



## TEMPLATES STEP 3. SUPPLY SIDE FOCUS FOR VALENCIA CITY PROJECT

Supply side focus			
3	<b>I. The collaboration strategy</b>	How to drive supply side motivation into the market opportunity?	<input type="checkbox"/>
	<b>J. The motivation</b>	Which are the motivations of the supply side profiles for engaging in the OSS renovation services network? Which is the message to orient supply capacities within the OSS context opportunity? Which are the correct channels to ensure their participation?	<input type="checkbox"/>
	<b>K. The network</b>	Which measures can avoid the current fragmented market and lack of coordination? How can a services network be built?	<input type="checkbox"/>
	<b>L. The packs</b>	Which packs of solutions are applicable in your context to ease the decision making and allow for a fair and reliable comparison?	<input type="checkbox"/>

Figure 1. Test materials for step 3

This step (and its sub-steps) aims to define **Valencian context supply side offer in order to design a proper long-term collaboration strategy and build an involved, durable stakeholders' network**. The document is an example of the application of the templates to Valencia (Spain) and serves as model for the transferability of the Citizen Hub concept. More information is available in [D2.3.- Citizen Hub protocol for supply side community building and network creation](#) and [D2.5. Suitable renovation packages and supporting services for the two pilots](#).

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## STEP 3.1.- SUPPLY SIDE INVOLVEMENT

### A. Activities, size & roles

#### A.1. Targeted suppliers' Solutions

Object (service provided)	Subject (providing a service)	Role (in the renovation process)
Walls (windows, shadows & insulation)	The informal	The facilitator
Roofs (insulation)	The professional	The reseller
Heating	The SME	The installer
Renewable energy sources	The big company	The all-in

Table 1.- Providers' segmentation matrix (Valencia city pilot)

#### A.2. Targeted suppliers' capacities

Profile	Characterization	Motivation	Opportunities	Probability of success	Objective	Drivers (Messages)
The informal 'bungler'	Size =1person AND p-age >40 AND legal entity =NULL AND recognition =low		Almost none	Low	activation	
The informal 'handyman'	Size =1person AND p-age >40 AND legal entity =NULL AND recognition =high	Secure work	Detected by SS or mouth to ear; when asking for a subsidy; when buying materials at DIY stores; in local social events: local dissemination campaigns addressing benefits and helping fulfilling requirements (lowering complexity)	Medium	activation	Status (recognition, validation, security)
Young prepared	Size <3person AND (p-age <40 OR E-age <5) AND e-level =high AND role =facilitator	Better work	When attending a training; when asking a product provider about a specific solution; when updating association data/quota; when processing subsidies or authorizations; when uploading documents or fulfilling requirements for finalizing administrative processes (authorizations, subsidies, certificates...)	Very High	renovation	Access (knowledge, resources, tools)
Experienced installer	Size <3person AND (p-age >40 OR E-age >5) AND role =installer	New service	When attending a product presentation; when updating association data/quota; when working for PS; when uploading documents or fulfilling requirements for finalizing administrative processes (certificates...)	High	renovation	Access (knowledge, resources, tools)
Settled (prepared & experienced) SME	Size >=3person AND (p-age >40 OR E-age >5) AND Size>€€	New locations	When attending a product presentation; when updating association data/quota; when working for PS; when uploading documents or fulfilling requirements for finalizing administrative processes (certificates...)	Medium	replication	Access (knowledge, resources, tools)
Big all-in company	Size >10person AND (p-age >40 OR E-age >5) AND Size>€€€ AND role =reseller	More work	Almost none	Low	Replication	Power (choose client, set solution)
...				?		Stuff (publicity, clients...)

Figure 2.- Supply side mapping and involvement (Valencia city pilot)

#### A.3. Targeted suppliers' roles<sup>1</sup>

<sup>1</sup> This activity has not been included the pilot project in Valencia.





## B. Campaign strategy design

### B.1. Targeted Suppliers

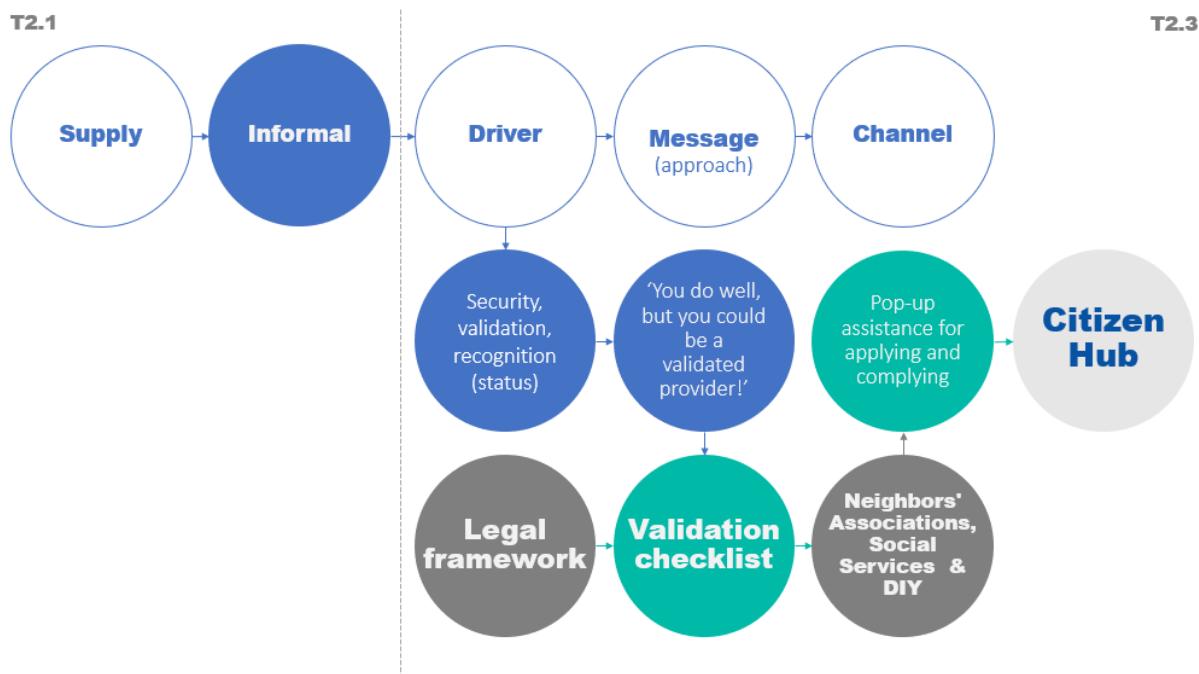


Figure 3.- Collaboration strategy itinerary according to supply side profile 'informal (Valencia city pilot)'



Figure 4.- Collaboration strategy itinerary according to supply side profile 'professional' (Valencia city pilot)



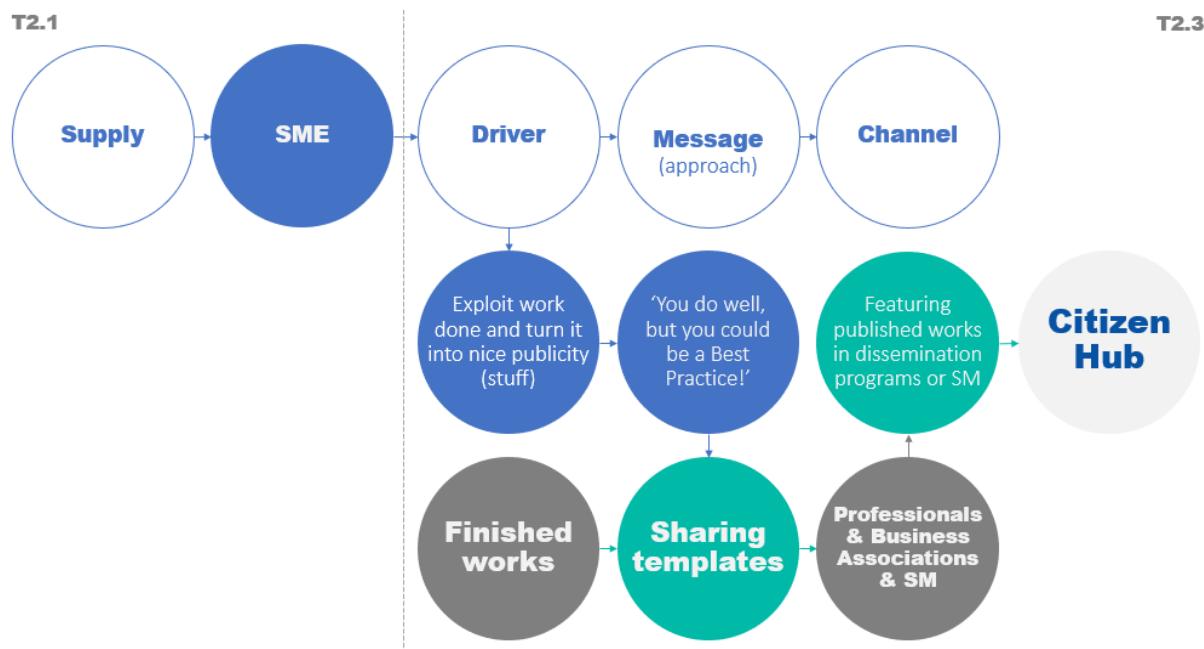


Figure 5.- Collaboration strategy itinerary according to supply side profile 'SME' (Valencia city pilot)

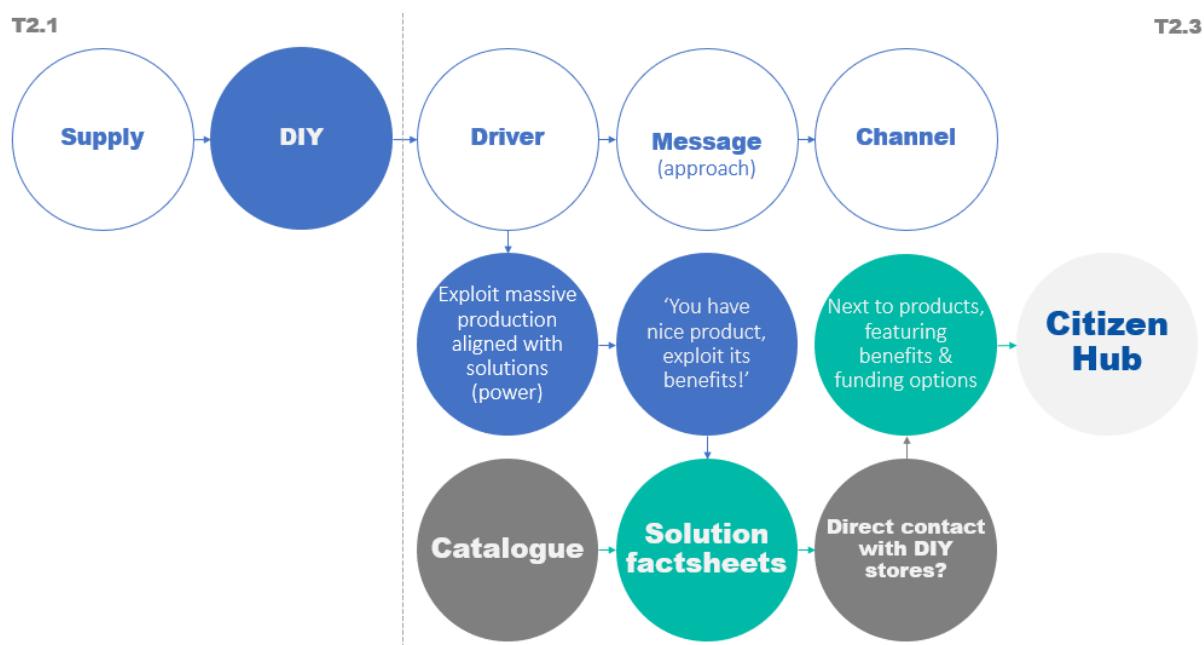


Figure 6.- Collaboration strategy itinerary according to supply side profile 'DIY store' (Valencia city pilot)





## C. Services network

### C.1. Targeted stakeholders

Supply side AB: Producers, suppliers, contractors etc. with good reputation and references on local level		
		Business
Property Managers	VRCP – Colegio de administradores de fincas Consejo Valenciano de Colegios de Agentes de la Propiedad Inmobiliaria (API) Asociación española de Gestores Públicos de Vivienda y suelo (AVS)	Asociación Valenciana de Empresas del Sector Energético (AVAESEN) Asociación de empresas Promotoras de Valencia (APROVA) Federación Valenciana de Empresarios de la construcción (FEVEC)
Professionals	Colegio Oficial de Arquitectos de la Comunidad Valenciana (COACV) Colegio Territorial de arquitectos de Castellón (CTAC) Colegio Oficial Ingenieros Industriales (IICV) - contacto VCE COGITI - contacto VCE Unión Profesional	Asociación de Promotores Inmobiliarios de la Provincia de Alicante (PROVIA) Plataforma Tecnológica Española de Construcción (PTEC) ATECYR – Spanish Technical Association of Air Conditioning and Refrigeration SENSEDI – Best technologies for buildings SIBER – Ventilation systems

Table 2.- Spanish Supply side AB (Valencia city pilot)

## D. Summary



Figure 7.- Valencia supply side engagement ecosystem (Valencia city pilot)





## STEP 3.2- OFFER DESIGN

### A. Verification of the mapping outcomes

#### A.1. Targeted Buildings

Edificio tipo	Categoría: Bloque de viviendas Zona climática: B3 Período de construcción: Entre 1960 y 1979	Características	N.º de viviendas N.º de viviendas por planta N.º de plantas Superficie por vivienda (m <sup>2</sup> ) N.º de estancias N.º de baños	18 2 9 108 3 2	Superficies (m <sup>2</sup> )	Fachada 1 Fachada 2 Medianera Cubierta plana Cubierta inclinada Suelo en contacto con el terreno Suelo en contacto con recinto no habitable Suelo en contacto con el exterior	1141 380 - 216 - 194 - 22	

1. Tu edificio se corresponde con el tipo:



Edificio de viviendas

2. Sus características constructivas son:



Cubierta



Cubierta plana, forjado unidireccional viguetas pretensadas



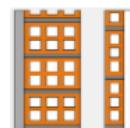
Suelo



Forjado unidireccional de viguetas pretensadas



Fachada



Muro capuchino, ladrillo y cámara de aire



Ventana



Marco metálico, vidrio monolítico, sin rotura de puente térmico



Muro de ladrillo de una hoja revestido

3. Selecciona las instalaciones más frecuentes en tu edificio:

Aire acondicionado frío calor y Calentador de Gas Natural

x ▾



Agua caliente



Calentador de Gas Natural  
(rendimiento 0,8)



Calefacción



Equipo Split (Reversible)



Refrigeración



Equipo Split (Reversible)

Figure 8.- Targeted building characterization (Valencia city pilot)



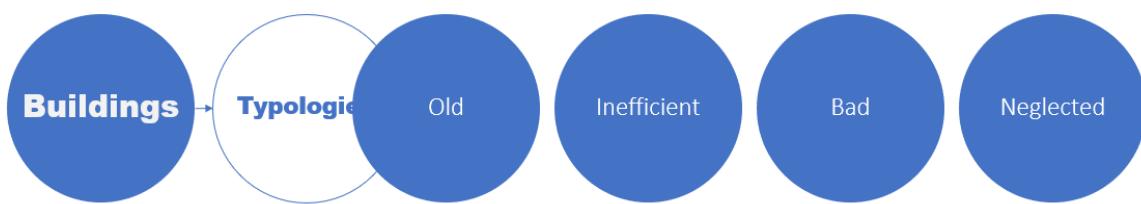


Figure 9.- building stock typologies for Valencia pilot (Valencia city pilot)

## A.2. Targeted population

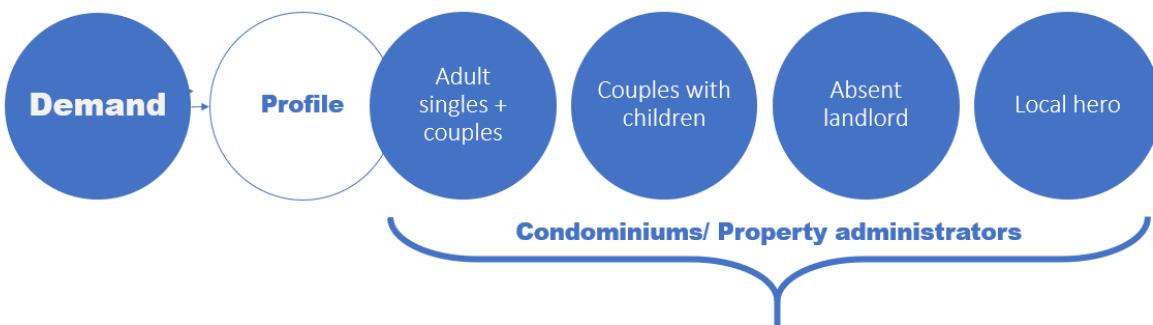


Figure 10.- demand side profiles for Valencia pilot (Valencia city pilot)

## A.3. Targeted Providers

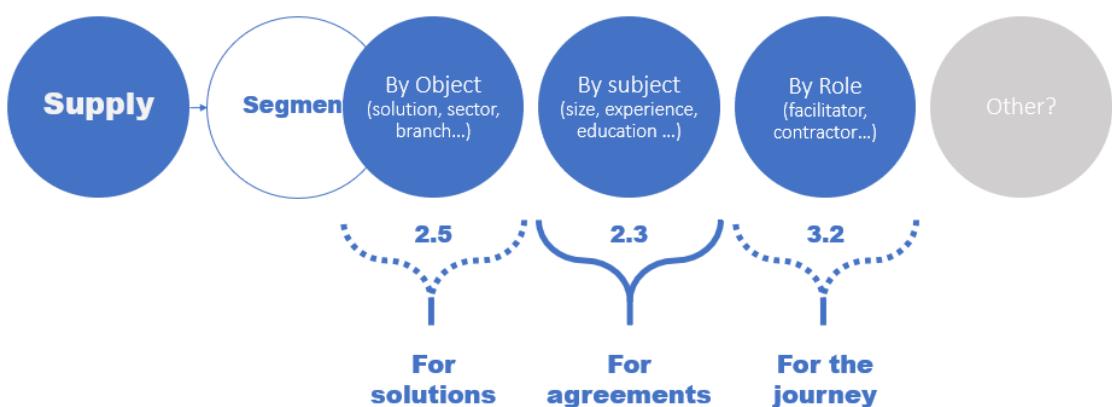


Figure 11.- Supply side segmentation purposes (Valencia city pilot)





## B. Renovation packages

### B. 1. Measures

Category		
Name	Description	Driver
Envelope	Building skin, potentially solving acoustic and/or thermal insulation, and aesthetics	comfort, health, savings, value
RES	New equipment in the generation side, for CO2 and EPnr savings	sustainability
Technology	New equipment in the consumption side, more efficient	sustainability, savings
Behaviour	Operation of the different 'smaller' systems, such as basic home automation, appliances or lightning can make a difference in comfort and consumption	Comfort, health, savings
...		
Class		
Name	Description	Driver
External addition	Application from the outside part of the living areas	Disruption
Element replacement	Changing one kind of element more or less independent from the envelope which involves minimum 'wet' works	Disruption, grants
System addition	Installation of local energy source taking advantage of local conditions	Disruption, grants
System replacement	Changing DHW and/or cooling/heating system for a more efficient one (Aerothal heat pump)	Disruption, grants
Training	Learning some tips and tricks to lower consumption and gain comfort!	Disruption,
...		

Table 3. Potential attributes according to targeted buildings analysis (Valencia city pilot)

Variables		
Name	Description	Driver
Non-energy reno Cost	Cost of priority works for the user (conservation and/or accessibility), in €	Duty
Energy reno Cost	Cost of energy renovation works (needed to access grant scheme), in €	Savings, access to grants
Cost inc. funding	Final cost for user (energy and non-energy, discounting the grant)	Savings
Energy demand	Estimated energy needed to maintain the home in comfort conditions, depending on the thermal envelope, in kWh/m <sup>2</sup> y	Comfort, access to grants
Primary energy consumption (non-renewable)	Estimated energy consumed to maintain the home in comfort conditions, depending on the systems, in kWh/m <sup>2</sup> y (comparable variable not depending on energy source)	Savings, energy bills
CO2 emissions	Translation from PE,nr according to an energy factor	sustainability
Time out of comfort	Hours a year on which is impossible to maintain a home in comfort conditions, according to envelope and systems	Comfort
Number of formalities	Permits needed to undertake the renovation	Disruption, distrust
Number of contracts	Number of professionals needed to contract to design/perform the renovation works	Disruption, distrust
...		

Table 4. Measurable (and accessible) variables (Valencia city pilot)





Measure	Attributes			Variables			
	Name	Class	Category	€/dwell	Energy	CO2	Comfort
rCV	Windows	Envelope	Window replacement	7.816 €	M	M	M
rAE_03	Walls	Envelope	External addition	7.019 €	H	H	H
rAE_02	Roof	Envelope	External addition	1.019 €	L	L	L
rAE_01	Floor	Envelope	External addition	759 €	L	L	L
BC_A	DHW HP	Technology	System replacement	1.705 €	M	M	M
BC_ACR	W/H/C HP	Technology	System replacement	11.583 €	H	H	H
rPV	PV panels	RES	System addition	4.185 €	H	H	L
w	Workshop	Behaviour	Training	0 €	L	L	M
...							
				Improvement:	Low	Medium	High

Table 5.- Solution definition scheme (Valencia city pilot)

## B.2. Scenarios

	Attributes			Variables			
	Measures	Strategy	Cost	With Grant	Energy	CO2	Comfort
00		Do nothing	0,00	0	115,62	21,55	823
02	rCV	Comfort/ Aesthetics	16.618,42	9.971,05	81,34	13,80	101
	rAE_01						
	rAE_02						
	rAE_03						
03	BC_ACR	Disruption	11.583,21	6.949,93	64,29	10,89	19
05	rCV	Disruption/ Comfort	9.522,04	9.522,04	84,83	14,85	625
	BC_A						
06	rPV	Emissions	4.185,17	2.511,10	79,66	15,46	823
007	rCV	True believers	26.055,02	7.255,02	30,06	6,44	8
	rAE_01						
	rAE_02						
	rAE_03						
	BC_ACR						
09	02+07	Comfort/ Aesthetics	20.803,60	4.160,72	27,57	4,69	101
10	03+07	Disruption/ savings	15.768,38	3.153,67	25,88	4,80	19
12	05+07	Disruption/ Comfort/ savings	13.707,22	4.797,53	47,11	8,45	625
13	06+07	True believers	30.240,19	11.440,19	3,23	0,55	8

Table 6.- Scenario definition scheme (Valencia city pilot)





## C. The Citizen Hub offer

### C.1. Network

Supply side AB: Producers, suppliers, contractors etc. with good reputation and references on local level		
Property Managers		Business
VRCP – Colegio de administradores de fincas Consejo Valenciano de Colegios de Agentes de la Propiedad Inmobiliaria (API) Asociación española de Gestores Públicos de Vivienda y suelo (AVS)		Asociación Valenciana de Empresas del Sector Energético (VAESEN) Asociación de empresas Promotoras de Valencia (APROVA) Federación Valenciana de Empresarios de la construcción (FEVEC)
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Table 7.- Spanish Supply side AB (Valencia city pilot)

### C.2. Financial solutions

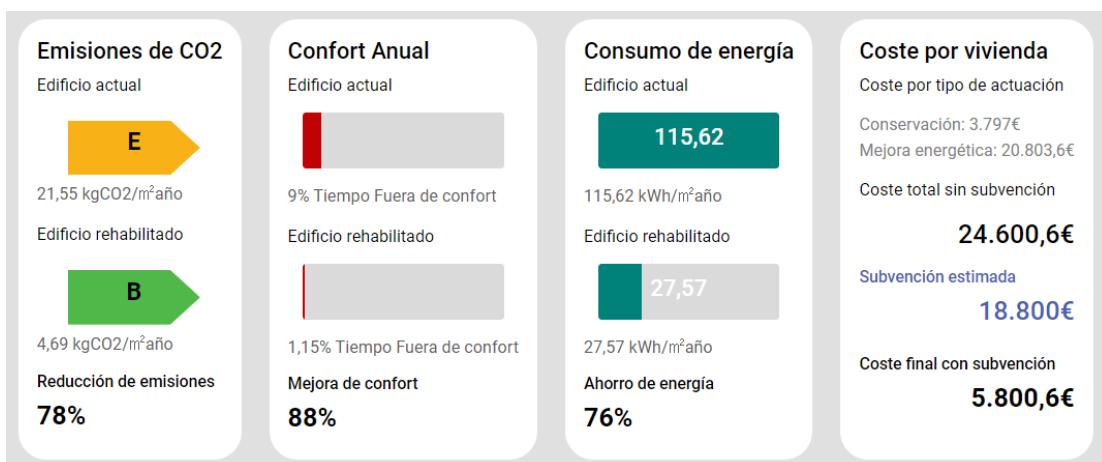


Figure 12.- Scenario 09 with accessibility costs included (Valencia city pilot)

### C.3. Solution packs<sup>2</sup>

<sup>2</sup> This activity has not been included the pilot project in Valencia.

