



Techelec
TECHNICAL SOLUTIONS

Techmetrys Manual

In depth manual for Techmetrys app and its functionalities.



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1 INTRODUCTION

Welcome to the Techmetrys shore power management system. This document provides all the information you need to use the shore power facilities. It gives a clear overview of how to use the web-based platform to activate a connection point, check your current consumption, or find which connection points are available at any given moment.

The manual explains the full process from registration to activation. First, registration is covered, followed by the steps to activate a specific connection point. Finally, additional information is provided regarding the general operation and the symbols displayed on the cabinets on the cabinets.

2 REGISTRATION

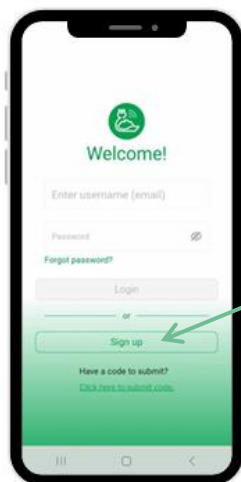
When using shore power and our software for the first time, follow the steps in this chapter to successfully register. After registration, you can start connecting to the supply point.

Registration can be completed on both a computer and a mobile phone. The required information and the final result are identical, but screen layouts may differ depending on the device.

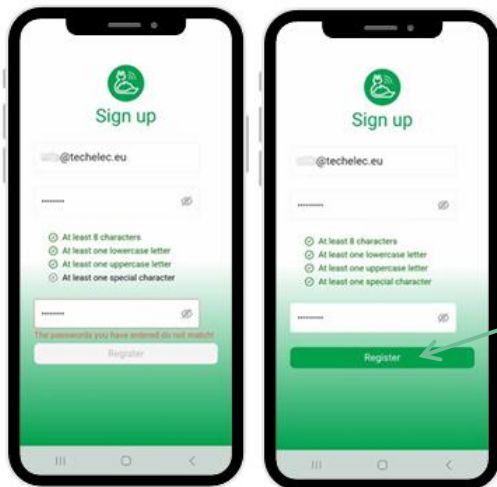
After registering, your account automatically receives the role 'UserGroupAdmin'

2.1 Registration on Mobile Phone

Open your preferred internet browser and go to **app.techmetrys.eu**.



When logging into the app for the first time, tap the green **Sign Up** button. This will take you to a new screen.



Niet actieve Register knop te zien op de linkse afbeelding.

On the Sign Up screen, enter your email address and password.

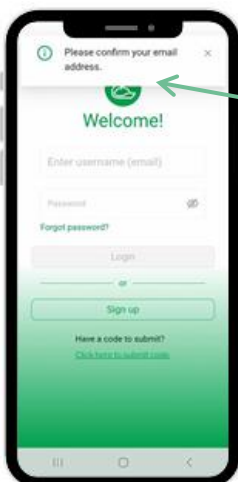
Choose a secure password that meets all the required criteria.

The software clearly indicates this using green text and a checkmark.

Only then will the **Register** button become active, and you can tap it to proceed to the next step.

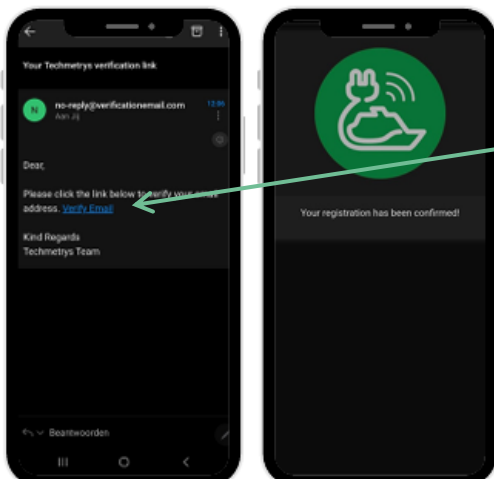
Important: You must have access to the email address you enter.

To continue the registration process, a verification email will be sent to this address.



After successfully tapping the Register button, a **pop-up** will appear.

Now leave the internet browser and open the inbox of your email account.



Open the email and tap the blue **Verify Email** link.

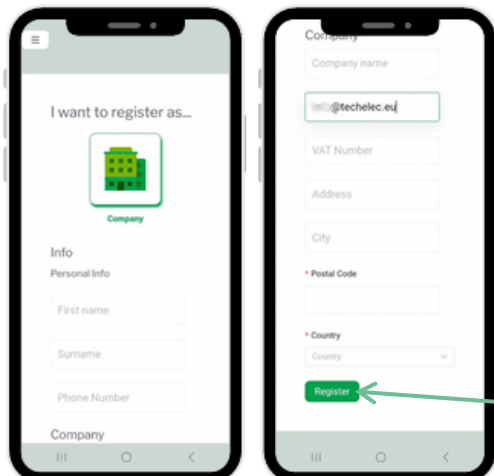
A pop-up will appear confirming that the registration was successful.

Return to your internet browser and continue in the last screen of the app, or navigate again to **app.techmetrys.eu**



Enter the email address you have just registered and your password. Then tap the green **Login** button.

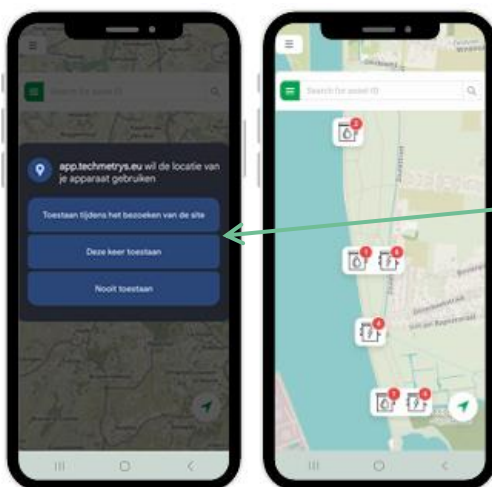
If you have forgotten your password, go to the chapter *Forgot Password* on page 11 chapter 3.2.



Once you are logged in for the very first time, you will be asked to complete your company information.

Fill in all the fields – all fields are mandatory. Your registration email address is already pre-filled under the billing information. If this differs from your login email address, you can change it here.

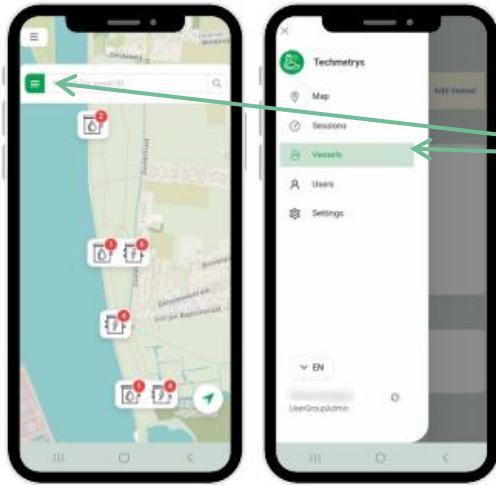
Once all information has been entered, tap the green **Register** button.



When you log into the software, you will arrive at the map view screen.

The first time, the software will ask for permission to use your location. If you allow this, the map will automatically focus on the nearest cabinets to increase ease of use.

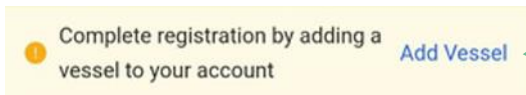
If you do not grant permission to use your location, you will always have to manually find your location on the map to find the nearest available cabinets.



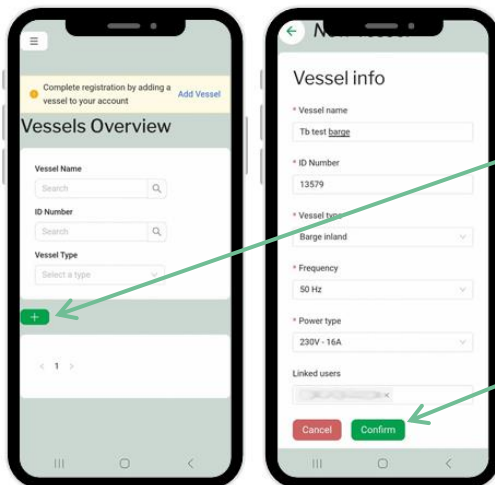
As the final step of your registration, you must add your vessel to your profile.

Navigate to the Vessels overview by tapping the **menu** icon and then selecting **Vessels**.

You may also see the pop-up (shown in the original screenshots) throughout the software if you have not yet added a vessel.

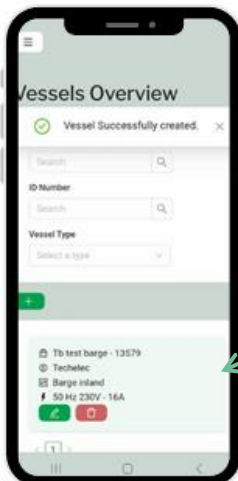


Tap the blue **Add Vessel** link to go directly to the correct page.



On the **Vessels Overview** page, tap the green **+** symbol to add a new vessel to your profile.

Enter all vessel information and then tap the green **Confirm** button.

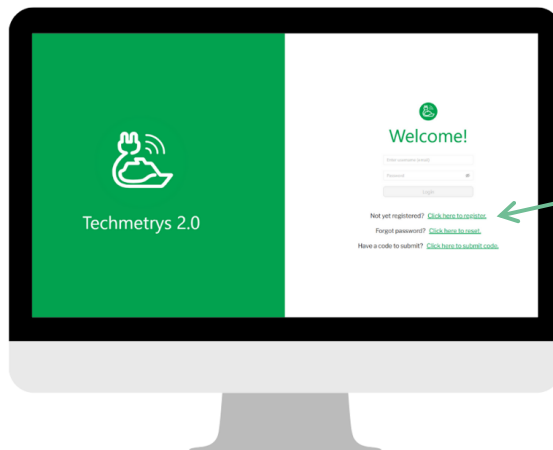


A **pop-up** will appear confirming that your vessel has been successfully **added** to your profile.

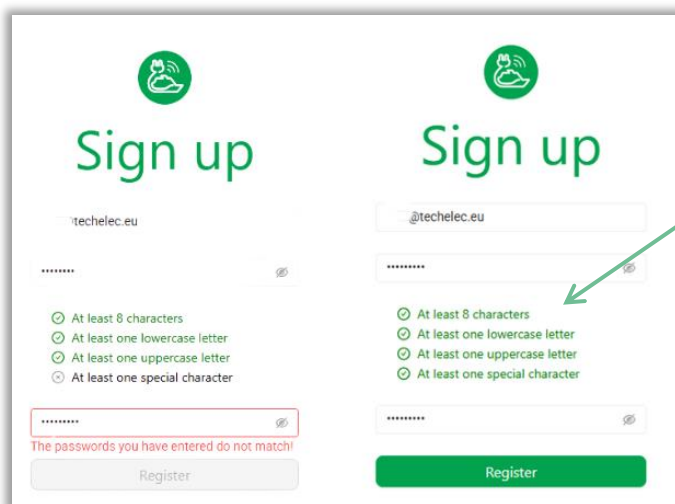
Your registration is now fully complete.

2.2 Registration on Computer

As the first step, open your preferred internet browser and go to:
app.techmetrys.eu

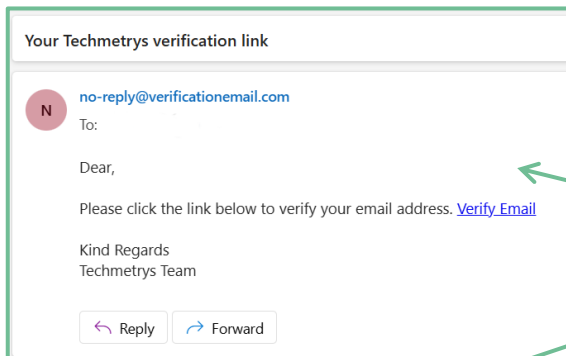


When logging into the app for the first time, click the green link **“Click here to register”** next to *“Not yet registered?”* This will redirect you to a new screen.



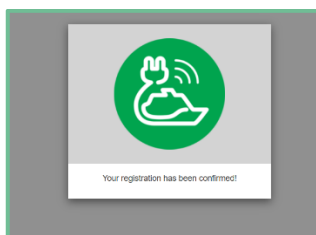
On the **Sign Up** screen, enter your email address and password. Choose a secure password that meets all password requirements. The software will clearly indicate this by showing green text and a checkmark. Only then will the **Register** button become active, allowing you to proceed.

Important: The email address you enter must be accessible to you. To continue the registration process, a verification email will be sent.

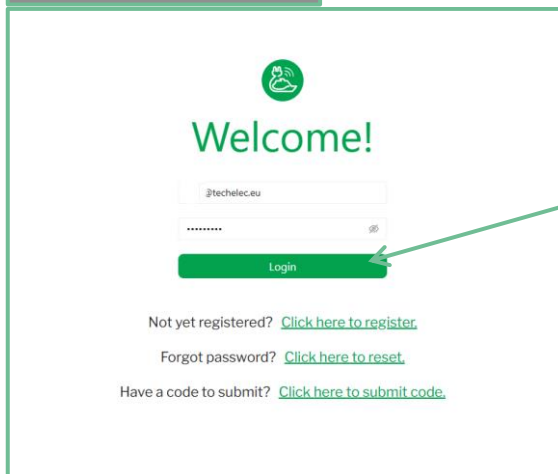


Now leave your internet browser and open your email inbox. Open the email and click the blue **Verify Email** link.

A pop-up will confirm that your registration was successful.

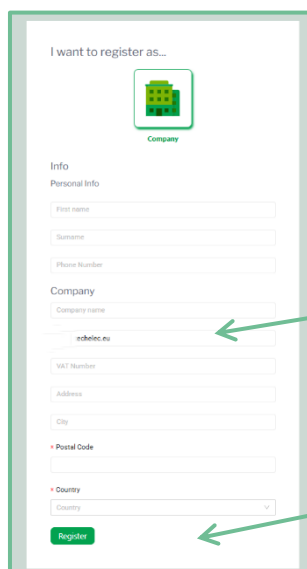


Return to your internet browser and continue in the last screen of the app, or go again to **app.techmetrys.eu**.



Enter the email address you just registered and your password. Click the green **Login** button.

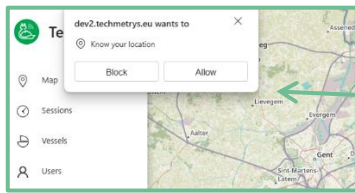
If you have forgotten your password, *Forgot Password?* Press on **Click here to reset** If you have forgotten your password, go to the chapter *Forgot Password* on page 11 chapter 3.2.



Once you are logged in for the first time, you will be required to complete your company information.

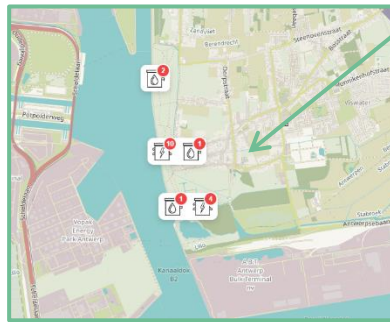
Fill in all fields – every field is mandatory. Your registration email address is pre-filled under the billing details. If this differs from your login email address, you may change it here.

When all information has been entered, click the green **Register** button.



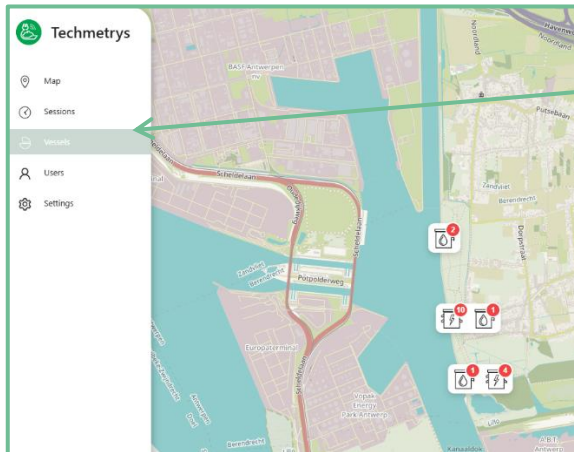
When you log into the software, you will arrive at the map view screen.

The first time, the software will ask for permission to use your location.



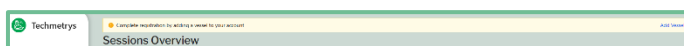
If you allow this, the map will automatically focus on the cabinets nearest to you. This increases ease of use.

If you do not allow location access, you will need to manually navigate the map to find the nearest cabinets.



As the last step of your registration, you must add your vessel to your profile.

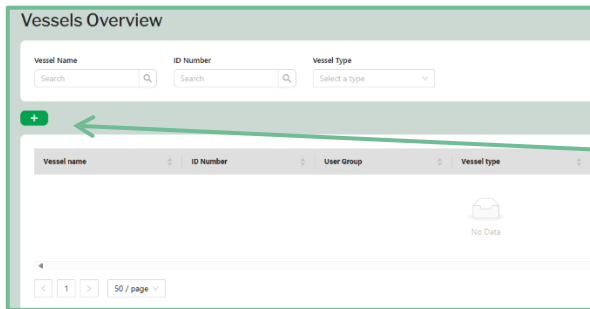
Click **Vessels** in the menu bar to navigate to the correct page. You may also encounter the pop-up (shown in the original screenshots) throughout the software if you have not yet added any vessel.



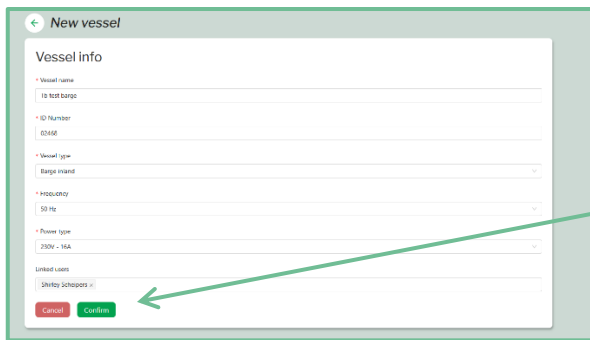
Click the blue **Add Vessel** link to go directly to the correct page. On the **Vessels Overview** page, click the green **+** symbol to add a new vessel to your profile. Enter all vessel information and then click the green **Confirm** button.

A pop-up will appear confirming that your vessel has been successfully added.

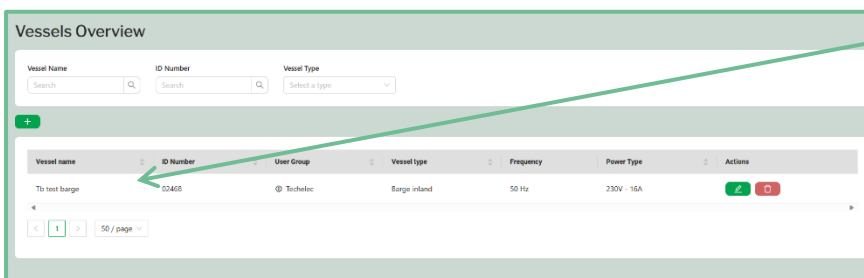
The pop-up at the top of the screen referring to vessel registration will also disappear. Your registration is now fully complete.



On the **Vessels Overview** page, click the green **+** symbol to add a new vessel to your profile.



Enter all vessel information and then click the green **Confirm** button.



Your vessel has now been successfully **added** to your profile.

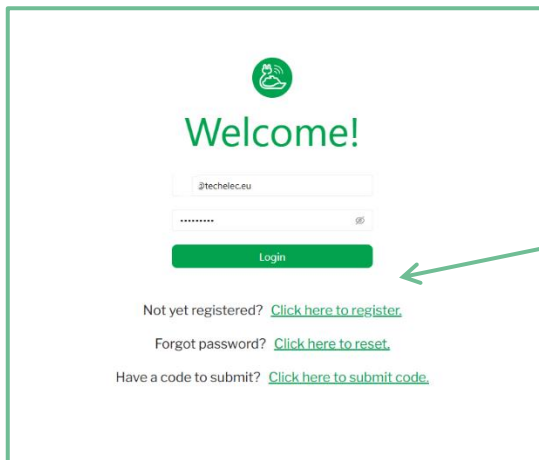
This completes the registration of your account.

3 LOGGING INTO THE APP

3.1 Login Procedure

If you have previously registered, you can follow the steps below to log into the software.

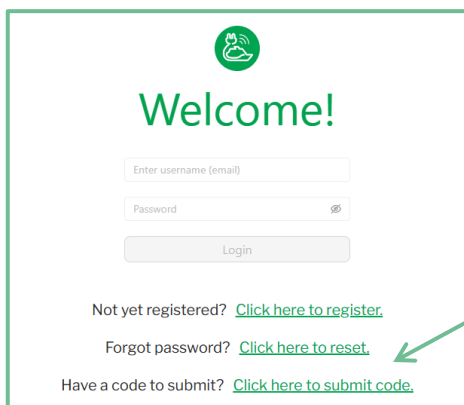
Open your preferred internet browser and go to:
app.techmetrys.eu



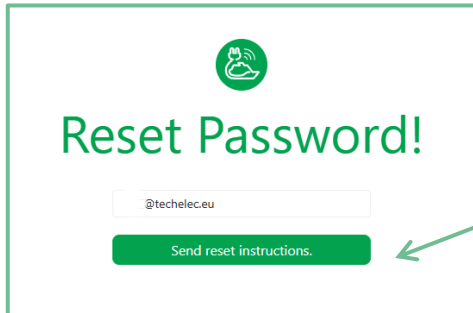
Enter the email address you registered with and your password in the fields provided. Then click the green **Login** button. After logging in, you will arrive at the map view screen.

3.2 Forgotten Password

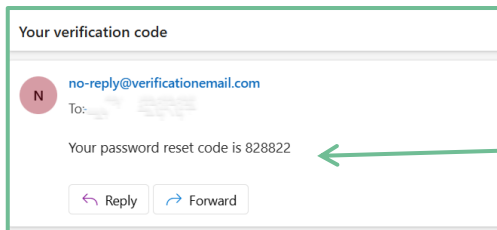
If you notice during login that you have forgotten your password, you can follow the steps below to reset it.



While attempting to log in, click the green **“Click here to reset”** link next to **“Forgot password?”**. This will redirect you to a new screen.

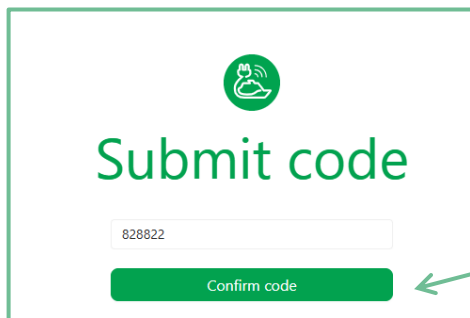


Enter your email address and click the green **Send reset instructions** button..



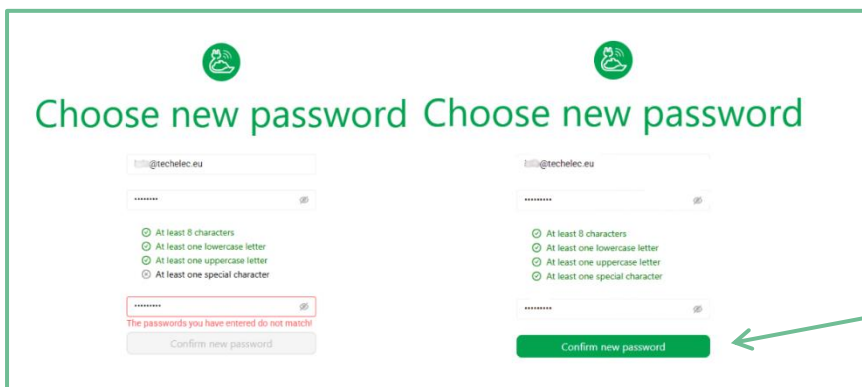
Now leave your internet browser and open your email inbox.

Open the email and remember or copy the code included in the message.



Return to your internet browser and enter the code into the required field.

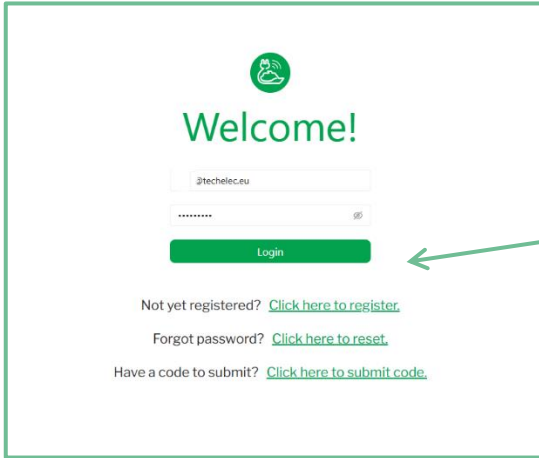
Then click the green **Confirm Code** button.



On the **Choose new password** screen, enter your email address and your new password. Choose a secure password that meets all criteria. The software will indicate this clearly using green text and a checkmark.

Only then will the **Confirm new password** button become active, allowing you to proceed to the next step.

Non-active button visible on left screenshot.



After confirming, you will be redirected back to the login screen.

Enter your email and your newly created password, then click the green **Login** button.

4 USE OF THE PLATFORM

4.1 The Home Page (Maps)

After logging into the Techmetrys platform, you will automatically arrive on the Home page.

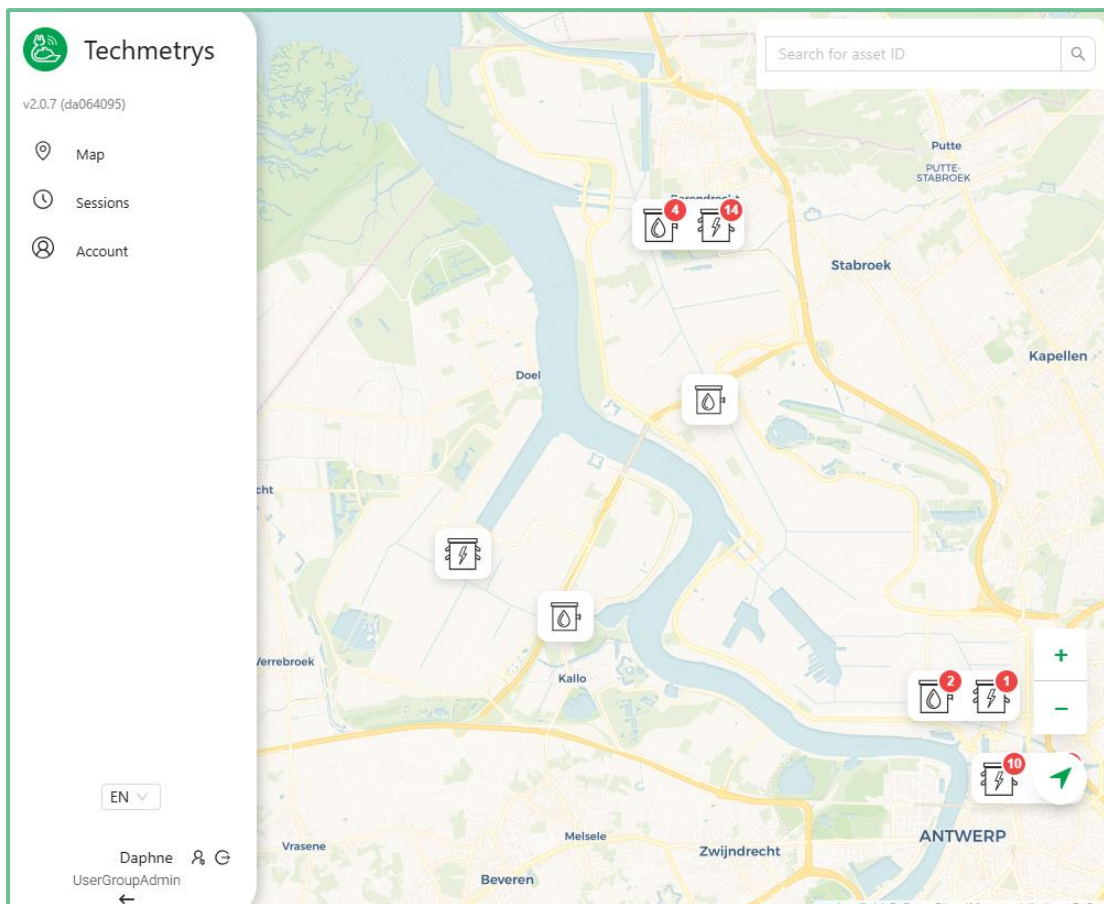
This is the central starting point of the platform and shows an interactive map with an overview of all available connection cabinets (assets).

When you allow the platform to access your location, the map will automatically focus on your current position and display the nearest cabinets.

When you do not give permission, you will need to manually zoom to the desired region to find the nearest cabinets.

On the left side of the homepage, you can see the menu.

From this menu, an end user has the choice between three different options.



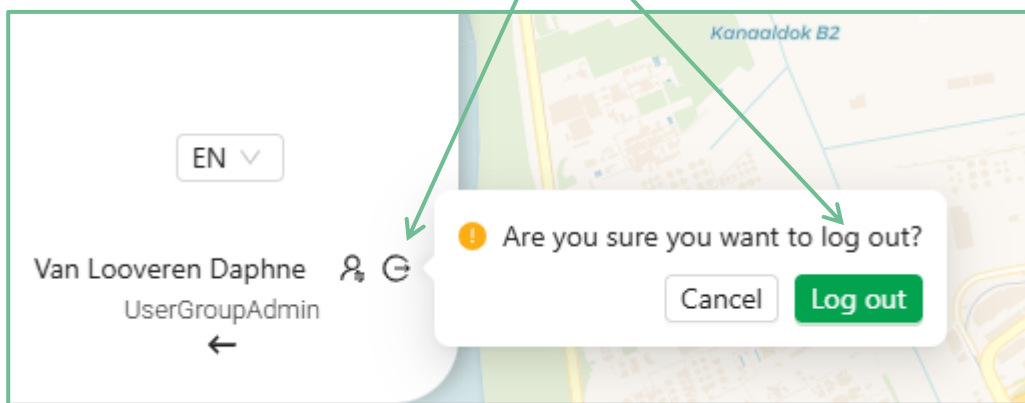
- **Map** – the overview page showing all cabinets on the map
- **Sessions** – all consumption sessions ever started by the user
- **Account** – all account-related data such as additional users, vessels, and company information

Below the Techmetrys logo, you will see a code: this indicates the version of the application. This is mainly for transparency purposes. An online software platform such as Techmetrys is always under development.

Finally, at the bottom of the menu bar, there is a dropdown menu that allows the user to choose their preferred language. By clicking the arrow showing “EN”, the menu opens and the user can choose between Dutch, French, German, and English. By default, the platform is set to English.

Under this menu, the name of the logged-in user is shown, with below it the user’s rights in the platform. The user who created the account first receives the UserGroupAdmin role. Only this role has permission to modify data under the submenu Account.

If the user wishes to log out, this can be done by clicking the button next to the username. A submenu then appears. By clicking the Log out button, the user will be logged out.



4.1.1 Map Symbols and Asset Types

On the map, the different types of assets can be easily distinguished. Within the platform, a distinction is made between electric cabinets and water cabinets.

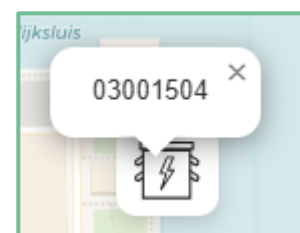


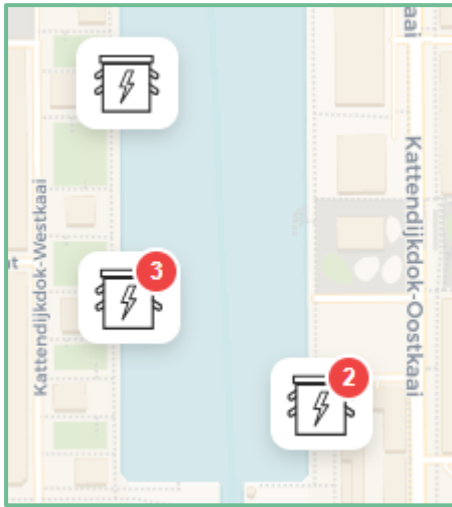
- An **electricity cabinet** (shore power) is represented by a **lightning bolt symbol**.



- A **water cabinet** is represented by a **drop symbol**.

When you hover over a cabinet with your mouse, the cabinet number will appear.





When a **red circle with a number** is shown on the map, it means that multiple cabinets are located together.

The number indicates how many cabinets are grouped.

By clicking this group, the map will zoom in further. Clicking the cluster will zoom in to show individual cabinets.

Finally, in the upper-right corner, there is a **search bar**.

Here you can enter the cabinet number (*Asset ID*) to navigate directly to a specific cabinet.

4.2 Starting and Stopping a Session – Connections < 125A

To start a session, you must first select the correct cabinet. This can be done on the map, via the search bar, or by navigating to the cabinet manually.

If location data is shared by the user, the map will be zoomed to the cabinets closest to the user.

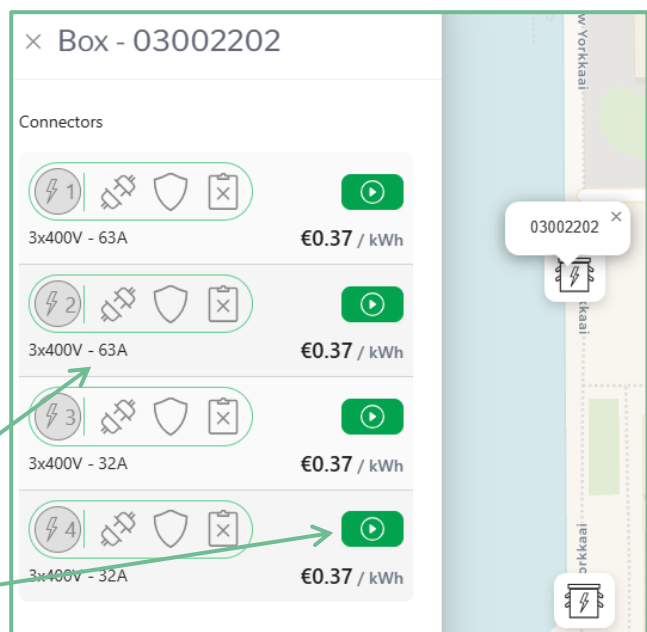
Once the correct cabinet has been selected, a new menu opens. In this menu, an overview of the cabinet details is shown. At the top, you can see the selected cabinet number.

Below that, the connectors are displayed.

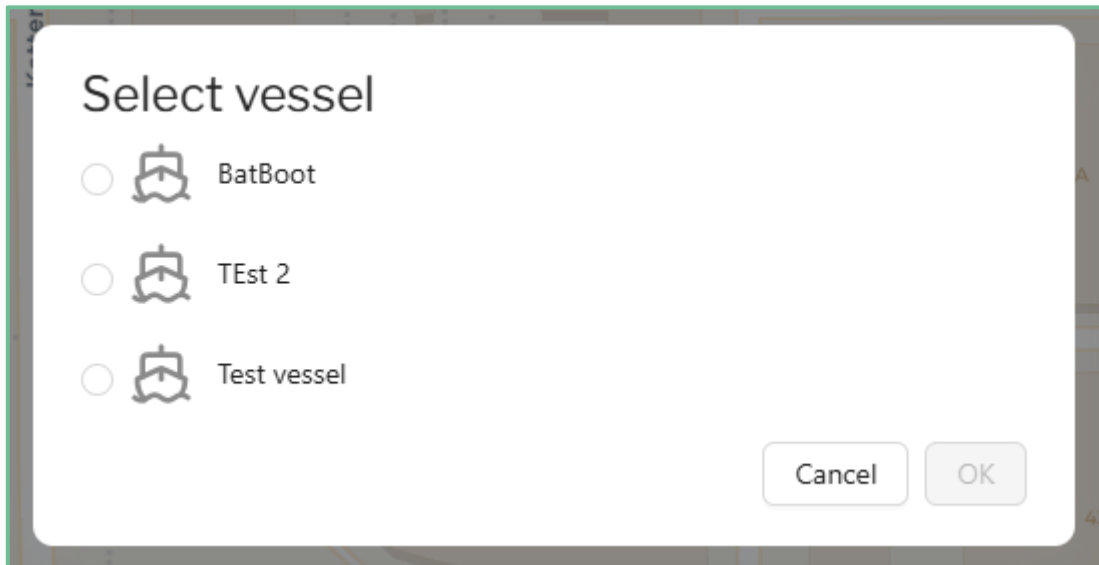
This example cabinet has **four connectors**.

Under each line, the available power and the price per kWh are shown.

To start a session, you only need to click the green **Start** button next to the desired connector.



If the captain has multiple vessels registered under their account, a menu will appear where the captain can choose for which vessel he wants to activate the session. In the example shown, the captain has **three vessels** registered under his account.



Note:

If the captain has multiple users who are *not* assigned to specific vessels, a user can only start a session for the vessel to which they are assigned.

After selecting the vessel, click **OK**. Authorization will now be sent to the connector. If successful, the green **authorization** LED will blink on the cabinet, and the connector will turn **BLUE** in the platform.



From the symbols next to the connector, you can see whether the plug still needs to be inserted in order to meet the start conditions.

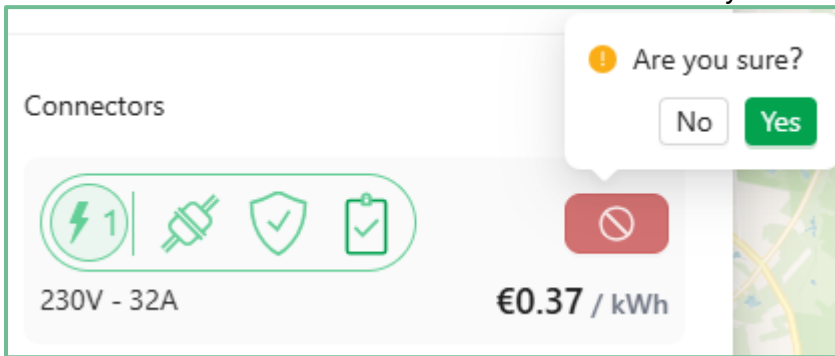


Once the plug is inserted and all start conditions are met, power is still not yet active.



By pressing the **Start** button, the relay will switch on. After pressing the button, the relay is activated and the connector turns **GREEN**.

A session can be ended in two way

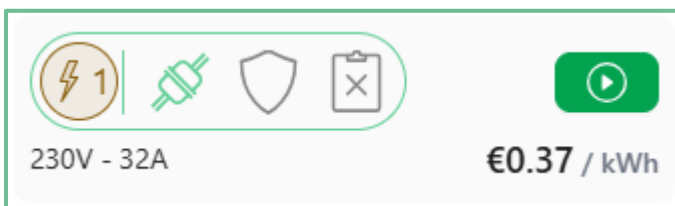


Stopping via the platform

The user can click the red **Stop** button in the platform (as shown in the image). A message appears asking the user to confirm whether they wish to stop. After clicking **Yes**, power is disabled and the session ends..



After confirmation, the cabinet is still sending the final consumption data. At that moment, the connector is temporarily blocked and turns **yellow**.



When the session has ended, the Start button becomes available again. In the example, the plug is still inserted..

Active sessions can also be ended by **pulling the plug out**.

After this event, the platform will automatically log the captain out..

4.3 Starting / Stopping a Session – Connections > 125A

Shore-power cabinets are equipped with **two connection points**, both of which can be used simultaneously by the same vessel. There is a **400A (Powerlock)** connection and a **125A (CEE)** connection. The connectors are accessible through doors on the waterside, which are locked with magnetic locks. Connection is only possible if the user has completed a *one-time registration* on the Techmetrys user platform (see **Registration**).

The shore-power cabinets are equipped with an **LCD screen** that displays all information of the connection point. The text on the screen is available in four languages: Dutch, French, German, and English. The preferred language is set on the user platform during registration and will be used during the login procedure. All further messages will be shown in the selected language until the vessel is logged out.

The shore-power cabinets comply with the applicable international standard (IEC 800005/3), meaning that all **safety regulations** must be respected before voltage is supplied to the sockets.

When clicking on a rivercruise cabinet on the map, the details of such a cabinet are shown.



The major difference is that the status of the door is also visible. In the image on the left, a **400A river-cruise connection** is shown. There is **no authorization** (grey connector) and the door is closed (**green**).



After authorization, the connector turns **blue**, and you can see that the door icon turns grey and shows an open position.

In the situation above, the connector must be plugged in, the door closed, and the physical button on the outside of the cabinet must be pressed. After doing so, power will be activated.

4.4 The Sessions Page

The **Sessions** tab provides a complete overview of all sessions, both active and closed. All completed and ongoing transactions are bundled in this overview list. Each session can be clicked, after which a detail page appears containing all information related to the transaction.

Every session in Techmetrys is unique and can be retrieved individually. This unique number is called the **transaction number**.

With this number, a specific session can be quickly located or followed up. At the top of the page, several filters are available that allow you to search based on:

- Transaction ID
- Name of the vessel
- User (operator)
- Start and end date
- Status (active or closed)







This way, the user gets quick and clear insight into all transactions and can easily find the correct session.

Sessions

Trans ID: Vessel: Initiator:

Start Date: End Date: Active:

No auto-refresh



Trans ID	Box	Connector	Initiator	Vessel	ID Number	Start time	End time	Duration	Usage	
TEC-1775	 501		Daphne Van looveren	Test Vessel	987654321	2025-11-19 14:29:36		0m 26s	0,076 kWh	<input type="button" value="Stop"/>
TEC-1774	 501		Daphne Van looveren	Test Vessel	987654321	2025-11-19 14:26:13	2025-11-19 14:28:55	2m 42s	1,900 kWh	
			Daphne Van			2025-11-19	2025-11-19			

In the example shown in the manual, you can see an **active session** and a **closed session**. From this page, the user can also end an ongoing session by clicking the red button.

4.5 The Session details page

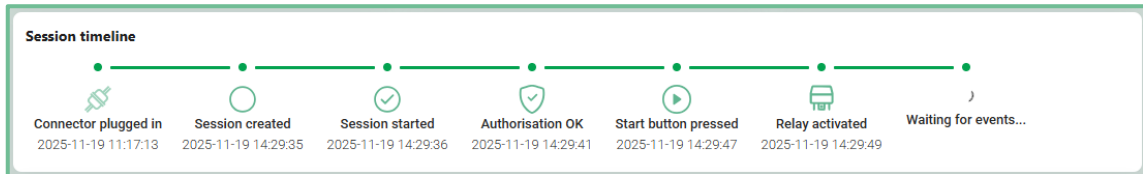
The detail page of a session provides a complete and in-depth overview of all information related to an active or recently completed session. This page is composed of **five separate sections**, which together form a clear picture of the status, consumption, and events that occurred during the session.

Session Details

Base metrics	General info	Technical data
<p># Transaction Id TEC-1775</p> <p>⌚ Elapsed time 19m 31s</p> <p>⚡ Total consumption 17,368 kWh</p> <p>€ Total spent 6,426 €</p> <p><input type="button" value="Stop Session"/></p>	<p>👤 Initiator: Daphne Van looveren</p> <p>🚢 Vessel: Test Vessel</p> <p>ENI Number: 987654321</p> <p>Start from: ⌚ 19/11/2025 - 14:29</p> <p>End at: ⌚ -</p> <p>Tx Id: TEC-1775</p> <p>Connector:   501</p>	<p>Max current L1: 346,176 A</p> <p>Meter start: 3.440,028 kWh</p> <p>Meter stop: 3.457,396 kWh</p>

The first section is **Base Metrics**. In this section the most important basic data of the session are shown, such as the transaction number, the total duration of the session, the number of kWh consumed and the total cost up to the last refresh of the data. This gives the user a quick and accurate snapshot of the current status.

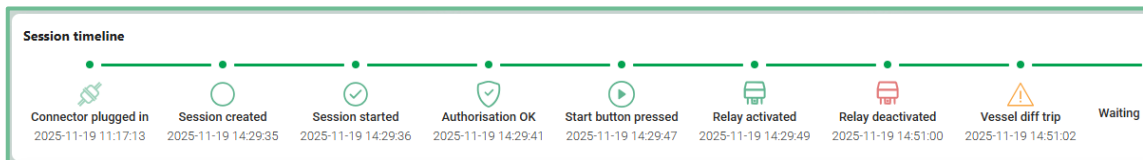
After that follows the section **General Info**. In this section, the data is shown of the person who started the session, the vessel for which the session is running, as well as the cabinet and the connector number that were used. Furthermore, more **technical data** is shown in this part. For example, the maximum measured current per phase is shown, as well as the meter readings as they are read out via the MID-certified meters. Thanks to these certified measurements, the end user receives transparent information about the exact consumption.



An essential part of the detail page is the **Sessions Timeline**.

This timeline is a very valuable tool for both captains and service technicians. It shows in chronological order all events during the session, such as the moment when the plug was inserted, when authorization was given and when the start button was pressed (including repeated attempts).

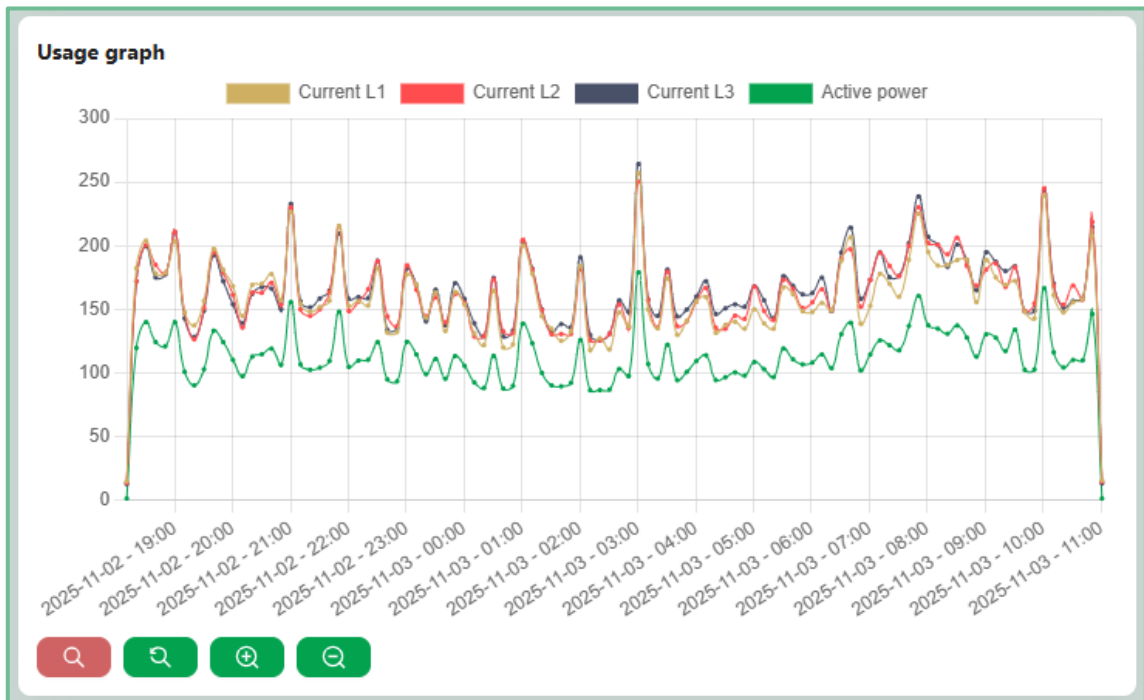
Technical incidents such as a ground fault or other electrical problems are also clearly shown in the timeline. This makes it possible to quickly determine what did or did not take place during the session. See example below.



The graph at the bottom of the detail page does not only provide a visual representation of current and power, but also interactive functions to analyse the data more precisely. Through the buttons on the graph it is possible to zoom in on specific parts of the timeline. This makes it possible to examine certain moments in the session in more detail, for example when an irregularity, peak or error message was detected.

In addition, there are filters available that allow certain data to be shown or hidden. For example, the user can choose to show only the current values of phase 2. By filtering out certain phases or parameters, it becomes easier to carry out targeted analyses and identify technical causes without being distracted by other information.

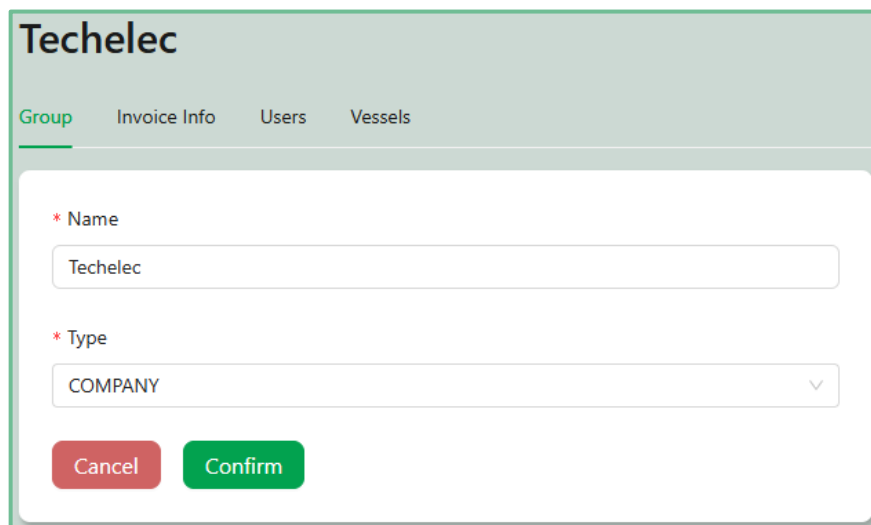
These interactive features make the graph a powerful tool for both technical personnel and end users who want more insight into the course of the session.



Together, these five parts form a complete and transparent overview, allowing each session to be analysed and followed in detail.

4.6 The account page

The account page is the central place where all personal and company information of a user within the Techmetrys platform is managed. This page consists of several tabs, each highlighting a specific part of the account.



Techelec

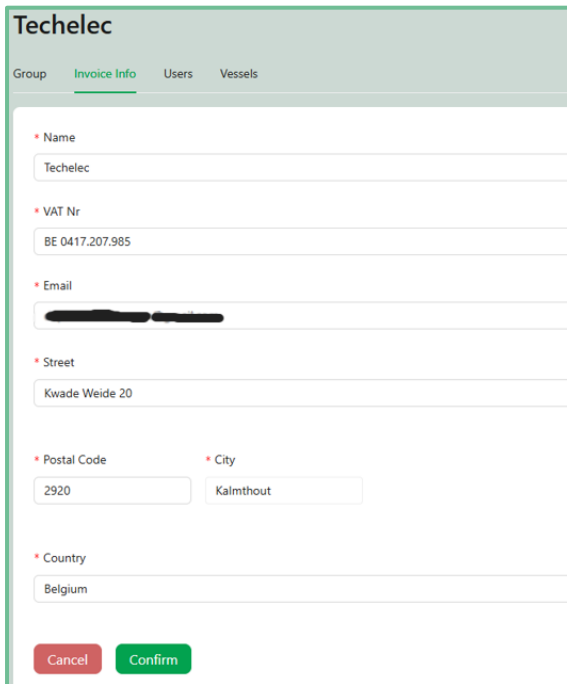
Group | Invoice Info | Users | Vessels

* Name

* Type

Cancel | Confirm

The first tab is **Group**. Every new registration within Techmetrys is automatically assigned to a group. For an end user, this group name is usually the same as the company name with which they register. This ensures that all users of the same company fall neatly under one shared structure. Within this group, roles, permissions and internal links between users are managed.

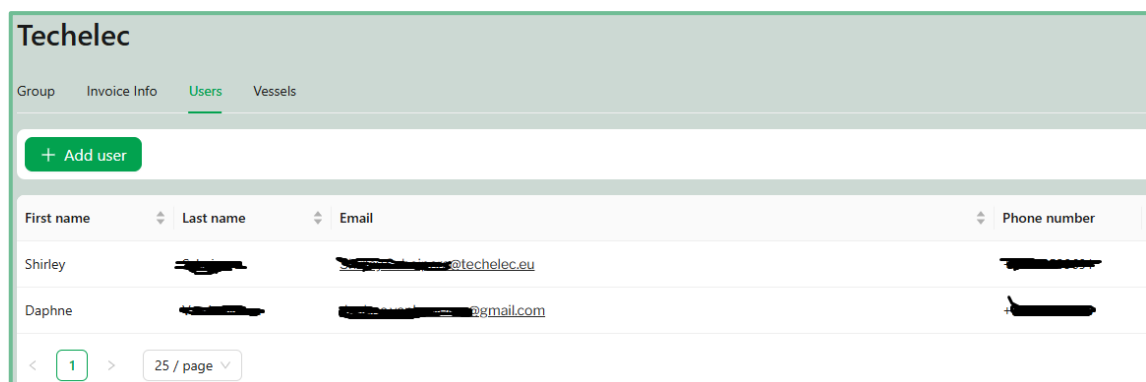


The second tab shows the **company information** that was entered during registration. This includes the company name, the address, VAT number and the official contact information. This information is also used for invoicing, so that all consumption and subscription data can be processed correctly.

Only the **UserGroupAdmin** has the authority to make changes to this company information. This prevents other users from accidentally modifying critical or financial details.

Note:

When a new team member or colleague needs to be added to the same account, this person must first be created inside the company account using the + Add user button. Only after this step is completed may the new user register themselves via the link: <https://app.techmetrys.eu/register>



First name	Last name	Email	Phone number
Shirley	[redacted]	[redacted]@techelec.eu	[redacted]
Daphne	[redacted]	[redacted]@gmail.com	[redacted]

By following this order, the new user is automatically linked correctly to the existing company account, ensuring all permissions and settings are applied correctly.








The third important tab is **Vessels**. On this page, new vessels can be added or existing vessels can be modified. Each vessel can be provided with the necessary details so that during transactions the correct information is shown. This ensures that all sessions can be clearly linked to the correct vessel and gives companies a structured overview for managing their fleet.









Together, these components offer a clear and complete overview of everything related to account management, allowing users to work efficiently and keep all data organised and secure.

5 Techmetrys – Symbols and Meanings

The Techmetrys platform uses symbols as much as possible to display information quickly and easily. This chapter provides an overview of all symbols used within the Techmetrys platform and their meaning. Each symbol helps the user to quickly interpret the status of a cabinet, connector or connection. In the first part you will find a table with all symbols and their meaning..

5.1 Part 1 – Table overview of symbols

Symbol	Meaning
	<p>Green: plug correctly inserted. Grey: not inserted..</p>
	<p>Green: door closed. Grey: door open</p>
	<p>Grey: No authorization. Green with checkmark :Authorized. Green with F Forced authorization F.</p>
	<p>Grey: not all conditions fulfilled. Green: all conditions fulfilled (door closed, plug inserted, authorized)</p>
	<p>Yellow: warning. Red: alarm or fault.  electricity box.  waterbox.</p>

	<p>Number = connector number.</p> <p> or  = water or electricity</p>
	<p>Connectivity:</p> <p>Red: no 4G/5G connection. Green: active 4G/5G connection.</p> <p>Ethernet connection Red: no connection. Green: active connection</p>
	<p>System in maintenance mode.</p>
	<p>Refresh of connector.</p>
	<p>Reset of box</p>
	<p>Simulates pressing the physical start button remotely.</p>

5.2 Part 2 – Visual guide

5.2.1 Plug

When the plug is correctly inserted, the icon lights up green. When it is not connected, it remains grey.



5.2.2 Door

The door symbol shows the status of the cabinet door: green for closed, grey for open.



5.2.3 Shield (Authorization)

The shield symbol shows the authorization status of the box. Green with check mark means authorized, green with F means forced authorization.



5.2.4 Tablet (Asset conditions)

The tablet indicates whether all start conditions are fulfilled. Green means the door is closed, the plug is inserted and authorization is present..



5.2.5 Box

The box icon shows the general status: yellow = warning, red = fault, , = water,

 = electricity,  = water.  



5.2.6 Connector

Each connector icon has a number and may contain a symbol for water or electricity.

Dark grey:



connector idle state, no plug inserted or other

Light grey



connector out of service

Orange:



connector in alarm, an electrical fault has occurred at the connection point. The captain has the possibility to reset the fault via the button.

Green:



connector in use. Power is present at the connection point

Blue:



connector in authorization state.

Red:



connector in alarm, connector cannot be used

Brown:



only a plug is inserted but there is no authorization or power on the connector