

A green-tinted map of Europe is the background for the top half of the slide. The map shows the outlines of the European continent and is overlaid with a grid of white lines. The text "TAKING COOPERATION FORWARD" is written in white, bold, sans-serif capital letters on the right side of the map.

TAKING
COOPERATION
FORWARD

TARGET-CE – Izobraževanje

Sašo Mozgan, Hana Kolenc – KSSENA
8.12.2021

TARGET-CE projekt



- ❑ **TARGET-CE** zbira in prilagaja («kapitalizira») orodja IKT, finančne modele, akcijske načrte in gradivo za usposabljanje v zvezi z energetske učinkovitostjo ter vse razporedi lokalnim in regionalnim upravam ter jih integrira v teritorialne in tematske strategije
- ❑ **TARGET-CE** cilj je postati pionir na področju energetske učinkovitosti (EE), ki ponuja in prikazuje rešitve za energetske učinkovitost v javnih zgradbah v okviru edinstvene spletne platforme, BOOSTEE-CE OnePlace (<http://oneplace.fbk.eu>)



The Online Energy Platform

OnePlace

TARGET-CE projekt



<https://www.youtube.com/watch?v=jOl21eNKxzs>



Interreg

CENTRAL EUROPE



European Union
European Regional
Development Fund

TARGET-CE

➔ website



<https://www.interreg-central.eu/Content.Node/TARGET-CE.html>

➔ facebook



<https://www.facebook.com/TARGETCE2022>

➔ twitter



<https://twitter.com/CeTarget>

MODUL #1

The Online Energy Platform

OnePlace

<https://oneplace.fbk.eu/>



The Online Energy Platform

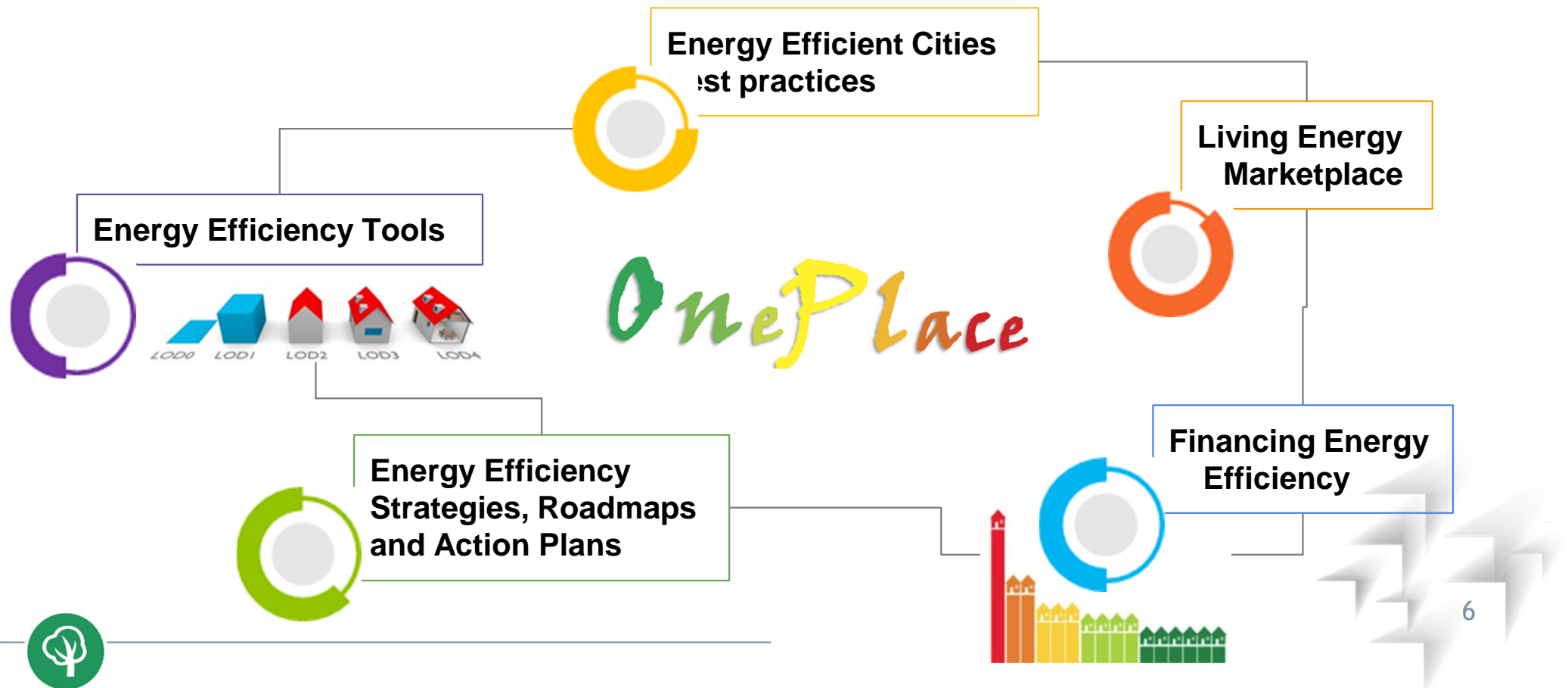
Vsebina 1. modula

1. OnePlace spletna platforma & 3D EMS orodje (BOOSTEE-CE)
2. Energy Ghost simulacijska igra (Energy@School)
3. Living Energy Performance Certificate orodje za upravljanje in baza podatkov (eCentral)
4. Energy Dashboard (CitiEnGov zbirka orodij)
5. Nalepke za spremembo vedenja (GreenSoul)



Spletna platforma - OnePlace

Spletna platforma vključuje 5 medsebojno povezanih modulov, obogatenih z vsebinami, povezanimi z energijo (najboljše prakse, baza podatkov naprav, energetske izkaznice, finance, strategije itd.), ki so prosto dostopni oblikovalcem politik, energetskega načrtovalcem in državljanom, da bi izboljšali upravljanje in razumevanje energetske učinkovitosti



Spletna platforma - OnePlace

Capitalized Projects

Marketplace

EE Cities

EE Strategies

EE Finances

EE Tools



<p>BOOSTEE-CE</p> <p>Interreg CENTRAL EUROPE European Union European Regional Development Fund</p> <p>BOOSTEE-CE</p>	<p>PANEL 2050</p> <p>CEE SEN CENTRAL EASTERN EUROPEAN SUSTAINABLE ENERGY NETWORK</p>	<p>EMPOWER</p> <p>EMPOWER Interreg Europe</p>	<p>ENERGY@SCHOOL</p> <p>Interreg CENTRAL EUROPE European Union European Regional Development Fund</p> <p>ENERGY@SCHOOL</p>
<p>ECENTRAL</p> <p>Interreg CENTRAL EUROPE European Union European Regional Development Fund</p> <p>eCentral</p>	<p>FEEDSCHOOLS</p> <p>Interreg CENTRAL EUROPE European Union European Regional Development Fund</p> <p>FEEDSCHOOLS</p>	<p>CITIENGOV</p> <p>Interreg CENTRAL EUROPE European Union European Regional Development Fund</p> <p>CitiEnGov</p>	<p>GREENSOUL</p> <p>GREENSOUL</p>



Spletna platforma - OnePlace

Capitalized Projects **Marketplace** EE Cities EE Strategies EE Finances EE Tools

Living Energy Marketplace

Living Energy Marketplace aims to connect customers interested in energy efficiency projects to qualified contractors (architects, engineers, auditors, craftsmen, technicians and installers, energy agencies etc.) in order to scale up investments in energy efficiency and to reduce information barriers. It also contains links and information covering the electronic & electric appliances to empower potential investors to make energy-wise decisions.



Device database

Here you can find links to databases covering all products that you are considering buying this kind of products.

[View more](#)



Experts Database

Contains database of links to experts in the field of architecture and energy efficiency, serving as a connection point between customers interested in energy efficiency and qualified professionals.

[View more](#)

Living Energy Marketplace želi povezati stranke, ki jih zanimajo projekti energetske učinkovitosti, s kvalificiranimi izvajalci (arhitekti, inženirji, revizorji, obrtniki, tehniki in monterji, energetske agencije itd.), da bi povečali naložbe v energetske učinkovitost in zmanjšali informacijske ovire.

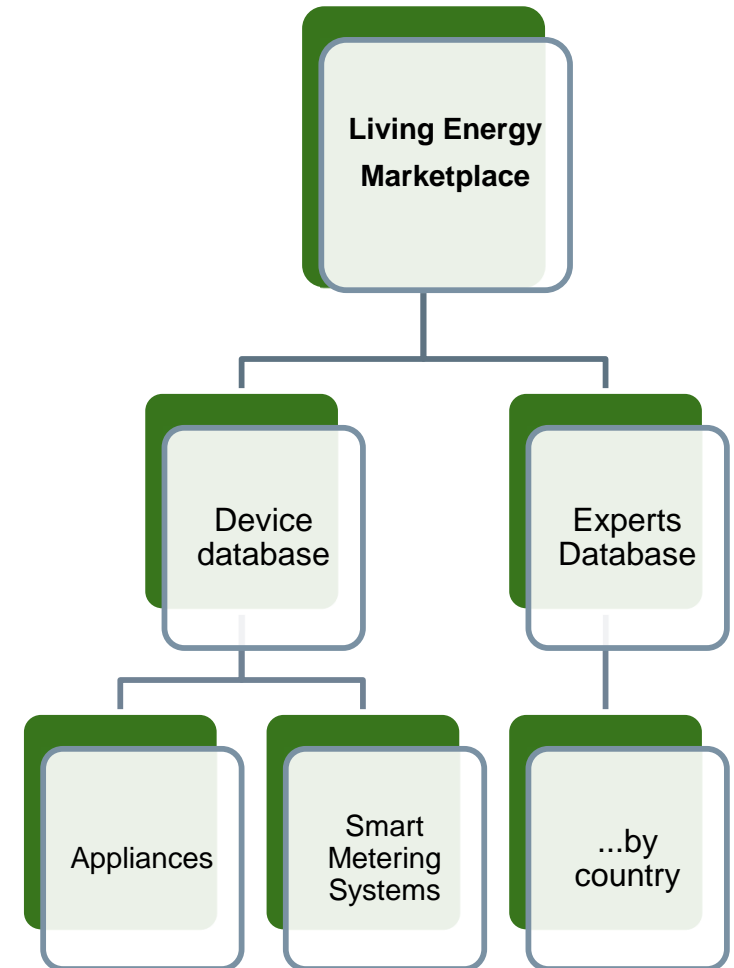


Spletna platforma - OnePlace

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Vsebuje:

- povezave in informacije o elektronskih in električnih napravah, ki potencialnim vlagateljem omogočijo sprejemanje energetske odločitve.
- in podatkovno bazo povezav do strokovnjakov s področja arhitekture, inženiringa, energetske učinkovitosti, obnovljivih virov energije itd. Ta baza podatkov naj bi služila kot povezovalna točka med strankami, ki jih zanimajo projekti energetske učinkovitosti, in usposobljenimi izvajalci.



V bistvu gre za zbirko podatkov o napravah in strokovnjakih, ki potencialnim vlagateljem omogočijo sprejemanje energetske pametnih odločitve.

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Najboljše prakse energetske učinkovitih mest

Search

Search..



Smart metering system in kindergarten Loptica

Koprivnica, Koprivnicko - krizevacka County, Croatia

The whole process of SM system implementation in kindergarten possibilities of available SM systems. In April, tech guys... [Read](#)



Smart metering system in public building "Music Scholl Fran Korun Koželjski Velenje"

Velenje, Savinjsko-Saleška region, Slovenia

Within the pilot action, Municipality Velenje with help of selected external experts, installed the smart meters in the Music Scholl Fran Korun Koželjski Velenje framework and the financial aid of project BOOSTEE-CE, which... [Read More](#)



Low energy reconstruction and repurpose of building

Koprivnica, Koprivnicko, Croatia

The subject of this project was the reconstruction and repurpose of building and management studies in media. Former military... [Read](#)



Energy Management System for Piastów Community

Piastów, Mazovian, Poland

Before the implementation of the investment, a stocktaking was carried out. Stocktaking included energy consumption points, the power, phase voltages, power frequency) with a frequency of 33 kHz, thermal parameters (supply and return temperature... [Read](#)

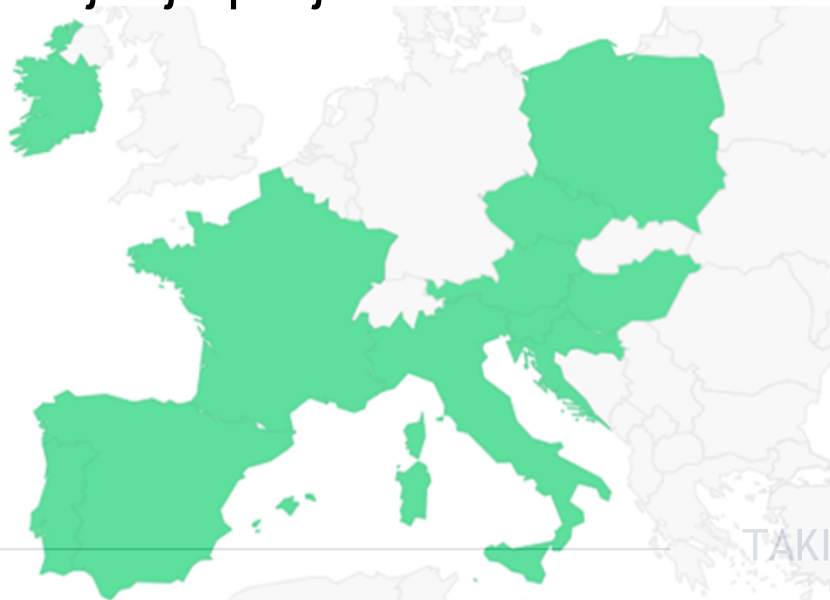
Zavihek energetske učinkovita mesta je namenjen za izmenjavo izkušenj in prepoznavanje dobrih praks v sektorju energetske učinkovitosti za javne organe in druge javne uporabnike. Prikazuje vrsto pristopov in ukrepov, ki so jih različna mesta uporabila za izboljšanje učinkovitosti, in tako pomaga pri usmerjanju mest pri oblikovanju učinkovitih politik in programov energetske učinkovitosti v mestih.

Spletna platforma - OnePlace

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Vsebuje:

- **55 primerov dobrih praks iz 11 držav (ki se nadgrajuje)**, ki prikazujejo primere energetske učinkovitosti stavb.
- Vsak primer dobre prakse prikazuje osnovne informacije, karakteristike sistema, finančne vire in koristi izvajanja projekta.



Spletna platforma - OnePlace

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Strategije energetske učinkovitosti, načrti in akcijski načrti

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Development Fund

EE strategies in schools (Energy@School)
[View more](#)



Roadmaps for Energy Future 2050 (Panel 2050)
[View more](#)

ENERGY GUARDIANS SMART-SCHOOL MANAGEMENT PLAN

Energy-related behaviour in public buildings

This survey will focus on energy-behaviour of public building users (employees & visitors). It is known that individual energy-consumption behaviour patterns in public buildings are different from individual behaviour patterns in residential buildings.

**HELPING CITIES IN CEE REGION
ON THEIR WAY TO CREATE
AND IMPLEMENT SECAPS**



Questionnaire example to change users' behaviour and achieve higher EE (GreeSoul)
[View more](#)

D.T2.2.1 Downstreaming eCentral tools and schemes for better management and renovation of public buildings

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CENTRAL EUROPE
eCentral
European Union
European Regional
Development Fund

How to turn a public building into a NZEB (eCentral)
[View more](#)

Pod zavihkom strategije EE so zbrane vse obstoječe strategije, načrti in akcijski načrti, ki so bili razviti v že zaključenih evropskih projektih.

Spletna platforma - OnePlace

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Financiranje energetske učinkovitosti



Analysis of innovative financing schemes for deep renovation of public buildings (eCentral project)

[View more](#)



Transnational methodological framework

[View more](#)



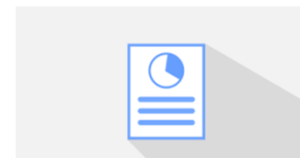
Comparative analysis

[View more](#)



EE financing roadmaps for public infrastructures

[View more](#)



Best practices and investments return models

[View more](#)

Pod zavihkom financiranje EE je vizualna predstavitev rezultatov transnacionalne strategije, finančnih načrtov, primerov dobrih praks in praktičnih korakov za uporabo nacionalnih virov in virov na ravni EU.

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- Analiza inovativnih shem financiranja poglobljene prenove javnih stavb - projekt eCentral
- Primerjalna analiza finančne sheme v državah CE
- Transnacionalna strategija financiranja energetske učinkovitosti
- Transnacionalni metodološki okvir za razvoj načrta EE
- Načrti financiranja energetske učinkovitosti za javno infrastrukturo v občinah CE
- Najboljše prakse in modeli vračanja naložb pri financiranju energetske učinkovitosti
- Kalkulator financiranja projektov energetske učinkovitosti

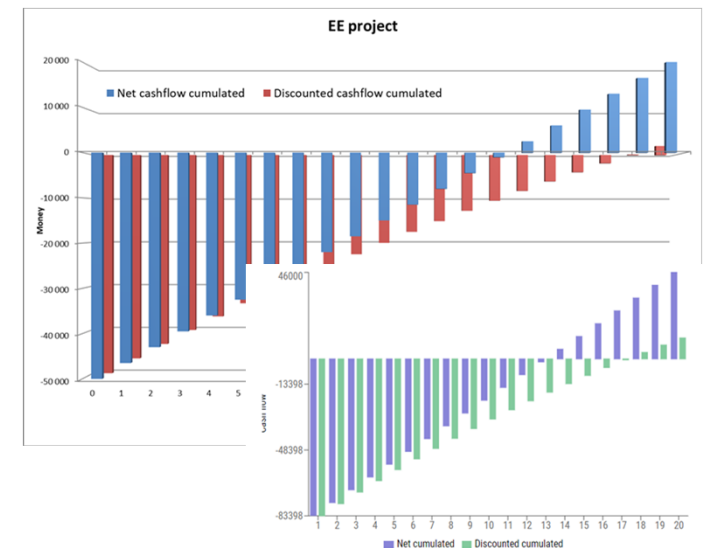


Capitalized Projects Marketplace EE Cities EE Strategies **EE Finances** EE Tools

Financiranje energetske učinkovitosti

- ❑ Preprost kalkulator EE, ki daje uporabniku osnovno indikativno predstavo o donosnosti in smiselnosti naložbe v projekt energetske učinkovitosti ali OVE.
 - ❑ Preračunava samo z lastnimi viri, brez upoštevanja subvencij ali posojil, kar lahko bistveno spremeni predvidene vrednosti (če gre za subvencije, se NPV in IRR povečujeta, dobe vračila pa se skrajšujejo, medtem ko posojila vplivajo na investicijo v nasprotni smeri)
 - ❑ Vključeni so pogoji in opredelitev osnovnih finančnih kazalnikov (NPV, IRR, Diskontna stopnja, obdobje vračila)
 - ❑ Vključuje grafično ponazoritev denarnega toka in diskontiranega denarnega toka.
- Pomembno opozorilo – kalkulator je le okvirno orodje, za konkretne naložbene izračune je zelo priporočljivo opraviti ustrezno finančno analizo s strani finančnega strokovnjaka!

Energy Efficiency Financing Project Calculator



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Orodja energetske učinkovitosti



3DEMS

The 3D energy management tool (3DEMS) serves as seedbed for in building models for energy-related needs.

[View more](#)

BOOSTEE-CE



Energy Ghost simulation game

Energy@school app developed as an educational tool to train students

[View more](#)

ENERGY@SCHOOL



The Living EPC Tool

The Living EPC Tool is a complex interactive web-based application for public authorities to identify investment opportunities, by

[View more](#)

eCentral



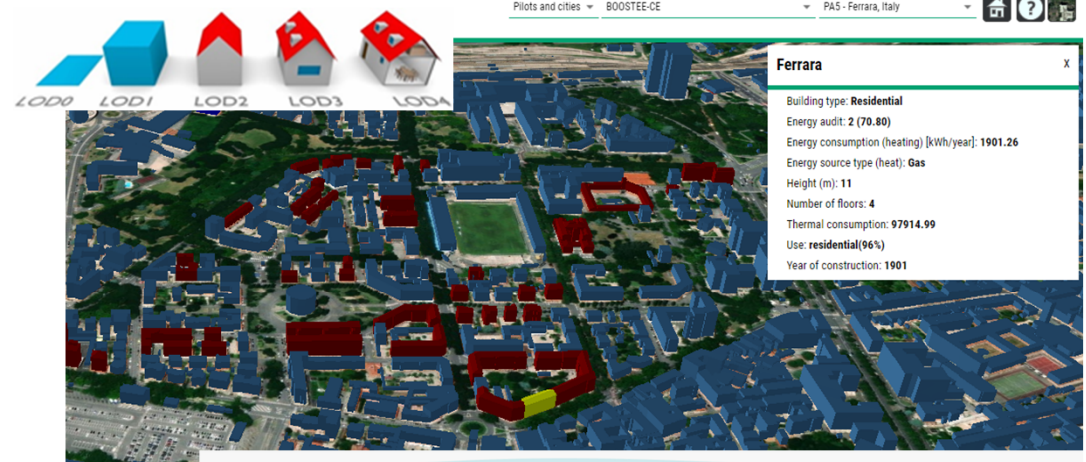
Energy Dashboard

[View more](#)

CitiEnGov



EE Stickers



Main page Discussion

Main Page

Welcome to the CitiEnGov Toolkit

The CitiEnGov Toolkit has a focus composed of two parts:

- the first part contains information about energy data in different regions of Central Europe (regions of project partners), and
- the second part describes a **role of energy topic within Public Authorities**

The topics of the Toolkit are the three main sectors that CitiEnGov project is dealing with:

- **Buildings**

Buildings
Mobility
Public lighting

National sections
Österreich
Hrvatska
Deutschland
Magyarország

The Online Energy Platform

1. OnePlace spletna platforma & **3D EMS orodje (BOOSTEE-CE)**
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The Online Energy Platform - OnePlace - the 3D EMS tool -

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EE Strategies

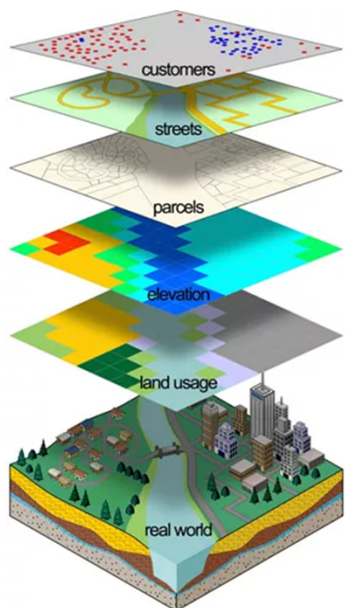
EE Finances

EE Tools

3D Energy Management System; 3D EMS tool (<https://oneplace.fbk.eu/3d/>)

Prostorski in neprostorski energijski podatki, ki so integrirani s 3D modeli mest v GIS okolja, so bili v nekaterih mestih že sprejeti, vendar smo zelo daleč od njihove široke uporabe in vsakodnevne uporabe.

DATA +
GIS +
3D CITY
MODELS



Čeprav so sedanje pobude pokazale potencial geoprostorskih podatkov, 3D modelov mest in spletnega GIS-a za boljše načrtovanje in upravljanje energetske učinkovitih stavb, še vedno obstaja vrzel med odnosom »lepo imeti« in odnosom »treba imeti«.

Obsežnejša in zmogljivejša uporaba GEOPROSTORSKIH
PODATKOV in orodij IKT ZA ENERGETSKO
UČINKOVITOST lahko podpre ustvarjanje PAMETNIH in
NIZKO OGLJIČNIH MEST.

The Online Energy Platform - OnePlace - the 3D EMS tool -

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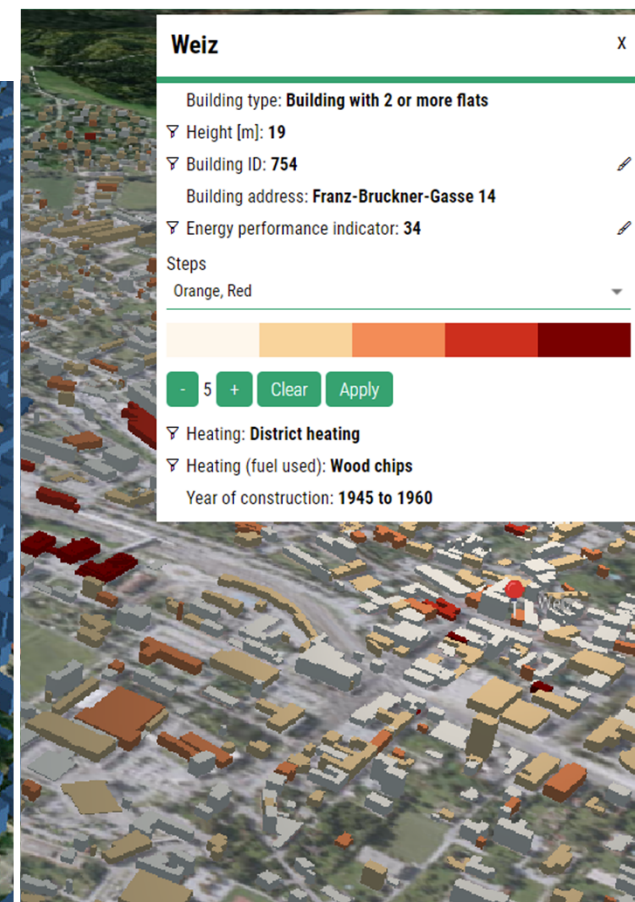
EE Strategies

EE Finances

EE Tools

3D Energy Management System; 3D EMS tool (<https://oneplace.fbk.eu/3d/>)

3D Energy Management System je modul (orodje WebGIS) za vizualizacijo, poizvedovanje in upravljanje energetske informacije/rabe/izgube/revizije (javnih) stavb z uporabo 3D modelov stavb.



The Online Energy Platform - OnePlace - the 3D EMS tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



3D Energy Management System; 3D EMS tool (<https://oneplace.fbk.eu/3d/>)

Na pilotnih območjih so bile za izbrane javne stavbe izdelane geoprostorske baze z urbanističnimi in energetske podatki, da bi jih združili s 3D geometrijami stavb v okviru orodja 3DEMS.



The Online Energy Platform - OnePlace - the 3D EMS tool -

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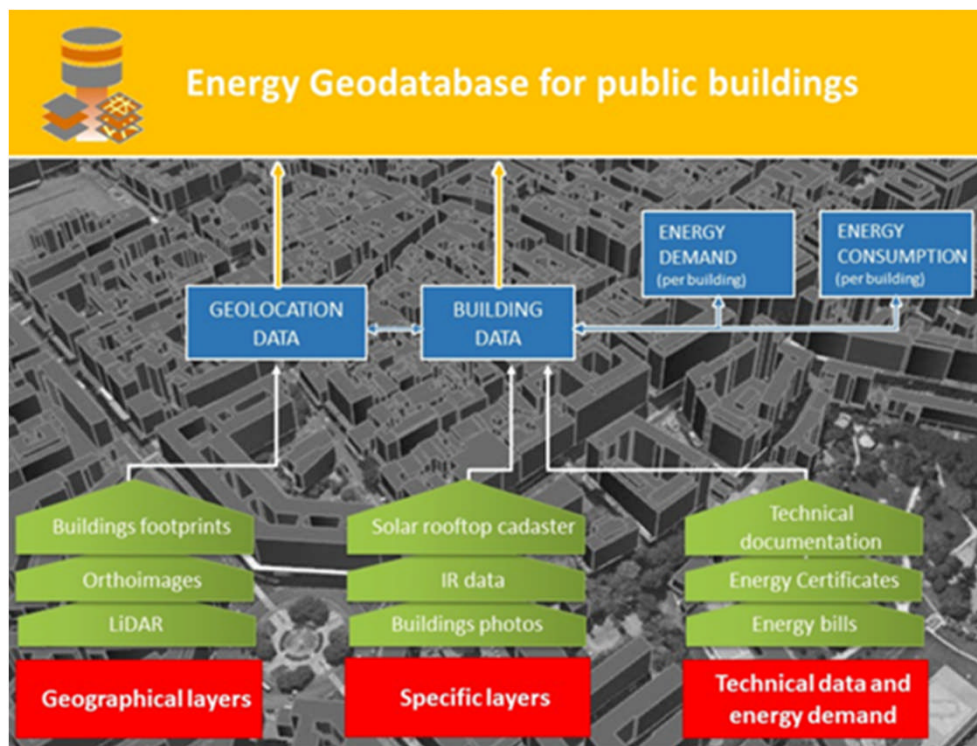
EE Strategies

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EE Tools

3D Energy Management System; 3D EMS tool (<https://oneplace.fbk.eu/3d/>)

Orodje 3 DEMS webGIS uporabnikom omogoča:



- (i) krmarjenje po mestnem okolju na različnih nadmorskih višinah in kotih kamere (na podlagi cezija);
- (ii) vizualizacija in interakcija z modeli stavb LOD1 v mestnem merilu, modeli stavb LOD2 v merilu posamezne stavbe (izbrani piloti);
- (iii) izbrati stavbo, ki vas zanima, in pridobiti energetske in druge katastrske/stavbne informacije, vključno s neprostorskimi podatki;

The Online Energy Platform - OnePlace - the 3D EMS tool -

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3D Energy Management System; 3D EMS tool (<https://oneplace.fbk.eu/3d/>)

Primer spletne vizualizacije geometrije stavbe (LOD1 in LOD2) s pripadajočo energijsko bazo podatkov



More than **10,000 buildings** were reconstructed in **LOD1**
(some 35 in LOD2) and visualized in 3D environment

The Online Energy Platform - OnePlace - the 3D EMS tool -

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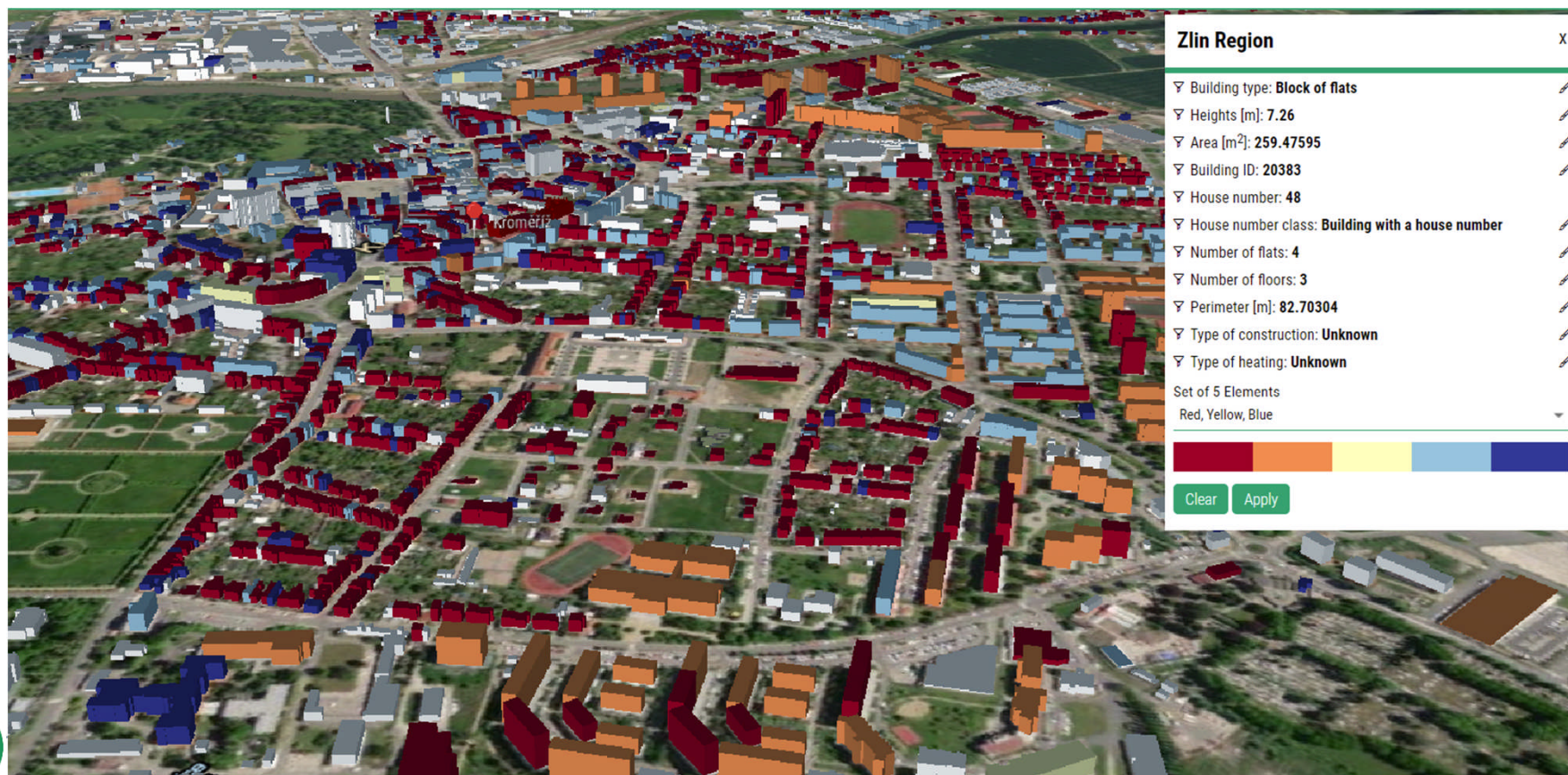
EE Strategies

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EE Tools

3D Energy Management System; 3D EMS tool (<https://oneplace.fbk.eu/3d/>)

Primer agregacijskih funkcij znotraj 3DEMS:
viri energije, ki se uporabljajo za ogrevanje stavb



The Online Energy Platform - OnePlace - the 3D EMS tool -

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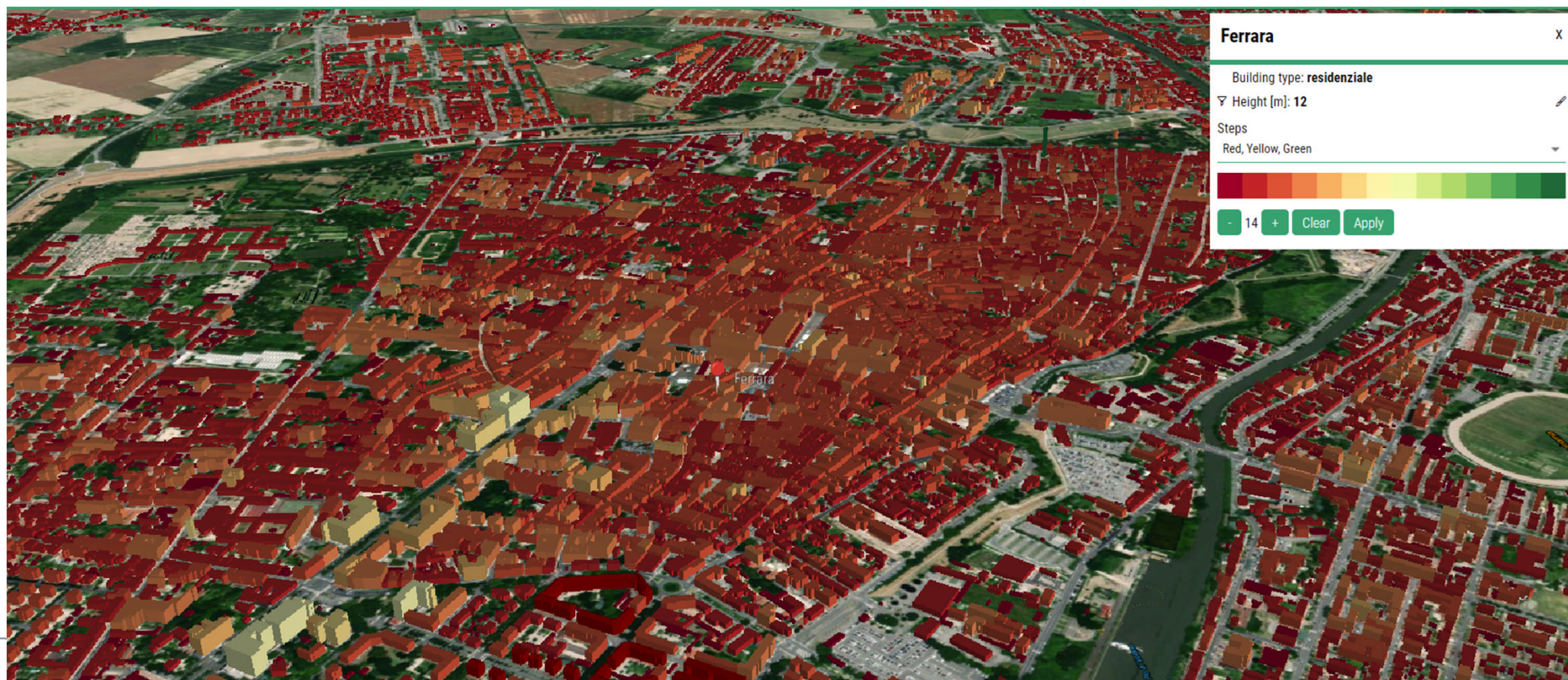
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3D Energy Management System; 3D EMS tool (<https://oneplace.fbk.eu/3d/>)

Primer agregacijskih funkcij znotraj 3DEMS:
višina



The Online Energy Platform - OnePlace

The Online Energy Platform

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The Online Energy Platform - OnePlace - the Energy Ghost simulator -

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Energy Ghost simulation game (Energy@School)

Cilj aplikacije ENERGY@SCHOOL je zbiranje in spremljanje podatkov o porabi energije v šolah s povečanjem vključenosti uporabnikov. Uporablja se lahko tako s fiksnih kot mobilnih naprav in zagotavlja:

- konfiguracija šole/učilnic, ki jih je treba spremljati;
- temperaturni podatki za vsak razred, ki ga je treba spremljati, in iz katerega koli električnega/toplotnega senzorja;
- prikaz grafov porabe električne/toplote na določen datum;
- spodbujanje preko igre.

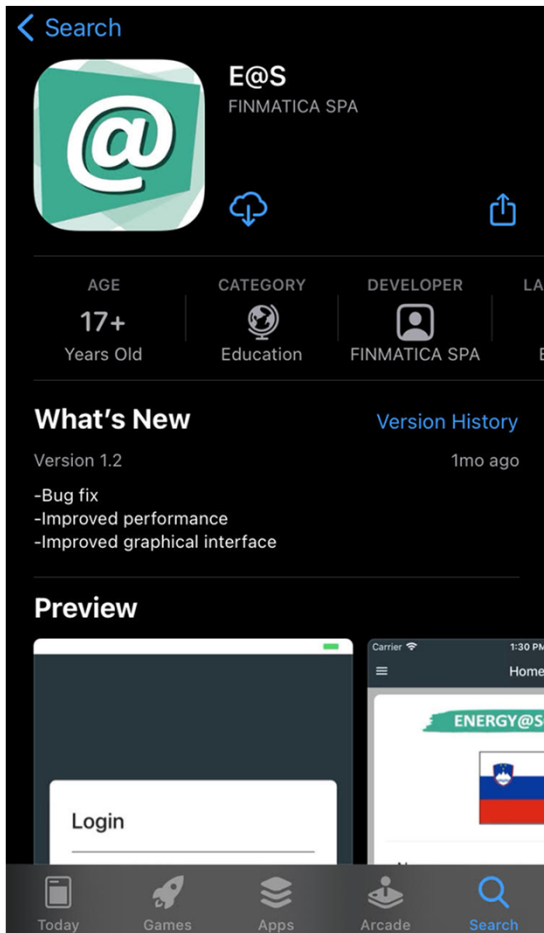


The Online Energy Platform - OnePlace - the Energy Ghost simulator -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



Energy Ghost simulation game (Energy@School)



user: UserDemo
pass: demo2021

Login to register a new school

<https://energyatschool.finmatica.it/#/registrationlogin>

School Registration

anna EGT Password Confirm Password

School Name Address City Italy

Class Number

Sensor Name GJ

submit

Username and school name must have at least 5 characters

TUTORIALS:

- 1) <https://youtu.be/jb4bnOQhlWg>
- 2) <https://youtu.be/UmHaScT5L8E>
- 3) <https://youtu.be/x6YWVPVIMyUg>



The Online Energy Platform - OnePlace - the Energy Ghost simulator -

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Energy Ghost simulation game (Energy@School)

☰ TARGET-CE

annaEGTC1 HOME Home / Dashboard

INSERT DATA

- Classrooms
- Sensors

VISUALIZE DATA

- Daily Report
- Ghosts Summary
- Score Summary
- Export Data

School info ⓘ

Name
anna EGTC 1

Address
test 1 - wroclaw, Poland

Score
107

Score Leaderboards (schools)

SchoolDemo	100
Primary School Celje	100
anna EGTC 1	107

Struktura domače strani

Meni na levi, ki prikazuje orodja za uporabnike (učilnice, senzorji, grafi).

The Online Energy Platform - OnePlace - the Energy Ghost simulator -

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Energy Ghost simulation game (Energy@School)

Obrazec za zbiranje podatkov

Z izbiro učilnice uporabnik dobi dostop do strani za zbiranje podatkov. Uporabnik preko obrazca vnese podatke o prisotnosti in temperaturi v izbranem dnevu.

Ob obrazcu se prikaže tabela z vnesenimi podatki.

Z izbiro senzorja lahko uporabnik izpolni podoben obrazec za zbiranje podatkov.

The screenshot shows the 'InsertTemperature' page in the Energy@School application. The user is logged in as 'annaEGTC1'. The interface is divided into three main sections:

- INSERT DATA:** A sidebar menu on the left with 'Classrooms' expanded to show '2a', and 'Sensors' expanded to show 'temp'. A red box highlights these options.
- Form:** The main area contains a form for 'instemp - 2a'. It includes a 'date' field set to '19.11.2021' and three rows of input fields for 'presence' and 'temp*' (temperature) for 'morning', 'midday', and 'afternoon' periods. Each 'presence' field has a checkbox and a 'x' icon. A 'submit' button is at the bottom.
- VISUALIZE DATA:** A table on the right displays the entered data. The table has columns for 'Date Time', 'Presence', and 'Temperature'.

Date Time	Presence	Temperature
19/11/2021 afternoon	✓	15 °C
19/11/2021 midday	✓	15 °C
19/11/2021 morning	✓	15 °C
18/11/2021 afternoon	X	21 °C
18/11/2021 midday	X	21 °C
18/11/2021 morning	X	21 °C

Navigation arrows and 'page 1 of 1' are visible at the bottom of the table.



The Online Energy Platform - OnePlace - the Energy Ghost simulator -

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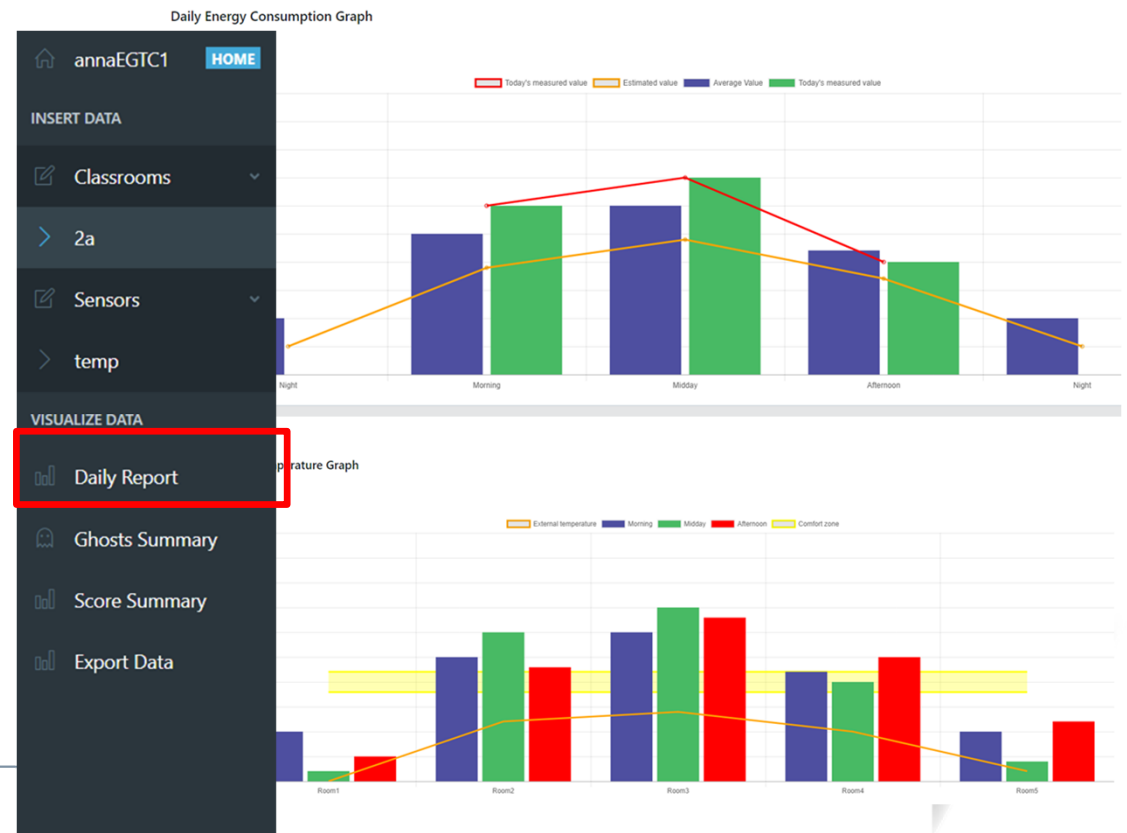
Energy Ghost simulation game (Energy@School)

Graf rabe električne energije

- Dejanska poraba zjutraj/popoldan/noč in izhodiščna vrednost, merjena pametnim merilnikom
- Povprečna dejanska poraba med obdobjem spremljanja

Graf temperature v razredu

- T° merjeno v določenih intervalih
- Zunanji T° (merjeno preko spleta)



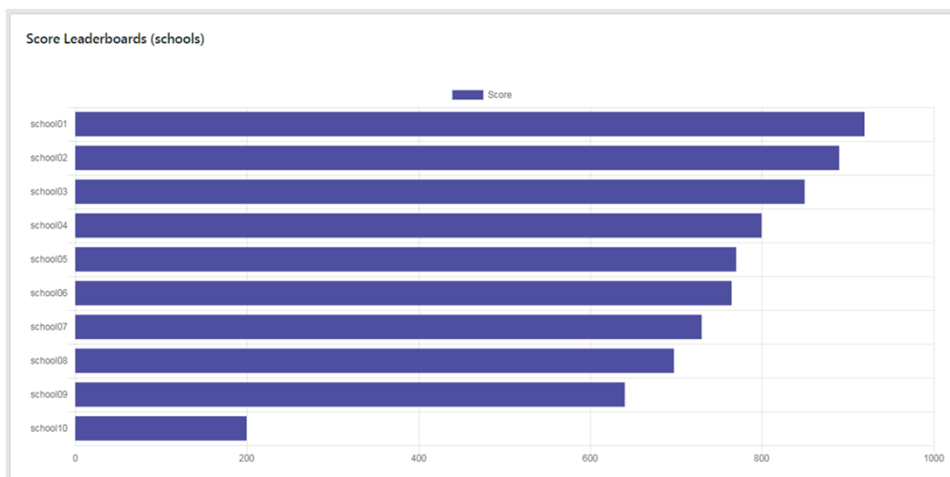
The Online Energy Platform - OnePlace - the Energy Ghost simulator -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Energy Ghost simulation game (Energy@School)

Točkovanje šole

- Rezultati vsake šole so predstavljeni v stolpčnem grafu, ki se posodablja glede na dosežene ali izgubljene točke med igro.



Ghosts Summary

Active Ghosts (click them to see details)



Solved Ghosts (click them to see details)



All you have to know about ghosts

Ghosts are alerts triggered by wrong energy consumption. They can be found after collecting data. First we have the elect...

annaEGTC1 **HOME**

INSERT DATA

- Classrooms
- 2a
- Sensors
- temp

VISUALIZE DATA

- Daily Report
- Ghosts Summary**
- Score Summary
- Export Data

Upravljanje duhov je prikazano pod zavihkom **Ghost Summary**: vsakič, ko se duh pojavi, je dodan na seznam aktivnih duhov, ko pa se zanj najde rešitev se pojavi na seznamu rešenih duhov.



The Online Energy Platform - OnePlace

The Online Energy Platform

1. OnePlace spletna platforma & 3D EMS orodje (BOOSTEE-CE)
2. Energy Ghost simulacijska igra (Energy@School)
3. **Living Energy Performance Certificate orodje za upravljanje in baza podatkov (eCentral)**
4. Energy Dashboard (CitiEnGov zbirka orodij)
5. Nalepke za spremembo vedenja (GreenSoul)



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects

Marketplace

EE Cities

EE Strategies

EE Finances

EE Tools

Living EPC tool (eCentral)

KAJ JE LIVING EPC TOOL?

- Kompleksno interaktivno spletno orodje.
- Ponuja različne kombinacije stroškovno optimalnih ukrepov za doseganje skoraj nič-energijskih zahtev (nZEB).
- Na podlagi vnesenih podatkov iz energetskega izkaznic, poročil o presoji ali informacij o porabi energije.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

ZA KOGA JE BIL RAZVIT IN ZAKAJ?



Lokalne oblasti

- Za javne stavbe, ki jih imajo v lasti ali v uporabi.
- Da bi olajšali njihovo sistematično spremljanje stavbnega fonda.
- Podpira jih pri prepoznavanju ključnih projektov za energetske prenove ter
- ponuja konkretno kvantificiranje energetskih in finančnih kazalnikov, kar ima za posledico doseganje standarda nZEB.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

KAKO ORODJE DELUJE?

- Orodje Living EPC temelji na metodi ISO 13790 (ki se trenutno uporablja v različnih državah EU).
- Vnaprej določene vrednosti se uporabljajo za poenostavitev postopka vnosa podatkov in ocene NZEB.
- Trenutno se orodje lahko uporablja v 6 državah: Hrvaška, Madžarska, Italija, Avstrija, Slovenija in Poljska. Kar pomeni, da je orodje prilagojeno državnim zakonodajam in specifikacijam glede standarda nZEB.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

eCentral

Register Login



Pritisnite gumb **Registracija**, da ustvarite nov račun, ali gumb **Prijava**, če že imate račun.

The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

eCentral

The screenshot shows the eCentral web interface. At the top left is the Interreg Central Europe logo. Below it is a dark sidebar with navigation options: MAP, BUILDINGS, BENCHMARKING, and TUTORIALS. The main area displays a map of Central Europe with several green location markers. In the top right corner, there is a language dropdown menu set to 'English' and a user profile icon labeled 'PROTOVNIK'. A text box on the map says 'Povečajte zemljevid, da poiščete vneseno zgradbo.' (Zoom in the map to find the entered building). Another text box on the right says 'Izberite jezik/državo.' (Select language/country).



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

The screenshot displays the eCentral web application interface. On the left is a dark sidebar with navigation options: MAP, BUILDINGS, BENCHMARKING, and TUTORIALS. The main area is titled 'Map' and shows a satellite-style map of a residential area. A popup window is open over a building, displaying the following information:

- Name: Jakljeva galerija
- Typology: Cultural Buildings
- Energy class: D
- Energy savings [%]: 0.51
- Primary energy savings [%]: 7512.99
- CO2 emission savings [t/year]: 1.79
- Total investment [EUR]: 33066.90
- Simple payback period [year]: 66.07
- Buttons: Edit building

An orange box highlights the popup window. Below the map, a white text box contains the instruction: 'Ko najdete zgradbo, lahko kliknete na ikono in prikazane bodo osnovne informacije.'



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

The screenshot displays the 'Detailed building data: Jakijeva galerija' page. The interface includes a sidebar with navigation options: MAP, BUILDINGS, BENCHMARKING, and TUTORIALS. The main content area features a teal navigation bar with tabs: BASIC INFO, BASIC INFO EC, ENERGY CONSUMPTION, BUILDING PARTS, VENTILATION, TERMOTECHNICAL SYSTEMS, LIGHTING, CURRENT BUILDING STATE, CALCULATION OPTIONS, NOTES, and NZEB. Below this, the 'Building basic info' section is visible, containing a table with the following data:

Basic Info	
Name	Jakijeva galerija
Building type	Cultural Buildings

Location Info

Address	Zadreška cesta 35
City	
Municipality	Prihova
Zip code	3331

Objekt je zasnovan kot trisegmentna stavba, grajena v več delih. Prvi del je bil zgrajen okrog 1970 in je bil namenjen bivanju ene družine. Kasneje sta bila priložena še dva

Vnos podatkov je razdeljen na 8 zavihkov - več vhodnih podatkov daje natančnejše rezultate.

Podatki, ki jih ni mogoče zagotoviti/vstaviti, so vnaprej določeni!



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

eCentral

Living EPC tool (eCentral)

PRIMER VNOSA PODATKOV

Edit basic info

Building name
Jakjeva galerija

Building image Currently: images/SI_01_Jakjeva_galerija.jpg
Clear
Change: Izberite datoteko Nobena datoteka ni izbrana

Building type
Cultural Buildings

Description
Objekt je zasnovan kot trisegmentna stavba, grajena v več delih. Prvi del je bil zgrajen okrog 1970 in je bil namenjen bivanju ene družine. Kasneje sta bila prizidana še dva segmenta, ki sta služila kot slikarski atelei umetnika Jožeta Horvata - Jakja. Danes je objekt v lasti Občine Nazarje, ki ga je v letu 2003 tudi delno obnovila. V njem se nahaja galerija s stalno razstavo del Jožeta Horvata - Jakja, galerija za gostujoče umetnike ter center za samostojno učenje pod vodstvom Ljudske univerze Velenje.

Year of construction
1,970

Building owner name
Občina Nazarje

Address
Zadreška cesta 35

City
Nazarje

Zip code
3331

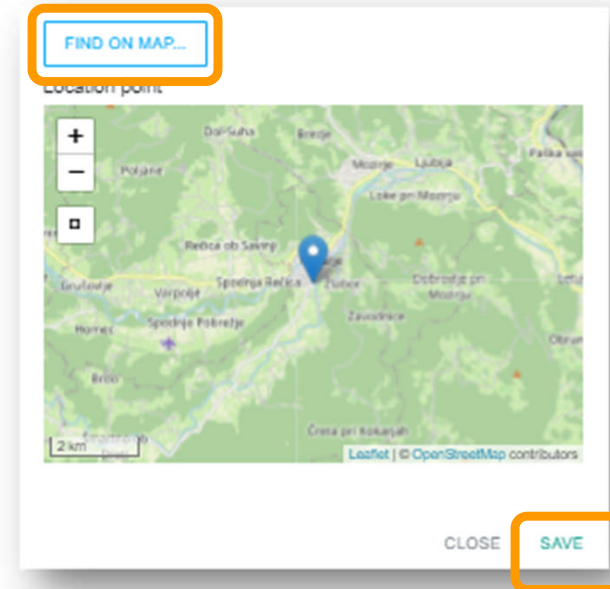
Country
Slovenia

Cadastral reference
036

Municipality
Prihova
Municipality of cadastral registry

Pomembno je izbrati vrsto stavbe.

Če je vpisan pravilen naslov (mesto, ulica) - lahko uporabnik klikne gumb NAJDI NA ZEMLJEVIDU in orodje bo na zemljevidu prikazalo lokacijo stavbe.



Ne pozabite shraniti svojega dela!

The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

EXAMPLE OF DATA INPUT

Add external wall

Name*

Renovation surface [m²]*

Current thermal insulation thickness

Heat transfer coefficient [W/m²K]*
0.0

Included in renovation
Determines whether the building part should be included in renovation

CLOSE ADD

Določite površino, ki jo je treba obnoviti.

Orodje ga lahko izračuna z uporabo napovedi baze podatkov.

Pri izbiri debeline toplotne izolacije se koeficient toplotne prehodnosti izbere samodejno, vendar ga lahko po potrebi spremenite.

Tukaj je možnost, ali želite ta del stavbe vključiti v izračune.

Kliknite na gumb ADD, da shranite.

The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

The screenshot shows the 'Detailed building data: Jakijeva galerija' page. The 'NZEB' tab is highlighted in orange. Below the disclaimer, the 'NZEB compliant measures' section is also highlighted in orange. It displays a table with columns for 'Financial results' and 'Energy savings results'.

Measures	Financial results				Energy savings results			
	Total investment [€]	Simple payback period[year]	Total investment with subsidies [€]	Simple payback period with subsidies[year]	New E _{prim} [kWh]	New Q _{HL,LD} [kWh]	E _{prim} Savings [%]	Q _{HL,LD} Savings [%]
	11	11	11	11	11	11	11	11

Tukaj najdete vse možne kombinacije ukrepov za doseganje standarda nZEB v skladu z veljavno zakonodajo za posamezno državo.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

NZEB compliant measures

Show 10 entries

Measures	Financial results				Energy savings results								Permitted values			
	Total investment [€]	Simple payback period [year]	Total investment with subsidies [€]	Simple payback period with subsidies [year]	New E _{prim} [kWh]	New Q _{H,LD} [kWh]	E _{prim} Savings [%]	Q _{H,LD} Savings [%]	New E _{prim} [kWh/m ²]	New Q _{H,LD} [kWh/m ²]	Renewable energy [%]	CO ₂ emissions reduction [t/year]	E _{prim} permitted [kWh/m ²]	Q _{H,LD} permitted [kWh/m ²]	Needed renewable energy percentage [%]	NZEB standard satisfied
<input checked="" type="checkbox"/> Vhodna vrata prenova, Garažna vrata prenova, Tla proti neogrevani kleti prenova, Okno J prenova, Okno S prenova, Okno Z prenova, Okno V prenova, Zamenjava sistema razsvetljave	33.966.90	66.07	33.966.90	66.07	21.470.83	55.207.52	25.92	8.51	59.81	153.78	86.11	1.79	65.00	—	50.00	Yes

Rezultati so predstavljeni skozi finančno in energetska perspektivo.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



Living EPC tool (eCentral)

NZEB non-compliant measures

Show 10 entries

Measures	Financial results				Energy savings results								Permitted values			
	Total investment [€]	Simple payback period [year]	Total investment with subsidies [€]	Simple payback period with subsidies [year]	New E _{prim} [kWh]	New Q _{h,nd} [kWh]	E _{prim} Savings [%]	Q _{h,nd} Savings [%]	New E _{prim} [kWh/m ²]	New Q _{h,nd} [kWh/m ²]	Renewable energy [%]	CO ₂ emissions reduction [t/year]	E _{prim} permitted [kWh/m ²]	Q _{h,nd} permitted [kWh/m ²]	Needed renewable energy percentage [%]	NZEB standard satisfied

Če orodje ne more oceniti nZEB, bo potencialni uporabnik prejel informacije o ukrepih prenove, ki jih je mogoče izvesti za doseg določene stopnje prihranka energije.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

The screenshot shows the 'Living EPC tool' interface. The 'BENCHMARKING' menu item is highlighted in orange. The main content area shows a 'Filters' section with an 'ADD FILTER' button, a 'Buildings' section with 'SELECT ALL' and 'DESELECT ALL' buttons, and a table with columns for 'Basic info' and 'Financial results'.

Basic info						Financial results			
Name	Building typology	Total net heated area [m ²]	Country	Energy class	Is NZEB satisfied	Total investment [€]	Simple payback period [year]	Total investment with subsidies [€]	Simple payback period with subsidies[yr]

Benchmarking ponuja možnost primerjave med izbranimi stavbami in tudi pridobivanje poročila za izbrane zgradbe.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



Living EPC tool (eCentral)

Buildings

SELECT ALL DESELECT ALL

Search: _____

Basic info						Financial results				Energy savings results							
Name	Building typology	Total net heated area [m ²]	Country	Energy class	Is NZEB satisfied	Total investment [€]	Simple payback period [year]	Total investment with subsidies [€]	Simple payback period with subsidies [year]	New E _{prim} [kWh]	New Q _{ind} [kWh]	E _{prim} Savings [%]	Q _{ind} Savings [%]	New E _{prim} [kWh/m ²]	New Q _{ind} [kWh/m ²]	Renewable energy [%]	CO ₂ emissions reduction [t/year]
Jubjuzva palača	Cultural Buildings	359.00	Slovenia	D	Yes	33,966.90	66.97	33,966.90	66.97	21,470.83	55,297.52	25.92	8.51	59.81	153.78	86.11	1.79
Gasliri dom Nazarje	Cultural Buildings	566.90	Slovenia	Not known	Yes	61,470.85	6.95	61,470.85	6.95	23,550.27	27,515.04	44.36	77.76	41.54	48.54	75.49	6.53
Dom kulture Nazarje	Cultural Buildings	1,220.35	Slovenia	Not known	Yes	46,147.45	5.60	46,147.45	5.60	66,901.27	300,843.90	61.57	10.74	54.82	245.87	96.54	25.12
Grad Vihovec	Cultural Buildings	310.00	Slovenia	Not known	Yes	46,486.00	24.47	46,486.00	24.47	12,187.60	47,779.87	42.90	44.28	39.25	154.13	94.53	2.39
Cultural		7,577.00	Slovenia	Not known	Yes	181,657.72	7.60	81,178.18	7.08	115,650.00	417,187.91	85.79	11.44	45.69	163.10	95.05	110.48

Get report for selected buildings

Poročilo lahko prenesete za vse izbrane stavbe.



The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

Living EPC tool (eCentral)

Charts

View type: **Custom** Calculation type: Total investment [€] Chart type: Bar chart

ADD REMOVE ALL CHARTS

Default view will show charts from measures summary, custom will allow you to create various charts of interest.

Obstaja možnost izdelave prilagojenih grafikonov.

- Total investment [€]
- Net heated area [m2]**
- Total investment [€]
- Simple payback period [year]
- Total investment with subsidies [€]
- Simple payback period with subsidies [year]
- New Eprim [kWh]
- New QH,nd [kWh]
- Eprim Savings [%]
- QH,nd Savings [%]
- New Eprim [kWh/m2]
- New QH,nd [kWh/m2]
- Renewable energy [%]
- CO2 emissions reduction [t/year]

Diagrami lahko temeljijo na različnih vrstah izračuna in za več izbranih stavb hkrati.

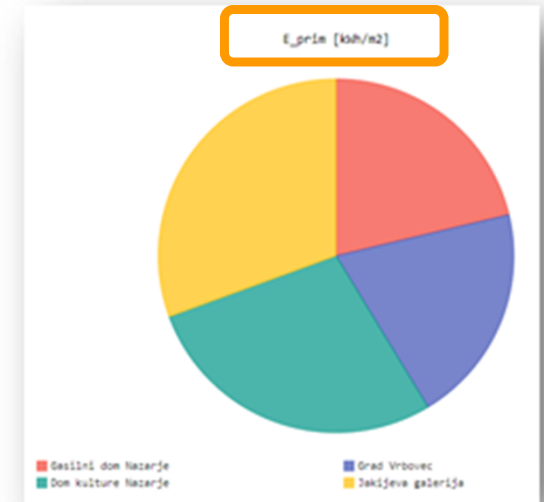
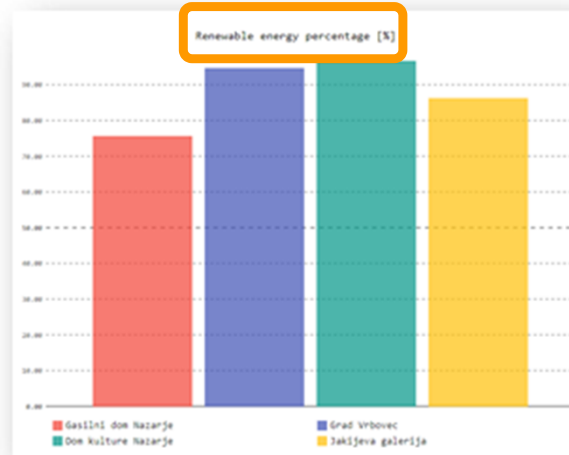
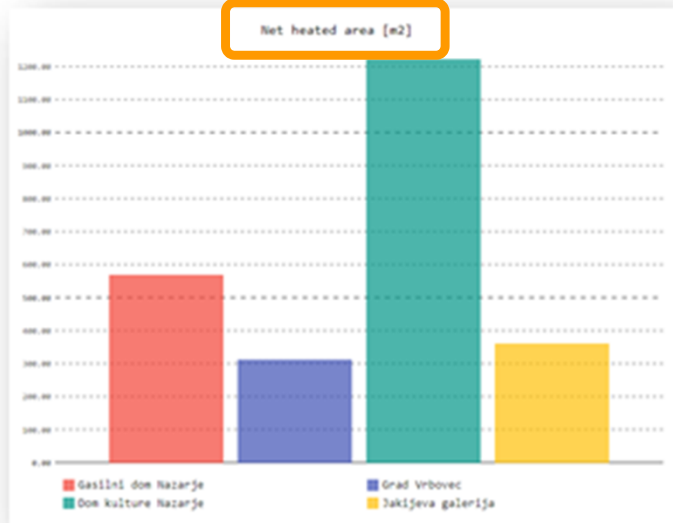


The Online Energy Platform - OnePlace - the Living EPC tool -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



Living EPC tool (eCentral)



The Online Energy Platform - OnePlace - the Living EPC tool -



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Living EPC tool (eCentral)

Link to the tool: <https://nzeb.thorium.software/>

Demo account

User name: kssenatarget

Password: target2020

Izjava o omejitvi odgovornosti: ocene tega orodja temeljijo na poenostavljeni metodi za potrebe po energiji za ogrevanje, zato so rezultati le splošna navodila za prenovo. Za natančnejše in realistične rezultate se posvetujte z arhitektom in/ali strojnimi inženirjem.



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The Online Energy Platform - OnePlace - the Energy Dashboard -

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EE Tools

[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)

- Rešitev za boljšo obravnavo podatkov, povezanih z energijo, o zgradbah, mobilnosti in javni razsvetljavi
- Razvit je bil po potrebi po usklajenih podatkih, povezanih z energijo
- Boljši/usklajeni podatki pomenijo boljše poznavanje ponudbe in povpraševanja po energetske virih – vključno z njihovo prostorsko porazdelitvijo v urbanih območjih, da se omogoči učinkovito modeliranje scenarijev in podpre splošne politične procese.
- Razvoj usklajenega podatkovnega modela CitiEnGov, ki temelji na direktivi INSPIRE EU (<https://inspire.ec.europa.eu/>)

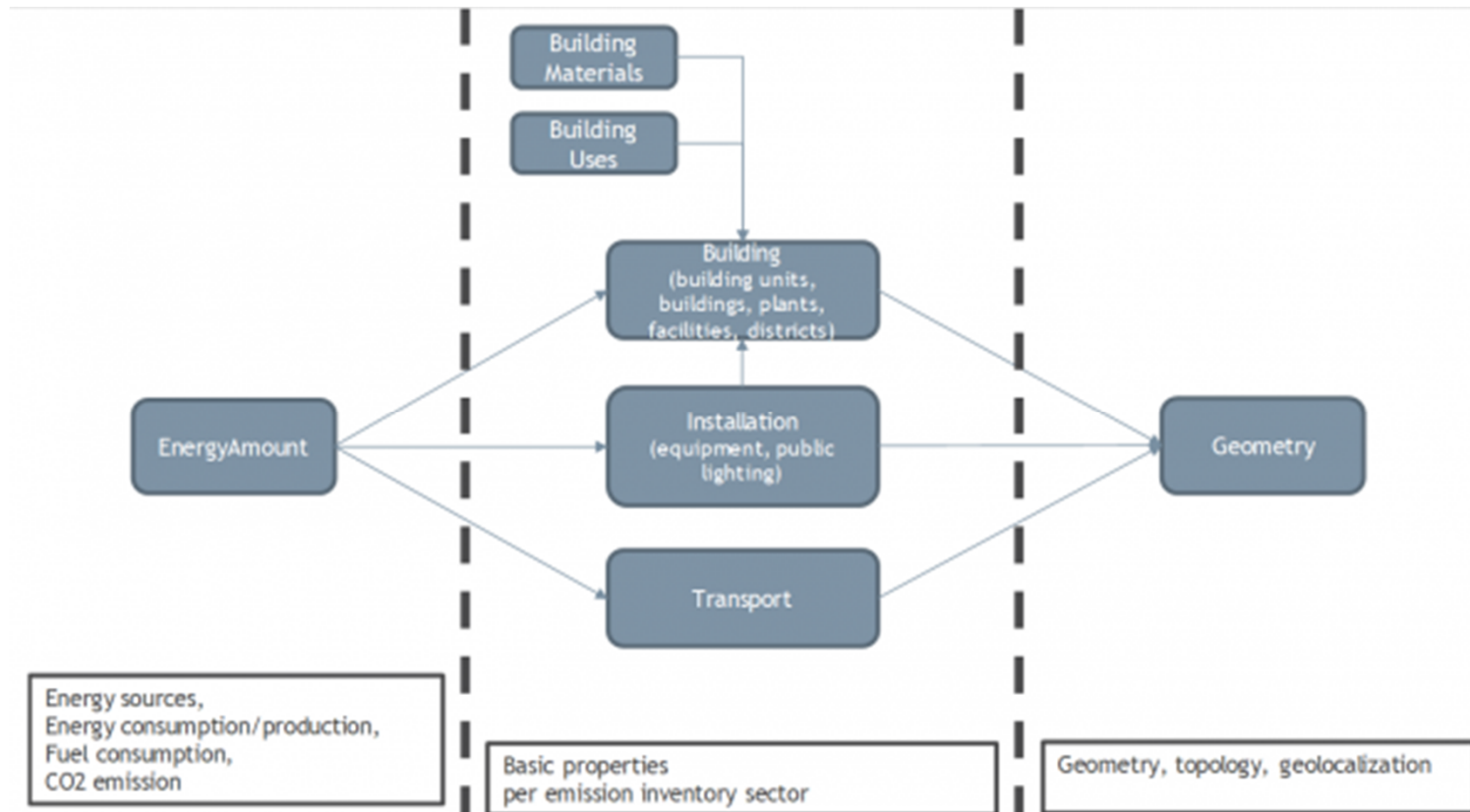


The Online Energy Platform - OnePlace - the Energy Dashboard -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)

- ❑ Konceptualni podatkovni model, ki temelji na podatkovnih specifikacijah INSPIRE

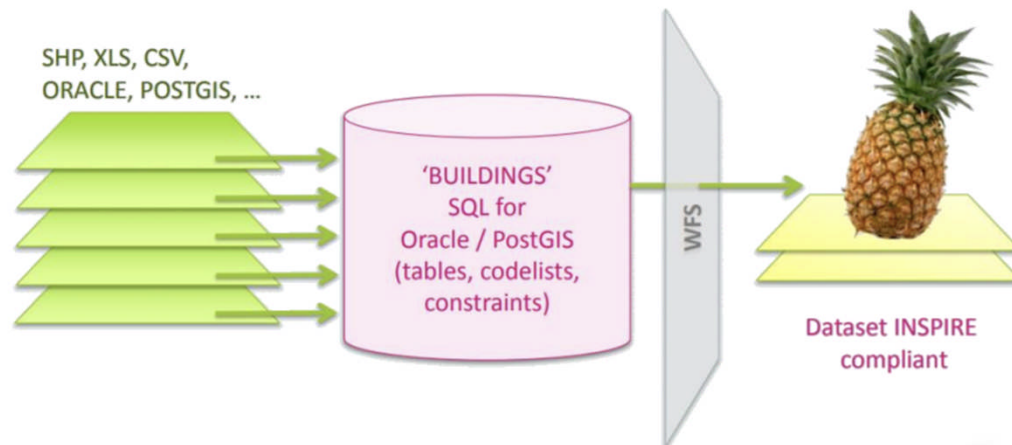


The Online Energy Platform - OnePlace - the Energy Dashboard -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)

- ❑ Implementacija podatkovnega modela, ki temelji na dveh večinoma uporabljenih različnih platformah, Oracle in PostgreSQL/PostGIS.
- ❑ Skripti SQL za ustvarjanje baze podatkov so na voljo na:
- ❑ http://toolkit.citiengov.eu/images/4/4e/CitiEnGov_Data_Model_Oracle.pdf
- ❑ http://toolkit.citiengov.eu/images/4/4a/CitiEnGov_Data_Model_PostGIS.pdf



The Online Energy Platform - OnePlace - the Energy Dashboard -



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EE Tools



[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)

DEMO

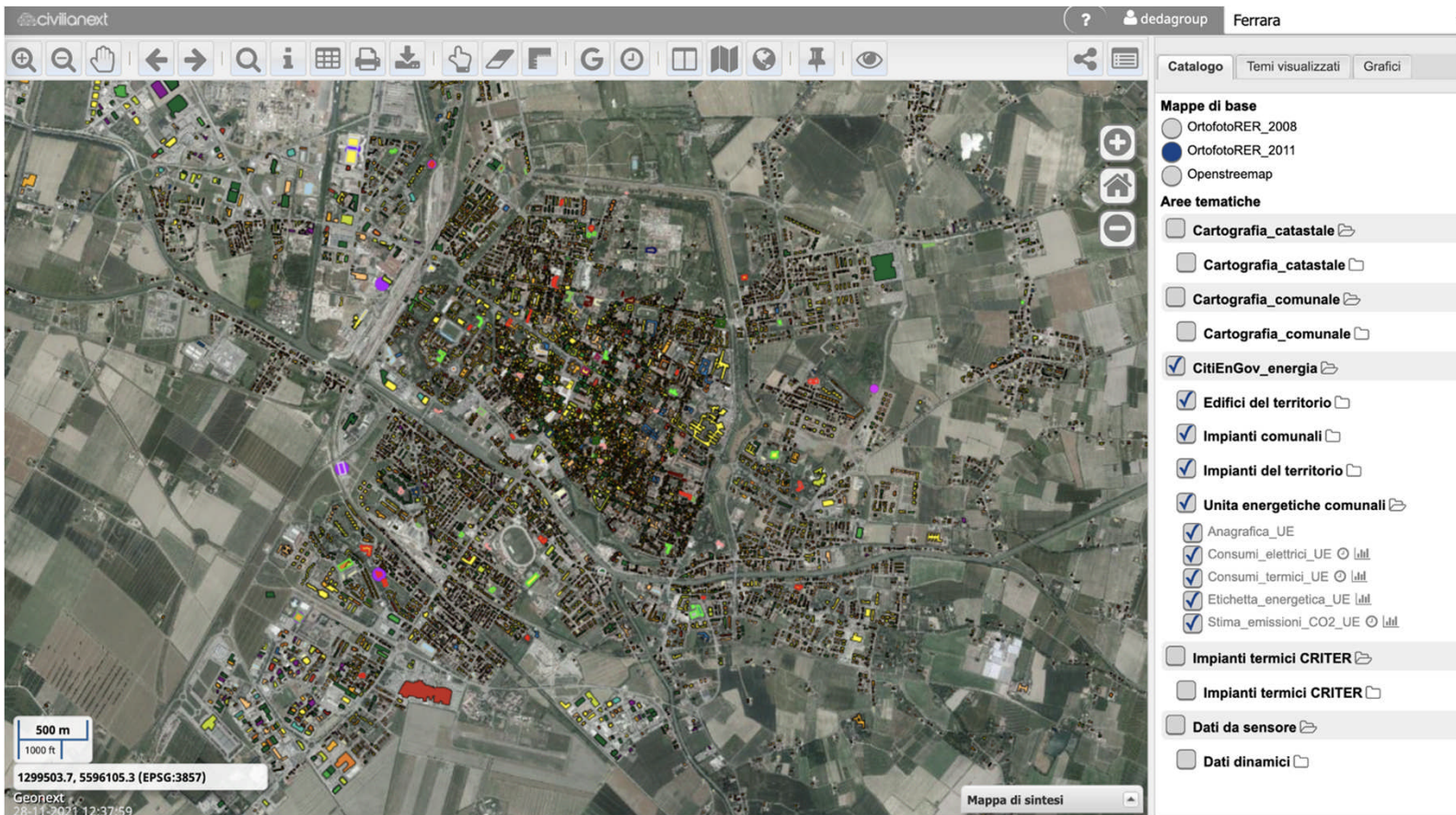
<http://sit.comune.fe.it/geonext/login.html>



The Online Energy Platform - OnePlace - the Energy Dashboard -

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[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)



Aktivirajte prikazane
plasti



The Online Energy Platform - OnePlace - the Energy Dashboard -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)

The screenshot shows the CitiEnGov Energy Dashboard interface. The main map displays a color-coded energy efficiency map of Ferrara. A popup window titled 'Interroga' is open, showing the following data for a specific building:

Etichetta_energetica	
ID edificio ACI:	85605
Etichetta energetica (intervallo):	M
Etichetta energetica (kWh/mc/anno):	37,1
N. certificati energetici:	9
Volume coperto da certificati (mc):	2.546,3
Fonte calcolo volume:	from SACE database
Uso prevalente (stima):	residential
Centra in mappa:	<input type="checkbox"/>
Evidenzia in mappa:	<input type="checkbox"/>

The right sidebar contains a 'Catalogo' menu with various map layers and data sources, including 'Mappe di base', 'Aree tematiche', and 'Unita energetiche comunali'. The 'Interroga' button is highlighted in the top toolbar.

Povečajte središče mesta in poiščite stavbo z gumbom i ("Interroga")

Pojavijo se informacije v zvezi z energijo stavbe (shranjene v podatkovnem modelu Citiengov).

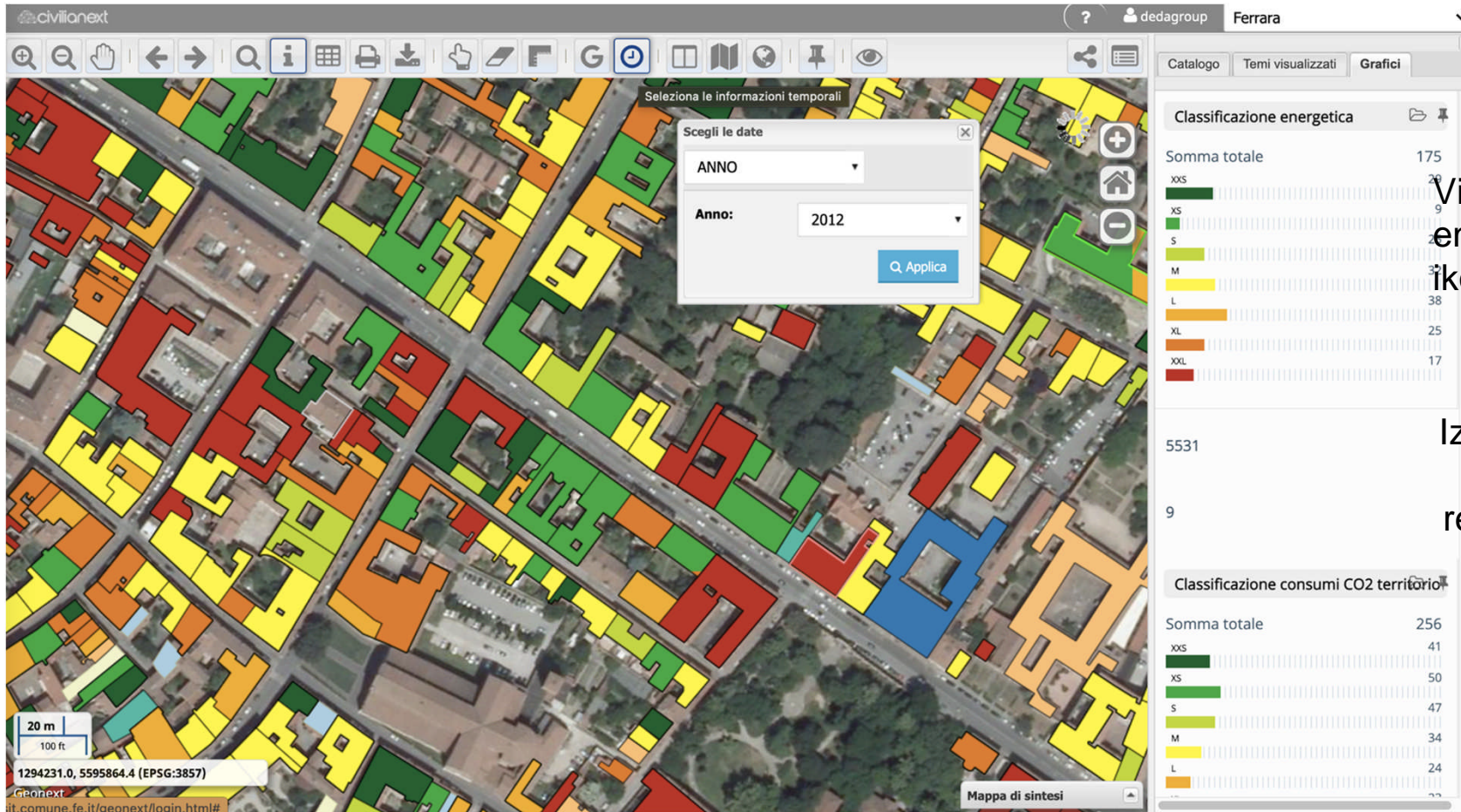


The Online Energy Platform - OnePlace - the Energy Dashboard -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)



Vizualizirane informacije o energiji na leto z uporabo ikone



Izberite leto (npr. 2012) in se prijavite za ogled rezultatov na prikazanem območju.

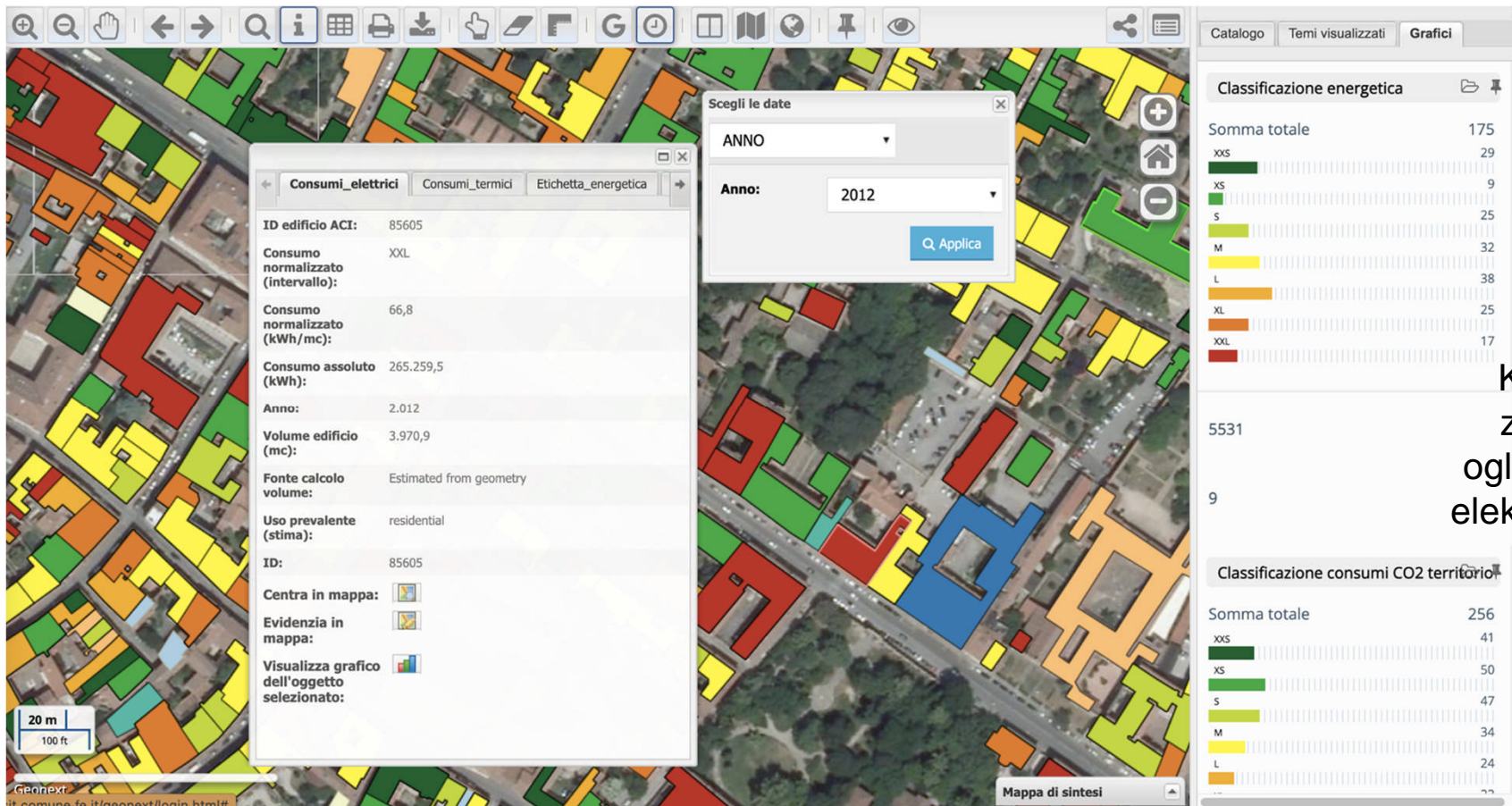


The Online Energy Platform - OnePlace - the Energy Dashboard -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)



The screenshot displays the CitiEnGov Energy Dashboard interface. It features a map of a city area with buildings color-coded by energy consumption. A data panel on the left shows details for a selected building (ID 85605), including normalized and absolute energy consumption, volume, and usage type. A date selection dialog is open, showing the year 2012. On the right, there are two bar charts: 'Classificazione energetica' (Energy Classification) and 'Classificazione consumi CO2 territorio' (Territorial CO2 Consumption Classification), both showing a distribution of buildings across consumption levels (XXS, XS, S, M, L, XL, XXL).

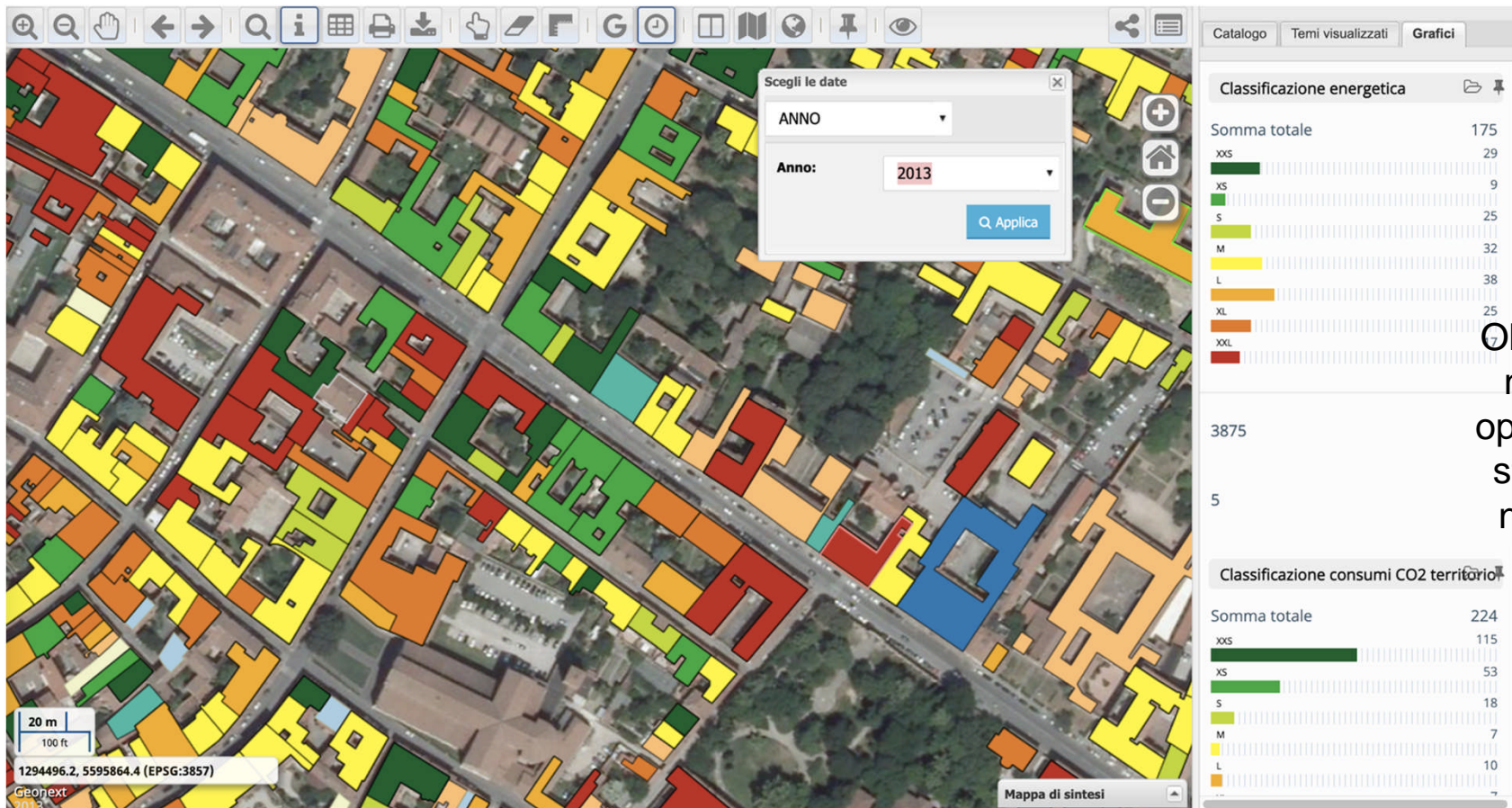
Kliknite na določeno zgradbo, če si želite ogledati njene podatke o električni in toplotni porabi za izbrano leto.



The Online Energy Platform - OnePlace - the Energy Dashboard -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**

[Energy Dashboard \(CitiEnGov Toolkit\) - http://toolkit.citiengov.eu/](http://toolkit.citiengov.eu/)



Ob spremembi leta npr. na 2013 boste morda opazili spreminjanje barv stavb, tj. spremembe v njihovi porabi energije



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5. **Nalepke za spremembo vedenja (GreenSoul)**



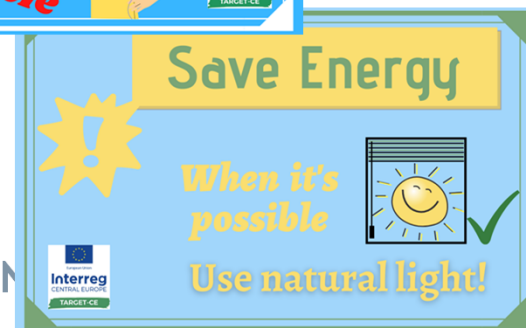
The Online Energy Platform - OnePlace - the Energy Dashboard -

Capitalized Projects Marketplace EE Cities EE Strategies EE Finances **EE Tools**



Stickers for behavioral change

- ❑ Nalepke, ki motivirajo ljudi, da varčujejo z energijo, spremenijo vedenje, podpirajo okolje in delujejo trajnostno
- ❑ Prilagoditev materiala, ki je bil izdelan v okviru projekta H2020 GreenSould
- ❑ Nalepke so na voljo v angleškem, italijanskem, nemškem, poljskem, slovenskem in češkem jeziku



TAKING COOPERATION



THEMATIC MODULE #1

<https://oneplace.fbk.eu/>

The Online Energy Platform

OnePlace

Hvala za vašo pozornost!

