



Enhancing citizens trust through citizen-driven air quality experiments and collaborative policy making: the COMPAIR project

Charalampos (Harris) ALEXOPOULOS

University of the Aegean



UNIVERSITY OF THE
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Association

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**VLAAMSE
MILIEUMAATSCHAPPIJ**

ATHENS 7-9 DECEMBER 2022

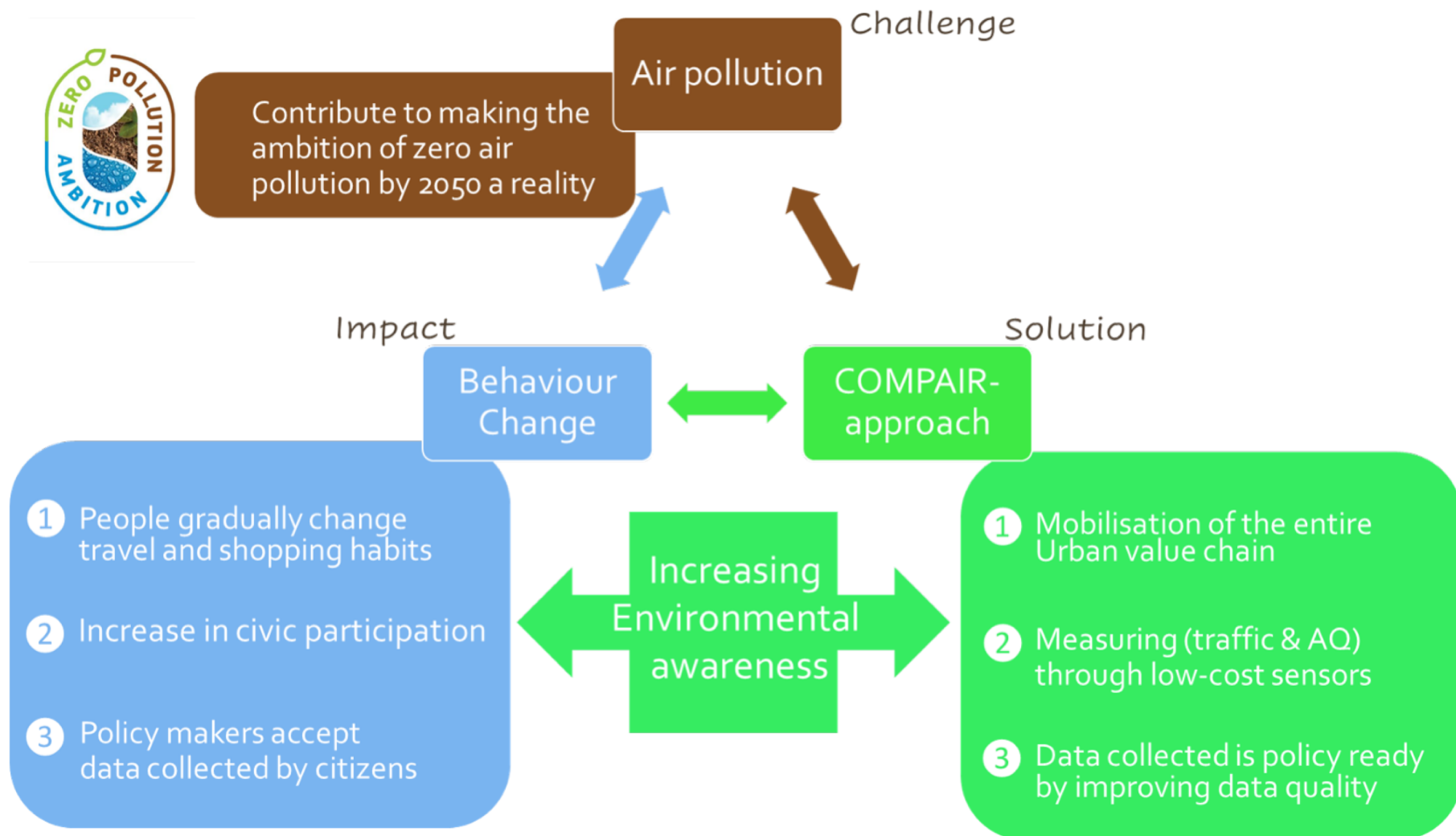
HELLENIC REPUBLIC
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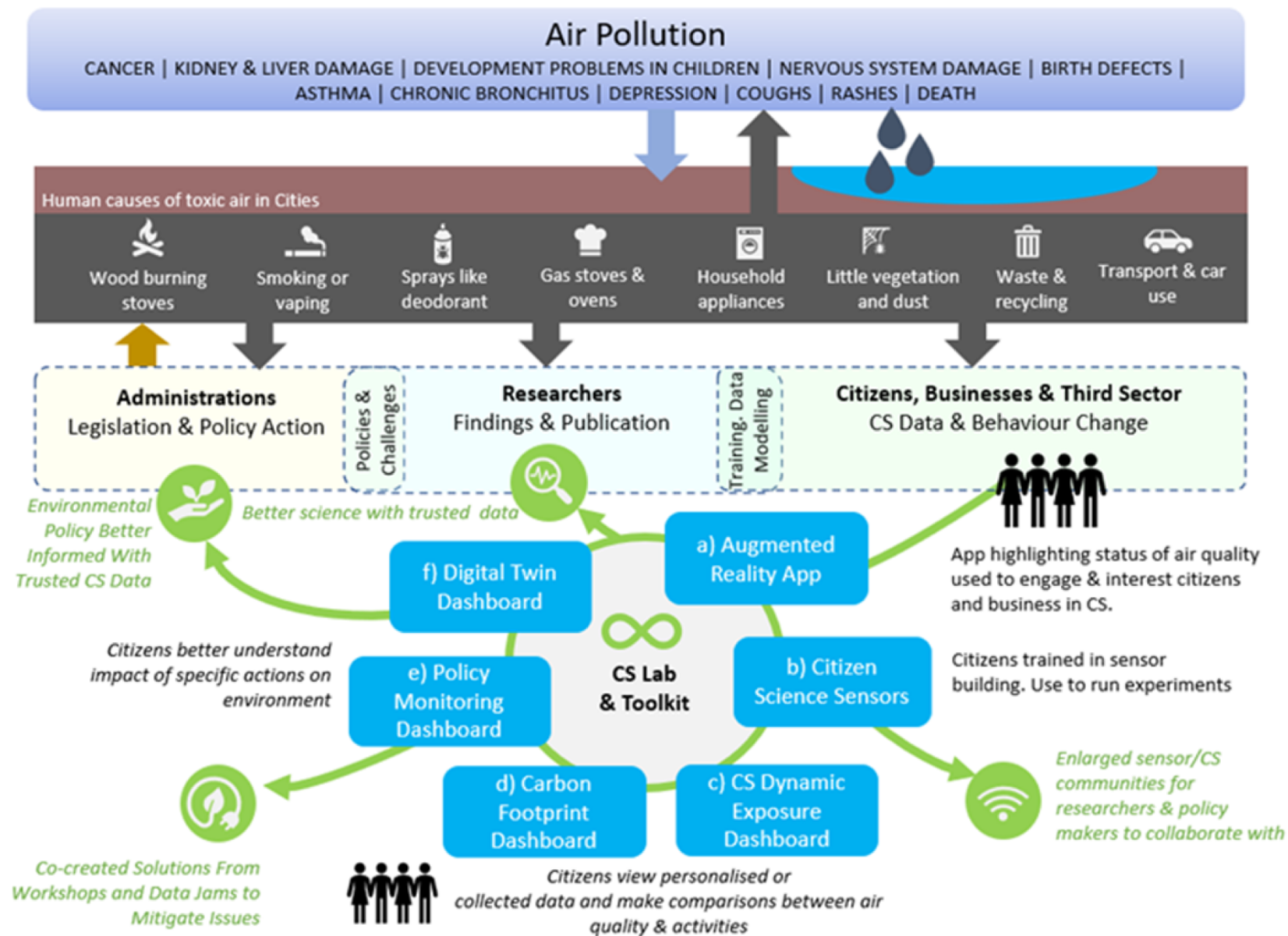
Objective





COMPAIR raises the value of CS outputs by using tech to empower all participants in the policy value chain

- Increasing representativeness in participation through trusted relationships and evidence of local problems using Augmented Reality apps
- Bolstering skills and science capacity through easy-to-use, low-cost, exciting sensors, tools and data visualizations.
- Increasing trust in CS by professionalising approaches to produce policy ready data that can be used by existing policy platforms e.g. Digital Twins





To ensure both public and policy impact, COMPAIR enhances the value of sensor data in 3 ways...

1. **Improving publication and availability** by aligning data models with existing international and EU data and metadata standards
1. **Raising data quality** by utilising expert calibration algorithms for automated quality assessment and validation to enhance accuracy of IoT sensors
1. **Broaden flexibility of APIs** for more tailored policy use, e.g. changing hourly results to a near real-time window for more operational decision making.

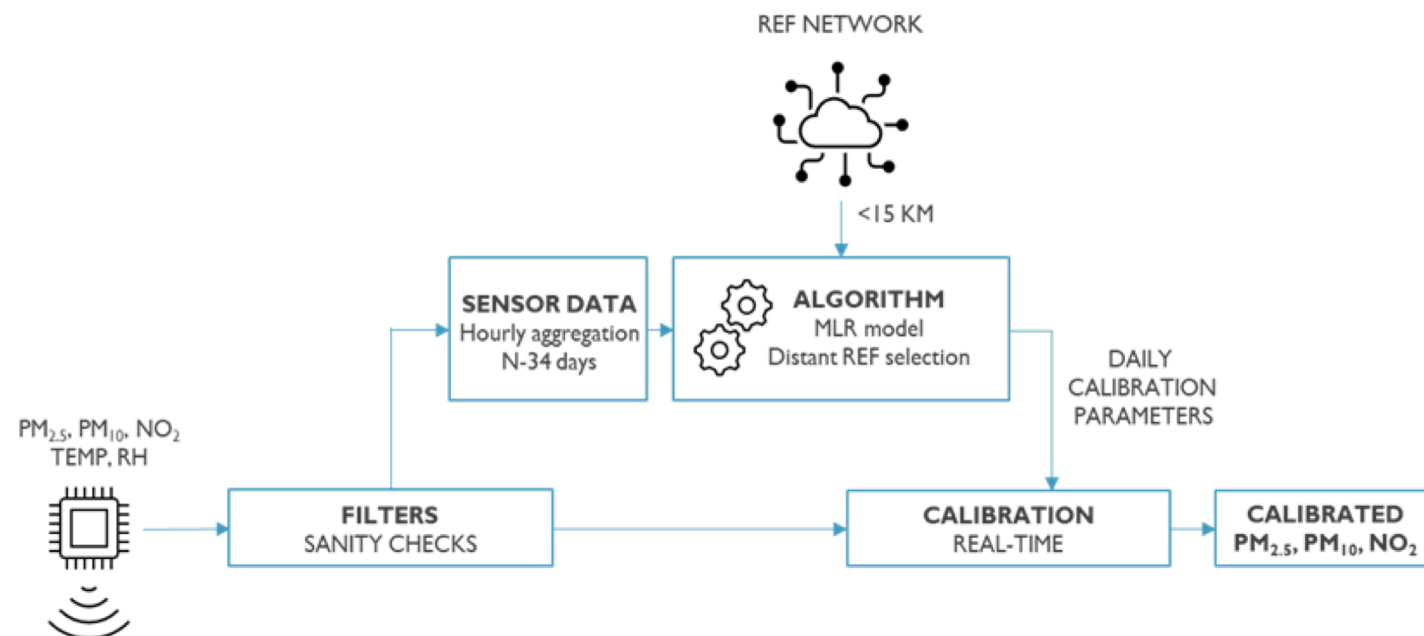
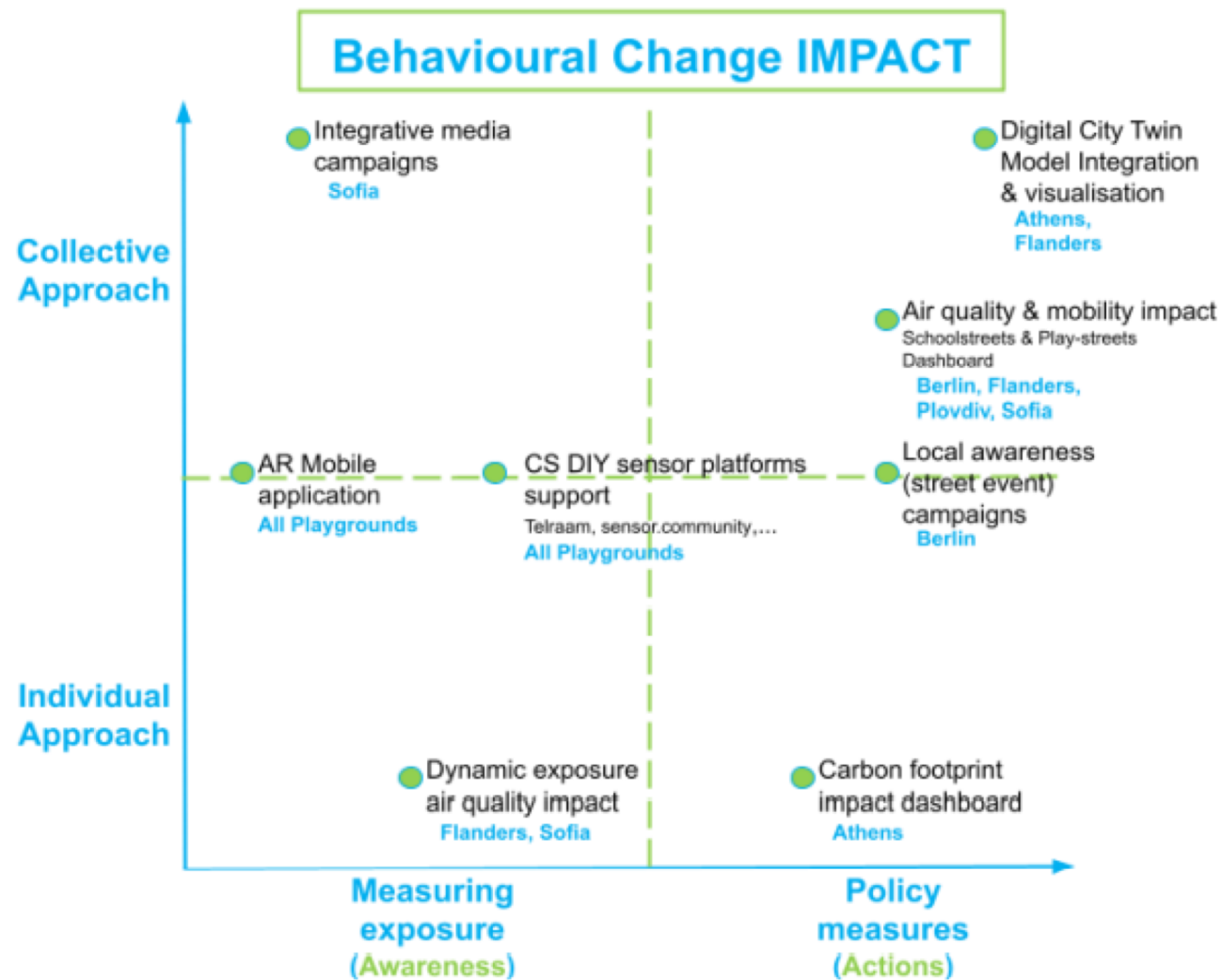


Fig: COMPAIR Calibration Schema



Together, the different pilot approaches help determine best tools to stimulate behavioural change

- Central theme for all COMPAIR experiments is the impact on air quality
- Impact can be direct (impacting behavioural change) or can be indirect via awareness-raising (showing local air quality exposure).
- Approaches can be collective (e.g., AR app showing current neighbourhood air quality) or personal (e.g., dashboard showing only your own air pollution exposure).
- COMPAIR pilot activities cover both squares of the quadrant, so evaluation can determine which type of CS activities have the most success and provide future CS recommendations





Pilots



CITIZEN SCIENCE USE CASE FOR

SOFIA & PLOVDIV

Creating awareness of commuting impact through visual dashboards. Making school streets safer and championing sustainable behaviours of young people.

www.WeCOMPAIR.com

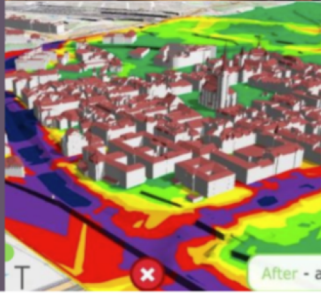


CITIZEN SCIENCE USE CASE FOR

FLANDERS REGION

Helping citizens navigate the city avoiding dynamic exposure to high pollution routes through the use of wearable air quality sensors. Using teleraam sensors to create safe school streets.

www.WeCOMPAIR.com



...and
validates
approach with
use cases in 4
countries



CITIZEN SCIENCE USE CASE FOR

ATHENS CITY

Creating a greener city by measuring and understanding the environmental impact of everyday habits e.g. wood burning, smoking, recycling and heating etc.

www.WeCOMPAIR.com

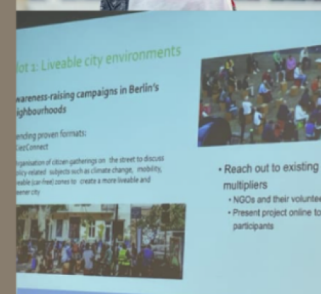


CITIZEN SCIENCE USE CASE FOR

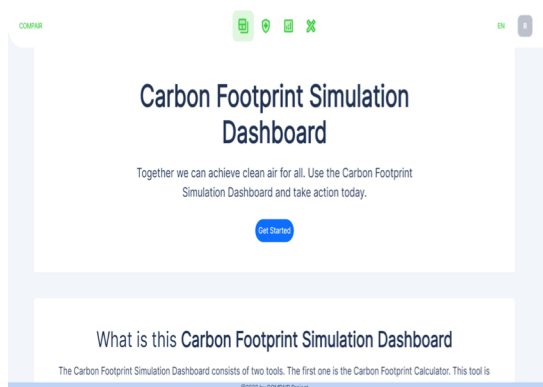
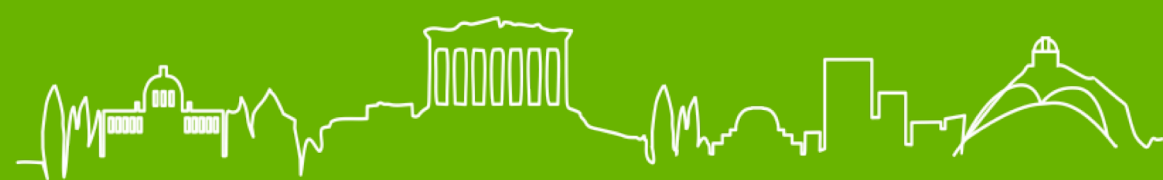
BERLIN & BRANDENBURG

Creating awareness of commuting impact through visual dashboards. Making school streets safer and championing sustainable behaviours of young people.

www.WeCOMPAIR.com



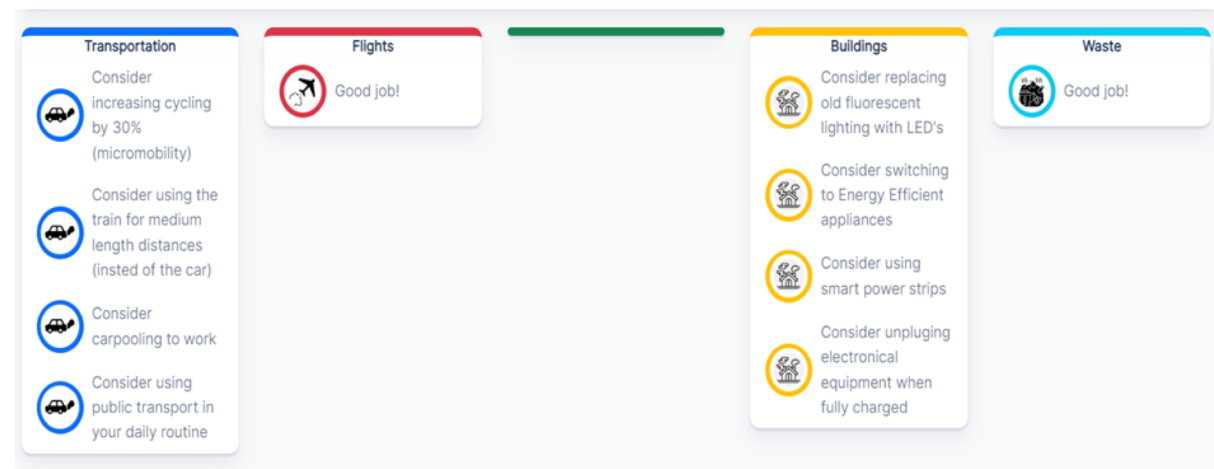
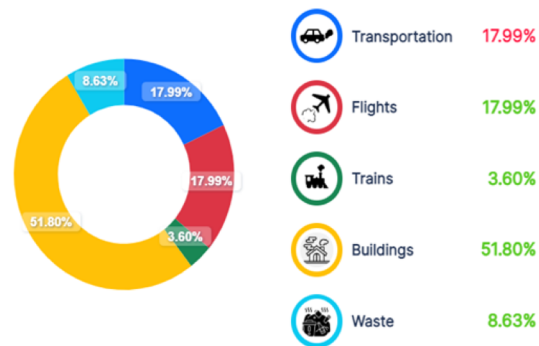
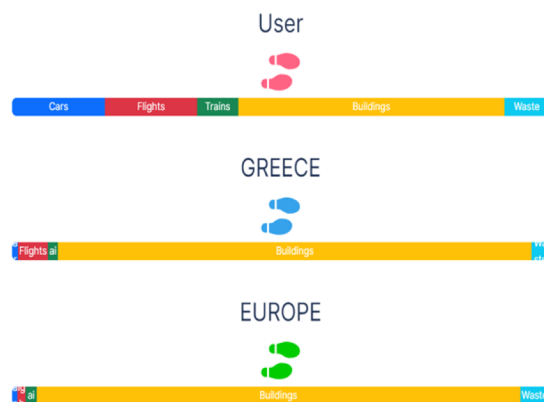
EUROGEO WORKSHOP 2022



Carbon Calculator

Scenario Simulation Dashboard

- Help citizens understand how they affect their carbon footprint through their daily activities
- Recommendations on how they can reduce their carbon footprint
- Allow citizens to participate in policy making
- Actions they are willing to make, as well as actions they are willing to accept from the government





Thank you for your attention!!



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AEGEAN

Harris Alexopoulos
University of the Aegean
Twitter: @xalexopoulos
email: alexop@aegean.gr