



CAR CARBON

Teresa Santos | ASCENDI

tsantos@ascendi.pt

Hosted by



YAVUZ SULTAN SELİM BRIDGE
AND
NORTHERN BİNGÖL MOTORWAY



2ND LARGEST ROAD CONCESSIONAIRE IN PORTUGAL

Asset Management



/ Control of 6 concessions → **627km**

Operation & Maintenance

/ Road **O&M**

/ **ITS**

/ Maintenance Management

Toll Services

/ **2** Operations **TT**

/ **7** Operations **MLFF**



INTRO



Highways play a crucial role in interurban and regional mobility, allowing people, goods and services to reach their destinations in safe and (most of the time) predictable conditions

Unfortunately they affect landscapes, water resources, habitats and biodiversity and the vehicles that use them significantly contribute to noise production and

HIGH LEVELS OF CO2 EMISSIONS

INTRO

- To better monitor and communicate our performance related to ESG Topics we published our first Integrated Report in 2019 using GRI Indicators

carbon emissions coming from vehicles were significantly higher than any other source

- In 2021 we were advised by a different consultant with a different methodology to calculate car carbon emissions

calculation was a *black box*

Annual Emissions are determined through the application of **EMISSION FACTORS** to traffic aggregated data but there is not an unique methodology

INITIAL GOALS



- To effectively and consistently monitor the carbon footprint of our road users
- To register and understand car carbon emissions at the stretch level and within different time frames

ARDIAN

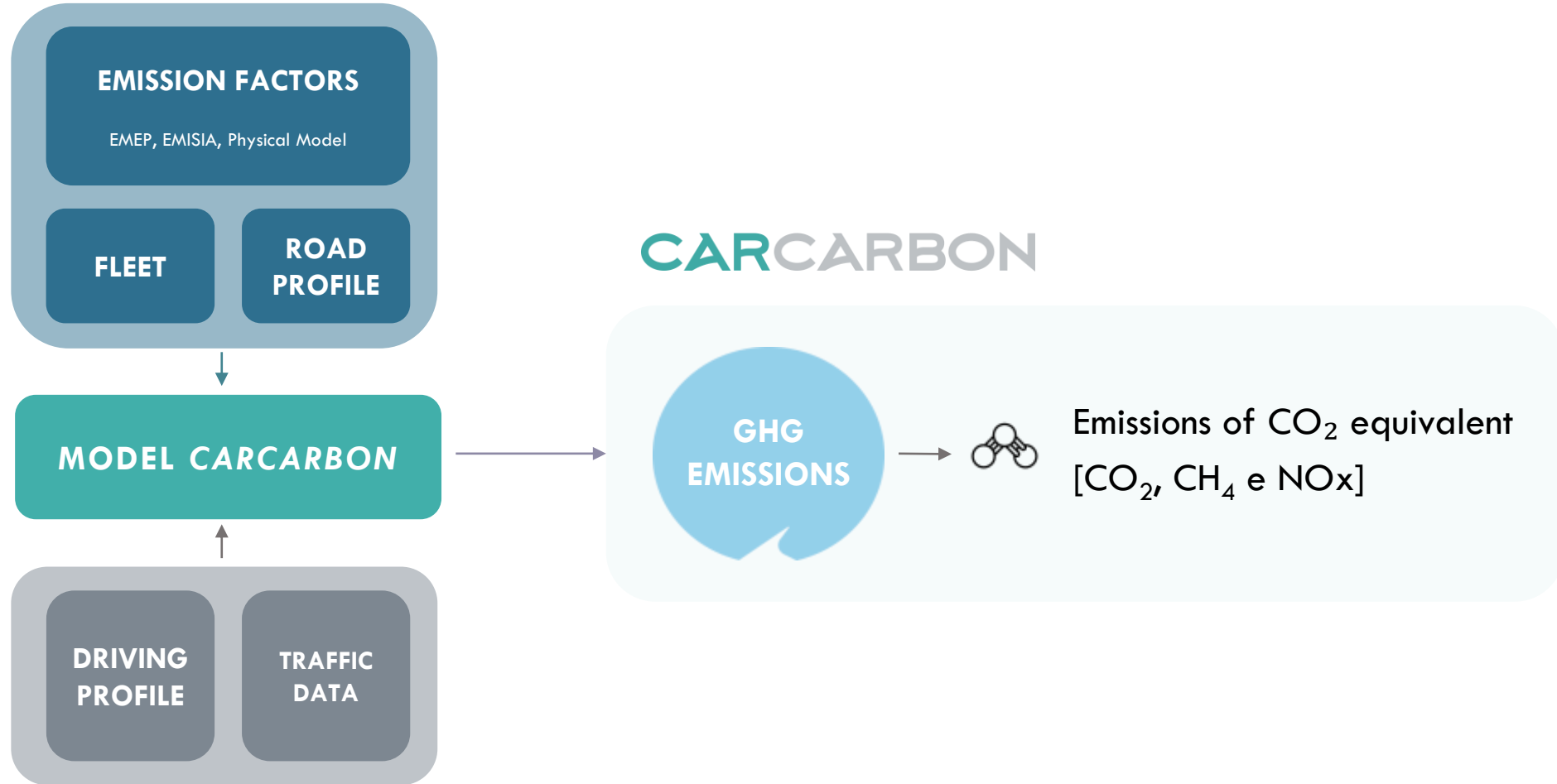
- To develop a tool dedicated to road infrastructure operators
- To help portfolio companies act towards reducing carbon footprint

PROJECT GOAL

TO DEVELOP A CARBON EMISSIONS CALCULATION MODEL DEDICATED TO THE ROAD SECTOR

- ✓ Using disaggregated traffic data
- ✓ Incorporating the geometric characteristics of the road
- ✓ Including driving behaviour
- ✓ Automating the process of importing, processing and producing information
- ✓ Supporting the calculation model with specialized bibliography

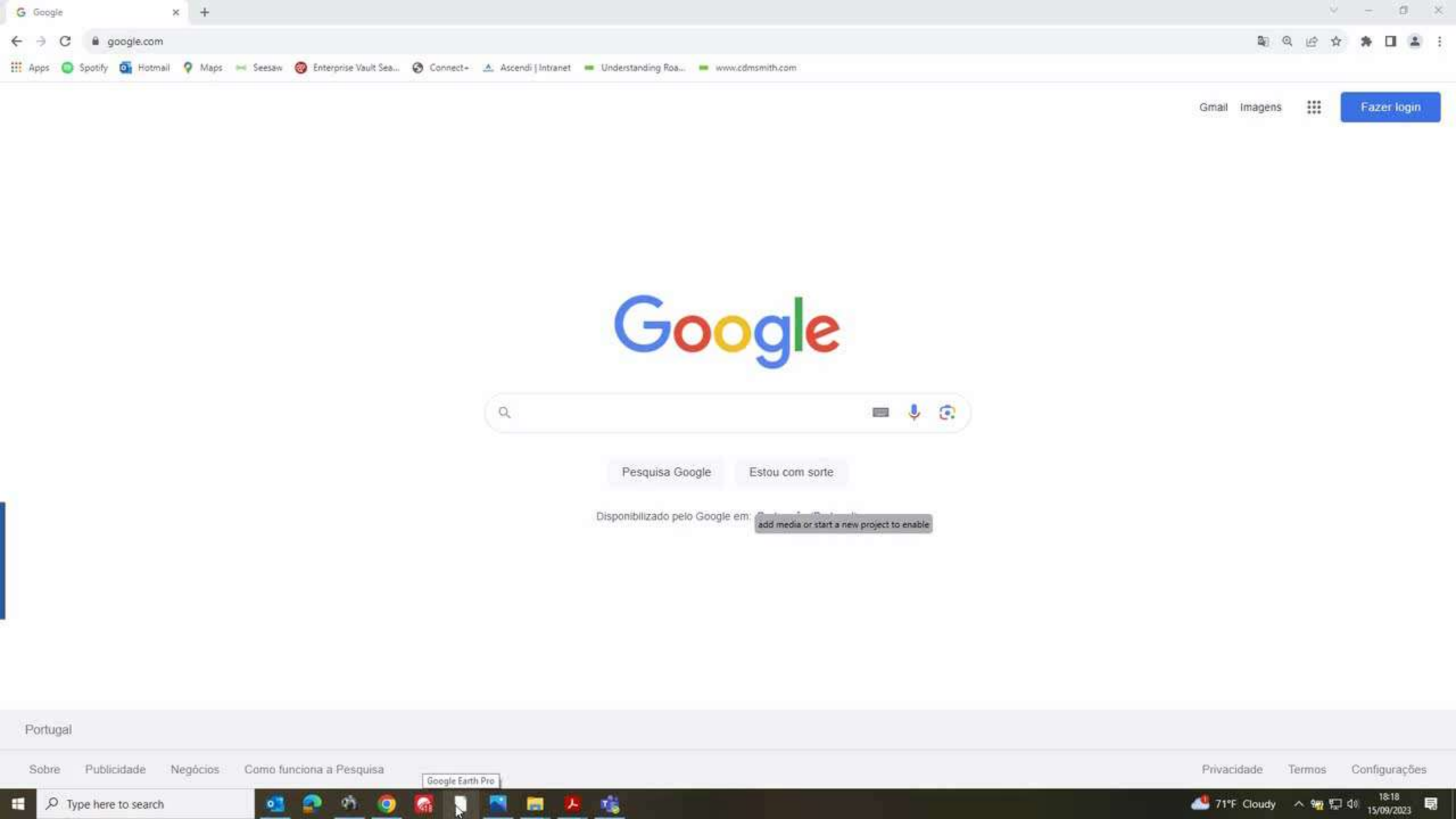
MODEL PRINCIPLES



CARCARBON DASHBOARD



- Fully Automated Process
- Intuitive and easy-to-navigate dashboard
- Emissions at a much more disaggregated level
- Comparability of information



Google

Search bar with magnifying glass icon and voice/image search icons.

Pesquisa Google

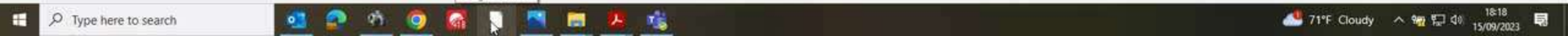
Estou com sorte

Disponibilizado pelo Google em: add media or start a new project to enable

Portugal

Sobre Publicidade Negócios Como funciona a Pesquisa

Privacidade Termos Configurações



NEXT STEPS



- Incorporate new (and different type of) information sources
- Communicate outputs through different channels
- Develop new modules/scenario analyses

CONTACTS

Teresa Santos | ASCENDI

tsantos@ascendi.pt

Geoffroy Palut | ARDIAN

geoffroy.palut@ardian.com

