



New solutions to boost sustainable urban mobility

How can we improve urban mobility by developing new traffic and public space management services and reducing emissions in urban areas?

Challenge context

Key facts

According to the European Environment Agency (EEA), urban mobility accounts for a third of all energy consumed and a quarter of greenhouse gas emissions. The level of atmospheric pollution, in addition to being very harmful to the environment, directly affects the health of urban inhabitants (70% of the world's population).

Problem description

- The massive expansion of urban areas causes inefficiencies in mobility, increasing pollution levels and impairing the activities of citizens on a daily basis.
- The high growth of Low Emission Zones requires an efficient management capacity to meet emission reduction targets.
- There is a lack of innovation initiatives aimed at smart management of park-and-ride lots, sidewalks and loading and unloading zones.
- There are no mitigation solutions that can absorb the traffic volume in large cities.



Photo by Chris Dickens on Unsplash

Challenge goals

Identify and implement technological solutions and smart mobility tools that allow us to reduce the environmental impact caused by inefficiencies in urban mobility management in the following categories:

- **Urban mobility elements with high congestion rates (intersections, traffic circles, urban highways)**
We are looking for innovative solutions that allow us to improve safety and efficiency in traffic management, taking advantage of different technologies (traffic lights, smart signaling, cameras, etc).
- **Low Emission Zones (urban centers)**
We are looking for innovative solutions associated with efficient management that improves environmental impact and fluidity/efficiency in urban mobility.
- **High-rotation parking zones, RPA (Residential Priority Area), park-and-ride lots, sidewalks, fords and loading and unloading zones**
We are looking for innovative solutions and new lines of development that allow us to move towards a smart city.

Solutions must be easy to implement to ensure scalability.

What are we looking for?

We are looking for innovative solutions that:

- Act as levers capable of reducing emissions of greenhouse gases caused directly or indirectly by urban mobility.
- Guarantee an adequate and fluid development of economic activities in the areas where the solutions are to be implemented.
- Ensure a better quality of life for the people who transit through these urban areas.
- Improve the acoustic quality of the most affected areas during peak hours.

Expected impact

- Contribute to urban spaces becoming emission free zones or mitigate existing ones as much as possible.
- Facilitate sustainable, accessible and safe urban mobility for both residents and visitors.
- Encourage the emergence of new actors to foster the implementation of smart mobility initiatives.
- Contribute to improve the quality of life of citizens.

Target audience

This challenge has a global scope and is aimed at the entire professional innovation community such as UTEs, research centers, universities and startups.