



Easy to visualize, even easier to build a better future.

Community CO2

CO2 Communauté

Team members: Ethan Irwin, Joseph Igiraneza
Supervisor: Dr.Carmella Cucuzzella, Morteza Hazbei
City Staff: Camilla Chiari, Philippe Fortin
Community Partners: donnees.montreal.ca

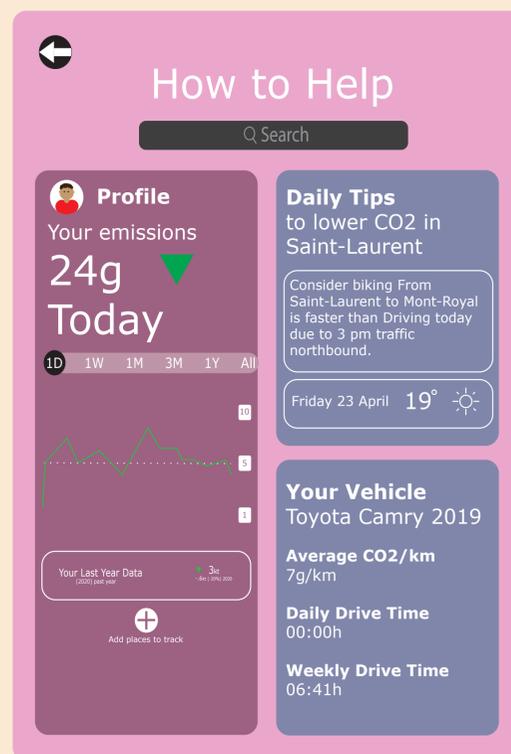
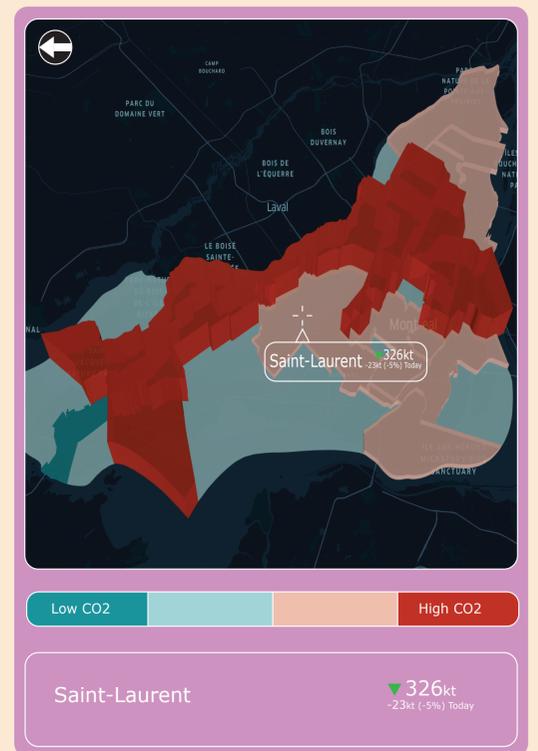
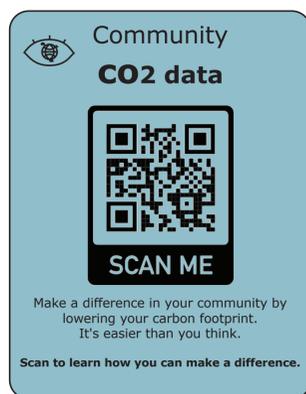
Discover

your community contributions to CO2 emissions so you can **create change in your area.**

What is it?

Community CO2 is a mobile application with a data visualization system for each borough in Montreal to see their contribution to CO2 emissions produced by vehicles. We created a user-friendly interface that allows people to visualize their contribution and community's daily, weekly, monthly, quarterly, yearly and all-time contributions to CO2 emissions in Montreal. The app is free, and QR codes will be installed strategically in all communities, allowing direct access to that borough's CO2 data and a download prompt for the app itself.

The data will be shown on Public screens in subways and other busy public areas to gain public engagement. QR codes will be placed on these public displays and signage in key places within communities to maximize public exposure and engagement.



How does it work?

Using data supplied by the city of Montreal, we measure the number of vehicles in each intersection. Using this data, we can determine the CO2 emissions per borough. Community CO2 shows daily, weekly, monthly, quarterly, yearly, and all-time CO2 emissions in the user's selected community. Below the timetable, we supply data comparing past year's CO2 emissions to the current emissions. The user can also add other community data they want to track (Saint-Laurent and Mont Royal, for example). With our app, we also display a map showing all Montreal boroughs and their current CO2 data compared to one another using colour and height to make the hot zones stand out. We will supply weather data, plans for community action, a "how to help" section where the user can create a profile and track their personal contributions to CO2 pollution in the city while also receiving recommendations about alternative modes of transportation depending on the current traffic, as well as busy areas to help promote alternative green transportation in congested parts of the city.

What is new and distinctive about your project?

Community CO2 uses a user-friendly interface to enhance public engagement by providing details on CO2 pollution in individual communities. Our goal is to offer well-documented, easy-to-understand chronological information to the public. We provide essential information about the community they live in to increase the population's awareness of CO2 pollution. We quickly and effectively deliver information directly to the residents of Montreal. Finally, we create a new data stream for the city and its residents to take existing traffic data and calculate CO2 emissions data.

Outcomes

With the new data being presented to the communities, we hope it will evoke change. The application will encourage people to help decrease their community emissions by taking greener transportation methods like walking, biking, or carpooling. We hope more people become aware of the pollutions within their communities and change their lifestyle choices to slowly create a healthier living environment. By reducing emissions, city air quality will increase, and the environmental impact of transportation emissions on the city will decrease, creating a better future for Montreal.

