



Are you ready to build  
a **carbon zero world?**



AYR

CEiIA

[www.ceiia.com](http://www.ceiia.com)

We are CEiIA, a Portuguese engineering and product development center that conceives, develops and productizes new technologies, products and services towards a more sustainable society.

We are one of the highest R&D investors in Portugal, and we work by bridging together cities, industry and universities in high-tech sectors such as automotive and mobility, aeronautics, ocean and space.

Today, using a sustainability-as-a-service model, we focus on developing emergent technologies that enable the creation of new services and business models towards carbon neutral cities.



AUTOMOTIVE



MOBILITY



AERONAUTICS



OCEAN



SPACE

Reducing CO<sub>2</sub> emissions is probably the biggest change we need to operate as a society.

**5 years to slash 45%  
of the World carbon emissions!**

How do we get there?



# What is AYR?

AYR is a platform that helps cities accelerate their decarbonization efforts.

## How?

Quantifying and valuing avoided CO<sub>2</sub> emissions.

- Fast and scalable deploy
- Helps initiatives that are already happening

## Why mobility?

Mobility represents more than 20% of global CO<sub>2</sub> emissions.



**Avoided CO<sub>2</sub> Emissions:** Difference between the average CO<sub>2</sub> emissions value set for a trip and the emissions value generated by using sustainable transport methods, such as bicycles or public transit.



# How does AYR® work?


AYR® quantifies and values CO2 emissions avoided by people making sustainable choices.

Valuing what is not emitted is the groundbreaking concept upon AYR® is built on.



# AYR<sup>®</sup> Blockchain Platform

registers all your CO<sub>2</sub> savings in real time

 **LUCAS C.** 

**2.1** Kg  
Saved CO<sub>2</sub>

**17**  
AYR

 **DAVID WADE** 

**0.8** Kg  
Saved CO<sub>2</sub>

**9**  
AYR

 **ANGELLO** 

**0.9** Kg  
Saved CO<sub>2</sub>

**9**  
AYR

 **JOHN SMITH** 

**1.5** Kg  
Saved CO<sub>2</sub>

**14**  
AYR

 **JESSICA M.** 

**0.5** Kg  
Saved CO<sub>2</sub>

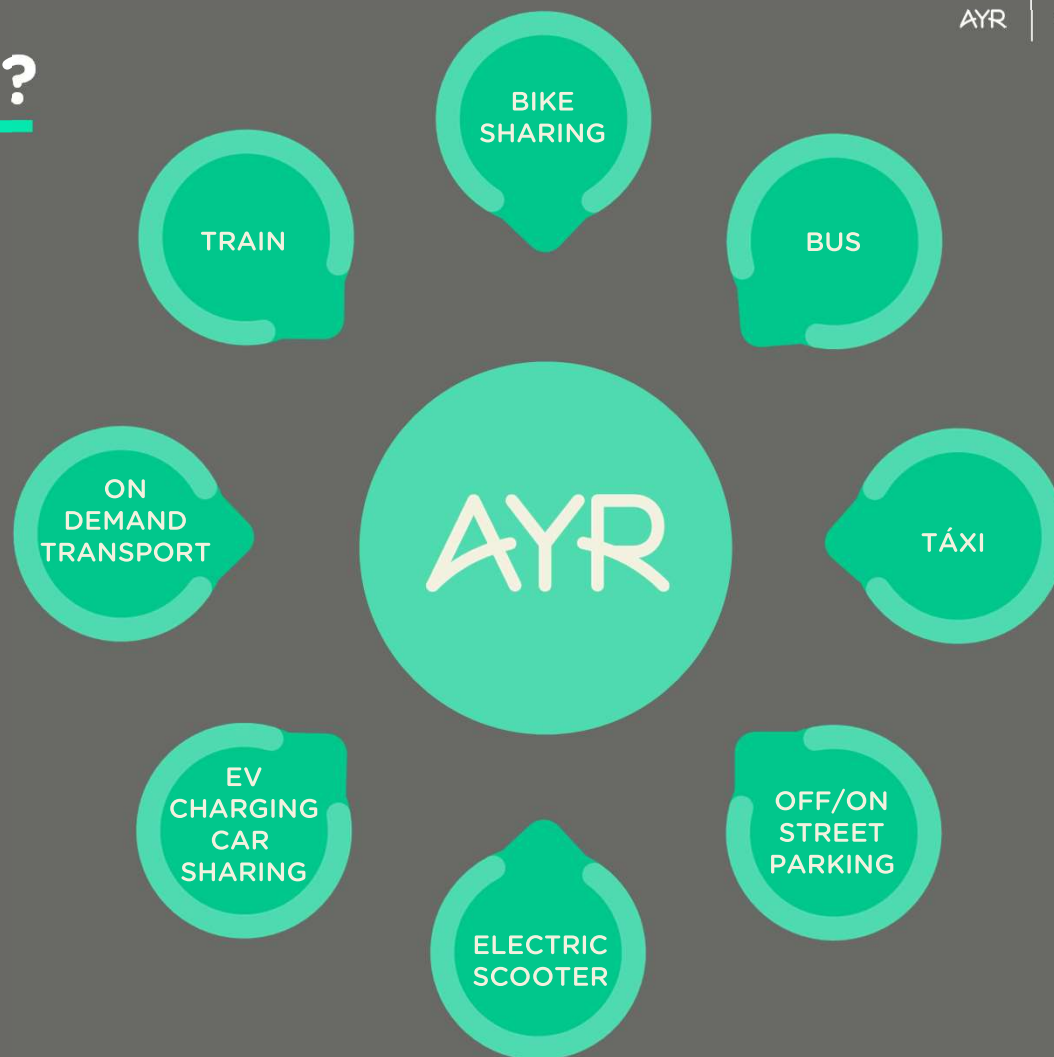
**7**  
AYR



# How does **AYR**<sup>®</sup> work?

## Mobility Ecosystem Integration

AYR enables the user to reduce his city mobility emissions and create value from that reduction no matter what means of transportation it's used.



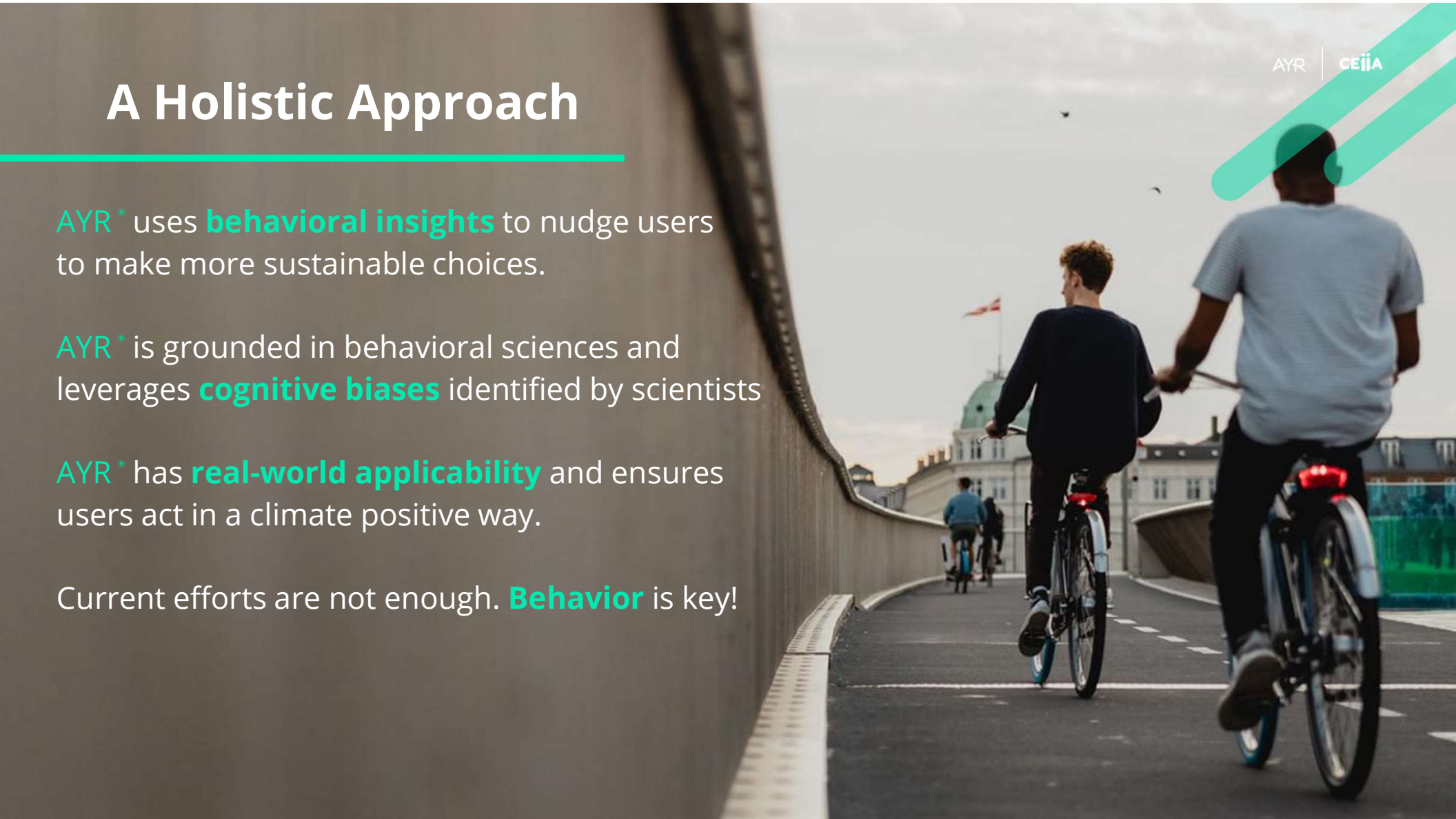
# A Holistic Approach

AYR<sup>®</sup> uses **behavioral insights** to nudge users to make more sustainable choices.

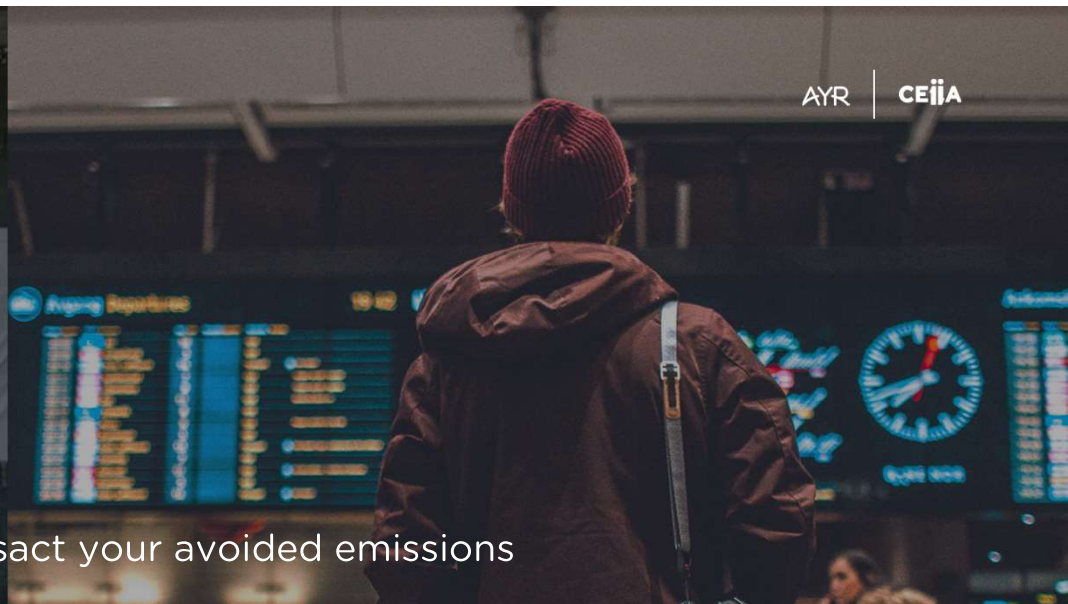
AYR<sup>®</sup> is grounded in behavioral sciences and leverages **cognitive biases** identified by scientists

AYR<sup>®</sup> has **real-world applicability** and ensures users act in a climate positive way.

Current efforts are not enough. **Behavior** is key!







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AYR<sup>®</sup> enables you to transact your avoided emissions

**AYR<sup>®</sup> tokens act as a local currency**



# AYR<sup>®</sup> platform, an enabler to create local carbon markets

Designed to connect communities, people and things in a network, where sustainable actions create tokens that can be exchanged for green goods and services or used to locally offset carbon emissions.



## AYR<sup>®</sup> Benefits



Tangible benefits  
for sustainable behavior



Foster communities for  
large scale impact



Feel-good factor – focused  
on long term behaviour change



Easy to deploy and to  
integrate to current activities



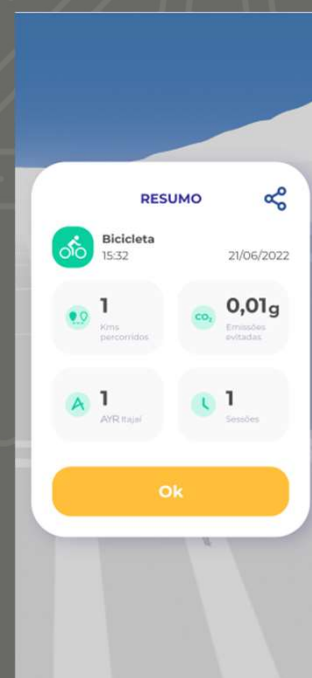
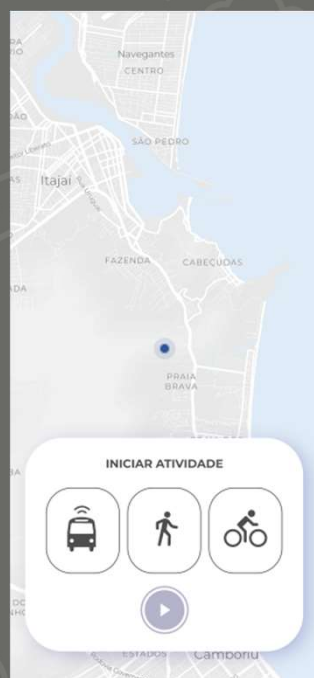
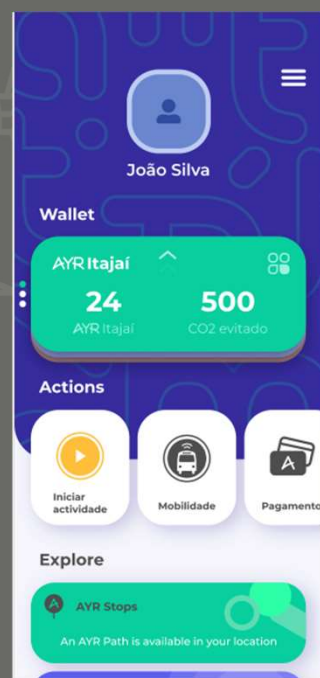
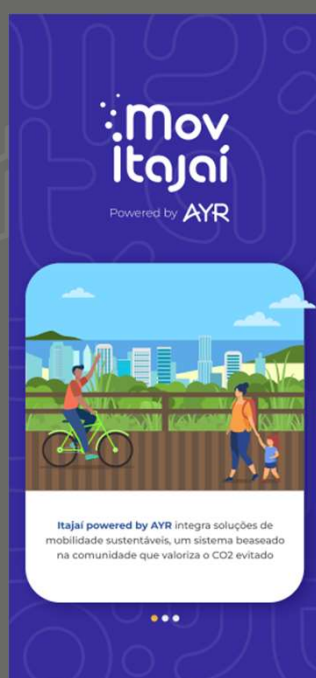
High quality credits –  
environmental integrity



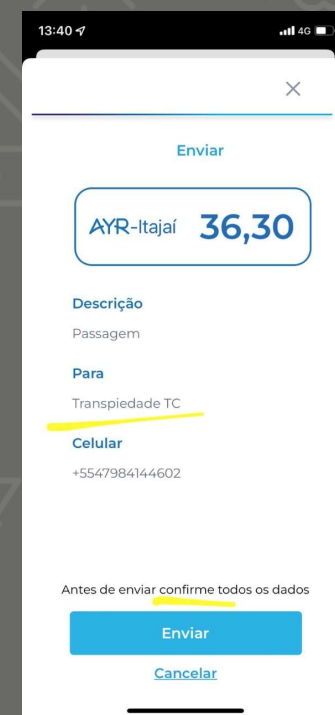
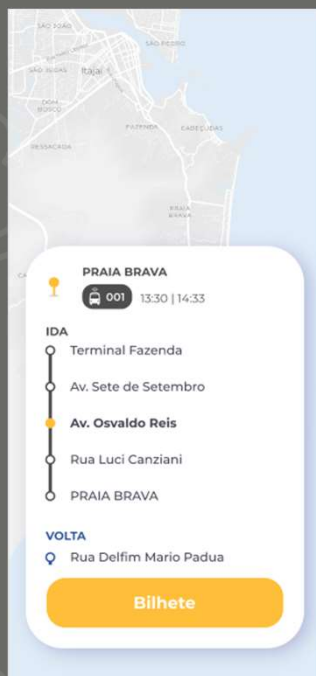
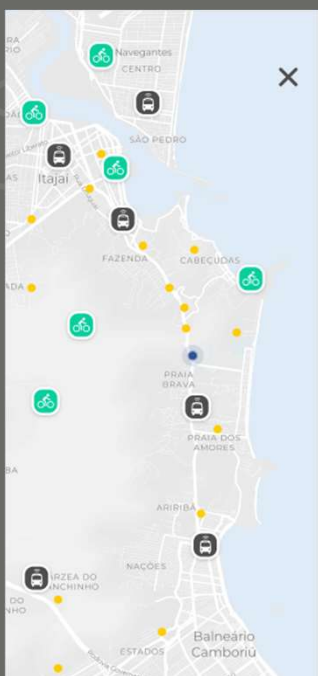
No double Accounting



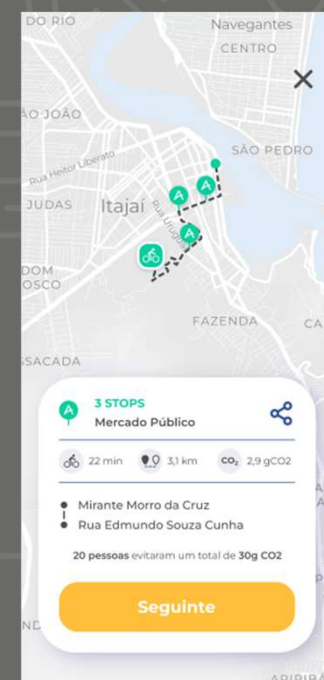
# MovItajai use case - Santa Catarina (Brazil)



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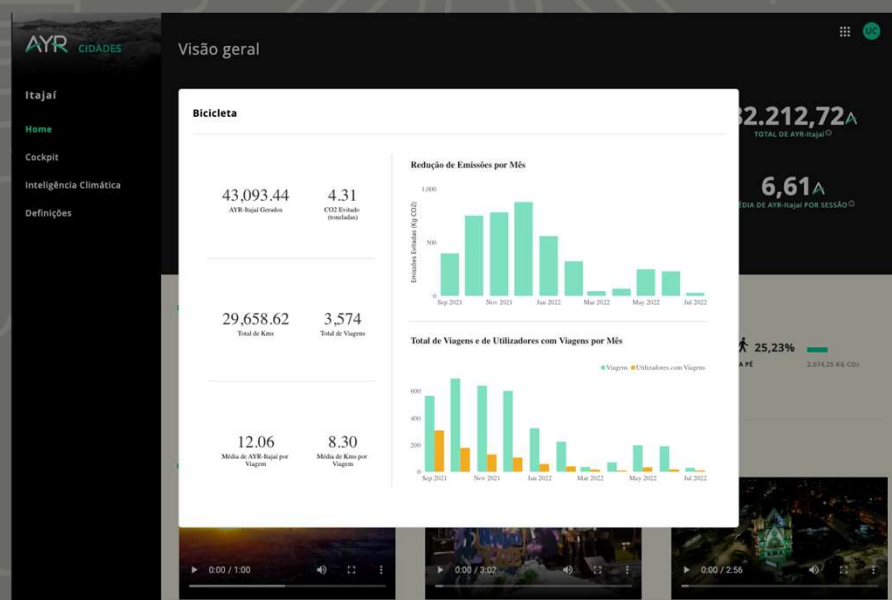
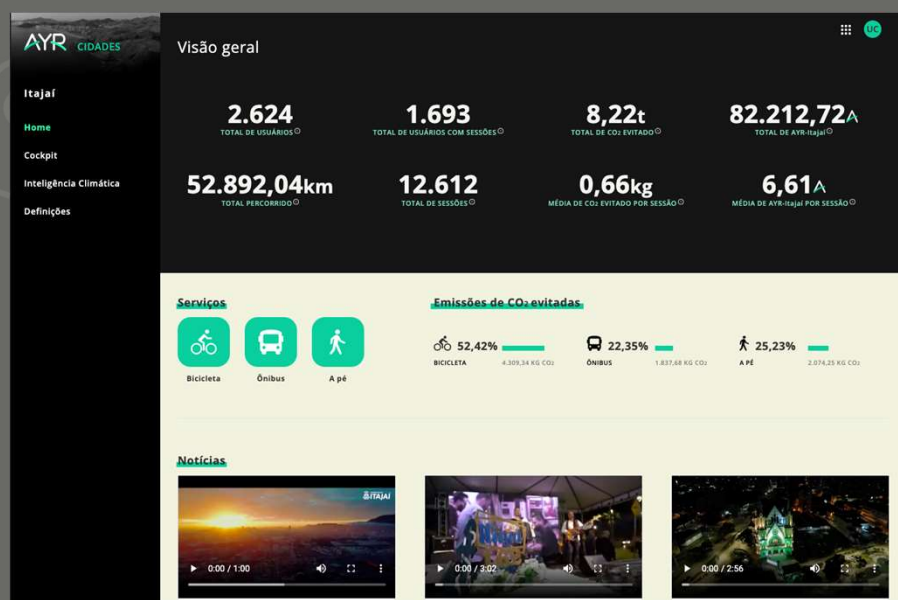


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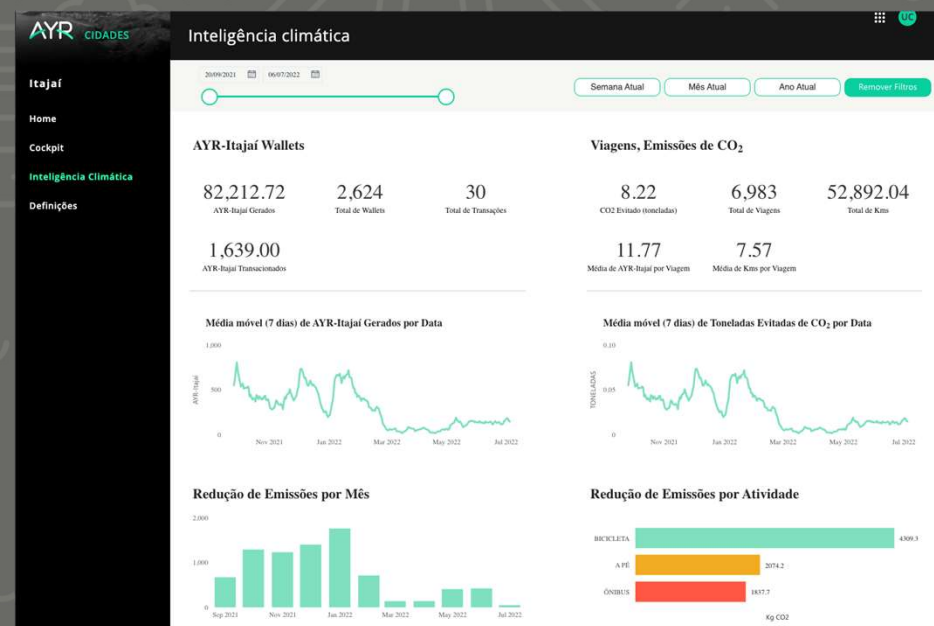
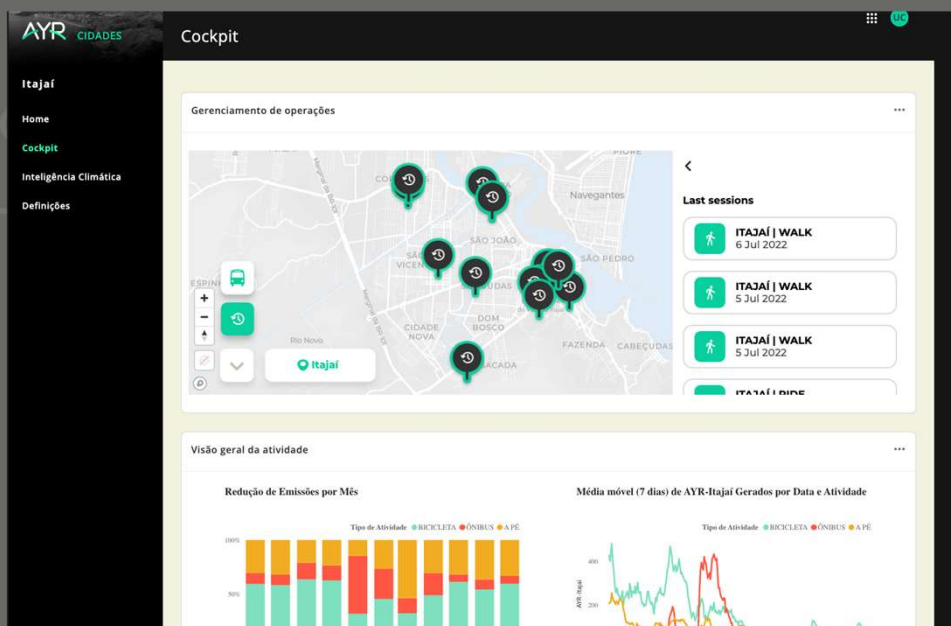


# AYR Plataforma



\* Ilustrative data

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\* Ilustrative data

# AYR Student

- Municipalities: Porto, Matosinhos, Braga and Guimarães
- 16 schools

## Objectives

- Reduce the carbon footprint of the school community's commuting movements.
- Raise sustainability awareness in youth communities.

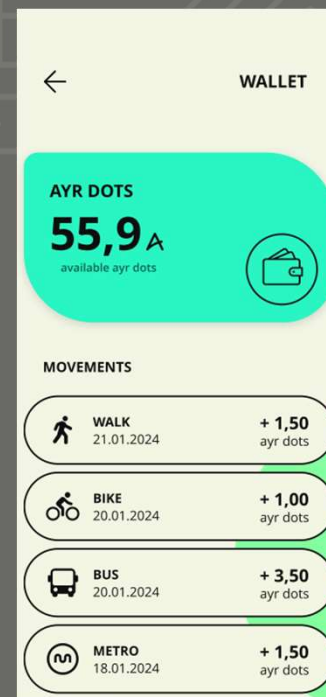
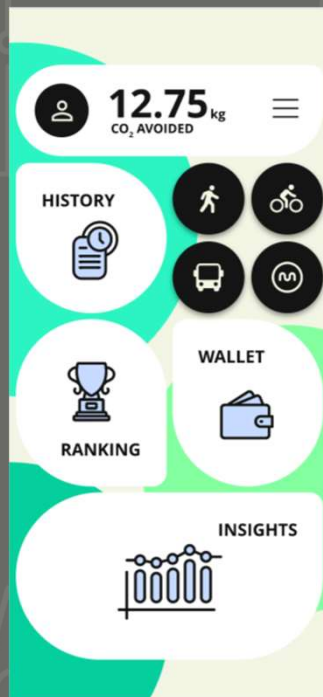
## Instruments

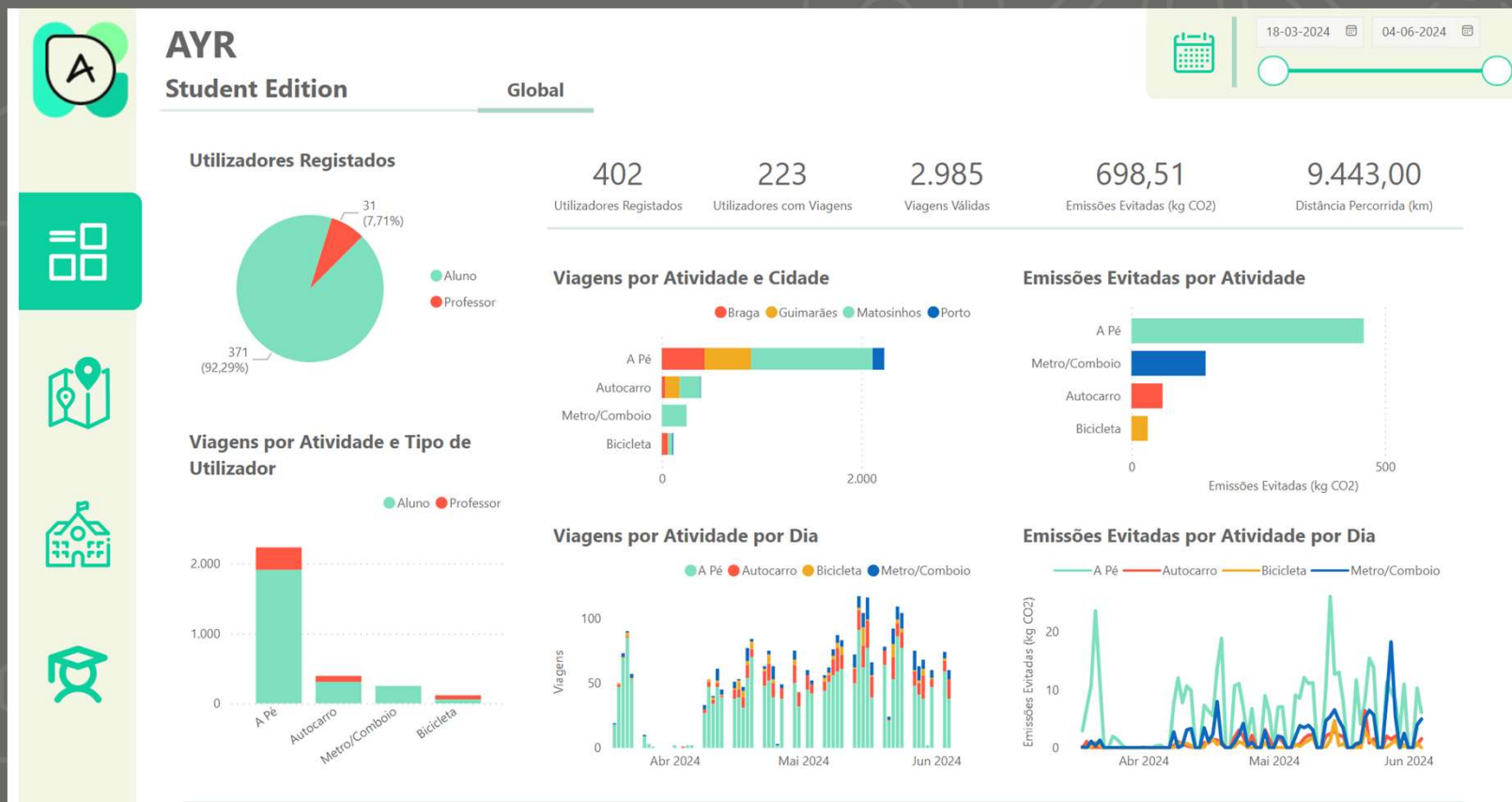
- AYR Student app to quantify carbon emissions avoided through the adoption of sustainable behaviors in mobility.



# AYR Student

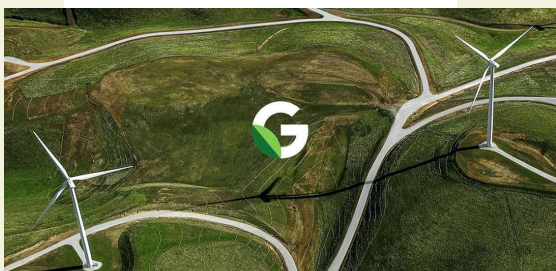
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**AYR<sup>®</sup> is changing the World**

Google.org



Google.org Impact Challenge on Climate  
- CEiA

The Google.org Impact Challenge on Climate commits €10M to fund bold ideas that aim to use technology to accelerate Europe's progress toward a greener, more resilient future.



## New European Bauhaus

The New European Bauhaus initiative connects the European Green Deal to our living spaces. It calls on all Europeans to imagine and build together a sustainable and inclusive future that is beautiful for our eyes, minds, and souls.



**AYR<sup>®</sup> is changing the World**



The IN3+ Award is the largest prize for support and promotion of research and innovation in Portugal. Now in its 4th edition, it is established as a platform for research, development, and knowledge promoted by INCM – Imprensa Nacional Casa da Moeda (Portuguese Mint)





# #chooseZERO

Made with  from Portugal

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