

ERA Equipment CO₂ Calculator

Version 2.0

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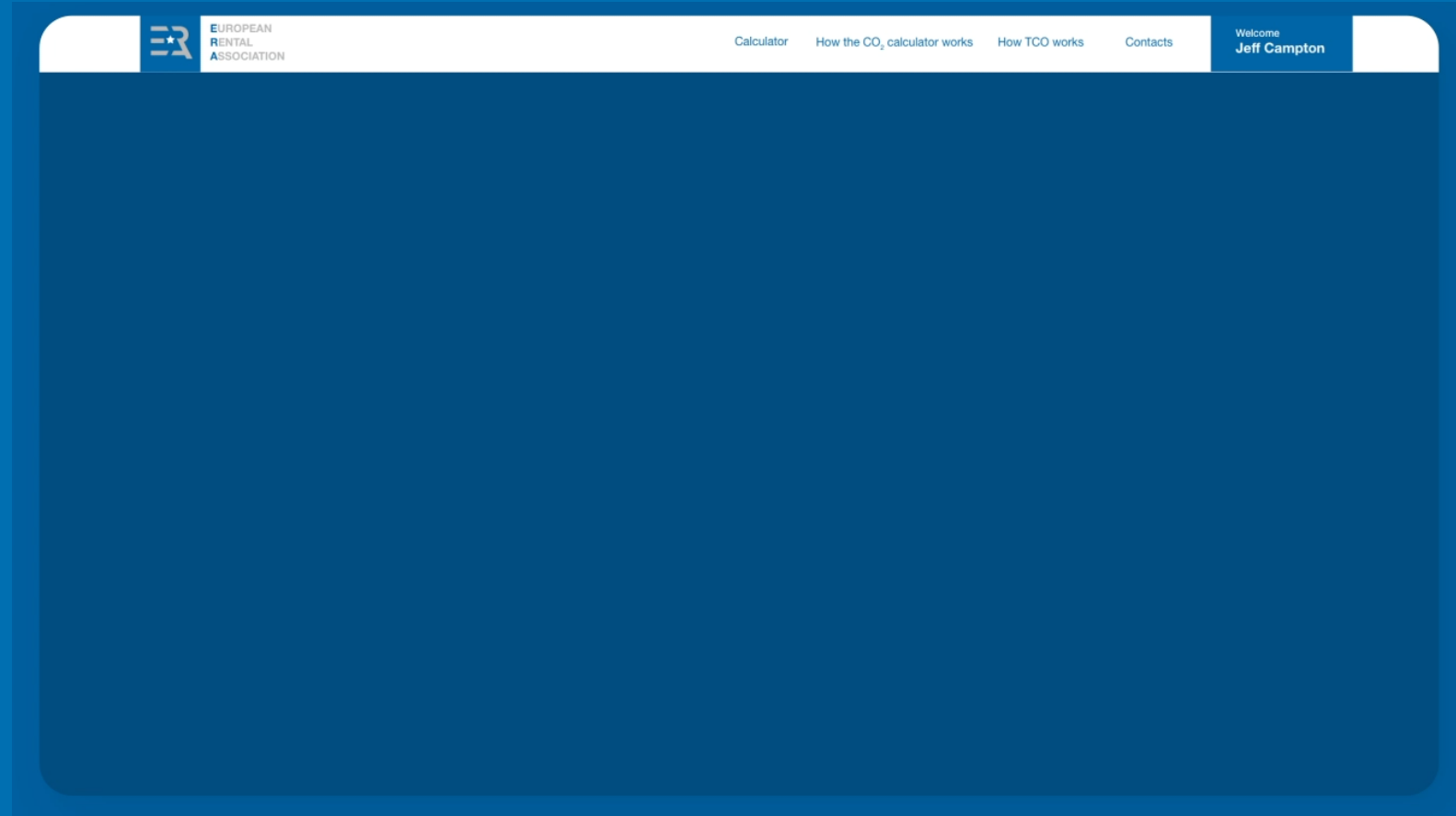
What is the ERA Equipment CO₂ Calculator

www.equipmentcalculator.org

The ERA Equipment

CO₂ Calculator **is a tool to estimate the carbon footprint of construction equipment over its entire life cycle.**

It applies to all types of construction equipment, from mini excavators to wheel loaders and from generators to boom lifts.



The version 2.0

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ITEM CALCULATOR

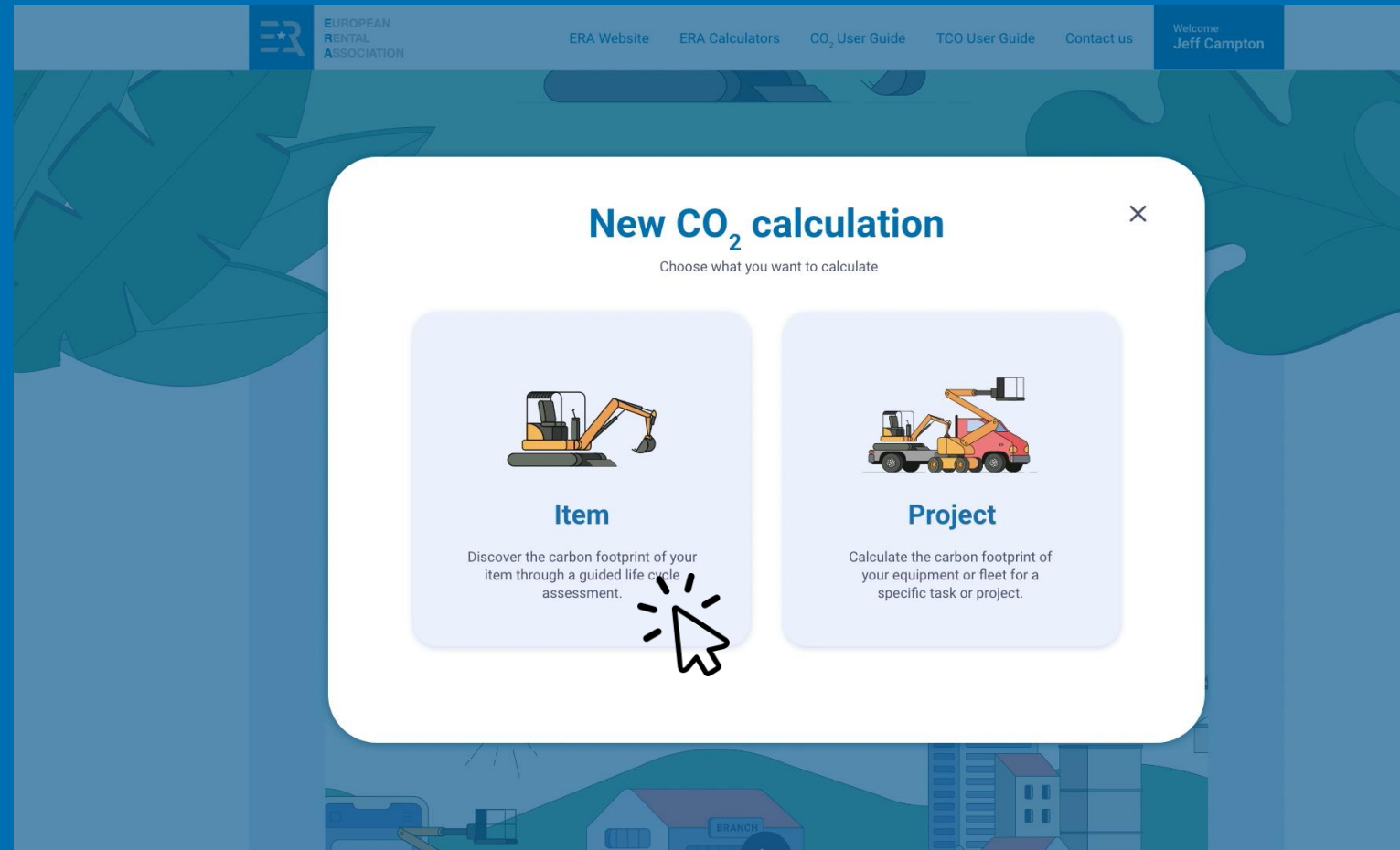
Calculates the CO₂ emissions for one piece of equipment

Result: CO₂ per hour of use

PROJECT CALCULATOR

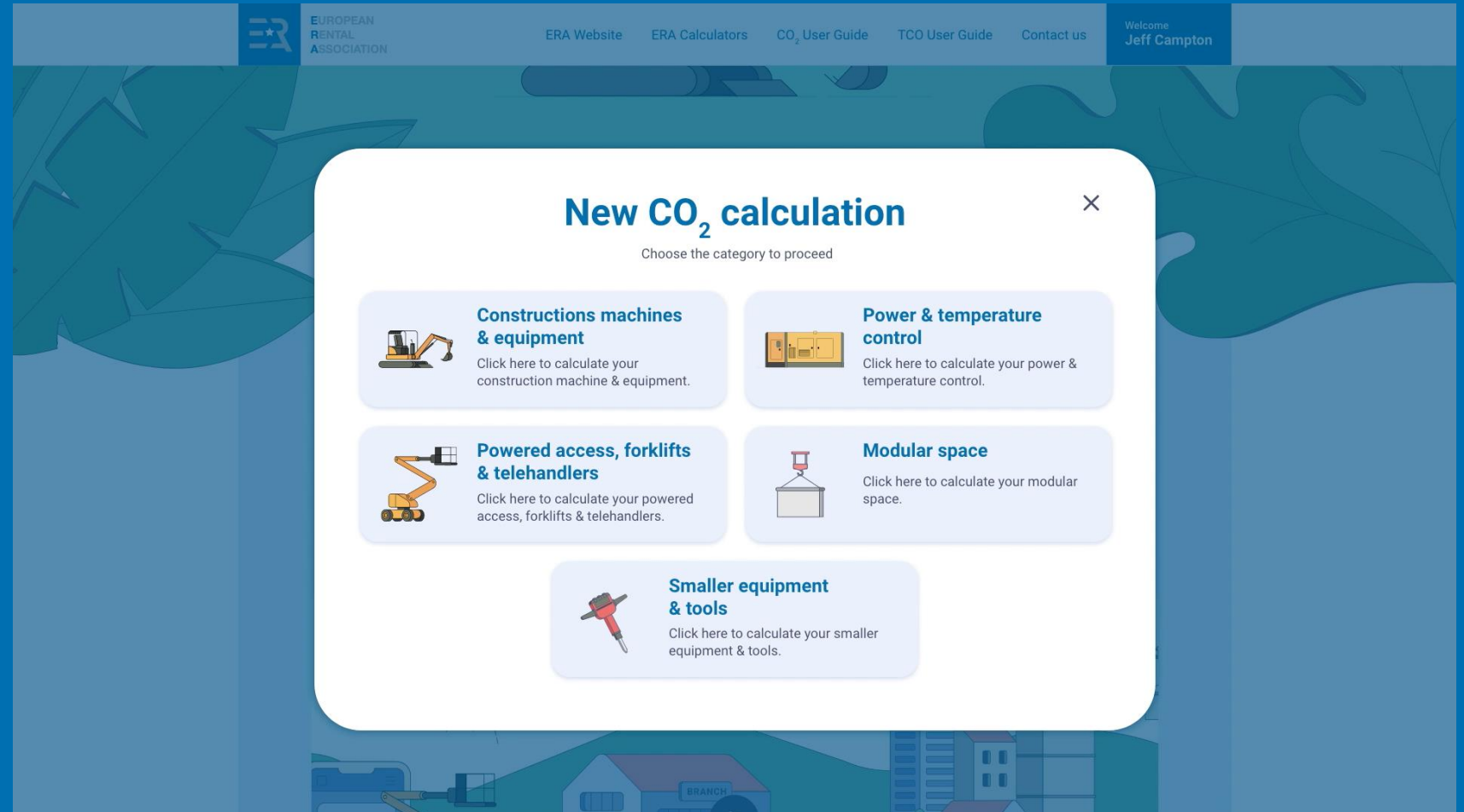
Calculates the CO₂ emissions for one or more equipment, for a specific project performed in a specific time frame

Result: CO₂ emitted for the project



Item calculation

The Equipment Calculator will be available in the following 5 categories



The background is a solid blue color with white line-art illustrations. In the upper left, there is a sun with rays and a cloud. Three other clouds are scattered across the top. In the lower half, there are two wavy lines representing a horizon or ground, with several stylized trees of varying heights and positions.

Equipment Calculation

Modular Space

The version 2.0

ITEM CALCULATOR

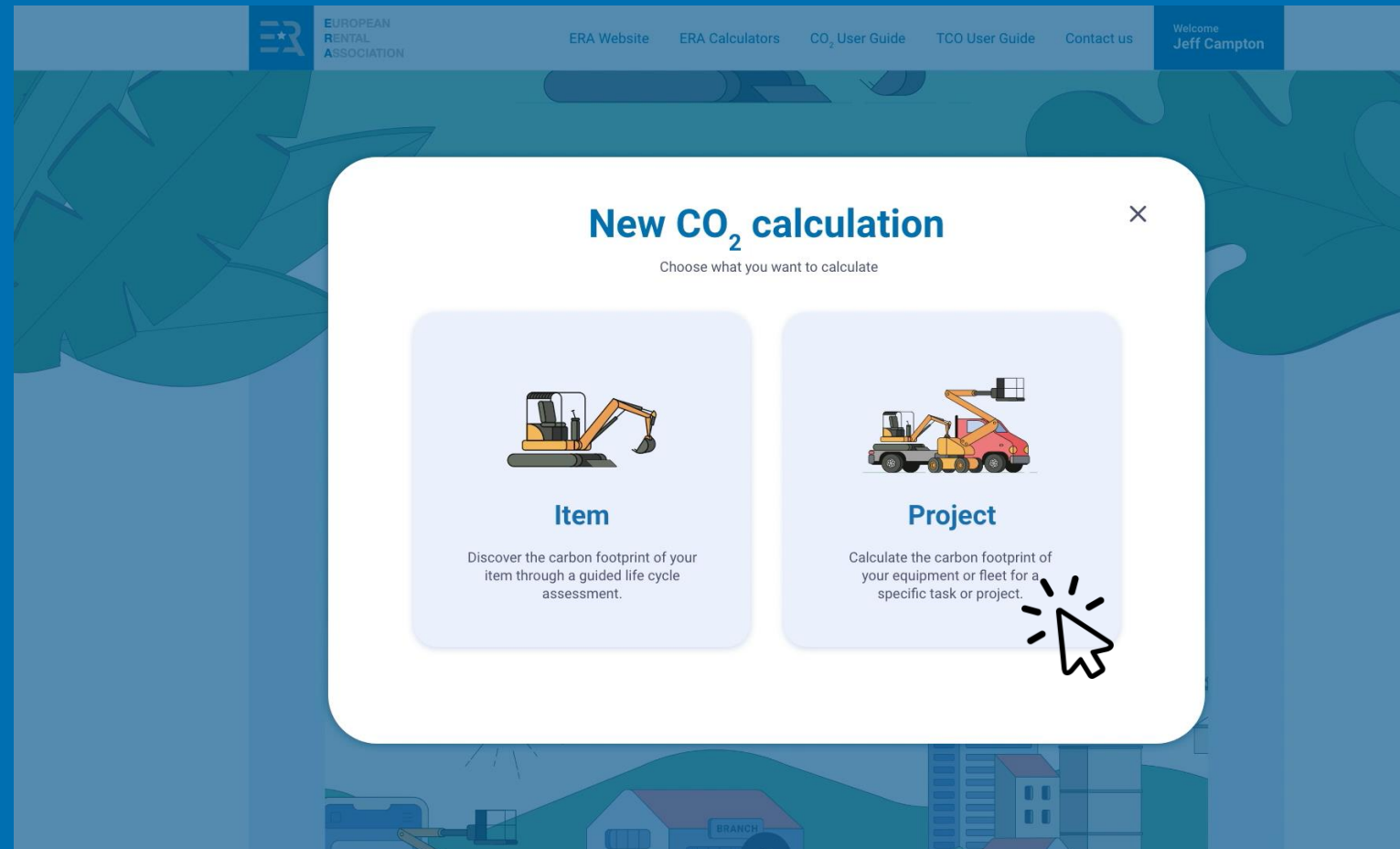
Calculates the CO₂ emissions for one piece of equipment

Result: CO₂ per hour of use

PROJECT CALCULATOR

Calculates the CO₂ emissions for one or more equipment, for a specific project performed in a specific time frame

Result: CO₂ per hour of use



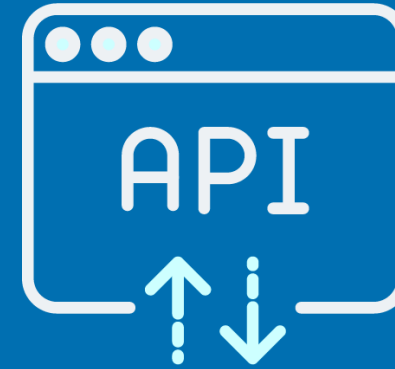


Project Calculation

A further evolution

API for integrations

Possibility to integrate, through APIs, the ERA CO₂ Calculator with third parties software that might be required to give their users an immediate and reliable response about CO₂ emissions.



The screenshot shows the ERA CO₂ Calculator web interface. At the top, there is a navigation bar with the ERA logo and the text 'EUROPEAN RENTAL ASSOCIATION'. To the right of the logo are links for 'ERA Website', 'ERA Calculators', 'CO₂ User Guide', 'TCO User Guide', and 'Contact us'. On the far right, it says 'Welcome Jeff Campton'.

Result

Insert new items or select items from your fleet to create a new project

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Project information

Name	Dates
Jobsite Main Street	13/06/22 - 17/06/22
Description	
Site preparation and construction works at Bern	

Equipment list

CATEGORIES	BREAKDOWN	
Construction machines & equipment	50%	^
EQUIPMENT		
	WEIGHT	ENERGY SOURCE
Excavator 305 - 1	5.800 kg	Diesel
Excavator 305 - 2	5.800 kg	Diesel
Excavator 305 - 3	5.800 kg	Diesel
Modular space		
Modular space	5%	v

Carbon footprint of this project

TOTAL 1030 kg co₂ eq.

CARBON FOOTPRINT BREAKDOWN

- TRANSPORT 30% 309 kg co₂ eq./hr
- OIL & MAINTENANCE 10% 103 kg co₂ eq./hr
- ENERGY 50% 515 kg co₂ eq./hr
- PRODUCTION 28% 288,4 kg co₂ eq./hr
- END-OF-LIFE -18% -185,4 kg co₂ eq./hr

A vertical bar chart on the right side of the breakdown section shows the relative contribution of each category to the total carbon footprint. The categories are color-coded: yellow for Transport, orange for Oil & Maintenance, light blue for Energy, dark blue for Production, and dark blue for End-of-Life. The Y-axis ranges from -20.0 to 1250.

Thank you

CO₂ Calculator - Version 2022

