

DATE
2024

Rue de Rivoli

Impacts on CO₂ emissions



A study by
origins.earth



Public policy study

Objective?

The city of Paris has had an ambitious plan to develop cycling since 2015. The creation of a cycle path in the famous Rue de Rivoli is one of the actions targeted by the plan. In 2017-2018, a first tranche of work was undertaken. In 2020, just after the first lockdown, the City of Paris decided to temporarily double the capacity of the cycle path and in 2021-2022, following the plebiscite from Parisian, to make it a permanent infrastructure.

We aimed to:

- Quantify the impact of this infrastructure on CO₂ emissions.
- Evaluate its contribution to the overall trend and the global objective of GHG emission reduction
- Verify the potential negatives externalities of the project (in terms of deferred traffic and emissions)

What did we get ?

-32%

Reduction of CO₂ emissions in 2019 compared to year 2018

In 2019, just after the first tranche of works, we can see a global reduction of 32% in CO₂ emissions from road transportation, if we compare to the total emitted in 2018.

-49%

Reduction of CO₂ emission at the end of 2022

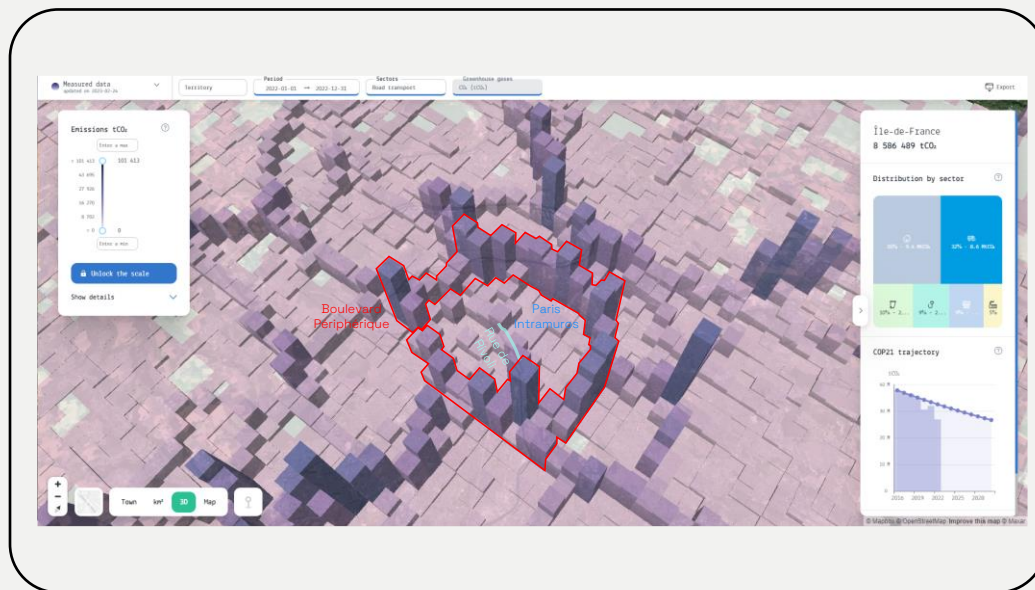
We validated that road transportation emissions reached in 2022 half of the reference value (2018). The benefits from the work undertaken to make the cycles lanes permanent and safe, are here obvious.

0

Impact on the trends in the nearest areas and Paris as whole

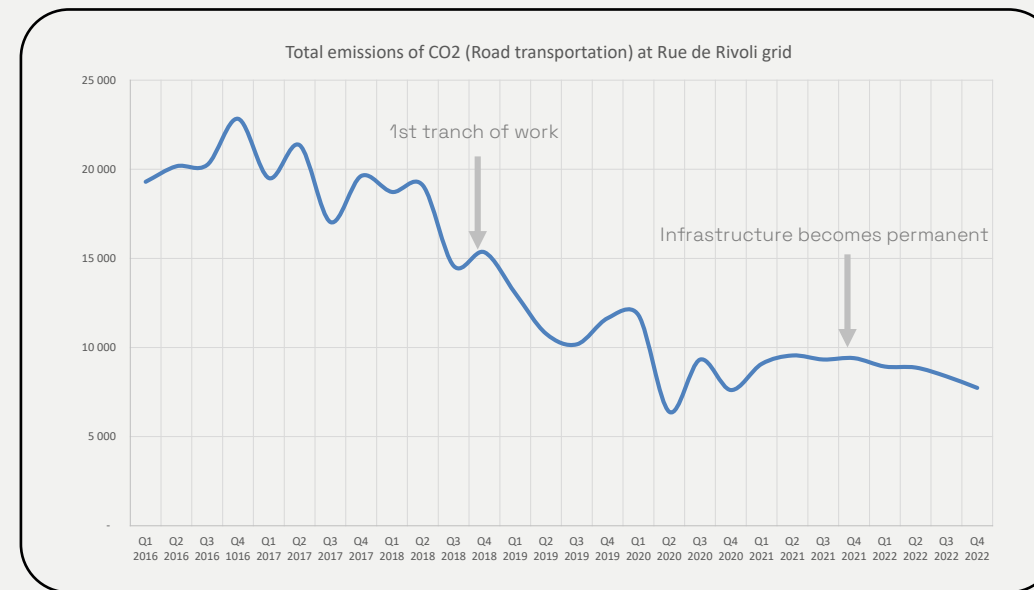
Each change to the traffic infrastructure is likely to generate an increase in traffic elsewhere in the city. After widening the perimeter of the analysis, we did not find any significant impact on overall emissions.

How did we get it ?



Continuous measurement since 2016

Thanks to the network installed since 2016 over Paris and the use of the technology chain over 7 years, we have analysed the trends per days and per km² in Paris. By zooming on Rue de Rivoli, we were able to extract results for this specific action.



Big data and statistic analyses

Having day-by-day emissions is the only way to actually identify the periods “before” and “after” the implementation of the infrastructure. It allowed us to compare to baseline, but also to isolate the effects from special events (such as the lockdown)



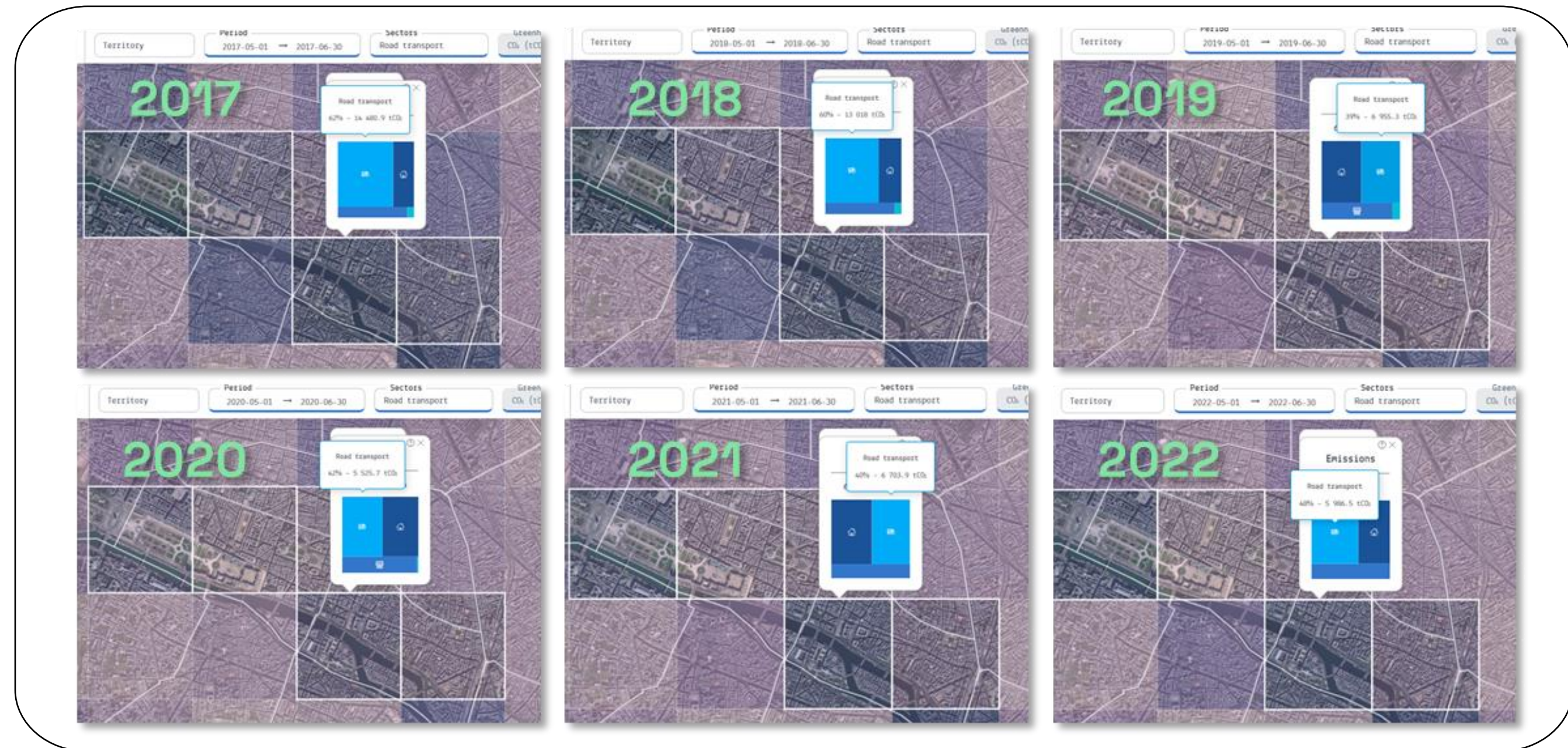
Overview to verify external impacts

Monitoring and calculating emissions for the whole Paris is the only way to verify external impacts without making dubious hypothesis. By widening the perimeter of the analysis we verified if the trend of reduction is confirmed elsewhere in the Capital

A little zoom

An easy quick assessment

In terms of communication, using the results through our platform, allows everyone to visualize really easily and quickly the impact when the policy occurs...





Contact

Laurent MILLAIR

COO

laurent.millair@suez.com

www.origins.earth.com

 Origins.earth

 Origins.earth