

PrioritEE PLUS

**Transferring the PrioritEE Decision Support Tool to public
authorities in the MED area**

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Conferência Arrudalab, 7th June 2021



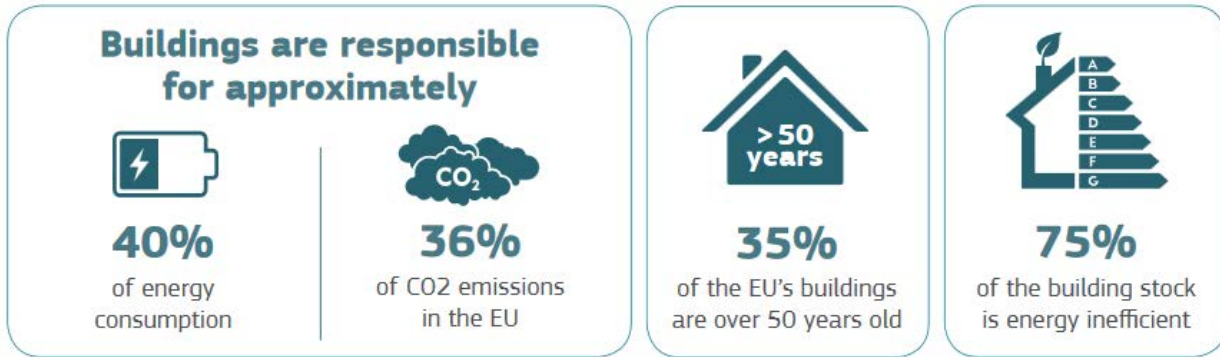
Context

INTERREG

The PrioritEE approach

PrioriTEE PLUS

Energy dependence and an increasing concern about climate change are currently major challenges faced by EU countries. Energy efficiency (EE) is a privileged driver to reduce EU energy and climate vulnerability.









<https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>

Only 0.4-1.2% (depending on the country) of the stock is renovated each year.

More renovation of existing buildings has the potential to lead to significant potential *energy savings* (- 5-6% of the EU's total energy consumption and - 5% of CO₂ emissions)

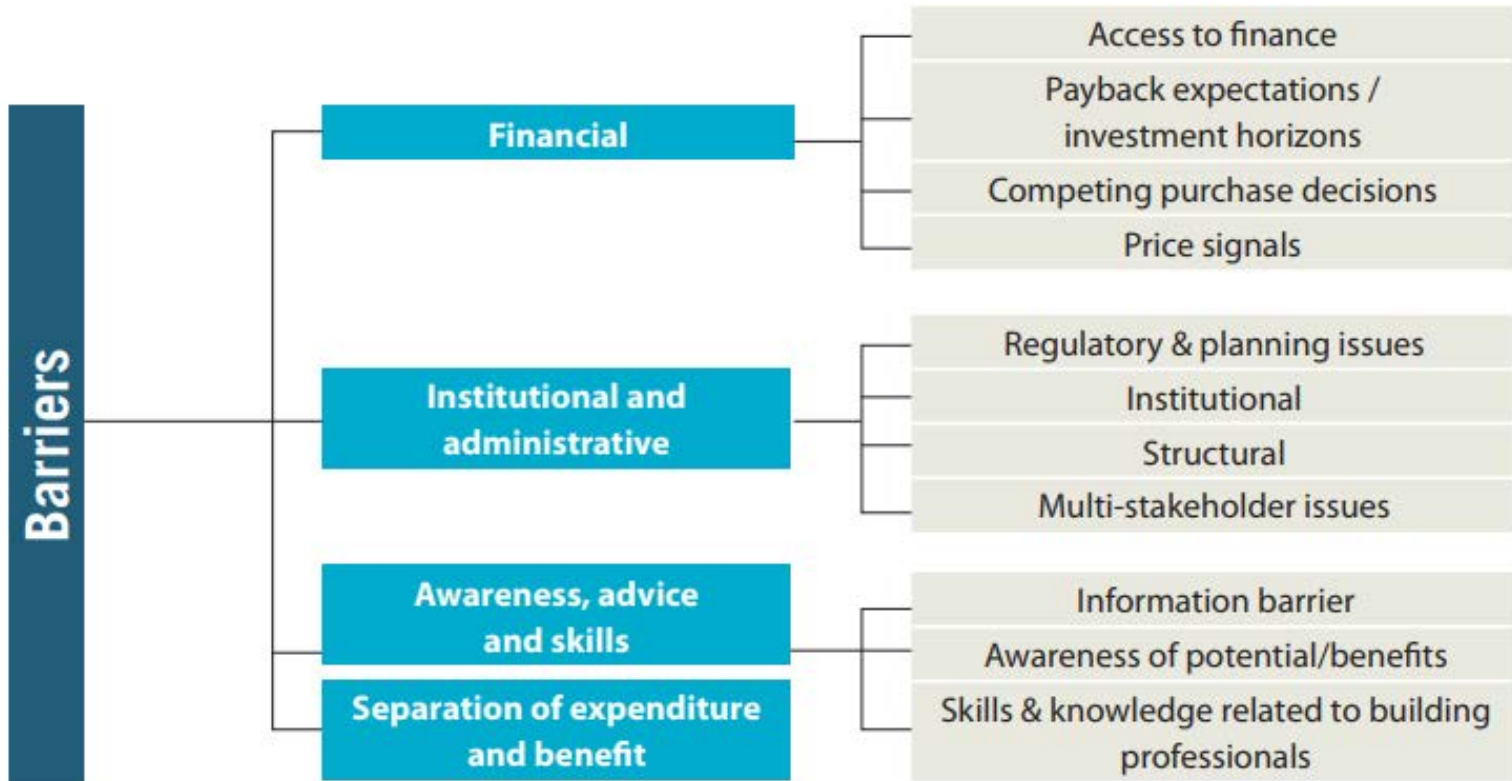
The non-residential sector in Europe

	Wholesale & retail 28%	Detached shops, shopping centres, department stores, large and small retail, food and non food shops, bakeries, car sales and maintenance, hair dresser, laundry, service stations (in gas stations), fair and congress buildings and other wholesale and retail.
	Offices 23%	Offices in private companies and offices in all state, municipal and other administrative buildings, post-offices.
	Educational 17%	Primary and secondary schools, high schools and universities, research laboratories, professional training activities and others.
	Hotels & restaurants 11%	Hotels, restaurants, pubs and cafés, canteens or cafeterias in businesses, catering and others.
	Hospitals 7%	Public and private hospitals, medical care, homes for handicapped, day nursery and others.
	Sport facilities 4%	Sport halls, swimming pools, gyms etc.
	Other 11%	Warehousing, transportation and garage buildings, agricultural (farms, greenhouses) buildings, garden buildings.

<http://bpie.eu/publication/europes-buildings-under-the-microscope/>

Main Barriers affecting building renovation

<http://bpie.eu/publication/europes-buildings-under-the-microscope/>



Public authorities have to manage varied building stocks - need to enhance their institutional capacity in the field of EE and use of RES

(obligations under EPBD and the EED)

CHALLENGES

Supply chain

Quality of workmanship

Technical failure

Disturbance



13 countries 57 regions in MED

10 EU MS + 3 IPA countries

122 million inhabitants

860 000 km² ➔ 15 000 km coastal area

Interreg MED priorities

Thematic priority axes

PRIORITY AXIS 1:

Promoting Mediterranean innovation capacities to develop smart and sustainable growth



PRIORITY AXIS 2:

Fostering low carbon strategies and energy efficiency in specific MED territories: cities, islands and rural areas



PRIORITY AXIS 3:

Protecting and promoting Mediterranean natural and cultural resources areas



Territorial priority axis

PRIORITY AXIS 4:

Enhancing Mediterranean Governance



Axis 2 – Low Carbon Economy

Efficient Buildings	To raise capacity for better management of energy in Public Buildings at transnational level
Result Indicator	Share of regional, subregional and local energy efficiency plans including adapted measures for public building stock

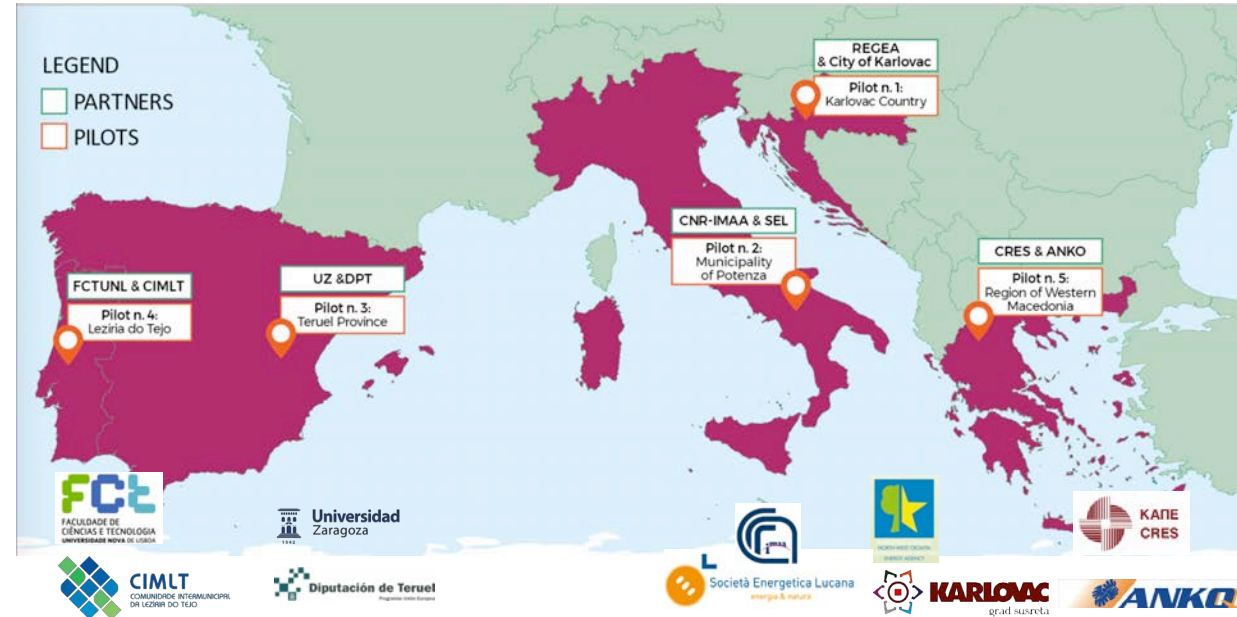
- ❖ Tools to manage and monitor energy consumption in public buildings
- ❖ Strategies to develop energy management plans for public buildings
- ❖ Targets participating in capacity building activities
- ❖ Territories engaged in developing energy efficiency plans/strategies

WHY AND HOW

The overall aim of PrioritEE is to strengthen the policy making and strategic planning competences of local and regional public authorities in the energy management of public buildings in five Mediterranean countries: Italy, Portugal, Spain, Greece and Croatia.

KEY FIGURES

- Full title: Prioritize energy efficiency measures in public buildings: a decision support tool for regional and local public authorities



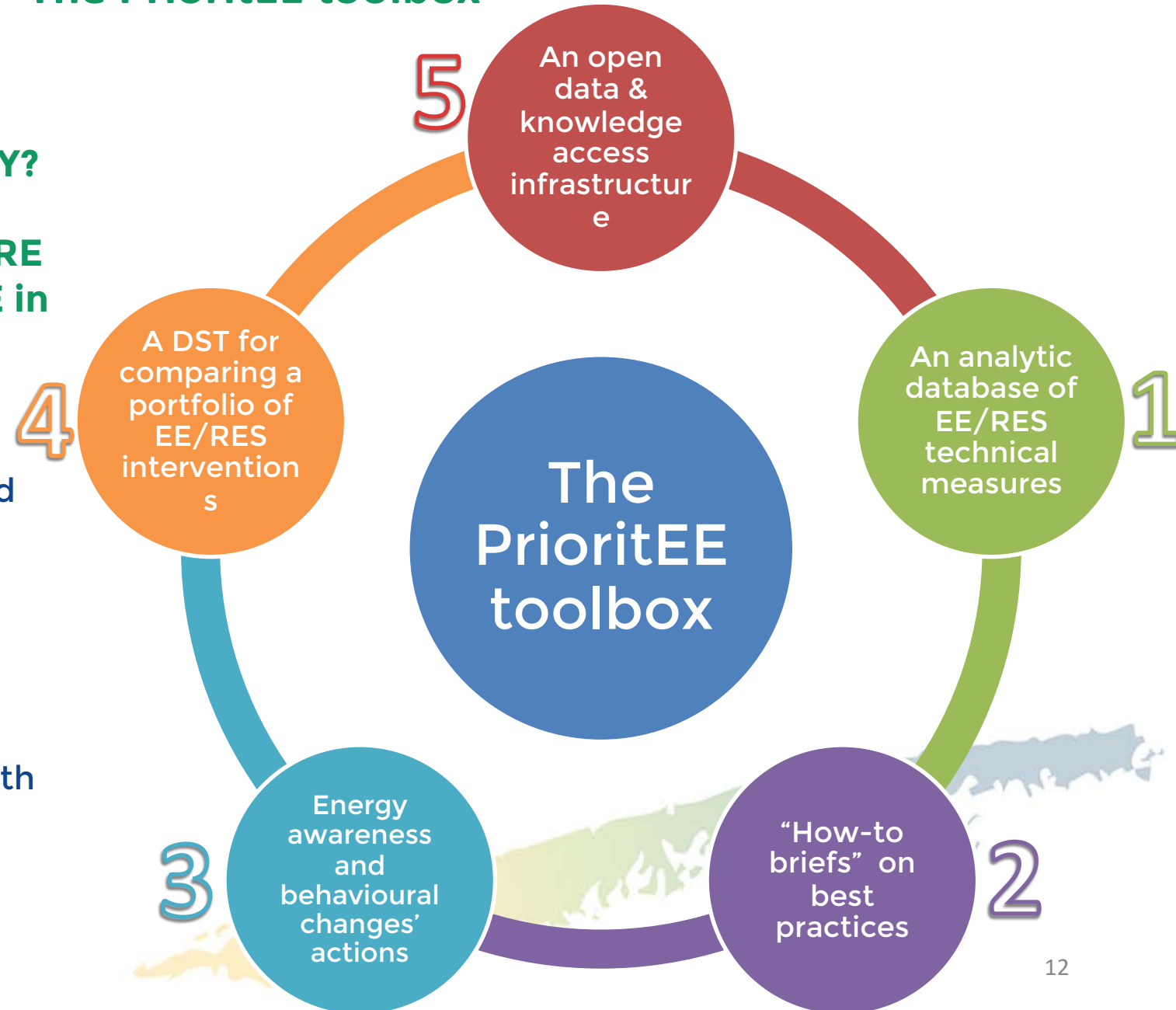
The PrioritEE toolbox

WHAT IS THE BEST VALUE FOR MONEY?
 or
WITH YOUR AVAILABLE BUDGET WHERE SHOULD YOU INVEST TO PROMOTE EE in MPB & LOWER ENERGY COSTS?

What for?

To promote EE and the use of RES in MPB and prioritize municipal Investments.

- transparent and objective evaluation of the investment opportunities (energy and CO2)
- **multiple pathways** available for local public administrators to **achieve EE saving targets**
- **list of interventions per building** labelled with an index of priority



Structure of the analytical database

PrioritEE Analytical Database Structure - Energy Efficiency and Renewable Energy Sources Measures

Buildings Typologies

Cultural Buildings



Educational Buildings



Office Buildings



Sports Facilities



Social Centers



Measures for the Different End Uses

Building
Structure/
Passive
measures

Climatization
and
Ventilation

Water
Heating

Lighting

Cooking

Other
Electric
Equipment

Solar
Photovoltaic
Systems

Micro Wind
Turbines

Country



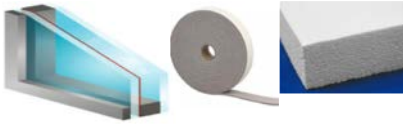
Database (per energy use)

Building
Structure/
Passive
measures



30
Different
Measures

13
Characterization
Indicators



Cooking



19
Different
Measures

15
Characterization
Indicators

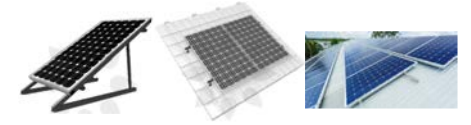


Solar
Photovoltaic
Systems



11
Different
Measures

11
Characterization
Indicators



Climatization
and
Ventilation



75
Different
Measures

12
Characterization
Indicators



Lighting



12
Different
Measures

17
Characterization
Indicators



Micro Wind
Turbines



8
Different
Measures

21
Characterization
Indicators

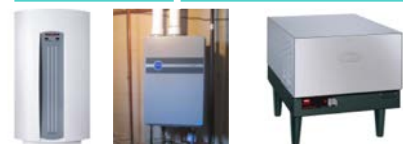


Water
Heating

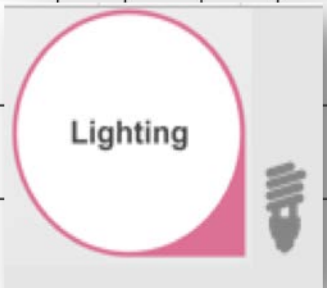


12
Different
Measures

20
Characterization
Indicators



Measure Title	Measure Code	Measure Description/ Typical Applications	Country	Building Typology	Building Sub Typology	Fuel Type	Typical Size (W)	Colour Temperature (K)	Colour Rendering Index (CRI)	Energy Efficiency (Lum/W)	Lifetime (hours)	Average Annual Use (hours/year)	Typical Illuminated Area (m2)	Cost of Measure (Euro/kilolumen)	Cost of Measure (Euro/m2)	O&M Costs (Euro/kWh)	Cost of Measure (Euro/W)	Cost of Measure (Euro/m2) Workspace	Cost of Measure (Euro/m2) Other	Examples of Equipment	Data Sources
Energy efficient lighting in non-residential buildings (Fluo T5 bulb with electronic ballast)	M.L.1	Offices, commercial buildings, and low bay industrial uses (below 5m)	Greece; Portugal; Spain; Croatia; Italy	Cultural Buildings; Schools; Office Buildings; Sports Facilities; Social Centers; Swimming Pools	Small; Large	Electrical Energy	6-80	2800-6500	80-85	72	32000	750		N/A	6,50		11,50	6,50			IEA ETSAP (2012); REGEA Tool (2017)
							16-70	2700-6500	80-85	80	36000	750	N/A	10,50					IEA ETSAP (2012); REGEA Tool (2017)		
Energy efficient lighting in non-residential buildings (High Pressure Sodium)	M.L.3	High bay areas, flood lighting, street lighting, etc., that need to be lit for a long periods	Greece; Portugal; Spain; Croatia; Italy	Cultural Buildings; Schools; Office Buildings; Sports Facilities; Social Centers; Swimming Pools	Small; Large	Electrical Energy	30-400	2000	25	84	20250	750		N/A	16,50						IEA ETSAP (2012); REGEA Tool (2017)
							70-400 (Up to 1000 W available)	3000-6000	65-96	88,5	13000	750	N/A	30,50					IEA ETSAP (2012); REGEA Tool (2017)		
Energy efficient lighting in non-residential buildings (Fluo T5 bulb with electronic ballast)	M.L.1	Offices, commercial buildings, and low bay industrial uses (below 5m)	Greece; Portugal; Spain; Croatia; Italy	Cultural Buildings; Schools; Office Buildings; Sports Facilities; Social Centers; Swimming Pools	Small; Large	Electrical Energy	1-6	2800-6500	<40	127,5	31000	750		13,9	N/A		32,00	22,00			IEA ETSAP (2012); CLTC (2015); REGEA Tool (2017)
							1-6	2800-6500	41-75	118,5	31000	750	20,8	N/A		32,00	22,00		IEA ETSAP (2012); CLTC (2015); REGEA Tool (2017)		
Energy efficient lighting in non-residential buildings (Fluo T8 bulb with electronic ballast)	M.L.2	Offices, commercial buildings, and low bay industrial uses (below 5m)	Greece; Portugal; Spain; Croatia; Italy	Cultural Buildings; Schools; Office Buildings; Sports Facilities; Social Centers; Swimming Pools	Small; Large	Electrical Energy	1-6	2800-6500	76-90	107,1	31000	750		32,7	N/A		32,00	22,00			IEA ETSAP (2012); CLTC (2015); REGEA Tool (2017)
							1-6	2800-6500	91-100	91,6	31000	750	52,8	N/A		32,00	22,00		IEA ETSAP (2012); CLTC (2015); REGEA Tool (2017)		
Energy efficient lighting in non-residential buildings (High Pressure Sodium)	M.L.3	High bay areas, flood lighting, street lighting, etc., that need to be lit for a long periods	Greece; Portugal; Spain; Croatia; Italy	Cultural Buildings; Schools; Office Buildings; Sports Facilities; Social Centers; Swimming Pools	Small; Large	Electrical Energy	1-6	2800-6500	<40	122,6	31000	750		19	N/A		32,00	22,00			IEA ETSAP (2012); REGEA Tool (2017)
							1-6	2800-6500	41-75	107,7	31000					32,00	22,00		IEA ETSAP (2012); REGEA Tool (2017)		
Energy efficient lighting in non-residential buildings (High Pressure Sodium)	M.L.1	Offices, commercial buildings, and low bay industrial uses (below 5m)	Greece; Portugal; Spain; Croatia; Italy	Cultural Buildings; Schools; Office Buildings; Sports Facilities; Social Centers; Swimming Pools	Small; Large	Electrical Energy	1-6	2800-6500	76-90	91,6	31000						32,00	22,00			IEA ETSAP (2012); REGEA Tool (2017)
							1-6	2800-6500	91-100	70	31000					32,00	22,00		IEA ETSAP (2012); REGEA Tool (2017)		



1. Engaging the stakeholders
2. Creating a Sustainable Energy Action Plan
3. Innovative financing of energy efficiency measures in public buildings
4. Roof-top uses for more efficient public buildings
5. Building envelope and sustainable thermal comfort in public buildings
6. Promoting behavioural changes for increased energy efficiency in public buildings
7. Centralised energy management and ICTs in public buildings





Interreg Mediterranean
 PrioritEE

HOW-TO BRIEF

The envelope consists of walls, floors, roofs, windows and doors. The building envelope is the physical separation between the building interior and exterior, and thus it is paramount for energy consumption and thermal comfort in buildings.

The quality of the building envelope, together with its user behaviour, determine the amount of energy needed from the HVAC system for thermal comfort. Certain HVAC systems enhance the energy sustainability of the building; for instance, solar heating or biomass boilers.

As a first step, check the current state of your building envelope to determine whether your building can use less energy to achieve thermal comfort. Then, check the status and efficiency of your HVAC system to minimise its energy consumption.

KEY FACTS:

- Space heating and cooling account for up to 50% of total energy consumption in cold climates and over 60% in the residential sub-sector in cold climate countries
- Setting the thermostat at 20-21°C in winter and 25-26°C in summer (set-points for thermal comfort) can save up to 30% energy in heating and cooling
- Building envelope design and features affects occupants comfort and productivity

Key concepts:

- U-value: measures how effective a material is an insulator. The better insulated a structure is, the lower its U-value (in W/m²K).
- COP: Coefficient of Performance

Nomenclature:

- EE: Energy Efficiency
- HVAC: Heating, Ventilation and Air Conditioning
- HCFs: HydroChloroFluoroCarbons
- VRF: Variable Refrigerant Flow

Overview of potential Energy Efficiency measures

	Envelope	HVAC system
Low investment	<ul style="list-style-type: none"> Small envelope repairs Install internal solar shading 	<ul style="list-style-type: none"> Adequate maintenance Small system repairs & upgrades Add energy efficient features
High investment	<ul style="list-style-type: none"> Add or increase external insulation Add or increase internal insulation Add insulation in air chambers of walls Replace windows Install external solar shading 	<ul style="list-style-type: none"> Replace heating system Install a Variable Refrigerant Flow (VRF) system

BUILDING ENVELOPE AND SUSTAINABLE THERMAL COMFORT IN PUBLIC BUILDINGS

Interreg Mediterranean
 PrioritEE

HOW-TO BRIEF

In Brief... and some tips

- Common problems in the building envelope include leaky windows, unshaded windows, and excessive heat gain from east and west-facing windows.
- Leaky and uninsulated walls and roofs, and old heating and cooling equipment is unacceptably inefficient.
- Check for air leaks around windows, doors, and roof penetrations. Energy savings can be achieved by sealing air leaks.
- Check for excessive heat generated by direct sun radiation and can reduce heat losses by approximately 10%-20%.
- Regular maintenance and small repairs of the heating and cooling systems can result in important energy savings at no or very little cost.
- Installing small energy efficient devices (such as radiator boosters or thermostatic valves) can reduce by 10-15% the energy consumption for space heating.
- Replacing traditional heating systems with more efficient ones can result in up to 50% energy savings.

Further references

Below you can find some references for further insight into possible improvements to your building envelope and the heating/cooling (HVAC) system:

- Solutions for thermal insulation: <http://www.thermocal.es/>
- A collection of videos & articles related to Airtightness, Insulation & Windows: <https://energyquarter.com/energy-saving/>
- Solutions for solar shading: <http://www.yourhome.gov.au/passive-design/shading>
- Overview of the environmental impact and efficiency of HVAC refrigerants: http://www.trane.com/commercial/uploads/pdf/11612/related_literature/refrigerant/hvac_refrigerants.pdf
- Micro CHP – a sustainable innovation? http://www.academia.edu/31469304/Micro_CHP_-_a_sustainable_innovation
- Best practice guide: heat pump technologies: www.seal.ie/Publications/Your_Home_Publications/Heating/Best_Practice_Guide_Heat_Pump_technologies.pdf
- Biomass boilers vs conventional gas boilers: <https://www.thegreengage.co.uk/tech/biomass-boilers-versus-conventional-gas-boilers/>
- More energy efficiency measures for buildings: <http://tribe-h2020.eu/>

Acknowledgements

The figures on this document are from the following sources:

- <https://www.homebuilding.co.uk/>
- <http://gogreena.co.uk/>
- <http://www.fitzperfectwindows.com/>
- <http://hatrolshutters.co.uk/>
- <https://www.wikihow.com/Bleed-a-Radiator>
- <https://www.4homeheating.co.uk/thermostatic-radiator-valves/>
- <https://sustaintrust.org.nz/products/>
- <http://woodpelletsoptions.co.uk/>
- <https://www.climachill.co.uk/heat-recovery-ventilation/>

About PrioritEE

PrioritEE is an INTERREG MED project co-financed by the European Regional Development Fund.

Partners: 

Associated Partners: 

For additional information please visit: <https://prioritee.interreg-med.eu>

ENGAGING STAKEHOLDERS 	Uključivanje dionika	Ενθαρρύνοντας τη συμμετοχή των ενδιαφερόμενων μερών στη βελτίωση της ενεργειακής απόδοσης των δημόσιων κτιρίων	Il coinvolgimento dei portatori d'interesse per il miglioramento dell'efficienza energetica degli edifici pubblici	Envolvimento de Stakeholders	Involucrando a los grupos de interés
CREATING A SUSTAINABLE ENERGY ACTION PLAN 	Izrada održivog akcijskog plana energetske učinkovitosti	Δημιουργία ασφαρών ενεργειακών σχεδίων δράσης	Redazione di un piano d'Azione per l'energia sostenibile	Desenvolvimento de um plano de ação de energia sustentável	Creación de un plan de acción para la energía sostenible en edificios públicos
INNOVATIVE FINANCING OF ENERGY EFFICIENCY MEASURES IN PUBLIC BUILDINGS 	Inovativno financiranje mjera energetske učinkovitosti u javnim zgradama	Καινοτόμες χρηματοδοτήσεις μέτρων ενεργειακής απόδοσης σε δημόσια κτίρια	Finanziamento innovativo delle misure di efficienza energetica negli edifici pubblici	Financiamentos inovadores para medidas de eficiência energética em edifícios públicos	Financiación innovadora de medidas de eficiencia energética en edificios públicos

ROOF-TOP USES FOR MORE EFFICIENT PUBLIC BUILDINGS 	Iskorištavanje krovova za veću energetsku učinkovit	Χρήσεις οροφής για εξοικονόμηση ενέργειας σε δημόσια κτίρια	Multiplicidade de usos nos telhados para Edifícios Públicos mais sustentáveis	Usos de las cubiertas para mejorar la eficiencia energética de los edificios públicos	
BUILDING ENVELOPE AND SUSTAINABLE THERMAL COMFORT IN PUBLIC BUILDINGS 	Ovojnica zgrade i održiva toplinska udobnost u javnim zgradama	Κέλυφος και θερμική άνεση σε δημόσια κτίρια	Interventi sull'involucro edilizio per la riqualificazione energetica ed il comfort termico negli edifici pubblici	Envolvente do Edifício e Conforto Térmico Sustentável em Edifícios Públicos	Envolvente del edificio y confort térmico sostenible en edificios públicos
CENTRALISED ENERGY MANAGEMENT AND ICT IN PUBLIC BUILDINGS 	Centralni sustavi upravljanja energijom i ICT u javnim zgradama	Κεντρική διαχείριση ενέργειας και τεχνολογίες πληροφορικής σε δημόσια κτίρια	Gestione centralizzata dell'energia e ICT negli edifici pubblici	Gestão energética centralizada e tic em edifícios públicos	Gestión centralizada de energía y TIC en edificios públicos
PROMOTING BEHAVIOURAL CHANGES FOR INCREASED ENERGY EFFICIENCY IN PUBLIC BUILDINGS 	Promicanje promjena navika za povećanu energetsku učinkovitost u javnim zgradama	Προγράμματα αλλαγής συμπεριφοράς για μεγαλύτερη ενεργειακή απόδοση στα δημόσια κτίρια	Promuovere i cambiamenti comportamentali per aumentare l'efficienza energetica negli edifici pubblici	Promovendo mudanças comportamentais para aumentar eficiência energética em edifícios públicos	Como promover los cambios de comportamiento para mayor eficiencia energética en edificios públicos

> Good Practices for changing behaviour

- 24 practices
- Schools, residence halls, City Hall, Sports Centre, Fire fighters buildings, social housing
- Schools (teachers/students); Householders; community, social housing tenants; Citizens, Local authorities
- Competitions, games, advices, information campaigns, economic incentives, monitoring systems, Voluntary certification scheme, networks and partnerships (...)

Behavioural Change Good Practices

TITLE	DESCRIPTION	TARGET GROUP	TYPOLOGY
GREEN SCHOOLS COMPETITION	Competition among State High Schools to reduce electric energy consumption during the school year	Schools (teachers/students)	Schools
THE POD	Digital schools programme to engage children in the sustainable use of energy	Schools (teachers/students)	Schools
SCHOOL CARBON REDUCTION PROGRAMME	Providing in-school advice and support to reduce their energy use (audits, etc.)	Schools (teachers/students)	Schools
DORM ENERGY EFFICIENCY PROJECT (DEEP)	Integrated energy-management and behavior-change program for University residence halls via training, showcase, etc.	Schools (university students)	Residence halls

pdf documents downloadable

Interreg Mediterranean > Start Page

Register Login

Decision Support Tool

A decision support tool (DST) has a purpose of helping local and regional authorities to quickly evaluate the possibility for energy (and financial) savings by applying energy efficiency measures in public buildings.

A link to the PrioritEE website

Project co-financed by the European Regional Development Fund

A link to the ERDF website

A link to the REGEA website

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> Decision-Support Tool

Interreg Mediterranean > Front page – Map

PrioritEE

English (en) MARKOREGEA

Click to select a language

All buildings which are input in the application can be seen in the Map – basic information are shown

MAP

BUILDINGS

BENCHMARKING

TUTORIALS

DST for comparing a portfolio of EE/RES interventions

Interreg Mediterranean > Basic Info

PrioritEE

You can upload a building image if you want

It is important to select the building type

If you input the correct address (city, street), you can find the building location in the map – click: FIND ON MAP...

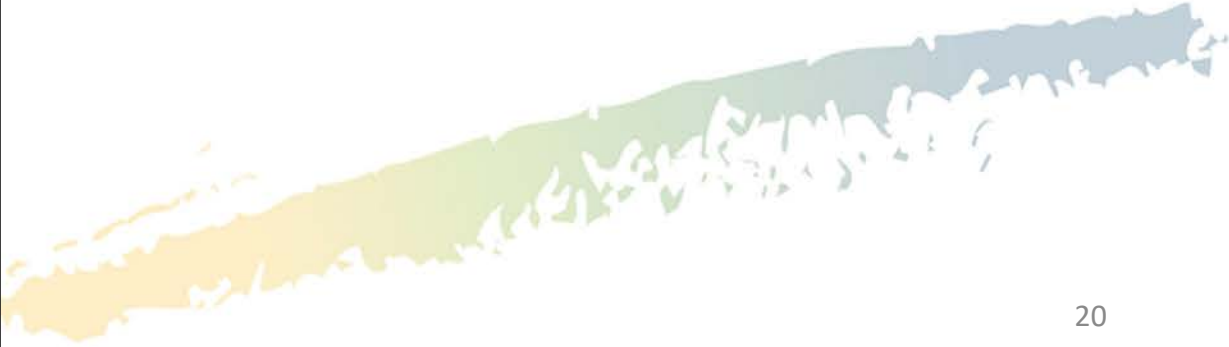
It is important to input information about the building heritage and primary heating energy source

Click SAVE to finish

CLOSE SAVE

Form fields:

- Building name: Test building Zagreb 2
- Building image: Odbani datoteku
- Building type: Educational Buildings
- Description: Lorem ipsum dolor sit amet...
- Year of construction: 1890
- Address: Zagreb, Susjedgradska 1
- Zip code: 10000
- Country: Croatia
- Cadastral reference: ...
- Municipality: Ciniomerac
- Location point: Map of Zagreb with a blue pin
- Building owner name: Grad Zagreb
- Is heritage building: No
- Primary heating energy source: Natural Gas

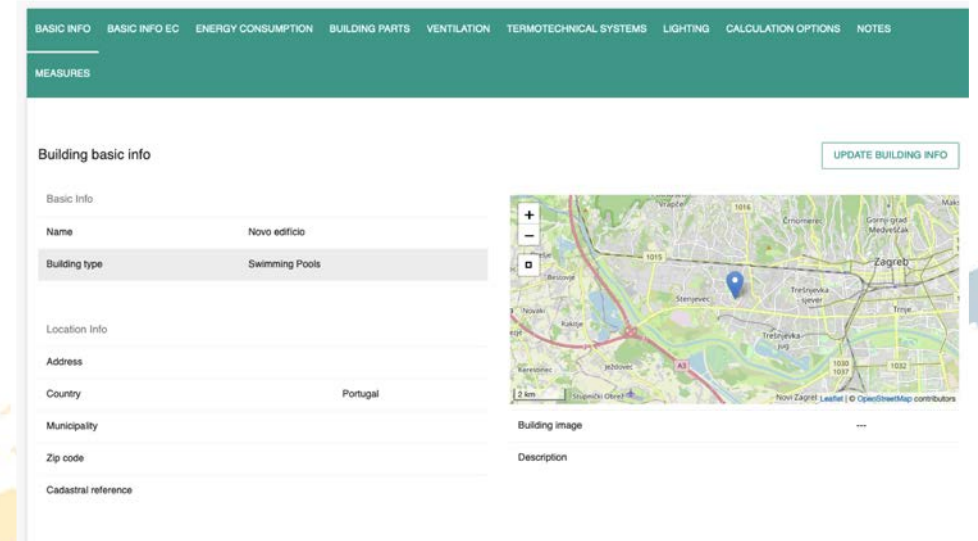
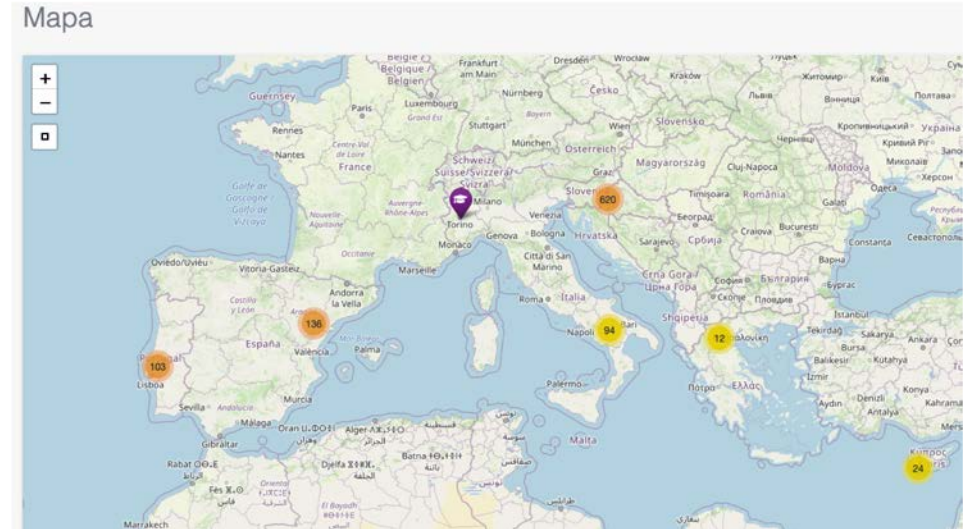


Translated into 6 languages (English, Italian, Portuguese, Greek, Croatian and Spanish)

Near 1000 municipal public buildings included.

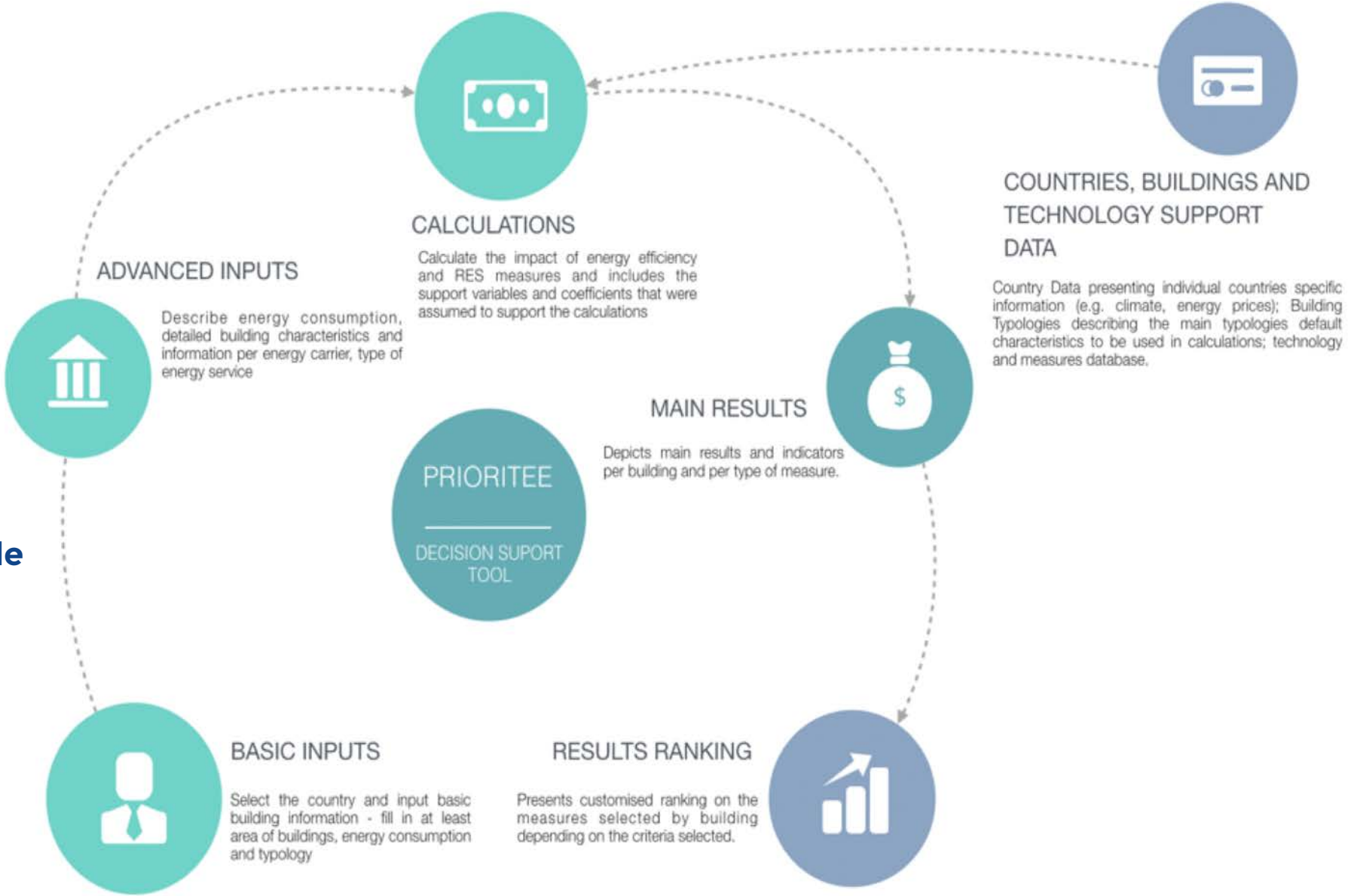
Inputs for each building:

- *Basic Information*
- *Energy Performance Certificate data*
- *Energy Consumption*
- *Building Components*
- *Ventilation*
- *Technical Systems*
- *Lighting*
- *Calculation options (prices, subsidies)*



> Main structure of the DST

- (i) two levels of inputs (basic and advanced)
- (ii) a country-specific data mode
- (iii) MPB building typologies based-structure.



Representative building typologies for each country



Simple to obtain information needs:

- Area
- Occupation schedules
- Number of users
- Construction type (insulation)
- Total energy consumption per energy carrier
- Split of energy consumption per energy service

Making use of energy certificates and energy audits data

For the following energy services:

- Lighting
- Space Heating
- Space Cooling
- Hot water
- Solar PV



Dados detalhados do edifício: Palácio João Afonso

- INFORMAÇÃO BÁSICA DO EDIFÍCIO
 - INFORMAÇÃO BÁSICA DO CERTIFICADO ENERGÉTICO
 - CONSUMO DE ENERGIA
 - COMPONENTES DO EDIFÍCIO
 - VENTILAÇÃO
 - SYSTEMAS DE CLIMATIZAÇÃO
 - ILUMINAÇÃO
 - OPÇÕES DE CÁLCULO
-
- NOTAS
 - MEDIDAS DE EFICIÊNCIA ENERGÉTICA

Definição de Informações Básicas do Edifício

ATUALIZE INFORMAÇÃO DE EDIFÍCIO

Informação básica

Nome	Palácio João Afonso
Tipologia de Edifício	Escolas

Informações de localização

Endereço	Rua Miguel Bombarda
País	Portugal
Município	Santarém
Código postal	
Referência no Cadastro	

Outro

Ano de Construção	2009
Nome do proprietário do edifício	Município de Santarém
Edifício Histórico	Não

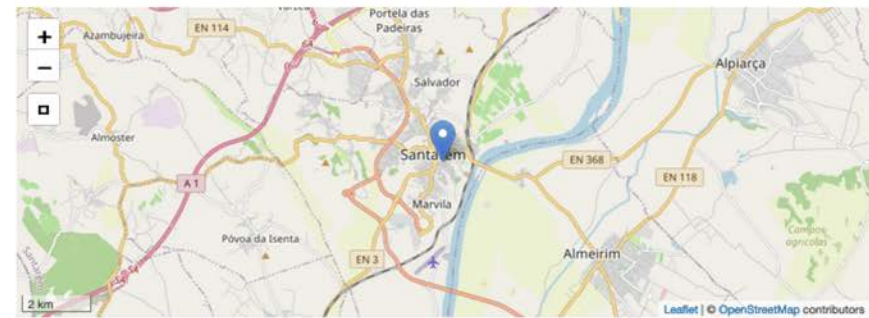


Imagem do edifício

Descrição: Edifício público destinado e conservatório de música e escola de dança.

Benchmarking offers a possibility for:

- Comparison of multiple selected buildings
- Extracting a report for selected buildings

MAP BUILDINGS BENCHMARKING TUTORIALS

Benchmarking

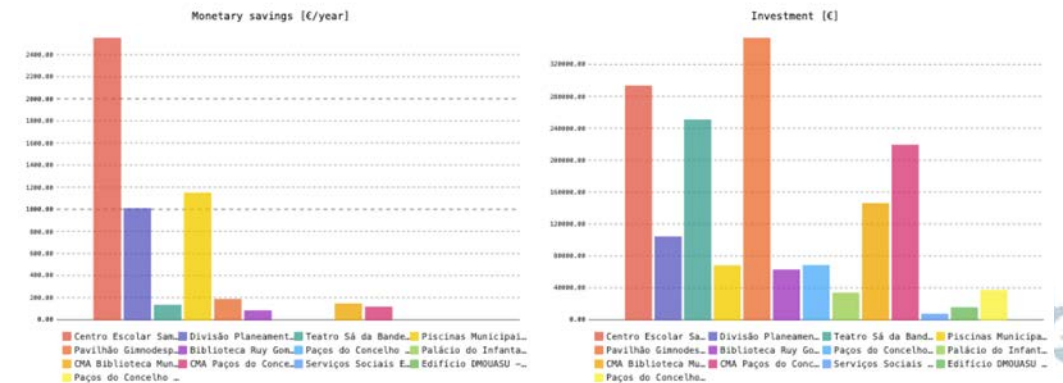
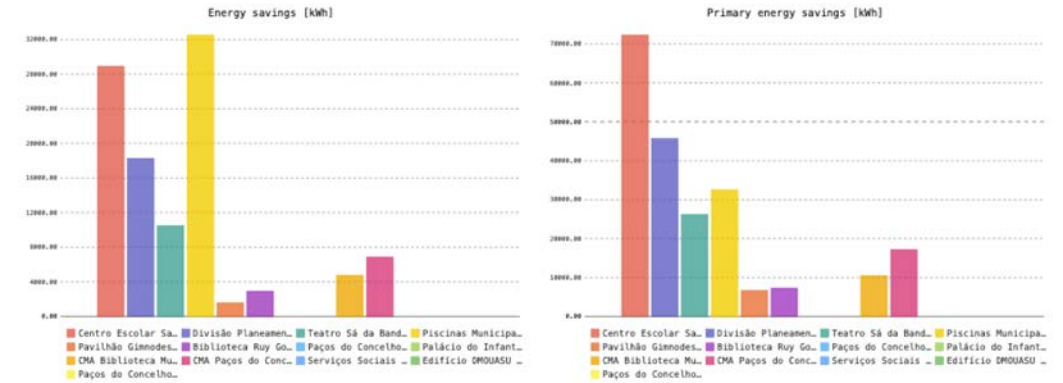
Filters

ADD FILTER

Buildings

Basic info		Measures summary					Benchmarking (before renovation)					Search		
Name	Building typology	Total net heated area [m ²]	Savings [kWh]	Primary energy savings [kWh]	CO ₂ emission reduction [t/year]	Savings [€]	Investment [€]	Simple payback period [year]	Thermal energy consumption [kWh/m ²]	Electricity consumption [kWh/m ²]	Water consumption [l/m ²]	Thermal energy consumption [kWh/m ²]	Electricity consumption [kWh/m ²]	W
Nova zgrada	Sports Facilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Nova zgrada	Sports Facilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Elementary school Svarca	Educational Buildings	3,000.00	204,760.82	31,536.25	8.67	13,867.12	125,000.00	9.05	96.00	3.00	0.05	795.58	0.00	
MUSEO CBC CALANDA	Cultural Buildings	1,600.00	152,427.53	433,895.14	47.70	13,265.42	87,833.00	6.61	130.60	131.34	0.02	5,250.00	5,280.00	
First Example	Sports Facilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paraninfo Universidad de Zaragoza – may be deleted at any time	Office Buildings	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
17 Biblioteca municipal	Educational Buildings	1,230.00	105,657.06	28,842.44	32.91	4,777.08	85,307.40	17.86	165.59	0.00	0.00	410.00	0.00	

Get report for selected buildings



- Tutorial for web-based application of the Decision Support Tool

From PrioritEE to PrioritEE PLUS



Prioritize energy efficiency measures in public buildings: a decision support tool for regional and local public authorities

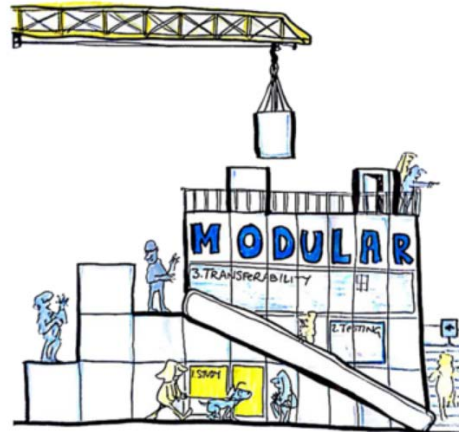
01/02/2017 - 31/07/2019

1st call for modular projects

Transferring the PrioritEE Decision Support Tool to public authorities in the MED area

01/03/2021 - 30/06/2022

4th call for modular projects - restricted for transfer and mainstream projects



SCIENTIFIC PARTNERS

LP.



CNR-IMAA, Italy



1.



FCT -NOVA University of Lisbon, Portugal



2.



Universidad
Zaragoza

University of Zaragoza, Spain



PUBLIC AUTHORITIES

3.



National Laboratory of Energy and
Geology, Portugal



4.



Municipality of Narni,
Italy



5.



Aragonese Federation of Municipalities,
Counties and Provinces, Spain



Portuguese Partners





- 2 local public authorities
- 2 Sectoral agency
- 1 Inter-municipal community


Giver APs
Municipality of Potenza (IT)
Società Energetica Lucana (IT)
Regional Development Agency of Western Macedonia SA - ANKO (EL)
CIMLT - Comunidade Intermunicipal da Lezíria do Tejo (PT)
City of Karlovac (HR)

Receiver AP
I.T.S. Efficienza Energetica (IT)
EUROMED Cities Network/City of Nice (FR)
IREC - Institut de Recerca en Energia de Catalunya (ES)
C.S.P. Gestioni Termiche srl (IT)
CONFAPI Terni (Italian Confederation of Small and Medium Industries) (IT)
Ordine degli Ingegneri della Provincia di Terni (IT)
CAMARA MUNICIPAL DE ARRUDA DOS VINHOS (PT)
AREANA TEJO (PT)
DPT - Provincial Government of Teruel (ES)
RNAE - Associação das Agências de Energia e Ambiente (PT)
ENA – Agência de Energia e Ambiente da Arrábida (PT)
University of Basilicata (IT)




- 3 local public authorities
- 1 training centre
- 2 Higher education and research

- 1 Infrastructure and (public) service provider
- 2 Sectoral agency
- 1 Research and Academia
- 3 Other



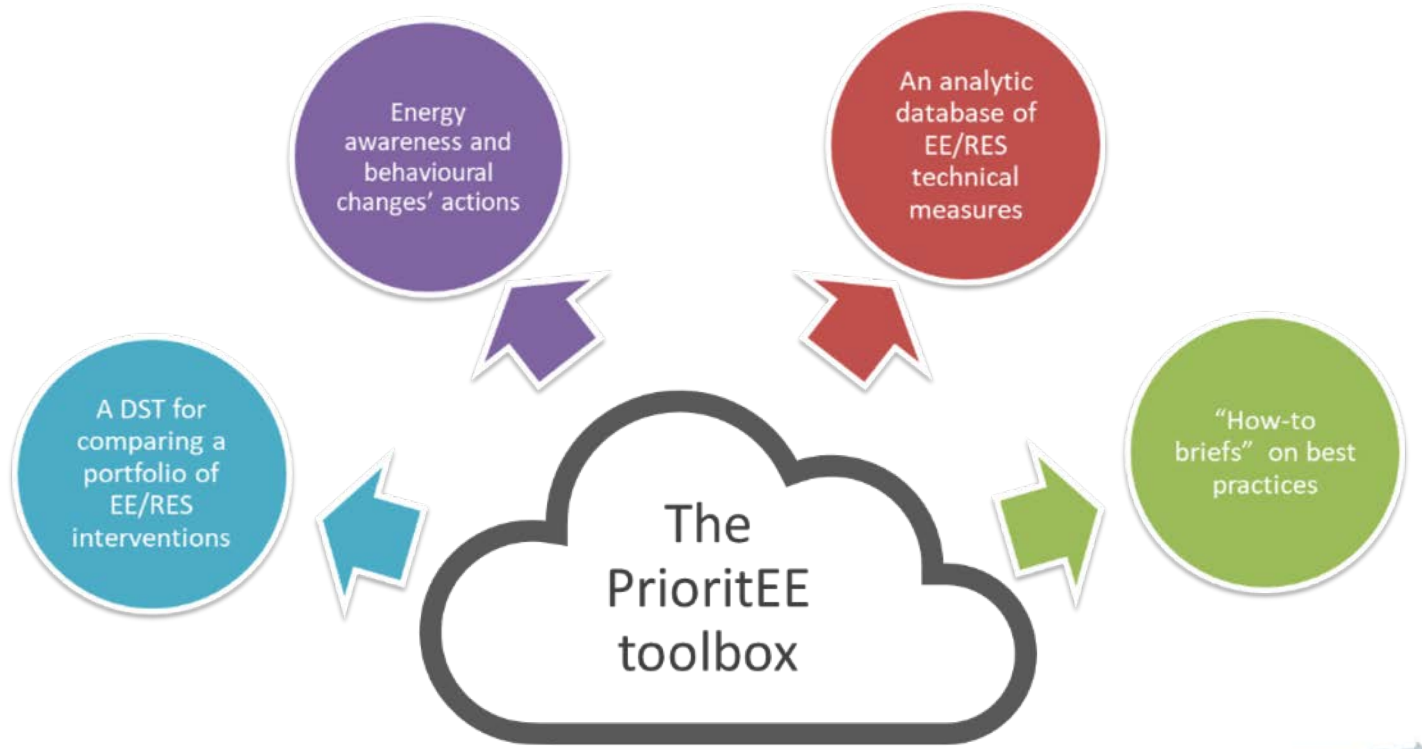
PrioritEE PLUS aims to improve, through transnational cooperation, the **capacities of public authorities in the energy management of Public Buildings and in local sustainable energy planning.**

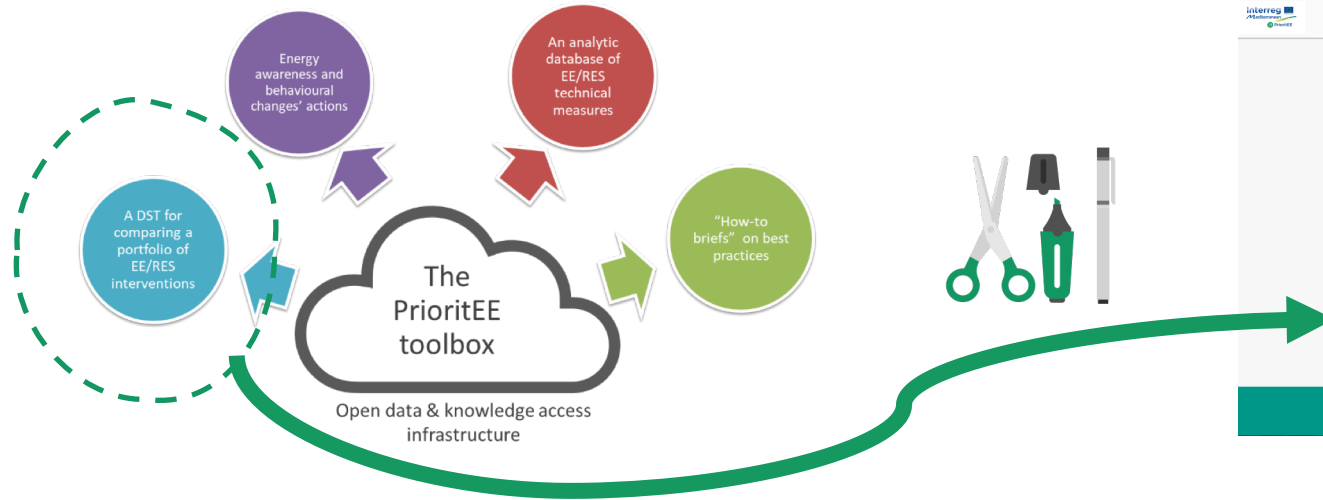


The overall objective is to encourage the use of analytical tools to **support decision making** and the implementation of economically feasible and replicable technical solutions in the various territories of Mediterranean Europe.

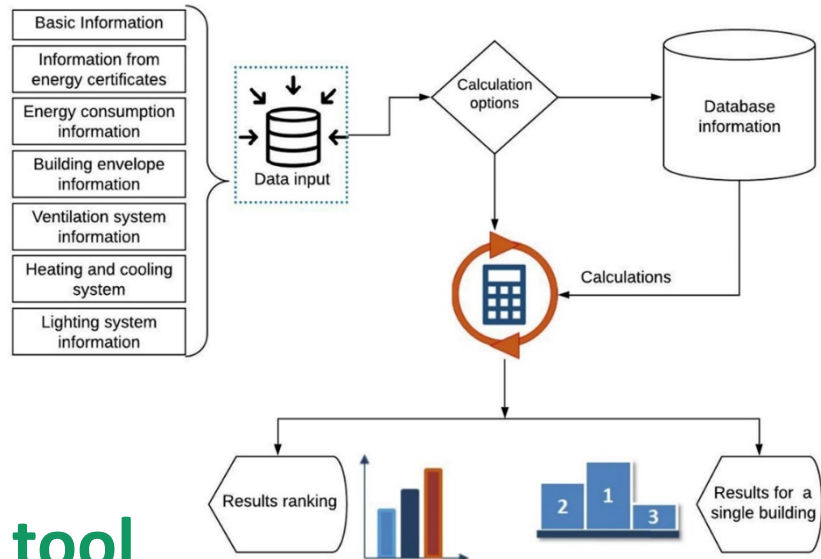
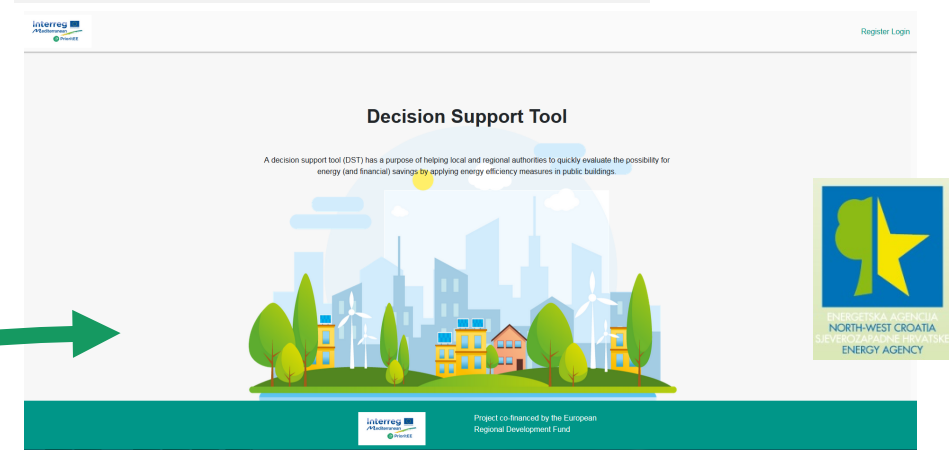


<https://prioritee.interreg-med.eu/what-we-achieve/main-outputs/>



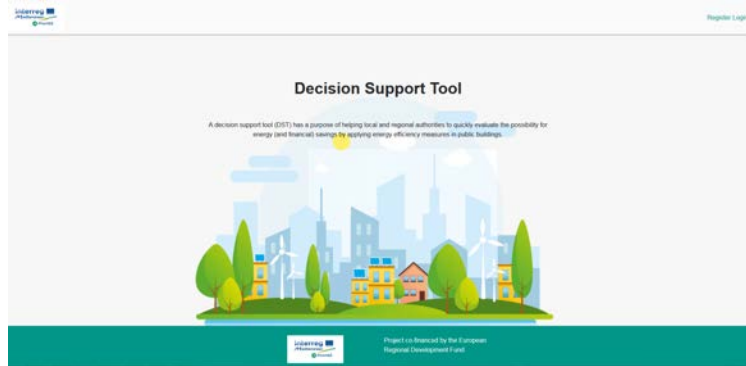


<http://dst.thorium.software/>



DST tool

- The web-based Decision Support Tool, available upon registration on the project web page
- It helps local and regional authorities to quickly and relatively easily evaluate the possibility for energy (and financial) savings by applying energy efficiency and RES measures in public buildings



The transfer process will be based on a structured capacity building program that involves local authorities, regional partners and key local actors, eliciting local specificities, supporting informed decisions on PBs renovation and leveraging the increasingly available information of energy performance certificates.

How to transfer

The commitment of “giver” and “receiver” partners will ensure a wider transfer of knowledge.
“**Givers**” will demonstrate the validity and usefulness of the DST and will assist the “**Receivers**” in its application.



Associated partners will also be a cornerstone for scaling and rolling out the DST at multiple levels.

On-line and in-person capacity building activities organized around the PrioritEE PLUS DST in a modular structure, with self-supporting chapters in online learning environments.

- **Training courses**, in local languages and in English, on a wide range of technical topics on building elements, EE solutions, energy economics, SECAP creation and funding application.
- **Local study visits** and **Peer learning activities** among partners and within the *Efficient Buildings community* to consolidate the cooperation network and support further initiatives



A wider audience will be also reached via the PrioritEE PLUS website, social media channels and semi-annual newsletters. **Conclusive thematic national seminars (webinars)** for the tool dissemination will involve national agencies, local authorities and other key stakeholders.

Milestones:

- *M.2.4.1 - Case Study Reports (M7, September 2021)*
 - *Case Study Energy Efficiency Strategies (M16, June 2022)*
- *M2.4.2 - National Seminars (M12, Feb 2022)*
- *M2.4.3 - Memorandum of Understanding on Decision Support Tool Uptake by Local Public Authorities (M16, June 2022)*

Project co-financed by the European
Regional Development Fund



 EFFICIENT
BUILDINGS

Efficient Buildings Digital Days

POLICY DEBATES & CAPACITY BUILDING WORKSHOPS

Save the date

7-9 & 15-17 June 2021
Online

EBC ANNUAL CONFERENCE



15 JUNE 2021

10:00-12:00



**PRIORITIZE ENERGY
EFFICIENCY MEASURES IN
PUBLIC BUILDINGS: THE
PRIORITEE TOOLBOX**

16 JUNE 2021

10:00-12:00



**FINDING THE RIGHT
INCENTIVE: SISMA SET TOOL
FOR THE BANKABILITY OF
REFURBISHMENT PROJECTS**

17 JUNE 2021

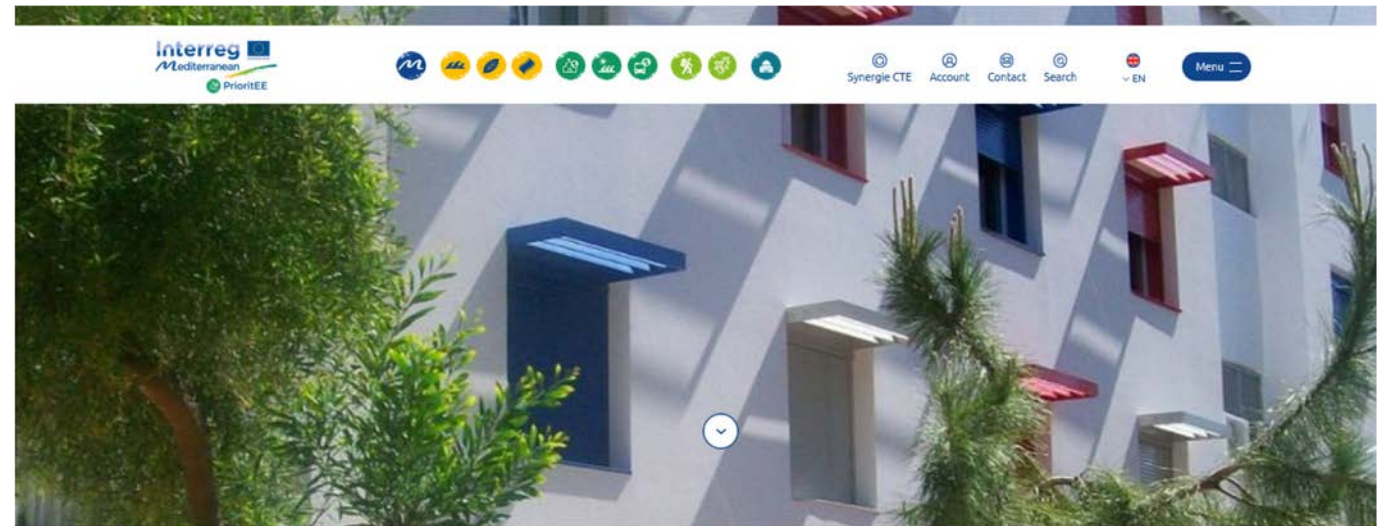
10:00-12:00



**ENERGY EFFICIENCY IN
SCHOOLS' BUILDINGS: TOOLS
FOR ENERGY PERFORMANCE
ANALYSIS**

Obrigado !!

João Pedro Gouveia, FCT-NOVA



PRIORITEE PLUS

PRIORITISE ENERGY EFFICIENCY (EE) MEASURES IN PUBLIC BUILDINGS: A DECISION SUPPORT TOOL FOR REGIONAL AND LOCAL PUBLIC AUTHORITIES

<https://prioritee.interreg-med.eu/>