RENAULT TRUCKS E-TECH MASTER

Environmental product information

renault-trucks.com

RENAULT TRUCKS

Renault Trucks

Renault Trucks is committed to improving sustainable goods mobility and is striving to reduce the effects its products have on the environment. Renault Trucks vehicles are designed to comply with legislation limiting atmospheric pollution and also to continue lowering fuel consumption which results in reducing carbon dioxide emissions.

Together with ever more fuel efficient transport solutions, Renault Trucks offers a full range of vehicles powered by alternatives to diesel fuel to enable operation in any environment: 100% electric; compressed natural gas; biofuels.

Renault Trucks implements an environmental policy based on specific commitments and a stringent management system that covers its dealer network, suppliers and partners. Our partner produces the vehicles in ISO 14001 certified production plants. It is geared to limiting its consumption of energy, water and raw materials but also to reducing waste production. Its products are designed to allow maximum reuse of the materials that have gone into their production.

Environmental product information

The environmental information on the product is derived from the Life Cycle Analyses (LCA) carried out on our vehicles. The LCA presented here takes into account the life cycle of a vehicle with one factory-assembled electric batteries, from the production of raw materials to final disposal and recycling. It assumes that the battery lifetime with be equivalent to the vehicle lifetime. It provides data on the environmental impact of each of these phases. However, because it is vast and complex, in some cases the LCA involves approximations. The results enable us to identify the most important environmental parameters in the product's life cycle.

THE THEMES

The environmental product information studies the impact of:

- **materials:** extraction and processing of raw materials used to produce the vehicle.
- **production:** manufacturing processes for components production at suppliers, transport of parts and vehicle assembly.
- **use phase:** production and consumption of electric energy. The vehicle consumption is measured following the homologation tests WLTP. Depending on the conditions of use, the vehicle energy consumption can differ from the published results.
- **maintenance:** consumables and materials used in preventive maintenance and the production of parts (impact calculated on the basis of average values).
- **end of life management:** dismantling of products, management of waste and recycling the vehicle's materials which will be used to produce new vehicles and batteries.

THE RESULTS

The results shown include:

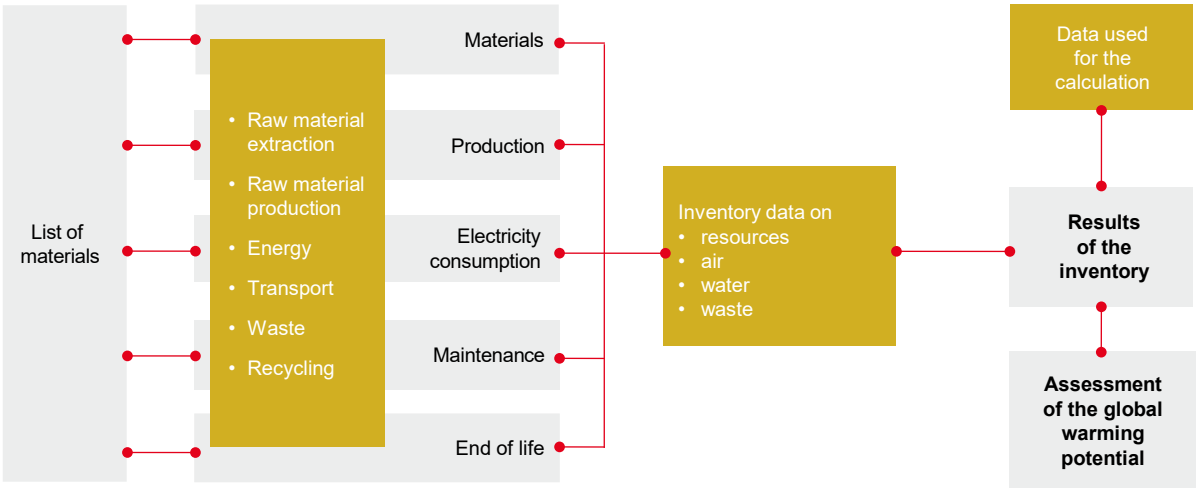
- the vehicle's bill of materials
- the assessment of the potential contribution to global warming potential

BENCHMARK VALUES

Life cycle analysis results vary considerably depending on the data used for the calculations, the most important being country and energy source, energy consumption and annual mileage for vehicle. The results shown here are based consumption measured following the WLTP homologation test for a **Renault Trucks E-Tech Master**, a 4x2 utility van designed for local distribution, throughout its entire life cycle.

Environmental product information

METHOD



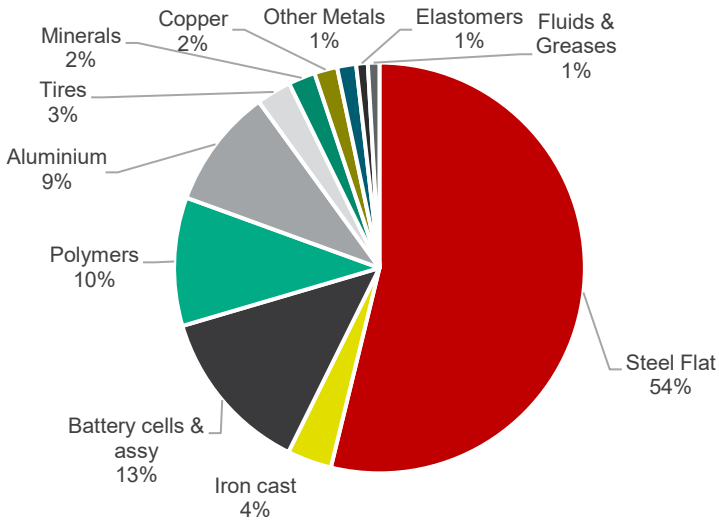
DATA USED FOR THE CALCULATION

Vehicle model	Power	Number of batteries	Vehicle type	Distance (km)	Consumption kWh/100 km	date
Renault Trucks E-Tech Master	105 kW	1 x 87 kWh	4x2 Utility van	300 000	24,5	2026

BILL OF MATERIALS

Bill of materials used in the vehicle and taken into account for calculating the life cycle analyses.

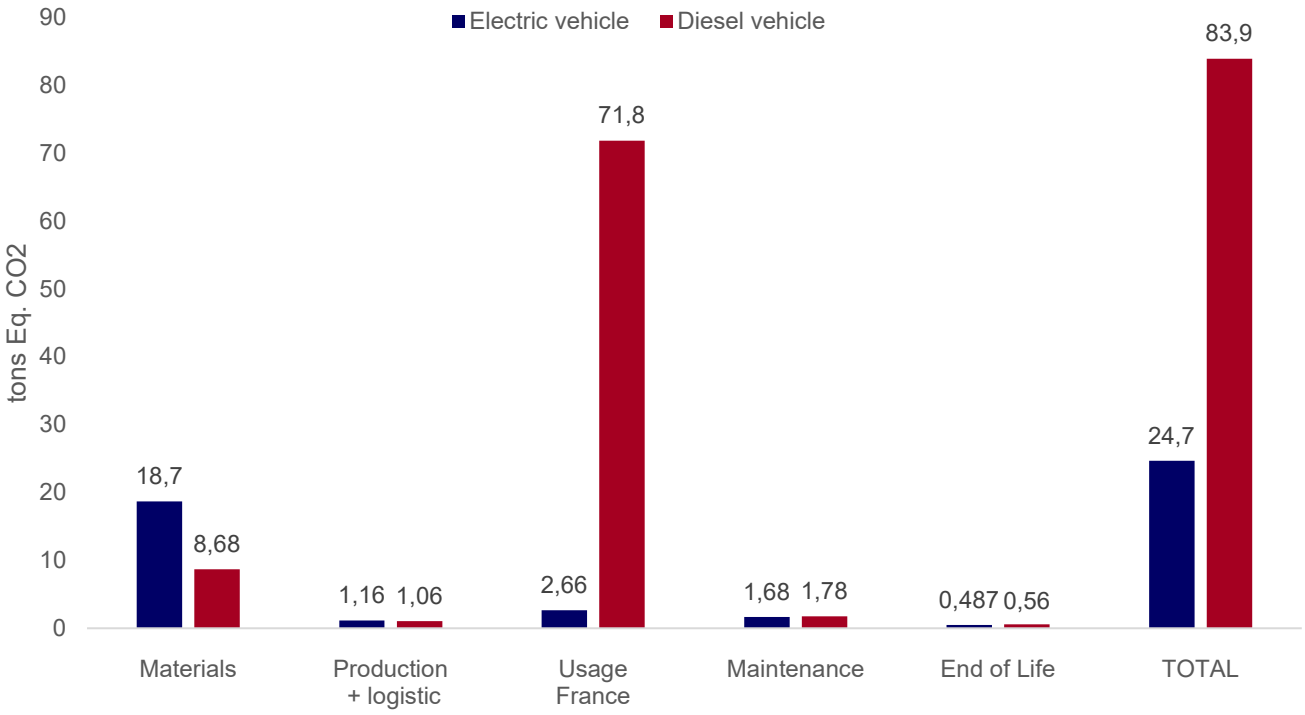
Materials	kg
Steel Flat	1407
Battery cells & assy	323
Polymers	248
Aluminium	232
Tires	68
Minerals	52
Copper	44
Other Metals	37
Elastomers	22
Fluids & Greases	22
TOTAL	**2455**



Assessment of the impact on the environment

Assessing a product's environmental impact throughout its lifetime makes it possible to determine which aspects must be studied to improve its overall environmental performance. This assessment may be qualitative but also quantitative by using appropriate methods and tools,

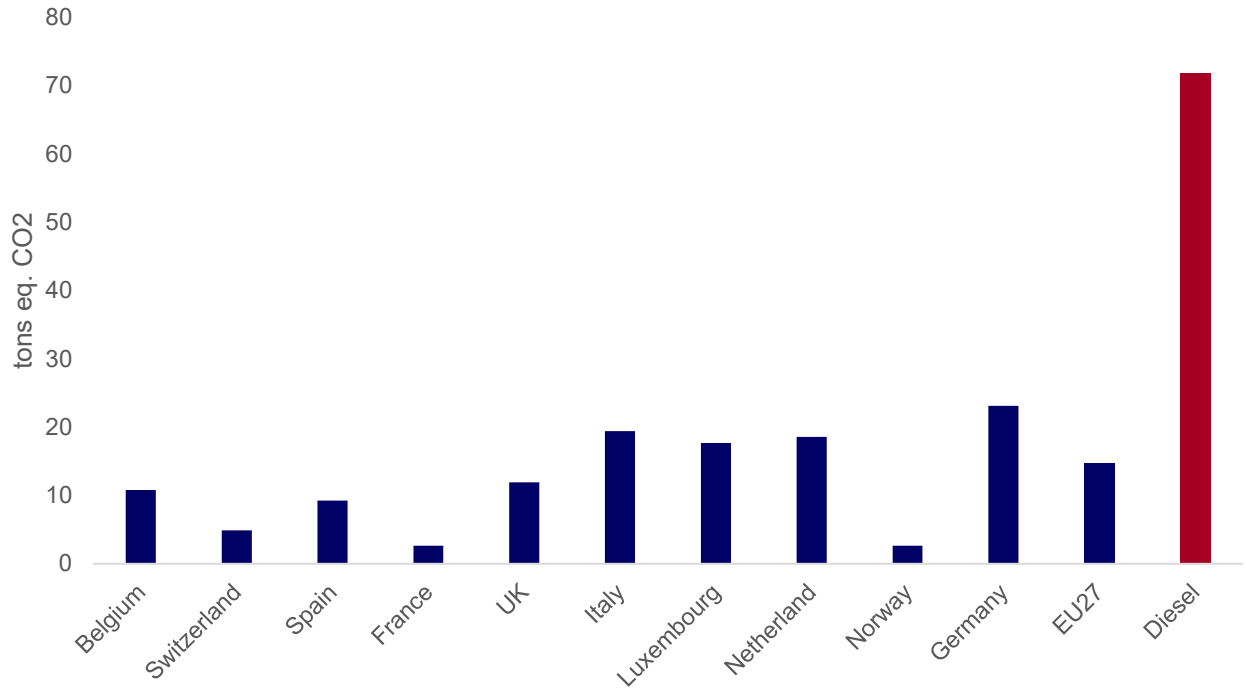
GLOBAL WARMING POTENTIAL



Global Warming Potential for the Life Cycles of the **Renault Trucks E-Tech Master, 4x2 Utility van** in France and Comparison with the same diesel Vehicle.
Carbon emission factor for electricity : 0,036 kg CO_2e/kWh in France (source electricity maps 2024), batteries charges losses included,

Assessment of the impact on the environment

Use phase emissions from production of electricity - CO_2eq.
National average and comparison with Diesel



Main markets for Renault Trucks E-Tech Master Utility van 4x2.
Carbon emission factor for electricity : source electricity maps 2024, batteries charges losses included; consider a gradual decarbonization of electricity in Europe by 2025.

Assessment of the impact on the environment

COMMENTS

Over the entire life cycle of an electric truck, materials, including batteries, account for most of the greenhouse gases emissions, while the use phase, which is very predominant for a diesel vehicle, is less.

By switching to electric power, the reduction of the truck's climate impact during this use phase can be extremely important depending on the selection of the primary source of this energy and its production origin.

The analyses show that electricity produced from coal will have a high carbon impact, unlike electricity produced from nuclear or renewable energy sources. The results on the whole life cycle differ according to the national energy mixes within the European Union but show a gain in all countries that should increase as decarbonization progresses

Powered by low-carbon electricity, the **Renault Trucks E-Tech Master Utility van 4x2** shows a significant reduction in CO_2 emissions equivalent of its life cycle of over 70%.

By developing its 100% E-Tech electric range of vehicles Renault Trucks is substantially reducing the CO_2 emissions from products over their entire life. Renault Trucks is continuing its efforts to reduce batteries environmental impact by securing materials supply and recycling and by using new technologies.

Renault Trucks is preparing battery management in line with the principles of the circular economy. After their first service life, batteries can be reconditioned and reused on trucks. Then, they will be recycled at the end of their life, with the recovered materials being reinjected into the manufacture of new units.

Find out more about sustainability at Renault Trucks:
Sustainability | Renault Trucks Corporate (renault-trucks.com)

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