Current situation: Sustainability

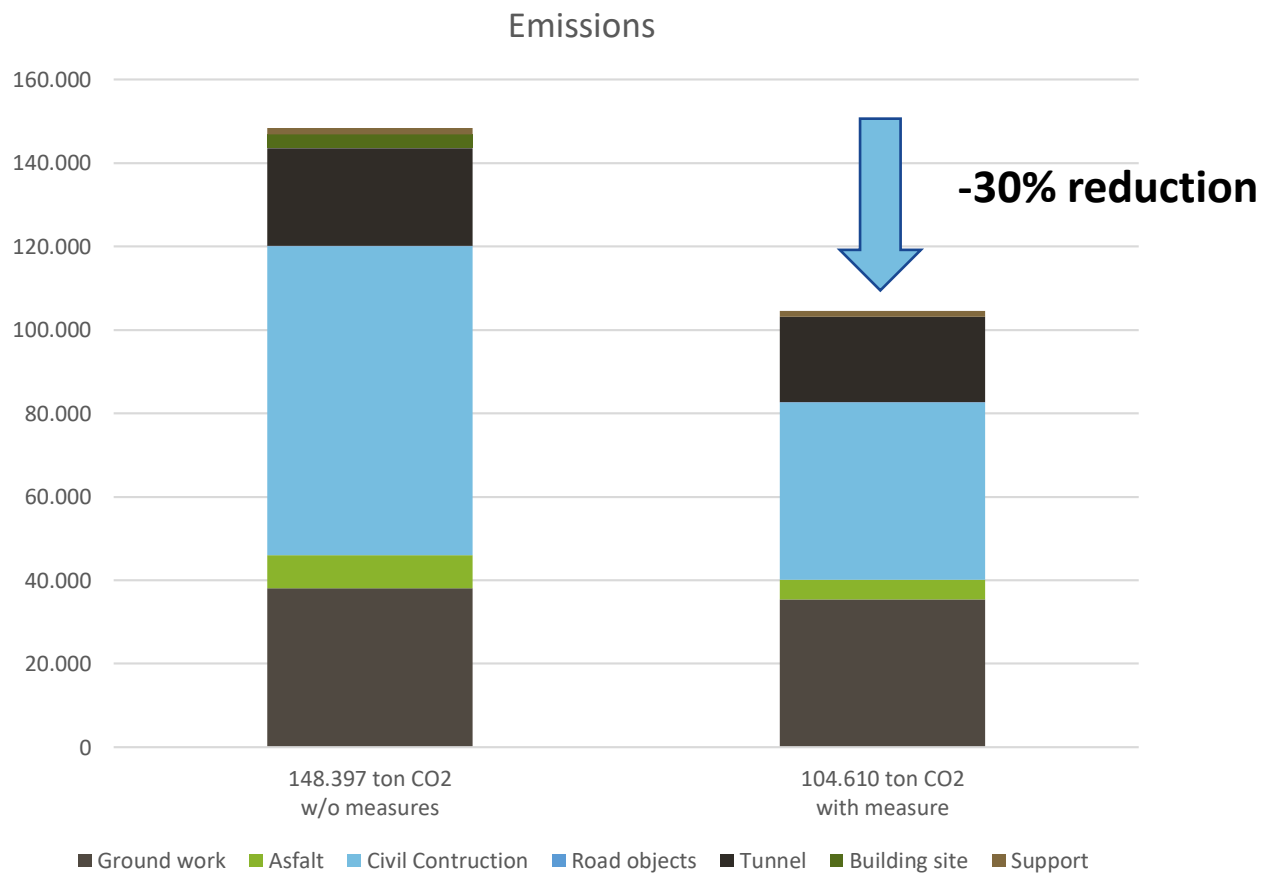
Q3 2020

CO_2 emissions

Emissions from start of work till Q3 2020

Goal: Reducing the emissions of the realisation phase with **23%***

*true emissions compared to the planning without reduction measures.

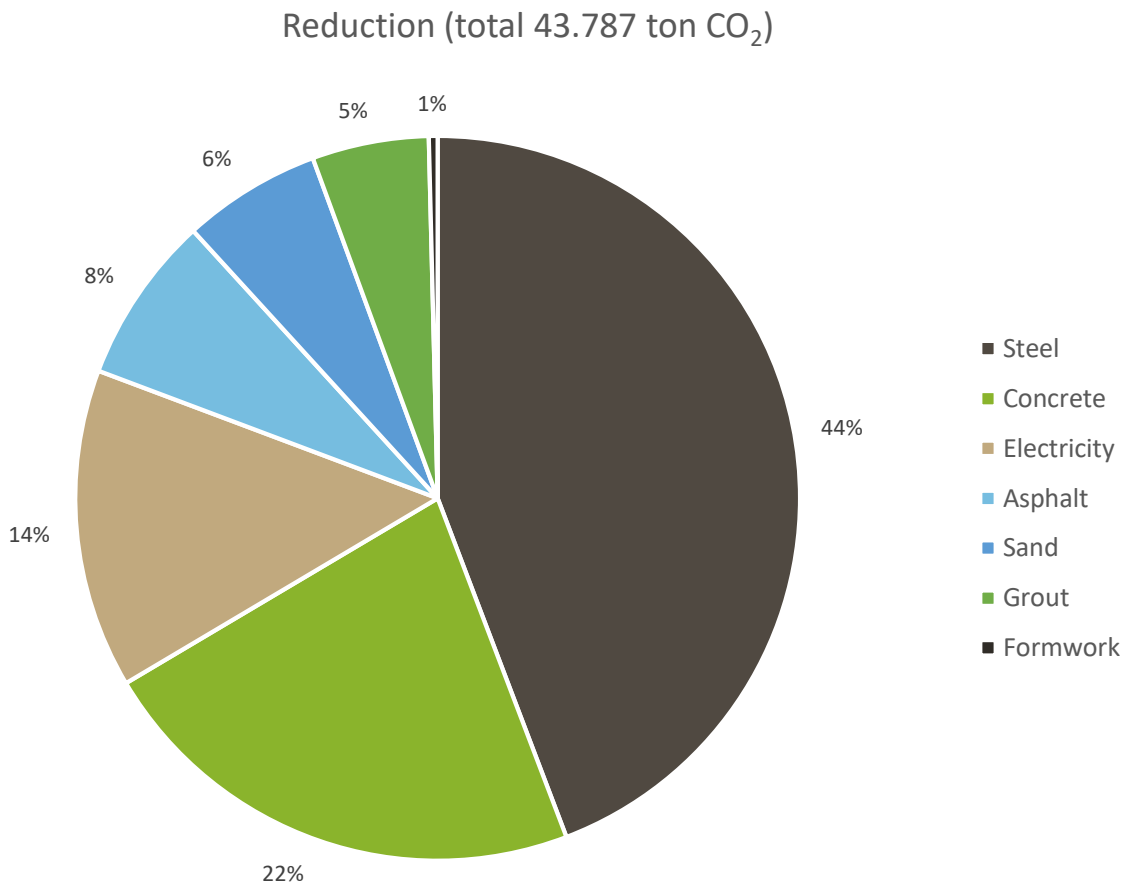


CO_2 reduction

True emissions compared to industry standard

Measures include:

- Reusing sheet piling
- Alternative fuel
- More sustainable cement (less CEMI)
- Green electricity
- Use of EURO 5/6 trucks
- More local sand
- More sustainable ingredients of grout



CO_2 goal scope 3: usage

To reduce our CO_2 footprint, we have set the following goal:
Reducing the emissions of the exploitation phase with **50%***
*planned emissions including measures compared to the original planning without reduction measures.

Let's talk about CO_2!
Do you have any questions, ideas or comments, let us know via duurzaamheid @mobilis.nl

SOLAR OPTIC FIBRE

Around 50% of the electricity use of a tunnel, comes from the entrance lighting. Using Solar Optic Fibre, almost **25%** less electricity is needed for the entire tunnel! The RijnlandRoute is the first project in which this technique is used for a tunnel. The electricity that is still required for the tunnel will be Dutch wind energy, which makes it free of CO_2 emissions.

Air filtration

Fine dust concentrations

- Something different from CO_2, but important for (local) air quality is the BESIX Clean-Air barrier. This barrier is installed at the N434 in July 2019. The BESIX Clean Air moss covered barrier filters PM10 and 2,5 out of the air in a natural way.
- This barrier combines mosses and technology to get a reduction of up to 43% in PM10 and 22,8% for PM2,5.

Materials passport

- The basis for a circular economy
- We use this passport to map necessary information of materials
- If we know the characteristics of the materials, there is a greater opportunity for high-value reuse

- COMOL5 and the Province of Zuid Holland were part of a national pilot project: the Materials Expedition
- Most important lessons learned (for all lessons learned click **here;** in Dutch):
  - It is hard to implement the Materials passport in an ongoing project; therefore start working on a Materials Passport at the beginning of a project. Make sure the structure is known and the tasks and responsibilities are allocated in the organisation.
  - Ensure that the request for documentation is standardized (preferably sector-wide, connect to existing systems such as the OTL and ILS).
  - Most often, it is not worth the time/investment to make a materials passport for existing infrastructure. This might be a different case when demolition and (possible) reuse are on the agenda.