



How to decarbonize homes today

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Where are carbon emissions coming from?

Total global greenhouse gas emissions



Industry, 20,6

land use, 12,96 Gt, 22%

Source: IPCC, 2022

Residential Solar 2.0

Optimizes energy production, consumption and storage

Maximizes self-consumption, manages backup events and provides grid independence

Sophisticated home energy management system, decision making algorithms and improved financials

A full SolarEdge system can help reduce a significant portion of energy-related carbon emissions from a home (Actual: **7.85** metric tons of CO2 per year)

solaredge



Electrification and distributed electricity generation are key to decarbonizing homes

Average US household energy CO2 emissions

Direct + electricity used, 2019

7.85 metric tons per year

Switching average fossil-fuel heating to a heat pump

Switching water heating from fossil fuel to a heat pump

Switching 50% of grid use to PV electricity

3.04 metric tons per year

0.85 metric tons per year

2.5 metric tons* per year

Switching an ICE vehicle to an EV

Assuming ~11,000 miles travelled annually

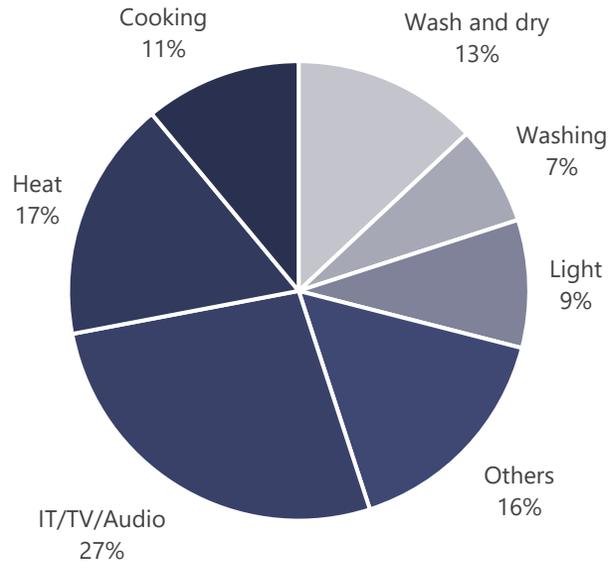
2.86 metric tons* per year

Smart energy management, further electrification and storage integration can drive even more emissions reduction

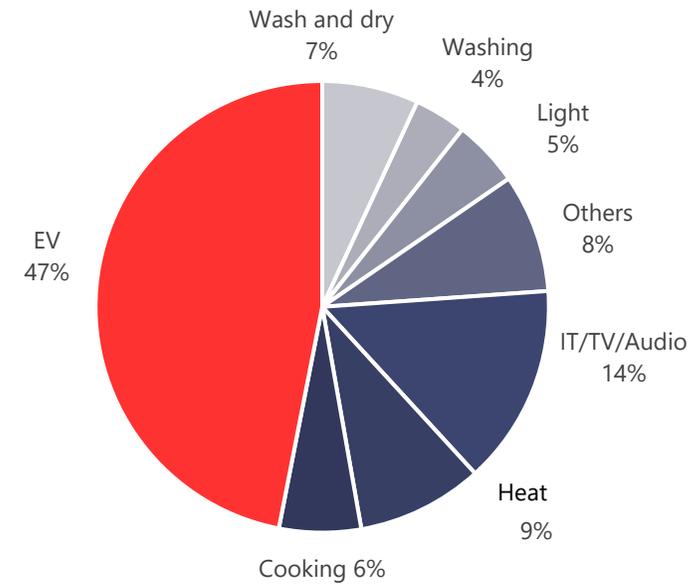
Sources: EIA, 2021; Environmental Research Letters, 2022; RMI, 2018; Carbon Switch, 2022

EV Charging To Become Household's Top Energy Consumer

Typical Electricity Consumption in German Household **WITHOUT** an EV



Typical Electricity Consumption in German Household **WITH** an EV



****Based on internal analysis**

Assumptions:

- Average German electricity Consumption for a 3-person household: 2.6MWh/year
- Average daily km driven: 35km
- Charging required 0.18 kwh/km

Source: <https://de.statista.com/infografik/17377/die-groessten-stromfresser-im-haushalt/>

Multi-Dwellings

Growing Urbanization
increases Energy demand



>40% of the OECD buildings
stock is in apartment buildings



+2B people(+28%) 2020-2050



Urbanization to increase from
55% to **68%** (+2.4B people)



21.7m households



47m parking spots in
MDUs



32.2m households



Agriculture and Industry



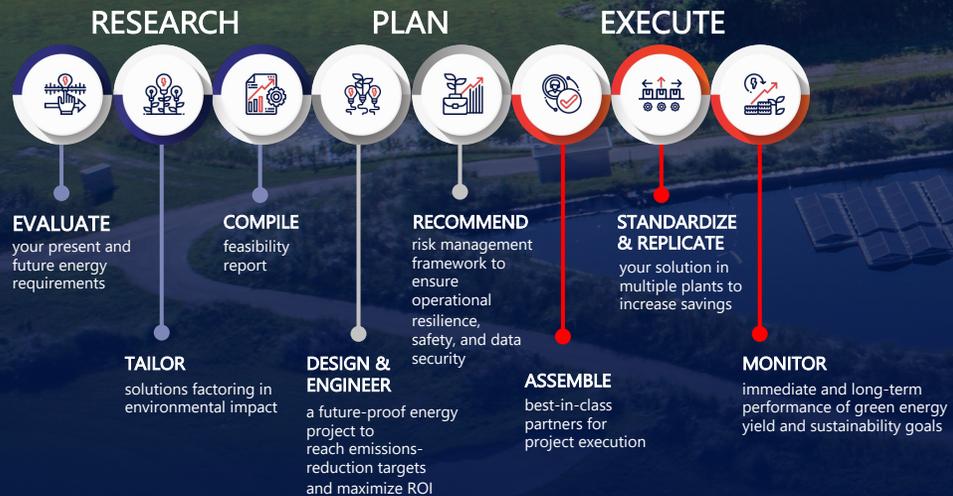
22% global GHG emissions* and 30% global energy consumption**



34% global GHG emissions and 31.9% global energy consumption

* Direct and indirect emissions, 2019

** Throughout the whole supply chain, 2.5% in cultivation phase



Summary



Grow residential integration



Smarter and better solutions for the cities



Integrate Agriculture and Industry into the solution