

A SMALL ELECTRIC CAR IS 3 TIMES CLEANER THAN A SMALL GASOLINE CAR

GASOLINE CAR **32.1 tCO₂** per life cycle

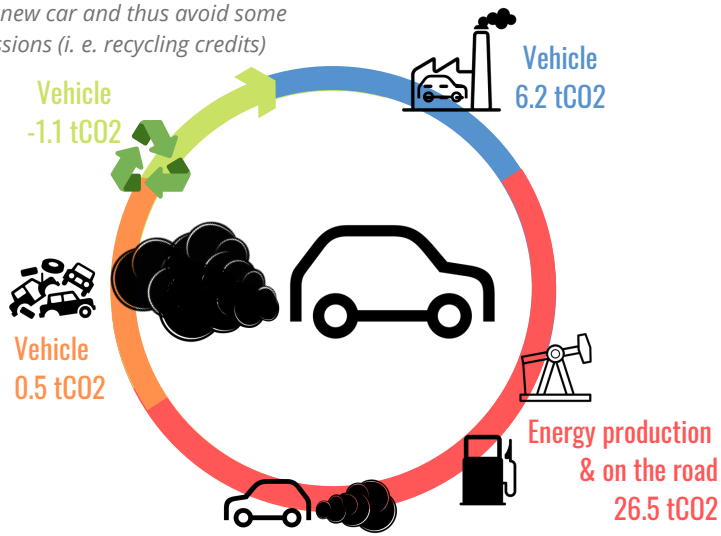
ELECTRIC CAR **10.1 tCO₂** per life cycle

RECYCLING

Thanks to recycling, parts of the car can be used for the production of a new car and thus avoid some emissions (i. e. recycling credits)

PRODUCTION PHASE

This phase includes resources and production of car parts



There are rules at EU level that require reusing and recycling car parts

END OF LIFE

The use phase includes fuel production, transport distribution and burning on the road, as well a car maintenance

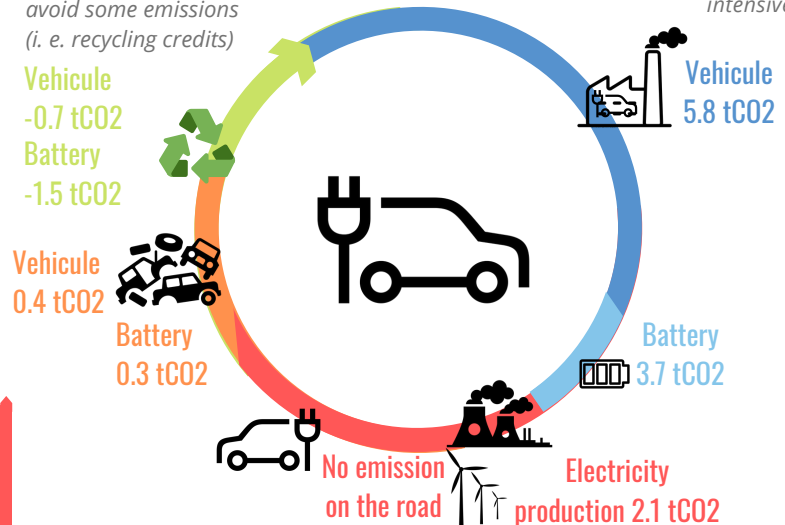
USE PHASE

RECYCLING

Thanks to recycling, parts of the car and of the battery can be used for the production of a new car and thus avoid some emissions (i. e. recycling credits)

PRODUCTION PHASE

This phase is the most emitting for electric cars because battery production is currently carbon-intensive



EU legislation also sets strict requirements for recycling batteries

Emissions of electricity production depend on the energy source

END OF LIFE

USE PHASE

Comparison of the emissions over the life cycle of a small car in France in 2016 (in tCO₂eq)

tCO₂ eq. : tons of CO₂ equivalent
1tCO₂ corresponds to 1 round trip by air from Paris to New-York

This figure is a simplification of the stages of a vehicle life cycle for one specific type of car to provide an overview of the elements to take into account when assessing the impact of a car.

Source : Jacques Delors Institute based on Chéron, M., Gilbert-d'Halluin, A., Schuller, A. « Quelle contribution du véhicule électrique à la transition écologique en France ? », Fondation pour la Nature et l'Homme, Rapport technique, décembre 2017