 2017. do prosinca 2018.;
  - g) pokretanje sustava praćenja i sustava davanja povratnih informacija u stvarnom vremenu za mjerenje i komuniciranje stvarnih iznosa smanjenja proizvodnje, i to sastavljanjem tjednih/dvomjesečnih izvješća za pregovarački odbor;
  - h) organizacija mjesečnih sastanaka pregovaračkog odbora radi praćenja rezultata energetske učinkovitosti i pomaganja u dijeljenju rezultata sa svim korisnicima zgradom (posjetitelji, osobe zadužene za usluge čišćenja i održavanja itd.);
  - i) [ostalo - dodati].
- 1.1.2. Posebni cijevi smanjenja bit će praćeni prema sljedećim postignutim odrednicama:
- prosječna mjesečna potrošnja struje, prilagođena sezoni, u 12 mjeseci koji prethode datumu početka;
  - prosječna mjesečna potrošnja goriva, prilagođena sezoni, u 12 mjeseci koji prethode datumu početka.
  - [slobodno dodati ili promijeniti ove postignute odrednice]

## 1.2. Pojedinačne obveze (dodati / promijeniti / obrisati)

1.2.1. Da bi se olakšalo postizanje prethodno navedenih ciljeva, svaka stranka prihvaća isključivu odgovornost za aktivnosti navedene u nastavku:

- Provedbu dodatnih ulaganja financirat će .....
- Provedbu mjera DSM-a popisanih u Akcijskom planu priloženom ovom dokumentu koordinirat će ..... ;
- Sustav praćenja i davanja povratnih informacija u stvarnom vremenu aktivirat će .....
- Organizacija mjesečnih sastanaka pregovaračkog odbora dužnost je .....
- [ostalo - dodati].

1.2.2. Vremenski okvir prethodno navedenih aktivnosti bit će kompatibilan s tolerancijom od najmanje jedne pune kalendarske godine kao razdoblja eksperimentiranja za planirane mjere DSM-a i boje je objašnjen u Akcijskom planu priloženom ovom dokumentu.

## 1.3. Zajedničke obveze (dodati / promijeniti / obrisati)

1.3.1. Kao dopunu pojedinačnim obvezama, stranke se zajednički obvezuju provoditi sljedeće aktivnosti:

- sudjelovati u mjesečnim sastancima pregovaračkog odbora;
- provoditi mjere DSM-a popisane u Akcijskom planu;

- dijeliti financijske koristi koje su rezultat smanjene potrošnje energije u skladu s načelima i postupcima specificiranim u 4. članku u nastavku.

## 2. članak Dijeljenje koristi

### 2.1. Opća načela

2.1.1. Stranke su suglasne dijeliti financijske uštede koje su rezultat provedbe Saveza zgrada na sljedeći način:

- 50 % financijskih ušteda postignutih mjerama DSM-a koje je usvojio stanar zgrade bit će mu vraćeno u obliku gotovinskih isplata i/ili drugim oblicima takvih nagrada, smanjenja naknada itd., o čemu će se usuglasiti mjesec dana nakon dovršetka pilot-mjere;
- preostalih 50 % u jednakim omjerima zadržavaju vlasnik zgrade i upravitelj zgradom.

2.1.2. Utvrđivanje točnog iznosa financijskih ušteda isključiva je nadležnost .....

2.1.3. Likvidaciju u jednakim omjerima financijskih ušteda provodi .....

2.1.4. Uz podršku projektnog partnera projekta TOGETHER (ime PP-a), stranke kvantificiraju uštede energije i njihovu novčanu vrijednost / ostale koristi poput nagrada.

2.1.5. Pregovarački odbor sastaje se u roku od mjesec dana od zaprimanja dokumenata popisanih u prethodnom stavku te konačno odobrava i iznos financijske uštede i njegovu raspodjelu u skladu s odredbama ovog Sporazuma.

2.1.6. Stranka zadužena za likvidaciju financijskih ušteda povezane isplate provodi u roku od 2 (dva) mjeseca nakon odluke pregovaračkog odbora o odobrenju.

## 3. članak Obveze strana

### 3.1. Obveza prema svim ostalim strankama

3.1.1. Svaka strana obvezuje se marljivo sudjelovati u provedbi pilot-projekta te surađivati s ostalima provodeći i ispunjavajući, brzo i u vrijeme, sve svoje obveze u skladu s Ugovorom koje se mogu razumno zatražiti u dobroj vjeri.

3.1.2. Svaka stranka obvezuje se pravovremeno obavijestiti pregovarački odbor o svakoj važnoj informaciji, činjenici, problemu ili odgodi u vezi s njezinom uključenošću te koje bi vjerojatno utjecala na pilot-fazu.

3.1.3. Svaka stranka pravovremeno pruža sve sadržaje ili materijale koji su drugim strankama razumno potrebni kako bi provodile svoje vlastite zadaće u pilot-fazi.

3.1.4. Svaka stranka poduzima razumne mjere kako bi osigurala točnost svih sadržaja ili materijala koje dostavlja drugim strankama.

## 4. članak Objavljivanje

### 4.1. Diseminacija

4.1.1. Tijekom razdoblja eksperimentiranja i tijekom 1 (jedne) godine nakon njegova završetka svaka stranka ima pravo diseminirati rezultata pilot-faze pojedinačno ili zajedno s jednom

strankom ili više drugih stranaka - uključujući, ali bez ograničenja, publikacije i prezentacije na konferencijama i seminarima - ovisno o uvjetu spominjanja ovisnosti te pilot-faze o projektu TOGETHER koji financira EU.

4.1.2. Sav materijal mora u potpunosti poštivati pravila objavljivanja i vizualni identitet projekta TOGETHER, u skladu s pravilima utvrđenima u programu SREDIŠNJA EUROPA. Treba osigurati da su svi interno i eksterno razvijeni dokumenti u potpunosti u skladu s tim pravilima te da će to omogućivati i pratiti projektni partner \_\_\_\_\_

## 6. članak Razno

6.1. Savez zgrada sastoji se od temeljnog teksta i sljedećih priloga:

- Prilog 1 (Akcijski plan )
- Prilog 2 (Mjere DSM-a - opis biheviornalne promjene)
- Prilog 3 (D.T2.1.6 Dizajn pilot-koncepta i D.T2.3.3. Alati DSM-a za angažiranje korisnika zgradom)

## 7. članak Izmjene i dopune

7.1.1. Izmjene i dopune teksta ovog Memoranduma o suglasnosti ili bilo kojeg njegova dodatka zahtijevaju da sve stranke potpišu zaseban pisani sporazum.

7.1.2. U slučaju da je bilo koja odredba ovog Memoranduma o suglasnosti nevažeća ili neprovediva, ostatak Sporazuma važeći je i provediv u najvećoj mjeri.

7.1.3. Nevažeća ili neprovediva odredba ili uvjet zamjenjuje se odredbom ili uvjetom koji ostvaruje istu ekonomsku svrhu.

## 8. članak Jezik

8.1.1. Ovaj Memorandum o suglasnosti sastavljen je na engleskome jeziku [*zamijeniti vlastitim jezikom*] te je nadležan za sve s njime povezane dokumente, obavijesti, sastanke, postupke i procese.

Ovlašteni predstavnici stranaka navedeni u nastavku pravovaljano su potpisali ovaj Memorandum o suglasnosti:

ORGANISATION 1 FULL NAME

ORGANISATION 2 FULL NAME

SIGNATURE

SIGNATURE

NAME OF SIGNATORY

NAME OF SIGNATORY

TITLE

TITLE

STAMP

STAMP

PLACE AND DATE:

PLACE AND DATE:

ORGANISATION 3 FULL NAME

ORGANISATION 4 FULL NAME

SIGNATURE

SIGNATURE

NAME OF SIGNATORY

NAME OF SIGNATORY

TITLE

TITLE

STAMP

STAMP

PLACE AND DATE:

PLACE AND DATE:



Attachment 1 (TOGETHER Action Plan from D.T2.1.6)

<b>PILOT CONCEPT DESIGN - ACTION PLAN PART A</b>					
<b>I.D. of the building</b>  Pictures <i>(size compatible with the template)</i>			<b>Basic approach</b>	<b>Improvement approach</b>	<b>Evolution approach</b>
<b>Name of the building</b>		<input type="checkbox"/> Educational building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Owner</b>		<input type="checkbox"/> Institutional building			
<b>Location</b>		<input type="checkbox"/> Other type of building			



<b>Engagement in previous projects related to the involvement of end-users for energy efficiency.</b>	<input type="checkbox"/> yes  <input type="checkbox"/> no	If you have ticked yes, describe briefly			
<p>Agreements and basic conditions of cooperation  <i>The first step is to meet the local requirements for cooperation with owners and managers of the pilot buildings. This first step can vary according to the different types of partners (agencies, cities, etc..)</i>  <i>In case the partners are not the owners of the buildings where the smart meters are installed, it is compulsory to sign an agreement regulating the relationship between the project partners and the associated partners. In fact the project partners maintains the ownership of the installed equipment even after the end of the project (for at least five years after the final ERDF reimbursement).</i></p>			<p><i>Provide a brief description of the terms of reference of the agreement signed (if applicable) e.g. number of the deliberation/number of registration of the agreement and brief summary of the contents with reference to the ownership and maintenance</i></p>		
<p><b><i>Establishment of a Negotiating panel</i></b>  <i>It is crucial to map who are the members of the panel and who is responsible for co-defining the energy reduction objectives, the activities to be implemented and the profit sharing approach.</i></p>			<p><i>Provide a brief description of the members of the negotiating panel</i></p>		

<p><b>Type of Smart Meters installed - Investment</b>  <i>Public procurement for purchasing and installing the smart meters</i>  <i>Different methods and different approaches are possible, considering the size of the investment and the EU/national rules on public procurement.</i>  <i>Installation of smart meters, implementation of software for data collection and interpretation, training of the involved subjects...</i>  <i>The PPs describe the list of devices that are installed in the building. Which kind of meter monitors which type of energy; further description and explanation of the installation.</i>  <i>The main goal is that of controlling the use and the costs of energy for a specific activity. Shifting from a system that is not controlled to a controlled one, it is possible to achieve energy saving.</i></p>	<p><i>Provide a brief description of the main features of the automatic energy consumption system installed and one or more pictures of the installation work</i></p>
<p><b>Energy Management System in use and first upgrade of the system connected to the introduction of the smart meters</b>  <i>Please, indicate your current system of energy management. The automatic collection of data is just the first step. How will the data be used? Who is responsible for checking the data collected?</i></p>	<p><i>Provide a brief description of the energy management system already in use and of the changes resulting from the smart meters installation</i></p>
<p><b>Data collection</b>  <i>How are the data collected? Where are the data saved (owner of the server)? Which kind of (energy management) software is used for viewing and processing the data (diagrams, statistics, etc..)?</i>  <i>Some screenshots of the software could be included as an example.</i>  <i>Are you planning a (temporary) parallel data collection in order to verify the correctness of the data collected through the smart meters?</i></p>	<p><i>Provide a brief description of the data collection system that you have developed in conjunction with the installation of the smart meters. Please include pictures and schemes explaining the data workflow</i></p>

<p><b>Profiling of the buildings results</b>  <i>All the pilots must be analysed from different points of view. The first analysis is the technical profile of the building, detailing the construction and technical equipment of the building. The technical profile is complemented by the users' profile. This information refers to deliverables D.T3.1.1 and D.T3.1.2. The profiles of the pilot buildings are useful as a "first view" of the pilot building....  As part of the pilot concept, the partners should deliver the technical profiles and users' profiles of the pilot buildings.</i></p>	<p><i>Provide a brief description of the results of the profiling of the buildings, including the main features related to the users' profile and technical profile of the buildings</i></p>
<p><b>Energy audit results</b>  <i>An energy audit must be provided for each pilot building of the project TOGETHER. There are different approaches for processing the audits. The energy audits are necessary to better understand "how the building works" and to define the potential opportunities in the field of energy efficiency for the pilot building, such as possibilities of investments, retrofitting, heating, cooling, ventilation or "simple" energy management of the building.  As part of the pilot concept, the partners should deliver the Energy audit report.</i></p>	<p><i>Provide a brief description of the main results provided by the energy audits</i></p>
<p><b>Negotiation of a Building Alliance</b>  <i>The Building Alliance is meant as a contract defining an improvement path that plans for technical interventions (structural and system interventions for energy efficiency), financial actions (financial schemes, contracts etc.) and actions aimed at improving the organization of time and space.  The Building Alliance[1] should be developed, also through the definition of its goals of consumption reduction, by September 2017.  The elaboration of the Building Alliance entails the selection of the tools affecting users' behaviour (basic and/or improvement approach) and the selection of integrated tools (advanced approach).</i></p>	<p><i>Provide a brief description of the main contents of the building Alliance by using the template provided by the Lead Partner D.T2.3.2  Make reference to the consumption data</i></p>

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[1] The subjects involved in the Building Alliance define together the potential incentives and benefit sharing to be included in the REINVESTMENT ACTION PLAN (WP T4) in terms of a “win-win approach” and circular economy  
 (D.T2.2.5 Transnational protocol for the definition of the system for calculating the savings generated by the Pilot Actions, functional to the Reinvestment Plan)

**DEFINITION OF THE ENERGY SAVING STRATEGIES- ACTION PLAN  
PART B**

<b>DEFINITION OF THE ENERGY SAVING STRATEGIES- ACTION PLAN PART B</b>	
Title of your Pilot Action	<i>Please, fill in!</i>
<b>Plan for the development and implementation of the Energy Management System (EnMS), including the Analytic Demand Side Management, for a strict control of energy consumption</b> <i>In this case, the interested owners have to develop, adopt and test the system by December 2018</i>	<i>Please, fill in!</i>

<p><b>Improvement plan with technical measures</b> (Structural and system interventions for energy efficiency)  <i>In this case, the interested owners have to plan:</i></p> <ol style="list-style-type: none"> <li>1) <i>the approval/modification fo their investment plan by the December 2018;</i></li> <li>2) <i>the use of their own resources, by the end of the project, to improve the technological performance of their pilot buildings</i></li> <li>3) <i>the resort to external resources in order to pay the necessary investment. By the end of the project, the interested partner can elaborate and submit projects to get regional/national funds. However, it is important to link the request of funds with the results provided by the energy audits!</i></li> </ol>	<p><i>Please, fill in!</i></p>
<p><b>Improvement plan with financial measures</b></p> <p><i>In this case, the interested owners have to adopt the financial measures within the framework of the TOGETHER project, with an official approval of the financial measures identified. For example, in case an administration is interested in developing an EPC contract, it is necessary that the contents are elaborated and approved by the end of December 2018. The effective launch of the EPC can be done at a later stage, but there is the clear need to get the technical/political pledge before the end of the project.</i></p>	<p><i>Please, fill in!</i></p>

**Plan for the implementation of the Demand Side Management**

*The plan entails the selection of tools affecting users' behaviour, i.e. tools for behavioural change, as well as low costs measures.*

*All the partners should match the list of (meanwhile identified and selected as key) DSM tools with the buildings where the Pilot Actions will be implemented.*

*Remember that the TOGETHER Application Form does not specify a minimum number of behavioural/analytic DSM tools to be provided/used within the pilot.*

*Inspiration can be taken from the D.T2.2.2, concerning low costs measures, and some communication tools developed under the Work-package Communication (e.g. tutorials, origami, videos etc) can be used*

Name of the selected tool	Select and describe
<i>Training and awareness raising campaigns</i>	
<i>Financial and economic incentives</i>	
<i>Leaflets</i>	
<i>Posters/signage</i>	
<i>Direct feedback system</i>	
<i>Success stories/newsletter</i>	
<i>Energy saving tips</i>	
<i>Social networking - sharing experiences</i>	
<i>Serious game</i>	
<i>Competition - battle of the building</i>	
<i>Social award</i>	
<i>Direct information provision and peer education</i>	

*Other possible DSM tools available in the D.T2.3.3*

Brief description of the pilot project. Please, clearly summarise the action planned for the interested pilot building in a few sentences (please note, one per each pilot building), providing results when the activities are implemented

*Please, fill in!*

Please, indicate the main objectives the pilot action aims to achieve in each building of your pilot cluster.

*Please, fill in!*

Possible problems and risks. Please, describe the difficulties that may occur during the implementation of the project action!

*Please, fill in!*

<p>Please, describe the planned activities (1.1., 1.2, 1.3) and their timing e.g. 1.1 informal training for caretakers: Sept- December 2017 1.2. organisation of a workshop for the sport associations Sept-December 2017 1.3. elaboration of the EnMs Sept-December 2017</p>	<p><i>Please, fill in!</i></p>
<p>Please, explain which is the specific target group of your Pilot Actions and its size (e.g. students, caretakers, members of the sport associations...)</p>	<p><i>Please, fill in!</i></p>
<p><b>Please, indicate which best practices or strategies inspired the development of your pilot action.</b></p>	<p><i>Please, fill in!</i></p>
<p><b>Please, indicate the profit sharing approach used (50/50, incentives, prizes etc.).</b></p>	<p><i>Please, fill in!</i></p>
<p><b>Verification of whether the proposed measures actually work.</b> Implementation, monitoring and support (until December 2018). Reporting of the savings achieved.</p>	<p><i>Please, fill in!</i></p>
<p><b>Setting up of a Supporting Structure.</b> According to the application form, A.T3.4 plans for the setting up of a Supporting Structure, at partners' level, supporting the implementation of the pilot action.</p>	<p><i>Provide a brief description of the structure that has been set up and that supports the implementation of the pilot action.</i> <i>In case of external support, please include references to the external company providing support for the implementation of the pilot activities.</i></p>



## Attachment 2 (DSM actions)

Starting from the IEA formula presented at the end of the previous section means that we recommend adopting the perspective of Contextual Design (see Glossary), which can be seen as a viable alternative to engineering and feature driven models of creating new persuasive technology systems.

In particular, our approach is based on the collection (from existing literature) of a list of behavioral changes that can be possibly targeted by the various DSM tools proposed in the following section. The list is non-exhaustive, both because of its construction, as one cannot figure out all the possible behavioral changes that may possibly occur within a building community, and because it is expected that every Negotiating Panel in charge of a building (and of its related pilot) will feel free to add, delete or adjust the initial list in accordance with the specific purposes of the pilot itself.

In addition, it has to be considered that most of the available evidence does not refer to energy efficiency in public buildings, but to residential buildings (private homes), with the exception of (CIRCE, 2015) and a few other works (summarized in Murtagh et al., 2013 – henceforth M&A, 2013). It is also due to this aspect that we have foreseen a joint session of revision and integration of the initial list of behavioral changes provided herein, which will involve all TOGETHER partners. This review session is part of the broader evaluation and approval process outlined in the following section 4 of the present Deliverable.

In the following table, we make the following high level classification of the competence of the behavioral changes which may incur in the context of the pilots:

- Group O: Behavioral changes of competence for the Owner of the building
- Group M: Behavioral changes of competence for the Manager of the building (mostly pertaining to small-value investments in maintenance or cleaning aspects and to zero-cost measures to improve energy efficiency in the use of equipment and appliances for lighting, heating and cooling)
- Group U: Behavioral changes of competence for the User of the building

Then we have numbered the items in each Group starting from 1 onwards.

Another relevant distinction concerns the typology of buildings involved in the pilots, as follows:

- Type G: Gyms and other sports facilities
- Type I: Institutional buildings and offices in general
- Type S: Schools and educational buildings in general

Finally we use one (\*), two (\*\*) or three stars (\*\*\*) to characterize the Consumption Reduction Potential (CRP) for the equipment or appliance under consideration, one star being low (up to 10% reduction), two stars being medium (between 10% and 20%), and three stars high (above 20% reduction). Note: these savings refer to the application of individual behavioral changes, not including their cumulative or self-reinforcing effects.

The source of the information displayed in each row is reported in the last column of the following table.

May the partners who want to add new items to this list use the same convention proposed above.

Please put a tick (✓) to identify promoted behavioral changes in the context of the Pilot:

ID	Type	Behavioral change description	CRP	Tick
M1	G, I, S	Clean windows periodically to allow a good penetration of natural light in the building	Û	

M2	G, I, S	Improve insulation of roller shutter box, which is often a significant point of air leakage	Ù	
M3	G, I, S	Install a sealed roller tape guide, removing the thermal bridges due to air infiltrations in its openings	Ù	
M4	G, I, S	Do periodic maintenance of room surfaces to keep their reflection coefficient high over time	Ù	
M5	G, I, S	Upgrade and maintain the filters of the HVAC system clean from dust reducing the efficiency of the coils	ÙÙ	
M6	G, I, S	Adjust the temperature of the thermostat so that it stays below 21°C in winter and above 25°C in summer	ÙÙ	
M7	G, I, S	Use free-cooling to renew the inside air of a room, to avoid starting up the compressor of the cooling system	ÙÙ	
M8	G, I, S	Replace the refrigerant fluids in heating and cooling equipment with new ones based on natural compounds	Ù	
M9	G, I, S	Add or repair boilers insulation to protect people from contact with hot surfaces and keep water hot for long	Ù	
M10	G, I, S	Install a regulatory system to keep temperature stable of the heating and cooling equipment	Ù	
M11	G, I, S	Clean the radiator surfaces from accumulated dust, acting like a layer of insulation	Ù	
M12	G, I, S	Purge radiators at the beginning of the heating season from the air trapped in the system	Ù	

M13	G, I, S	Lower the domestic hot water temperature set-point at 60° C	Ù	
M14	G, I, S	Fix the dripping taps in public restrooms to prevent leakages and save water	Ù	
M15	G, I, S	Clean the domestic hot water tank and heat transfer surfaces to avoid sediments	Ù	
M16	I, S	Combine general lighting with task lighting allowing to concentrate light only where and when it is needed	Ù	
M17	G, I, S	Regularly clean and maintain lamps and luminaires to increase visual comfort of users and energy savings	Ù	
M18	G, I, S	Reduce the number of lamps where lighting levels are acceptable and measured as such via a light meter	Ù	
M19	G, I, S	Reduce the number of luminaires where lighting levels are acceptable and measured as such via a light meter	Ù	
M20	I, S	Exploit natural light orientation of the workplaces to reduce the need for artificial light and avoid glare	Ù	
M21	G, I, S	Move the furniture or objects that block the natural light to the center of the room	Ù	
M22	I, S	Remove any furniture from the front of HVAC terminal units in order to increase their performance	Ù	
M23	I, S	Foresee different lighting scenarios for the same room depending on the activities done therein	Ù	
M24	I, S	Place floor lamps and hanging lamps in room corners to exploit reflection of light into the walls	Ù	

M25	I, S	Deploy multiple power strips with switch in all rooms and/or programmable plugs	Ù	
M26	S	Repair refrigerator door seals to prevent cool from escaping from the inside	Ù	
M27	I, S	Deploy solar chargers to charge mobile phones or other portable devices	Ù	
M28	G, I, S	Use paper towels to dry hands in restrooms instead of electric dryers	Ù	
M29	I, S	Remove refrigerators from places next to heat sources (including other appliances)	Ù	
M30	I, S	Install coffee machines with thermal jugs and vacuum insulation to keep coffee warm for long	ÙÙÙ	
M31	I, S	Regularly inspect and maintain the elevator system, to foresee breakdowns and prevent malfunctions	ÙÙ	
M32	I, S	Compress the work schedule to reduce the number of hours of lighting / heating / air conditioning	ÙÙ	
M33	I	Allow employees to work from home every now and then (e.g. on alternate days or for specific tasks)	ÙÙ	
M34	I, S	Share with the building occupants the details of the energy bills paid	Ù	
M35	I, S	Instruct the building occupants on the functioning and use of the thermostats to control heating	Ù	
M36	I, S	Inform the building occupants on the benefits of turning idle devices off before leaving the room	Ù	

M37		Insert description here		
M38		Insert description here		
O1	G, I, S	Use silicone, putty or draught excluder to reduce air infiltrations through windows and doors	ÙÙÙ	
O2	G, I, S	Seal air leaks located in all cavities present in the building	Ù	
O3	G, I, S	Inspect regularly wood and aluminum window frames to spot cracks exposing to moisture or decomposition	Ù	
O4	G, I, S	Add a low emissivity window film to reinforce thermal insulation of glass	Ù	
O5	G, I, S	Add a solar control window film decreasing the amount of energy that passes through the glass	Ù	
O6	G, I, S	Put silver foil behind radiators to avoid heating the wall and reflecting heat back into the room	Ù	
O7	G, I, S	Add or repair HVAC distribution system (ducts & pipes) insulation, to reduce losses in distribution	ÙÙ	
O8	G, I, S	Verify the correct operation of the ventilation system's timers and controls	ÙÙ	
O9	G, I, S	Analyze the combustion and maintenance of heating boilers	Ù	
O10	G, I, S	Place the condenser unit in a ventilated area without solar radiation	Ù	
O11	G, I, S	Install a programmable thermostat	Ù	

012	G, I, S	Use ceiling fans instead of air conditioning when possible	Ù	
013	G, I, S	Relocate thermostats to appropriate areas	Ù	
014	G, I, S	Clean heat exchangers of chillers	Ù	
015	G, I, S	Install dampers on flue gas ducts	Ù	
016	G, I, S	Install motion sensors for HVAC systems	Ù	
017	G, I, S	Install humidity sensors	Ù	
018	G, I, S	Install an efficient destratification fan system	Ù	
019	G, I, S	Install thermostatic radiator valves	ÙÙÙ	
020	G, I, S	Install a radiator booster	Ù	
021	G, I, S	Add or repair domestic hot water storage tank insulation	Ù	
022	G, I, S	Add or repair domestic hot water distribution systems	Ù	
023	G, I, S	Maintain and inspect domestic hot water electric pumps	Ù	
024	G, I, S	Install a timer for the domestic hot water recirculation pump	Ù	
025	G, I, S	Install a timer for the domestic hot water boiler	Ù	
026	G, I, S	Install mixing valves in the outlet of the DHW tank	Ù	
027	G, I, S	Install taps with flow reduction (faucet aerator)	Ù	

028	G, I, S	Add or repair water heaters insulation	Ù	
029	G	Install low-flow showerheads	Ù	
030	G, I, S	Install thermostatic taps	Ù	
031	G, I, S	Install motion sensor faucets	Ù	
032	I, S	Change to accent lighting where possible	Ù	
033	G, I, S	Foresee lighting zoning through manual switches	Ù	
034	I, S	Optimize interior security lighting	Ù	
035		Insert description here		
036		Insert description here		
U1	G, I, S	Close windows and doors when HVAC systems are operating	Ù	
U2	G, I, S	Manage properly the opening of windows and doors for natural ventilation	Ù	
U3	I, S	Use external solar shading correctly	Ù	
U4	I, S	Use internal solar shading correctly	Ù	
U5	I, S	Turn off the air conditioning system at least 20 minutes before leaving the room	ÙÙ	
U6	I, S	Avoid using personal heaters in air-conditioned spaces	Ù	
U7	G, S	Turn off kitchen and bath fans immediately after use	Ù	
U8	G, S	Use shower instead of bath	Ù	



U9	G, S	Limit shower length to 5-7 minutes	Ù	
U10	G, I, S	Disconnect the domestic hot water tank in case it is not working for more than three days	Ù	
U11	I, S	Wash hands with cold water instead of warm water	Ù	
U12	I, S	Turn off lighting in unused rooms or zones, esp. on Friday afternoons	ÙÙ	
U13	I, S	Turn off the luminaires close to windows when there is enough daylighting	Ù	
U14	I, S	Set the energy saving mode of the electrical equipment	ÙÙ	
U15	I, S	Turn off the screen of the monitor	ÙÙ	
U16	I, S	Adjust the brightness of the TV or monitor screen to a medium level	ÙÙ	
U17	I, S	Choose dark colors for the background images of the desktop screen	ÙÙ	
U18	I, S	Use the (black) non animated screensaver after a few minutes of screen inactivity.	ÙÙ	
U19	I, S	Possibly do photocopying and printing works at double-side and in draft quality mode	ÙÙ	
U20	I, S	Organize multiple printing or photocopying jobs to avoid switching the equipment on & off	ÙÙ	
U21	I, S	Avoid printing documents which can be used in digital form or transcript manually the contents of web pages and emails with little information on	Ù	

U22	I, S	Turn off TV, radio, computers and other appliances if nobody uses them	ÛÛ	
U23	S	Set the economic program of the washing machine	ÛÛ	
U24	S	Set the economic program of the dishwasher	ÛÛ	
U25	S	Set the economic program of the electric oven	ÛÛ	
U26	S	Set appropriate temperatures for the refrigerator and freezer	ÛÛ	
U27	I, S	Unplug battery chargers when their use is not required	Û	
U28	I, S	Reduce the number of personal printers and replace them with a common networking one	ÛÛ	
U29	S	Use a dishwasher instead of washing dishes by hand if the domestic hot water system is electric	Û	
U30	S	Use pressure cookers for daily cooking	Û	
U31	S	Use a toaster oven or microwave instead of the oven	Û	
U32	I, S	Turn off all stand-alone electronic devices at the end of the day	Û	
U33	S	Air dry dishes instead of using the dishwasher's drying cycle	Û	
U34	S	Wash only full loads of dishes and clothes	Û	
U35	S	Turn off the oven or electric cooker before finishing the cook of a meal	Û	

U36	S	Air dry clothes instead of using the washing machine's drying cycle	Û	
U37	S	Regularly defrost manual defrost refrigerators and freezers	Û	
U38	S	Decalcify (e.g. with vinegar or citric acid) the dishwasher, washing machine & other appliances which use water.	Û	
U39	S	Cover liquids and wrap foods stored in the refrigerator to reduce the release of vapors that add to the compressor workload	Û	
U40	S	Match the size of the pan to the heating element	Û	
U41	S	Use a covered kettle or pan or electric kettle to boil water instead of an electric or gas cooker	Û	
U42	S	Use the washing machine with cold water	Û	
U43	S	Clean the backside of the fridge once a year	Û	
U44	S	When cooking on the range, use pot lids to help food cook faster	Û	
U45	S	Iron efficiently: first, accumulate large batches of clothes, start by those needing cooler temperatures, then iron clothes needing higher temperatures and finally turn off the iron and use the stored heat energy to complete the ironing. Remember to turn off the iron if ironing is stopped.	Û	
U46	S	Defrost food naturally instead of using the microwave oven	Û	
U47	S	Disconnect the fridge in case it is not working for long times	Û	

U48	S	Disconnect the vending machine in case it is not working for long time (e.g. during holiday)	ÙÙ	
U49	S	Dry your hair naturally or with a towel instead of using hair dryer	Ù	
U50	I	Do not call more than one lift If there are several with distinct call buttons, to prevent useless rides	ÙÙ	
U51	I, S	Use stairs instead of lifts whenever possible	ÙÙ	
U52	I, S	Wear adequate clothing to the season and to the actual temperature in the building	ÙÙ	
U53	G, I, S	Do not turn the air conditioning system on when the windows are open	ÙÙ	
U54		Insert description here		
U55		Insert description here		