



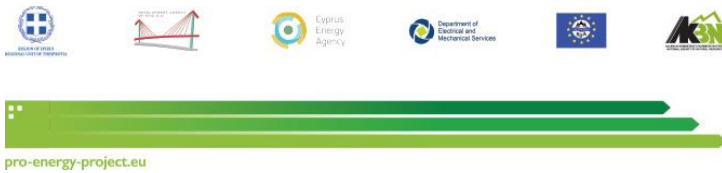
PROJECT

PRO-ENERGY - PROMOTING ENERGY EFFICIENCY IN PUBLIC BUILDINGS OF THE BALKAN MEDITERRANEAN TERRITORY

Work Package:	5. Pilot actions & Sustainability
Activity:	5.2. Integrated cloud-based joint ICT platform
Activity Leader:	Region of Epirus - Regional Unit of Thesprotia
Deliverable:	D5.1.2 Integrated cloud-based joint ICT platform

Version:	1.0	Date:	11/07/22
Type:	Report		
Availability:	Confidential		
Responsible Partner:	Region of Epirus - Regional Unit of Thesprotia		
Editor:	TREK Development		

Interreg 
EUROPEAN UNION
Balkan-Mediterranean
PRO-ENERGY



Interreg 
EUROPEAN UNION
Balkan-Mediterranean
PRO-ENERGY

DISCLAIMER:

This publication has been produced with the financial assistance of the European Union under the Interreg Balkan-Mediterranean 2014-2020. The contents of this document are the sole responsibility of the Region of Epirus - Regional Unit of Thesprotia, and can under no circumstances be regarded as reflecting the position of the European Union or of the Programme's management structures.

CONTENTS

IDENTIFICATION SHEET	5
1. Introduction	6
1.1. Purpose	7
2. User Guide	8

IDENTIFICATION SHEET

Project Ref. No.	BMP1/2.2/2052/2019
Project Acronym	PRO-ENERGY
Project Full Title	‘Promoting Energy Efficiency in Public Buildings of the Balkan Mediterranean territory’

Security (distribution level)	Confidential
Date of delivery	11/07/22
Deliverable number	5.2
Type	Report
Status & version	1.0
Number of pages	27
ACTIVITY contributing to the deliverable	D5.1.2 Integrated cloud-based joint ICT platform - D5.1.2.b Οδηγός διαχείρισης και χρήσης της Κοινής Πιλοτικής Πλατφόρμας ΤΠΕ
Responsible partner	Region of Epirus - Regional Unit of Thesprotia
Editor	TREK Development

1. Introduction

PRO-ENERGY is a transnational cooperation project, co-financed by the Cooperation Programme “Interreg V-B Balkan Mediterranean 2014-2020”, under Priority Axis 2, Specific Objective 2.2 Sustainable Territories. The project aims at promoting Energy Efficiency in public buildings in the Balkan Mediterranean territory and to create a practical framework of modelling and implementing energy investments interventions, through specific ICT monitoring and control systems, as well as through energy performance contracting (EPC). The specific objective of PRO-ENERGY is to reduce by more than 20% the energy spending in public buildings of the participating entities in one year after the implementation of pilot actions.

Based on the above, Work Package 5 (WP 5) “Pilot actions & Sustainability” includes the implementation of pilot actions designed & specified in the Joint Strategy (WP3) & the drafting of a follow-up plan for sustainability of results (pilot actions, trainings) & its consultation with stakeholders. Three types of pilot actions are foreseen:

- 1) Design & development of an open-source Joint ICT Platform,
- 2) The design & development of the Joint Cost-Benefit Analysis Modeller (open to all) &
- 3) The joint preparation of Energy Performance Contracts (open tendering). Pilot actions will valorise results (open to all) of WP3 energy audits on selected buildings.

One public building per area involved will be equipped with smart sensor systems. An integrated cloud-based joint ICT platform will measure & analyse energy consumed at any given period of the day from different sources. Then all data & measurements (available to the wide public) will be integrated & analysed, using specially designed ICT tools, algorithms, data analytics & statistical methods, thus producing the energy consumption profile of each building.

The Activity 5.2 “Integrated cloud-based joint ICT platform” aims at the design & development of an open-source Joint ICT Platform which will guide energy consumers behaviour to energy saving actions contributing to the achievement of 20% reduced energy spending in pilot buildings & to increased energy efficiency.

1.1. Purpose

The present document provides the user guide which was created for the management and use of the integrated ICT platform in order for its administrators to be trained. The Region of Epirus - Regional Unit of Thesprotia was responsible for the design and the development of the ICT platform, thus responsible for the conduction of a manual/guide upon the completion of the platform.

In the following pages of the present document, instructions for the management and use of the ICT platform are provided.

2. User Guide

PRO-ENERGY

Promoting Energy Efficiency in
Public Buildings of the Balkan
Mediterranean Territory

Web App

Interreg 
Balkan-Mediterranean
PRO-ENERGY 





Web App v1.0

This presentation should provide you a basic understanding of the pro-energy web application.

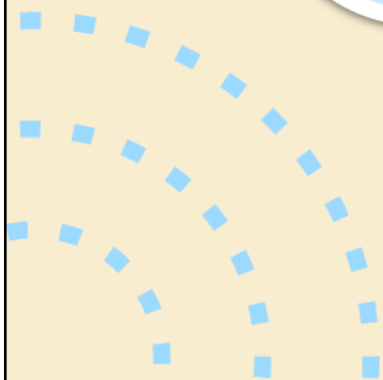


Table of Contents

01

Login & Navigation

02

Localization

03

Dashboard

04

Recommendations

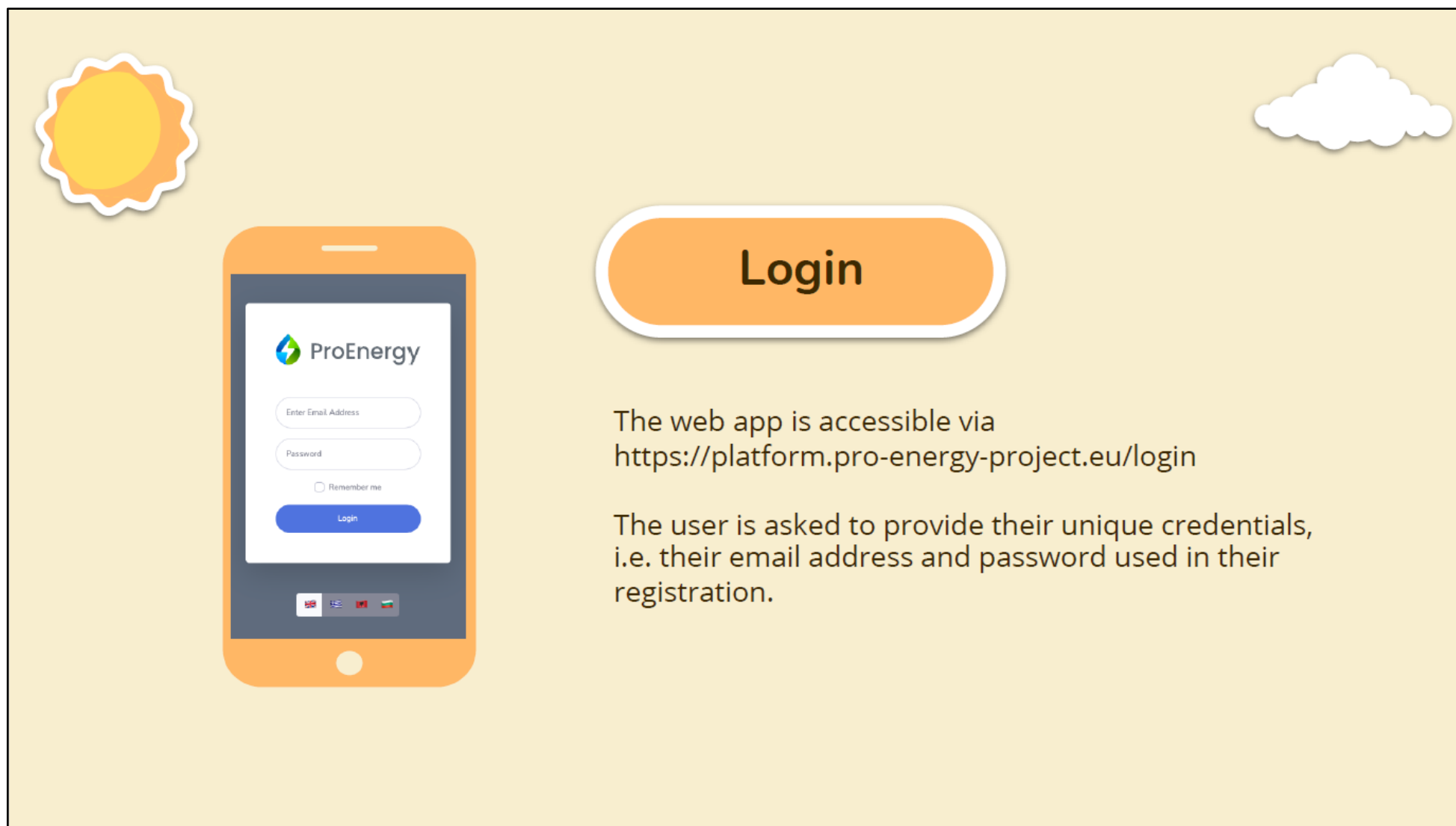
05

History

06

User Management





The illustration shows a smartphone with an orange border. The screen displays the ProEnergy logo at the top, followed by two input fields labeled "Enter Email Address" and "Password". Below these fields is a checkbox labeled "Remember me" and a blue "Login" button. At the bottom of the screen, there are four small icons representing different countries. To the left of the phone is a stylized sun icon, and to the right is a stylized cloud icon. In the center of the illustration is a large orange rounded rectangle with the word "Login" written in black text.

Login

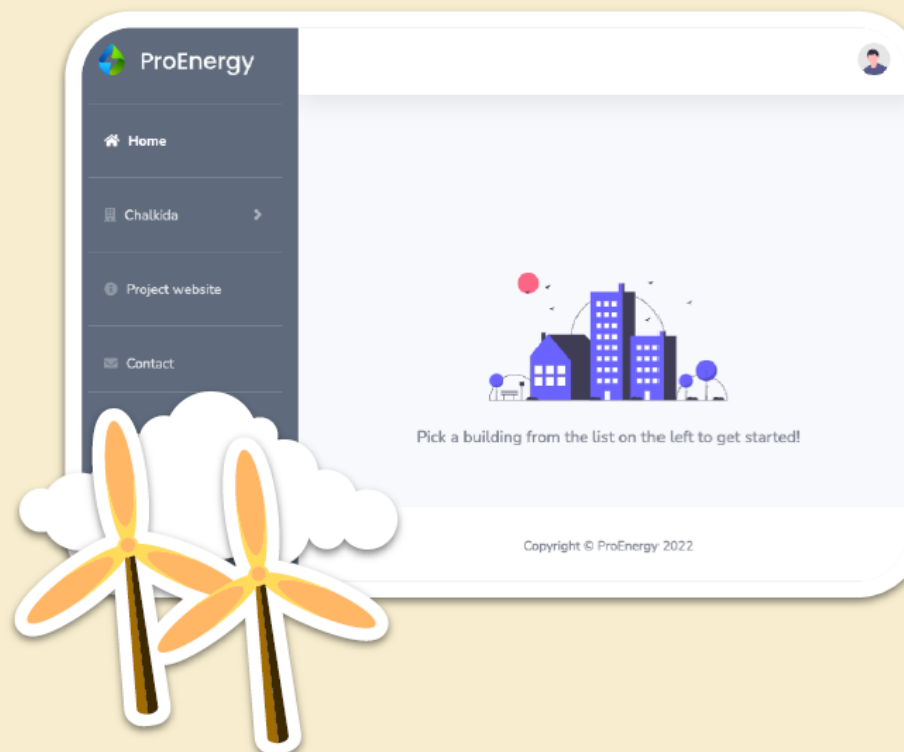
The web app is accessible via
<https://platform.pro-energy-project.eu/login>

The user is asked to provide their unique credentials, i.e. their email address and password used in their registration.

Navigation

Users can navigate through the sidebar, displayed at the left section of the screen.

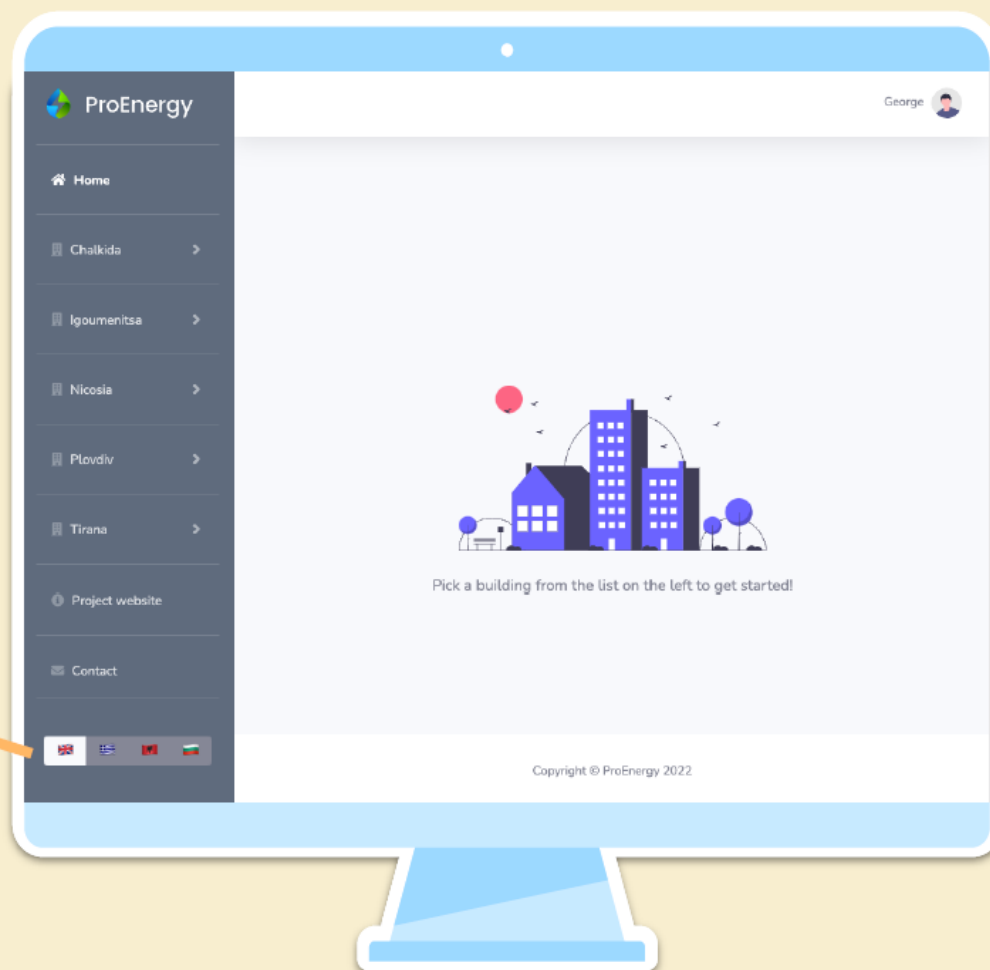
Sidebars are a staple of web apps navigation. They are convenient to users and ensure that certain page elements are always in view.



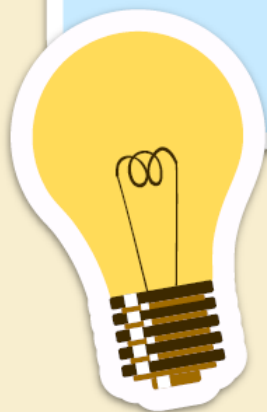
Localization

The app supports multiple languages (Albanian, Bulgarian, English & Greek).

A user can alter the app language by clicking on the respective flag.



The pro-energy web app can be viewed using many different devices, such as desktops, tablets, and phones.



Responsive Design

Building Views



Dashboard

Monitoring the energy & other needs in buildings efficiently & intelligently.



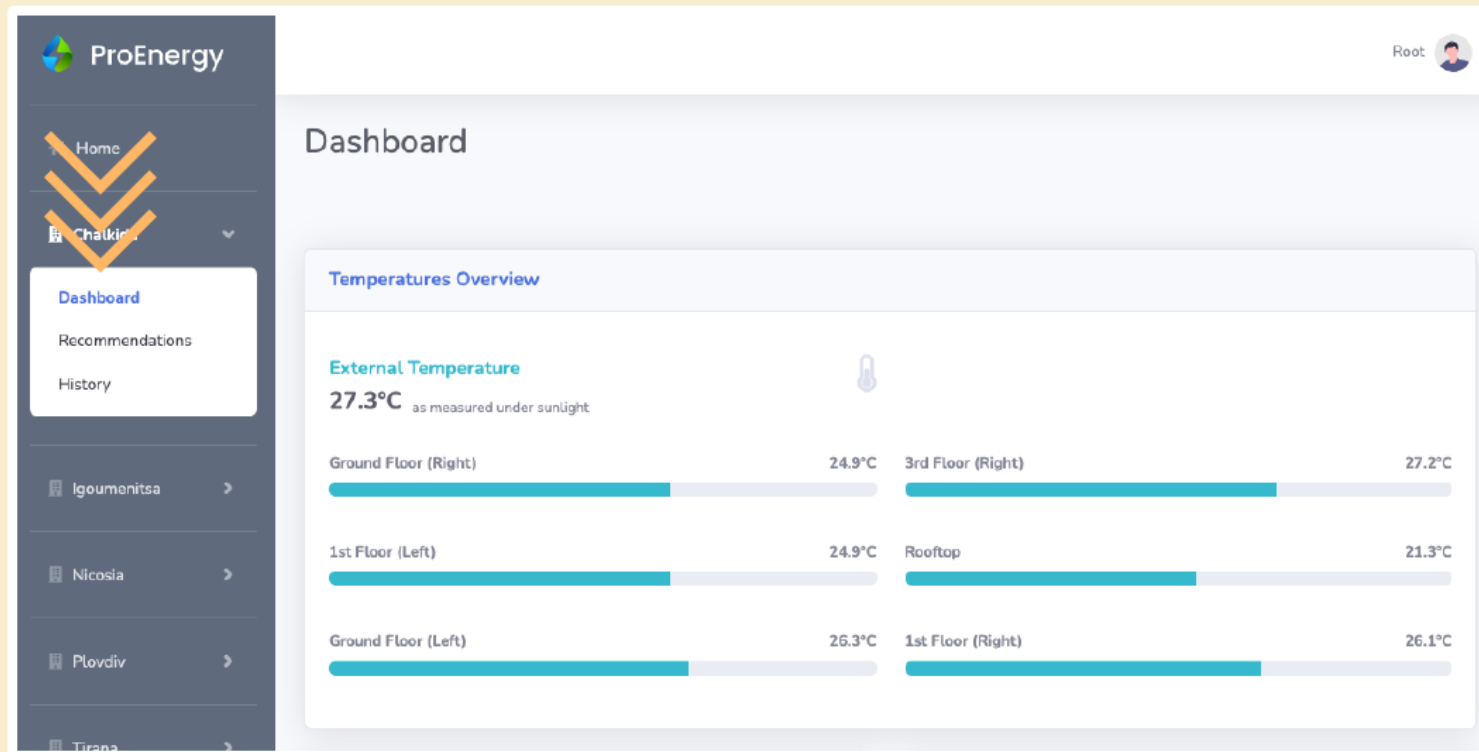
Recommendations

Providing suggestions based on the analysis of the gathered data.



History

Historical data depicting the energy usage footprint over time.

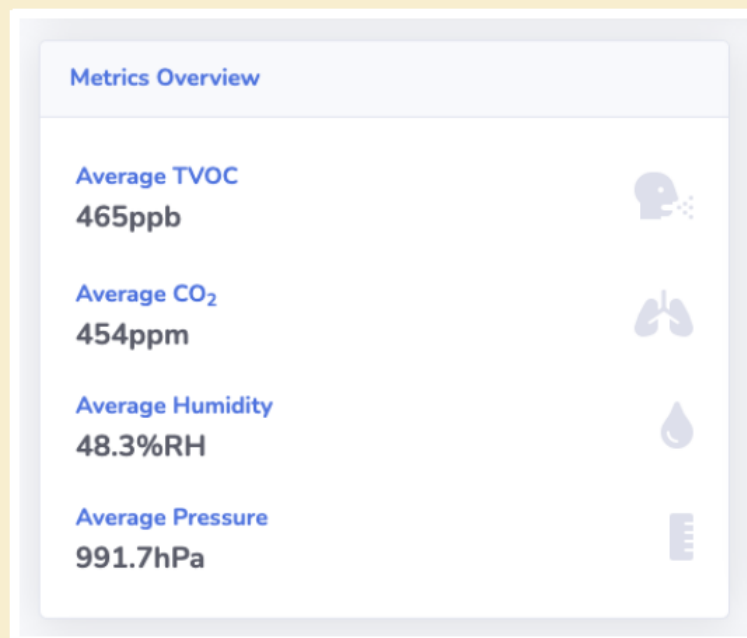


Dashboard

Presents multiple high-level metrics, useful for optimizing energy efficiency & productivity.



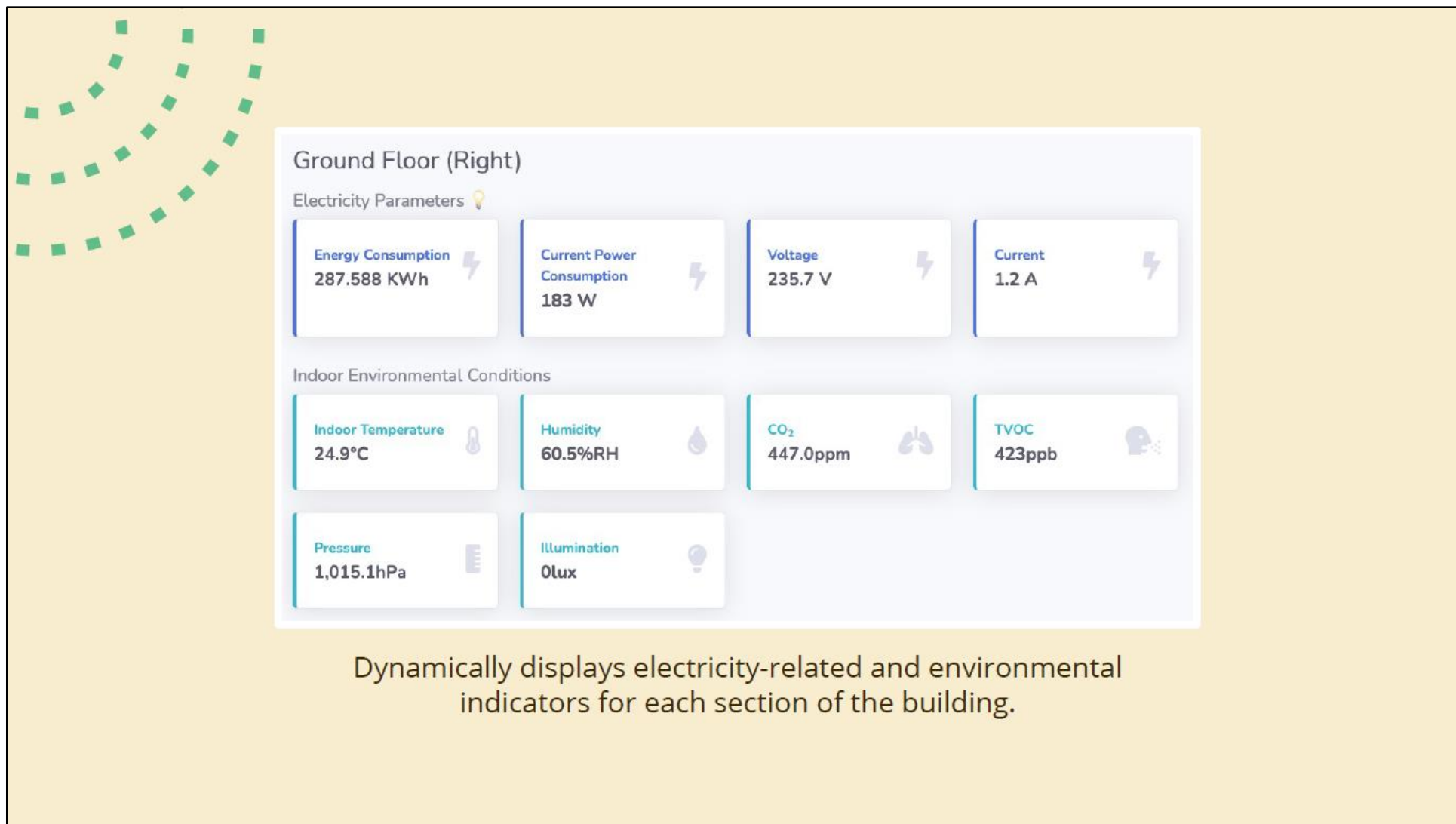
The average measurements of total volatile organic compounds, carbon dioxide, humidity and pressure within the building



The average measurements of total volatile organic compounds, carbon dioxide, humidity and pressure within the building

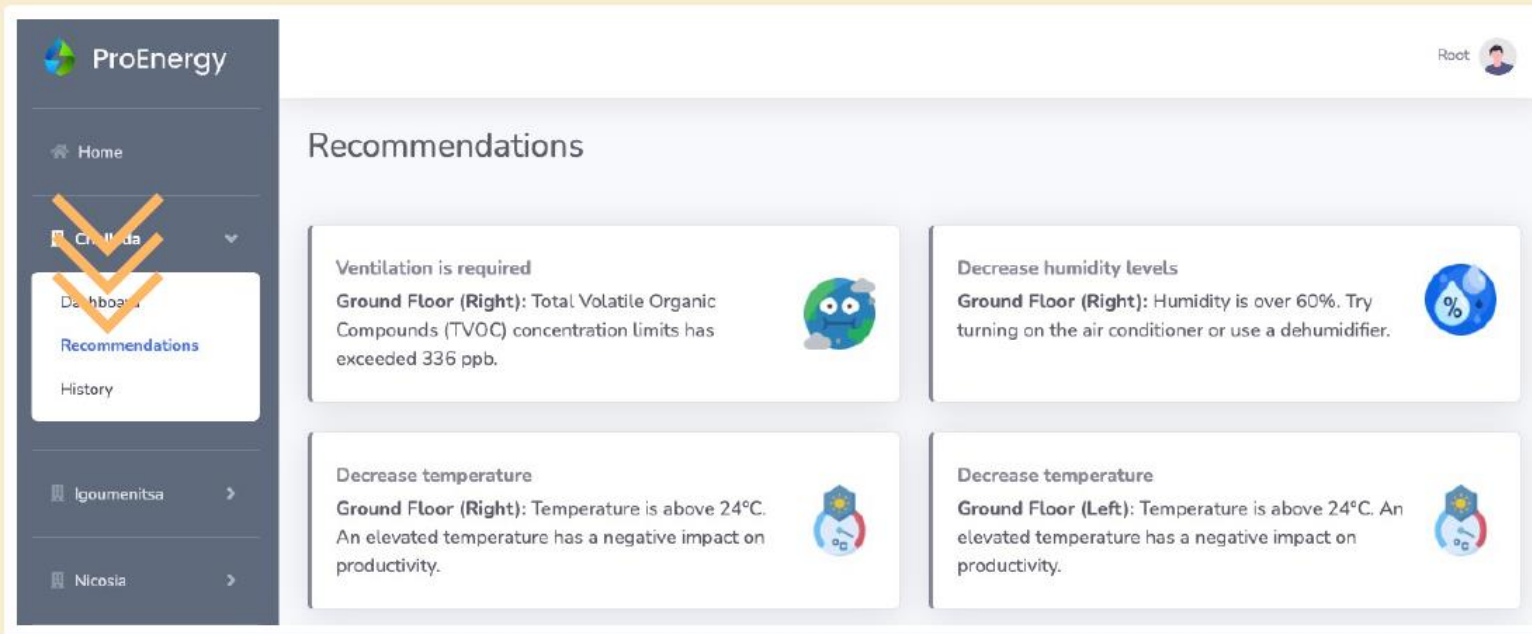


Depicts the rooms or sections of the building that currently consume most of the overall power



Recommendations

Displays real-time suggestions that derive from the raw data received from the building's sensors.



The screenshot displays the ProEnergy dashboard interface. On the left is a dark sidebar with navigation options: Home, Challouja, Dashboard, Recommendations, History, Igoumenitsa, Nicosia, Plovdiv, Tirana, Project website, and Contact. The main content area is titled 'Milesight AM107 2576' and 'Ground Floor (Right)'. It features a 'Select sensor' button and a section for 'Last 30 days measurements'. This section includes a 'Show 10 entries' dropdown and a search input. Below is a table with columns for Temperature (°C), Humidity (%RH), CO₂ (ppm), Pressure (hPa), and Date. The table contains 10 rows of data. At the bottom, it shows 'Showing 1 to 10 of 3,517 entries' and a pagination control with buttons for Previous, 1, 2, 3, 4, 5, ..., 352, and Next.

Temperature (°C)	Humidity (%RH)	CO ₂ (ppm)	Pressure (hPa)	Date
24.9	60.5	452	1015	2022-05-27 20:39:49
24.9	60.5	452	1015	2022-05-27 20:29:49
24.9	60.5	447	1015.1	2022-05-27 20:19:49
24.9	60	457	1015.1	2022-05-27 20:09:49
24.9	60	452	1015.1	2022-05-27 19:59:49
25	60	454	1015.1	2022-05-27 19:49:49
25	60	451	1015.1	2022-05-27 19:39:49
25	60	455	1015.1	2022-05-27 19:29:49
25	60	457	1015	2022-05-27 19:19:49
25	59.5	452	1014.9	2022-05-27 19:09:49

History

Enables users to select a sensor in order to observe how its values change over time.



Contact form

A user can provide feedback or just choose to communicate with the system administrators via the respective contact form that is available via the app sidebar.

The screenshot shows a mobile application interface with a dark sidebar on the left and a white contact form on the right. The sidebar contains icons for Home, Chalkida, Igoumenitsa, Nicosia, Plovdiv, Tirana, and Project website. The contact form is titled "Contact form" and includes the instruction "Please fill the following form to let us know of any issues you might have." Below this, there are two input fields for "Name" and "Email", followed by a larger text area for "Message". A blue "Send Message" button is at the bottom of the form. A decorative graphic of a yellow plug and green leaves is overlaid on the bottom right corner of the form area.

User Levels

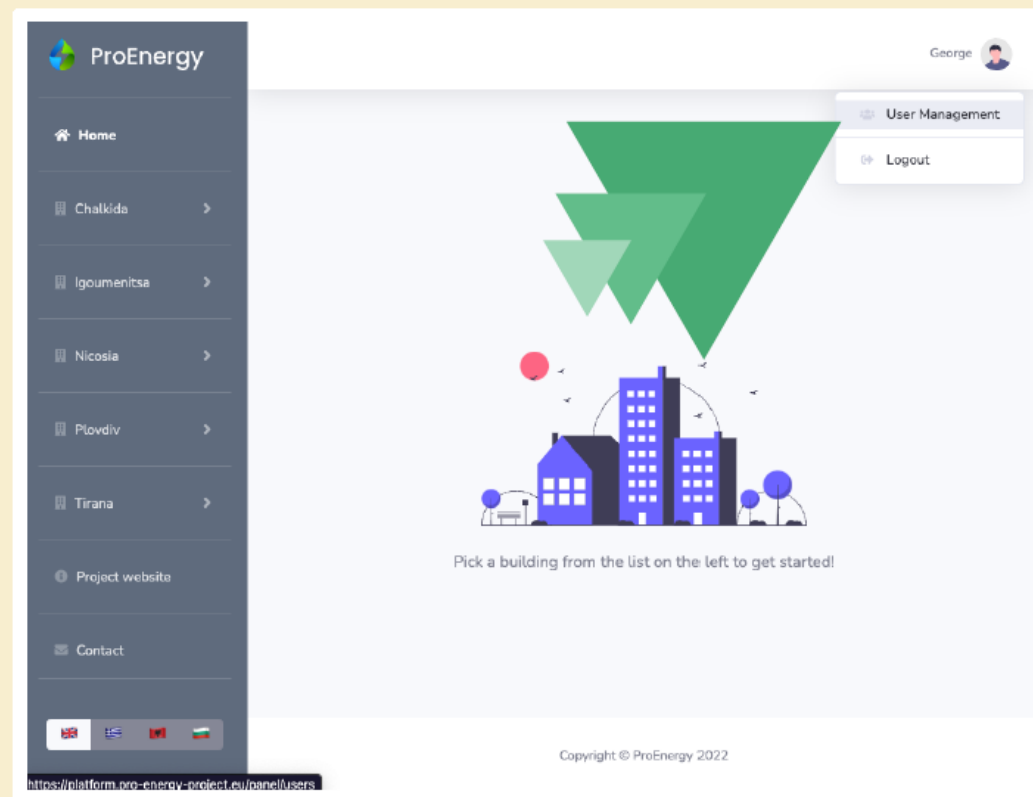
The pro-energy web application supports the following user levels:

1. **Super Admins:** system administrators who can access all buildings information and manage all users registered in the system.
2. **Building Admins:** project partners who can access the information of a specific building and manage the users of the particular building.
3. **Basic Users:** managers of a building or other personnel authorized by the project partners; all these can only access information of a specific building.



User Management

This panel is available for the first two user levels, i.e. the super admins & building admins.



The image shows a user registration form in a web application. The form is centered and contains the following fields:

- Name**: A text input field with a user icon on the right.
- Email ***: A text input field containing "mail@example.com" and an envelope icon.
- Password**: A text input field with a key icon.
- Language ***: A dropdown menu showing "English" and a globe icon.
- Role ***: A radio button selection list with three options:
 - Admin**: The admin has all rights
 - Chalkida Administrator**: A building administrator can access the information of a specific building and manage the users of the particular building.
 - Chalkida Basic User**

At the bottom of the form are two buttons: "Cancel" (with a close icon) and "Create" (with a checkmark icon).

On the right side of the form, there is a green circular callout bubble with white text that reads: "Enables the registration of new users...".

The background of the application shows a sidebar on the left with the title "Users" and a list of users: "Chalkida Admin", "Chalkida User", "Root", and "Super Admin". On the right, there is a "Role: All" filter and a list of roles: "Nobody", "Nobody", "Admin", and "Super Admin".

...plus a few User Management Actions

Update name, email & password

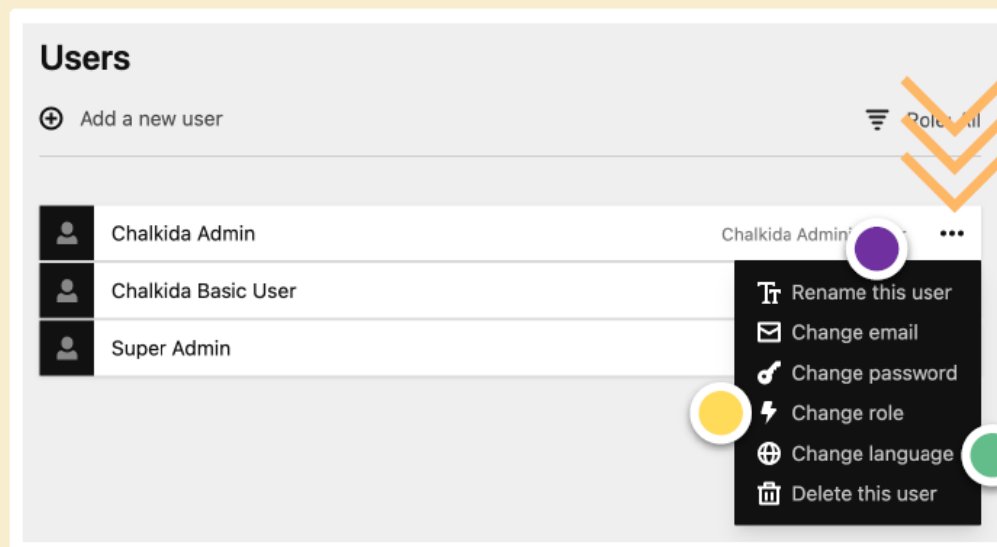
Alter the user's name & login credentials

Change role

Select among super admin, building admin & basic user

Change language

Set the default language of the user





Pro-Energy

**Web Application
v1.0**

