

TAKING
COOPERATION
FORWARD



Treviso, 31 Maggio 2017



Strumenti di DSM (Demand Side Management) e costruzione della “Alleanza per l’Edificio”



Francesco Molinari, mail@francescomolinari.it

INDICE (PARTE I)

Strumenti di DSM

La logica
sottostante

Scopo

Quadro di
riferimento

Esempi

Processo di scelta
degli strumenti

Requisiti di
personalizzazione

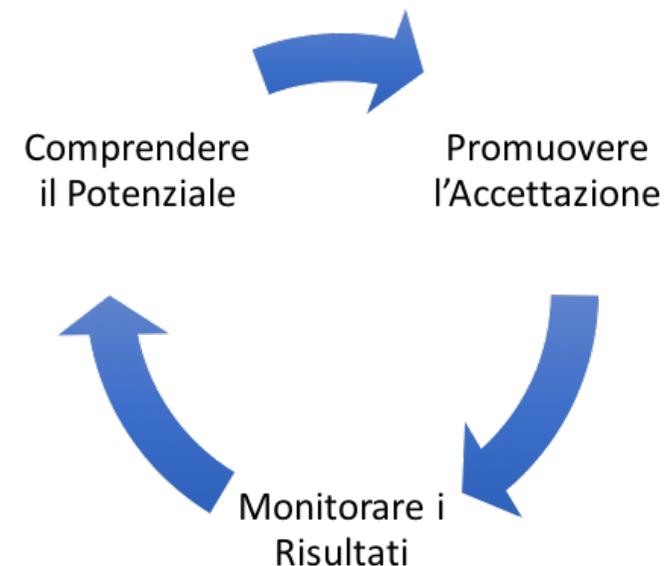


*Potenziale * Accettazione = Risultato*

Visione statica

“Il potenziale in sé e per sé non è l’unica questione. Un altro problema è come ottenere sufficiente accettazione delle misure di efficientamento energetico da parte degli utenti dell’edificio. Qualsiasi grande numero moltiplicato per zero sarà zero!” (Zonta, 2016)

Visione dinamica



Attachment 2 (DSM actions)

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	*	
M2	G, I, S	Improve insulation of roller shutter box, which is often a significant point of air leakage	*	
M3	G, I, S	Install a sealed roller tape guide, removing the thermal bridges due to air infiltrations in its openings	*	
M4	G, I, S	Do periodic maintenance of room surfaces to keep their reflection coefficient high over time	*	
M5	G, I, S	Upgrade and maintain the filters of the HVAC system clean from dust reducing the efficiency of the coils	**	
M6	G, I, S	Adjust the temperature of the thermostat so that it stays below 21°C in winter and above 25°C in	**	



QUADRO DI RIFERIMENTO

Elementi della visione	Categorie di strumenti DSM	Tipologie di immobili	Utenti target	Esempi proposti	
Comprendere il potenziale di un dispiegamento su larga scala del DSM	Strumenti di diffusione delle informazioni	Generici Istituzionali Scolastici	Adulti	Pubblicità degli Energy Audits	
	Strumenti di edutainment (istruzione e intrattenimento)		Teen ager	Preparazione di supporti	
			Bambini	Messaggistica semplificata	
	Promuovere l'accettazione delle misure proposte di cambiamento comportamentale		Strumenti di simulazione e di istruzione/formazione	Adulti	Origami e Slogan
				Teen ager	La metodologia e il pacchetto di strumenti online del progetto EURONET 50/50 MAX
			Incentivi economici e finanziari	Bambini	La formazione dei formatori
Adulti				Alla scoperta delle etichette degli apparecchi elettronici	
Monitorare i risultati ottenuti in termini di efficientamento energetico degli edifici	Strumenti di restituzione immediata		Teen ager	La condivisione 50/50	
			Bambini	Facciamo Bingo con l'energia!	
			Adulti	Il software ENERCLOUD	
	Strumenti di interazione sociale e basati sulla competizione		Teen ager	L'applicazione mobile ECAS	
			Bambini	L'applicazione mobile GOOSECHASE	
		Adulti			



Adulti

Publicità degli Energy Audits

Energy Performance Certificate (EPC) 

17 Any Street, District, Any Town, B5 5XX

Dwelling type: Detached house Reference number: 0919-9628-8430-2785-5996
 Date of assessment: 15 August 2011 Type of assessment: RdSAP, existing dwelling
 Date of certificate: 13 March 2012 Total floor area: 165 m²

Use this document to:

- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

Estimated energy costs of dwelling for 3 years	£5,367
Over 3 years you could save	£2,865

Estimated energy costs of this home

	Current costs	Potential costs	Potential future savings
Lighting	£375 over 3 years	£207 over 3 years	You could save £2,865 over 3 years
Heating	£4,443 over 3 years	£2,073 over 3 years	
Hot water	£549 over 3 years	£222 over 3 years	
Totals:	£5,367	£2,502	

These figures show how much the average household would spend in this property for heating, lighting and hot water. This excludes energy use for running appliances like TVs, computers and cookers, and any electricity generated by microgeneration.

Energy Efficiency Rating

The graph shows the current energy efficiency of your home. The higher the rating the lower your fuel bills are likely to be. The potential rating shows the effect of undertaking the recommendations on page 3. The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

Top actions you can take to save money and make your home more efficient

Recommended measures	Indicative cost	Typical savings over 3 years	Available with Green Deal
1 Increase loft insulation to 270 mm	£100 - £350	£141	✓
2 Cavity wall insulation	£500 - £1,500	£537	✓
3 Draught proofing	£80 - £120	£78	✓

See page 3 for a full list of recommendations for this property.
 To find out more about the recommended measures and other actions you could take today to save money, visit www.direct.gov.uk/savingenergy or call 0300 123 1234 (standard national rate). When the Green Deal launches, it may allow you to make your home warmer and cheaper to run at no up-front cost.

Energy Performance Certificate 

This home's performance is rated in terms of energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO₂) emissions.

Energy Efficiency Rating

Environmental Impact (CO₂) Rating

England & Wales EU Directive 2002/91/EC

The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating the less impact it has on the environment.

Estimated energy use, carbon dioxide (CO₂) emissions and fuel costs of this home

	Current	Potential
Energy use	198 kWh/m ² per year	164 kWh/m ² per year
Carbon dioxide emissions	2.4 tonnes per year	2.0 tonnes per year
Lighting	£82 per year	£41 per year
Heating	£332 per year	£311 per year
Hot water	£122 per year	£105 per year

The figures in the table above have been provided to enable prospective buyers and tenants to compare the fuel costs and carbon emissions of one home with another. To enable this comparison the figures have been calculated using standardised running conditions (heating periods, room temperatures, etc.) that are the same for all homes, consequently they are unlikely to match an occupier's actual fuel bills and carbon emissions in practice. The figures do not include the impacts of the fuels used for cooking or running appliances, such as TV, fridge etc.; nor do they reflect the costs associated with service, maintenance or safety inspections. Always check the certificate date because fuel prices can change over time and energy saving recommendations will evolve.

To see how this home can achieve its potential rating please see the recommended measures.

 Remember to look for the energy saving recommended logo when buying energy-efficient products. It's a quick and easy way to identify the most energy-efficient products on the market. This EPC and recommendations report may be given to the Energy Saving Trust to provide you with information on improving your dwelling's energy performance.



Teen ager
Bambini
TAKING COOPER

Preparazione di supporti
Messaggistica semplificata

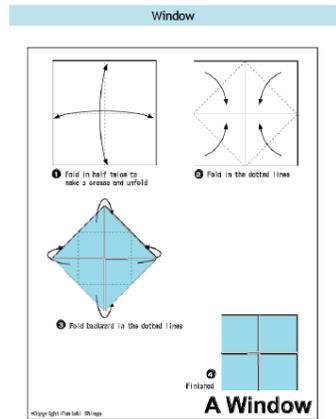
Adulti

Origami e Slogan

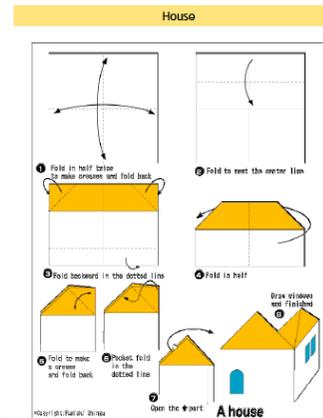


Le perdite di calore attraverso gli infissi delle finestre possono aumentare la bolletta energetica fino al

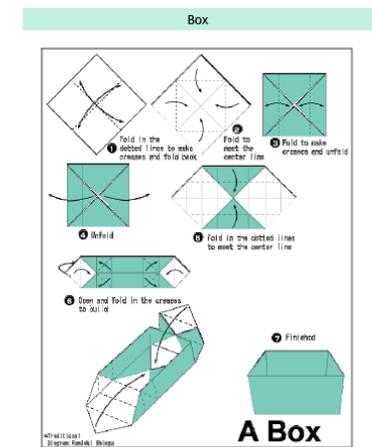
25% .



Gli edifici sono responsabili del 40% del consumo energetico e del 36% delle emissioni di CO₂ nell'Unione Europea.



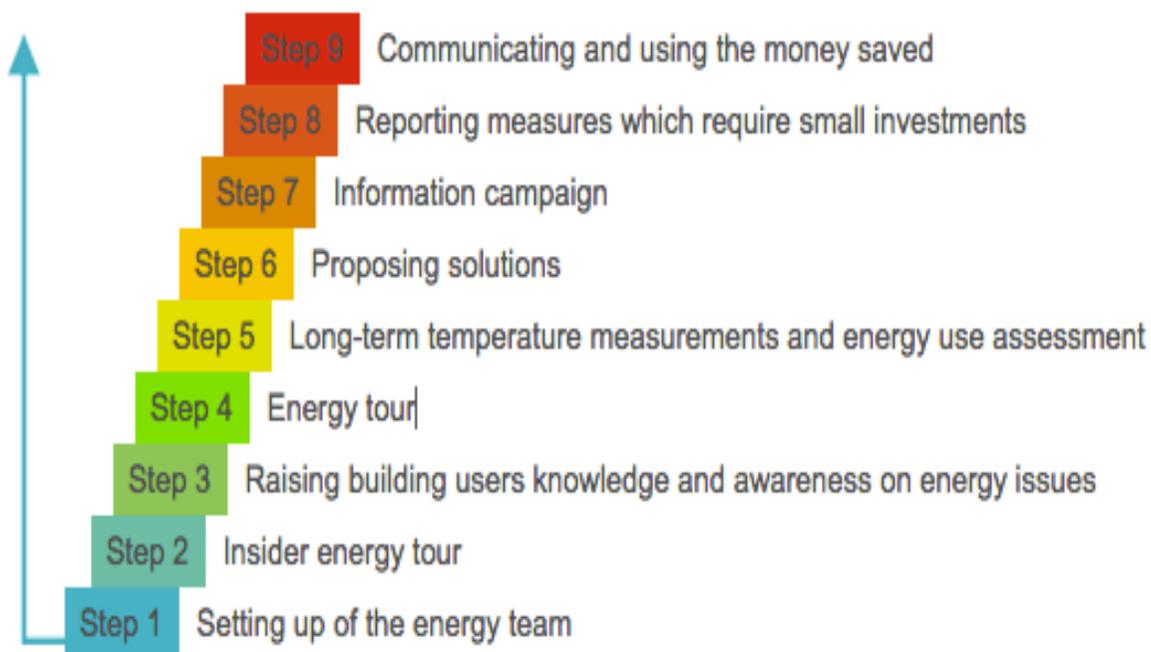
Una scatola di attrezzi per l'efficiamento energetico. La scelta è vostra.



Teen ager

Bambini

La metodologia e il pacchetto di strumenti online del progetto
EURONET 50/50 MAX



www.euronet50-50max.eu/



Adulti

La formazione dei formatori

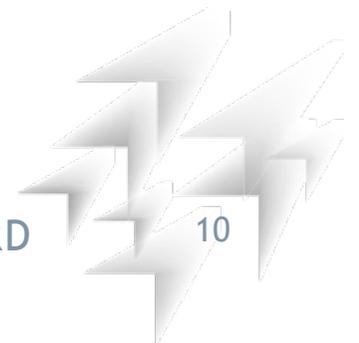
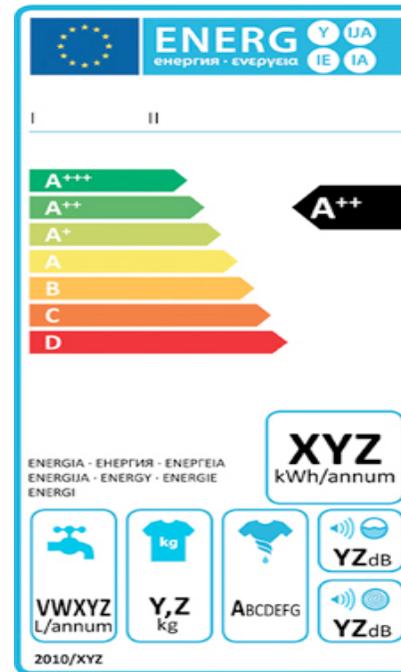


ESEMPI

Teen ager

Bambini

Alla scoperta delle etichette
degli apparecchi elettronici



Adulti

La condivisione 50/50



Teen ager

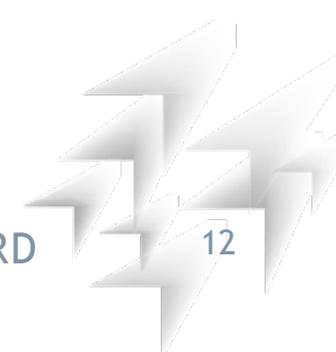
Bambini

Facciamo Bingo con l'energia!

POWER BINGO

12	24	40	59	72
3	30	37	60	63
4	20	FREE	51	72
9	18	39	54	65
1	26	33	49	70

myfreebingocards.com



Adulti

Il software ENERCLLOUD



The screenshot displays the ENERCLLOUD software interface, which is a data management tool for energy projects. It features a complex table with multiple columns, likely representing different energy sources, production volumes, and associated costs or revenues. The table is organized into several sections, with a prominent 'Totale' (Total) row at the bottom of each section. To the right of the main data table, there is a vertical traffic light indicator (red, yellow, green) used for status monitoring, accompanied by a legend explaining the color-coded states. The interface also includes various filters and search options at the top.



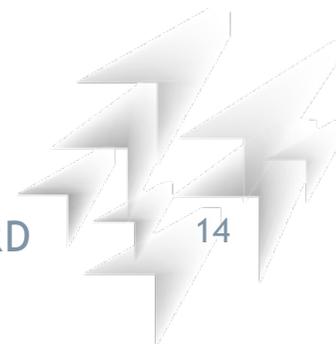
Teen ager

Bambini

L'applicazione mobile ECAS



<http://ecas.netzheimat.at/>





Mix and match mission types

When designing your hunt, a variety of mission types can be used to deliver the best event.



PHOTO & VIDEO

Simple & exhilarating. The classic with a twist!



TEXT

Powerful & flexible. Great for riddles, puzzles & surveys.



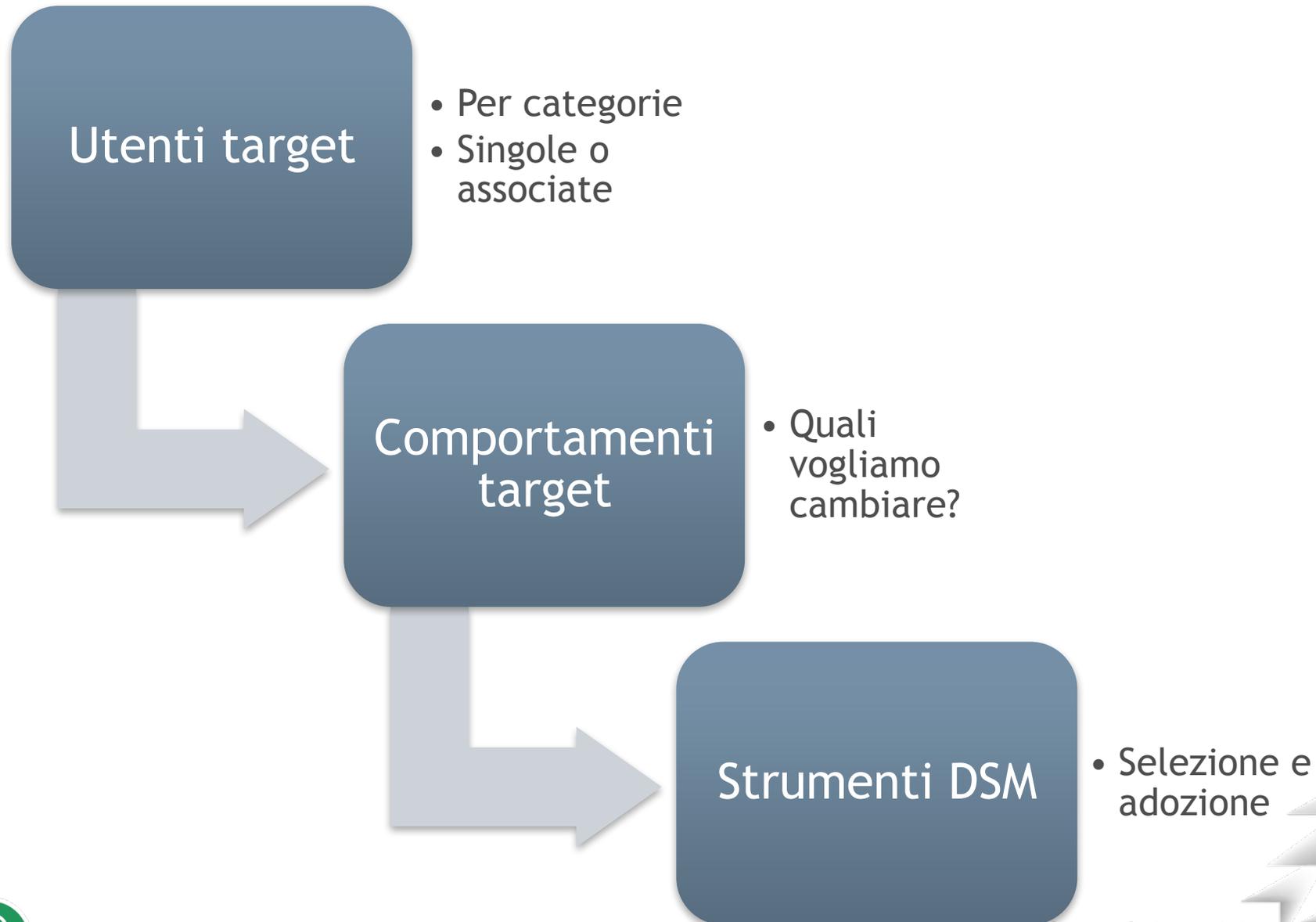
GPS

Creative check-ins. Perfect for location puzzles & race checkpoints.

<https://www.goosechase.com/how-it-works/>



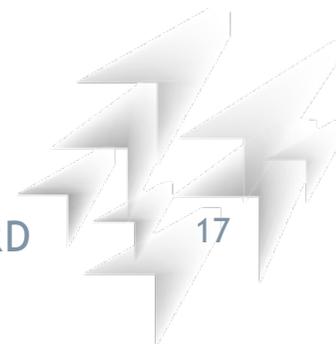
PROCESSO DI SCELTA



REQUISITI DI PERSONALIZZAZIONE

Una volta identificato, ciascuno strumento richiederà un certo grado di personalizzazione alle esigenze specifiche dell'edificio e dei suoi utenti.

Rimaniamo a disposizione per approfondire questi aspetti.



INDICE (PARTE II)

“Alleanza per
l’Edificio”

Percorso
concordato

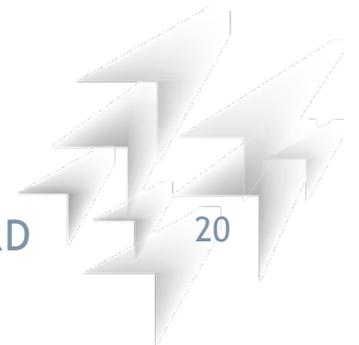
Attività in corso
nel progetto

Prime bozze e
allegati



ATTIVITÀ IN CORSO NEL PROGETTO

- *Ricerca di esempi pratici nello stato dell'arte (piuttosto rari nel caso degli edifici funzionali)*
- *Elaborazione di modelli (aperti)*





Memorandum of Understanding (aka “Building Alliance”)

Related to the Building named (add name if existing) located at
..... (type full address here, including street number, mailbox, city)
identified in the local Cadastre / Building Registry as follows: (type full building
coordinates if available)

Henceforth designated: The Building

Between

The following Parties (feel free to drop or add names):

- TYPE THE ORGANISATION FULL NAME HERE, having its seat in (City),
..... (full address, including street number and mailbox),
tax code or corporate registration number, represented for the
purpose of signing this Building Alliance by  / , in the position
of (President / Director / Manager etc.), henceforth designated: The Building Owner
- TYPE THE ORGANISATION FULL NAME HERE, having its seat in (City),
..... (full address, including street number and mailbox),
tax code or corporate registration number, represented for the
purpose of signing this Building Alliance by  / , in the position
of (President / Director / Manager etc.), henceforth designated: The Building Manager
- TYPE THE ORGANISATION FULL NAME HERE, having its seat in (City),
..... (full address, including street number and mailbox),
tax code or corporate registration number, represented for the
purpose of signing this Building Alliance by  / , in the position
of (President / Director / Manager etc.), henceforth designated: The Building Occupant
- TYPE THE ORGANISATION FULL NAME HERE, having its seat in (City),
..... (full address, including street number and mailbox),
tax code or corporate registration number, represented for the
purpose of signing this Building Alliance by  / , in the position
of (President / Director / Manager etc.), henceforth designated: The TOGETHER Partner
(if different from all of the above)

- Originali, mai usate prima
- Da tradurre in italiano una volta definite
- Open Source (licenza CC-BY-SA)



Attachment 2 (DSM actions)

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	*	
M2	G, I, S	Improve insulation (often a significant p		
M3	G, I, S	Install a sealed rol thermal bridges d openings		
M4	G, I, S	Do periodic mainten their reflection coef		
M5	G, I, S	Upgrade and mainf system clean from c the coils		
M6	G, I, S	Adjust the temperat eave below 21°C i		

Attachment 1 (TOGETHER DSM tools)

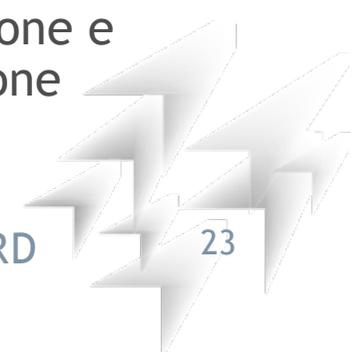
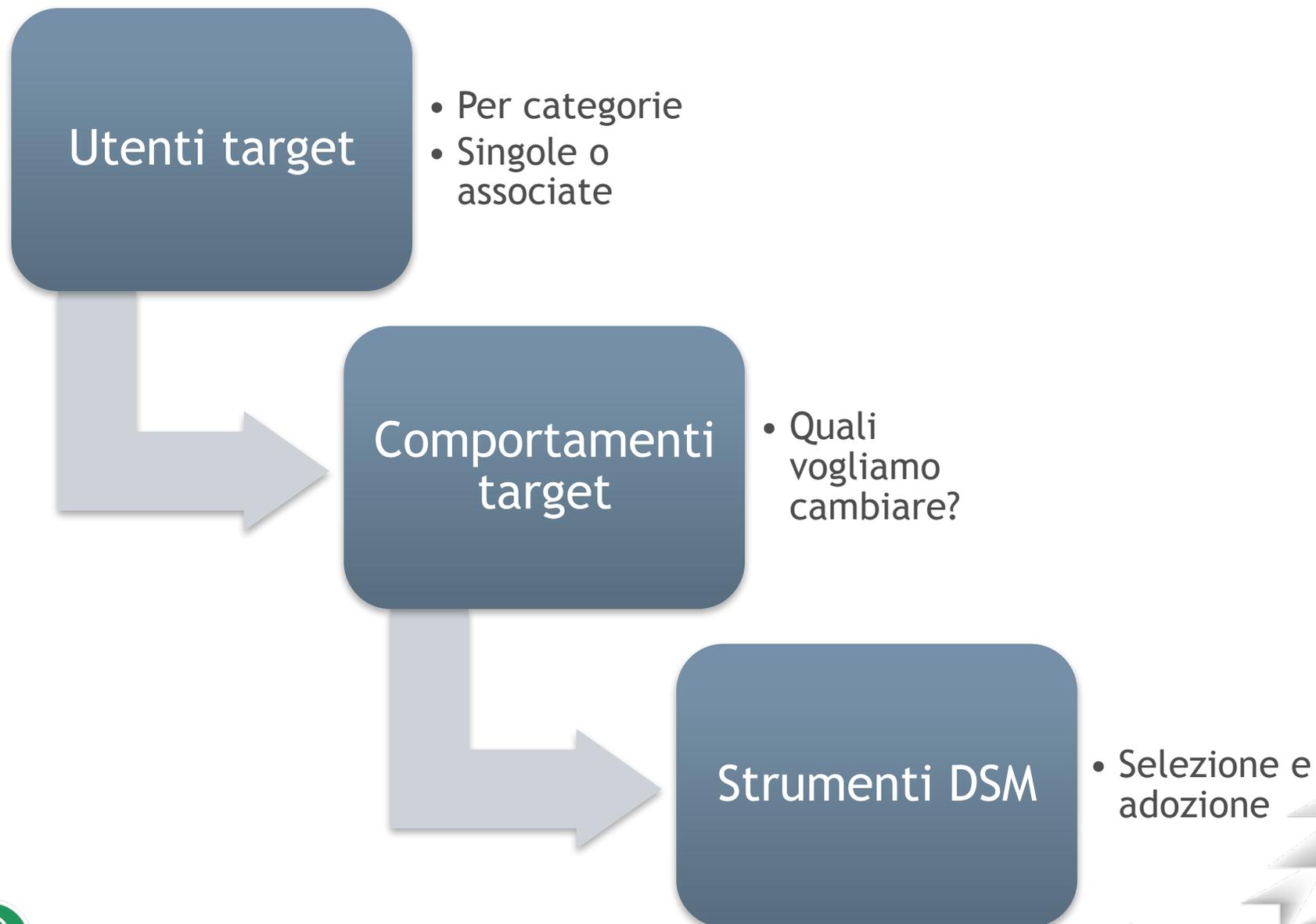
Please put a tick (✓) to identify selected DSM tools in the context of the Pilot:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Public Display of Energy Audits		
Experimental Design and Preparation of Templates		
Simplified Messaging		
TOGETHER Origami and Slogans		
The EURONET 50/50 Max Methodology and e-Pack		
Training of Trainers		
Discovering the Energy Efficiency Labels of Appliances		
The 50/50 Sharing Concept		
The Great Power Bingo!		
ENERCLOUD Software		
Energy Consumption Analyzer (ECAS) mobile app		
The Goosechase mobile app		

Here follows a brief presentation of the tools selected.



PROCESSO DI SCELTA



THANK YOU FOR YOUR ATTENTION



Francesco Molinari
External expert, Province of Treviso
Project TOGETHER



www.interreg-central.eu/together



mail@francescomolinari.it



+39 347 333 7434



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