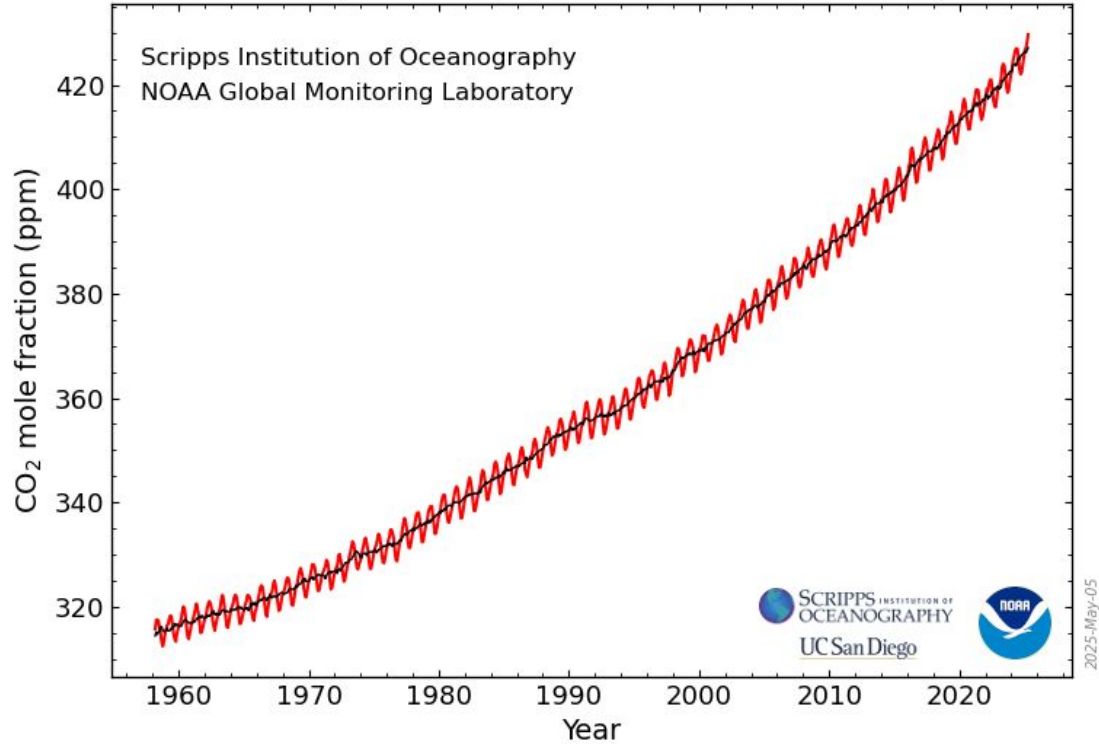


429,64 ppm*

* im April 2025, Mauna Loa Messstation



Atmospheric CO₂ at Mauna Loa Observatory



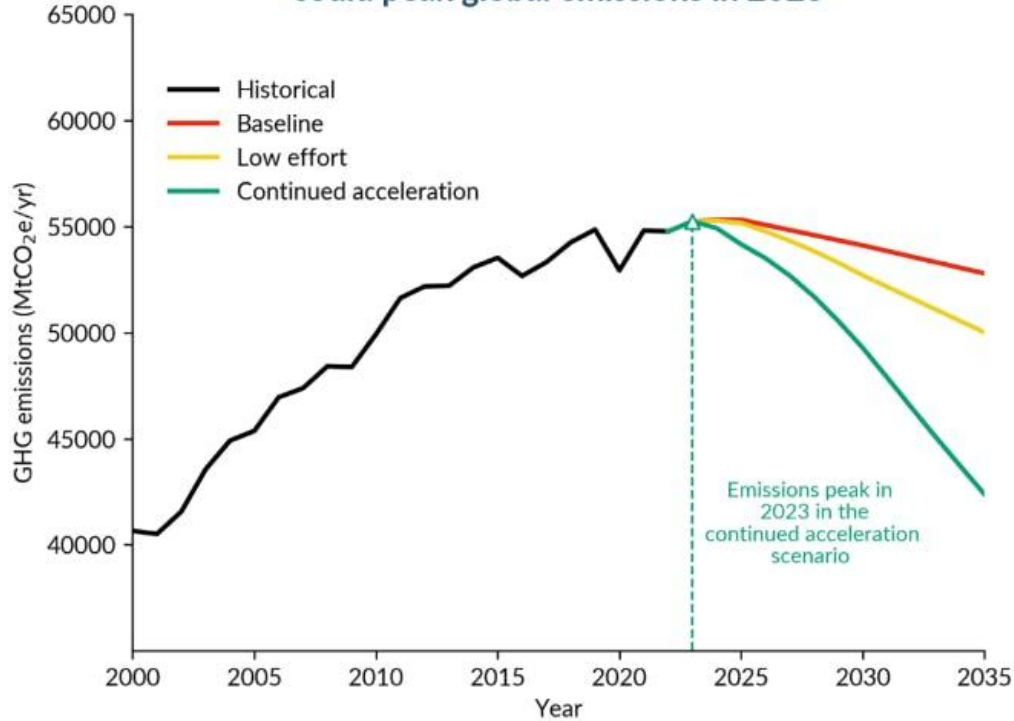
Quelle: NOAA



Mann beißt Hund!



Continued acceleration of zero carbon technologies could peak global emissions in 2023



Quelle: Climate Analytics



Wachstum der
Emissionen gestoppt?



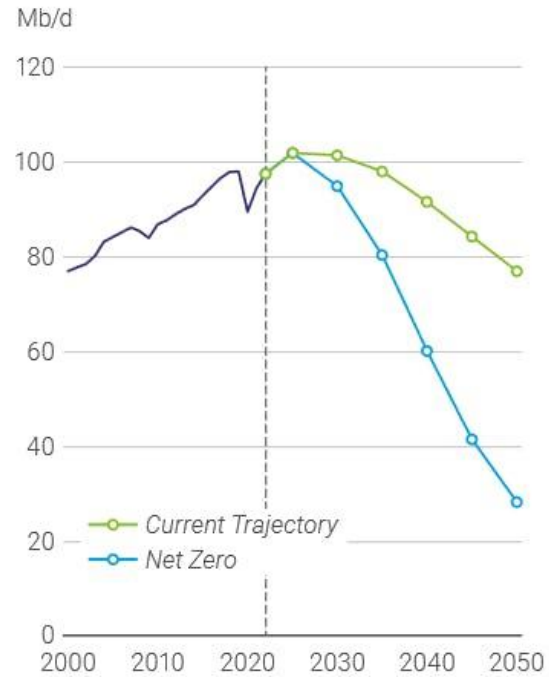
- Eine andere Geschichte
- Was das für die Zukunft bedeutet



Ein Kampf, der sich lohnt.



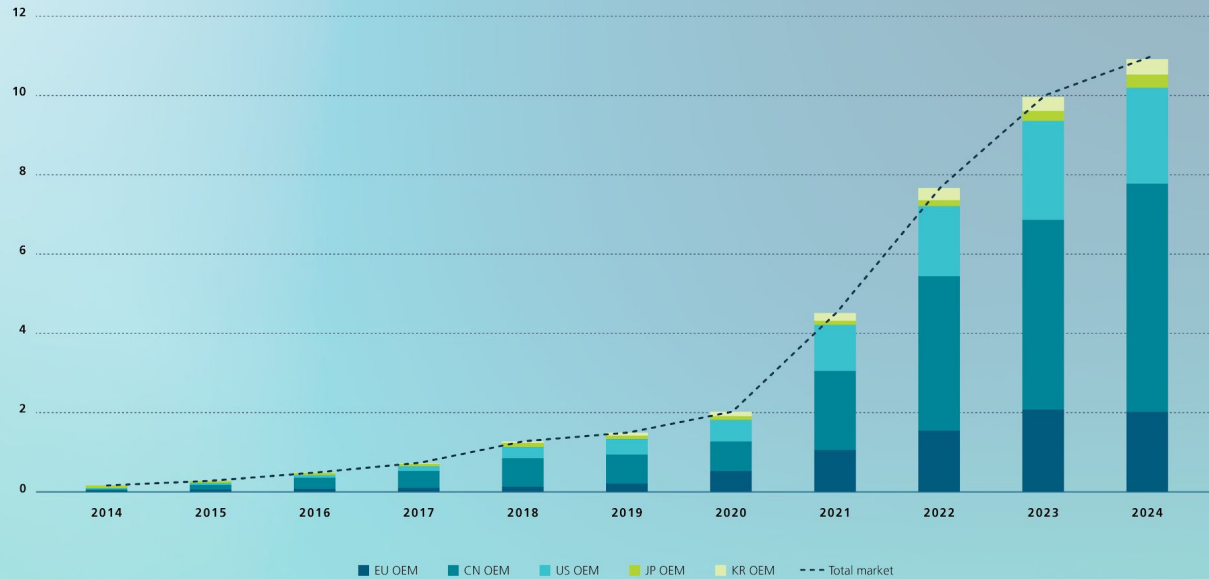
Oil demand



Quelle: BP



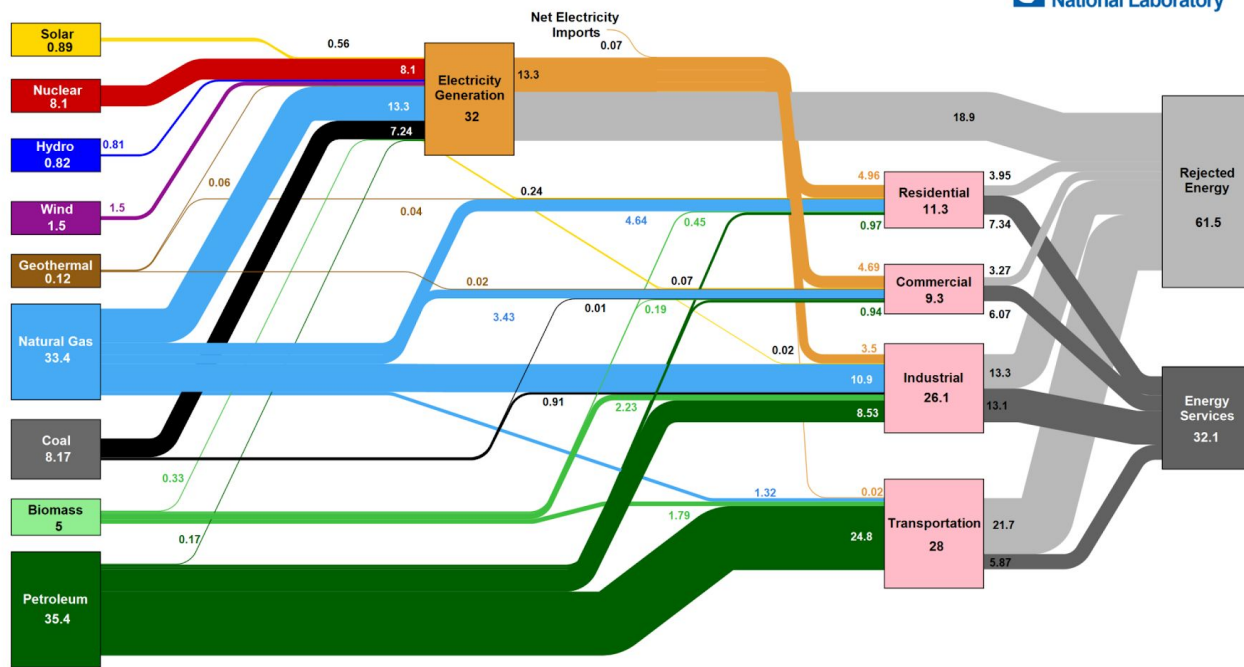
Sales market battery electric vehicles (BEV) passenger cars in millions



Quelle: Fraunhofer ISI



Estimated U.S. Energy Consumption in 2023: 93.6 Quads



Source: LLNL October, 2024. Data is based on DOE/EIA SERDS (2024). If this information or a reproduction of it is used, credit must be given to the Lawrence Livermore National Laboratory and the Department of Energy, under whose auspices the work was performed. Distributed electricity represents only retail electricity sales and does not include self-generation. EIA reports consumption of renewable resources (i.e., hydro, wind, geothermal, and solar) for electricity in BTU-equivalent values by assuming a typical fossil fuel plant heat rate. The efficiency of electricity production is calculated as the total retail electricity delivered divided by the primary energy input into electricity generation. End use efficiency is estimated as 65% for the residential sector, 65% for the commercial sector, 49% for the industrial sector, and, 21% for the transportation sector. Totals may not equal sum of components due to independent rounding. LLNL-MI-410527

Quelle: LLNL

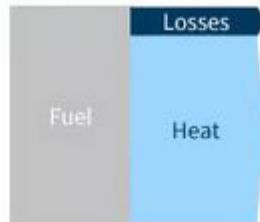


Fossil thermal



30%–40% efficiency

Gas boiler



85% efficiency

Internal combustion engine



25%–40% efficiency

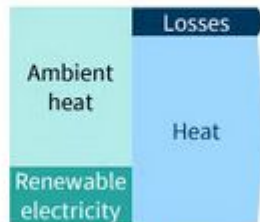
Wind and solar



100% efficiency

2–3x
as efficient

Heat pump



300%–400% efficiency

3–4x
as efficient

Electric vehicle



80%–90% efficiency

2–4x
as efficient

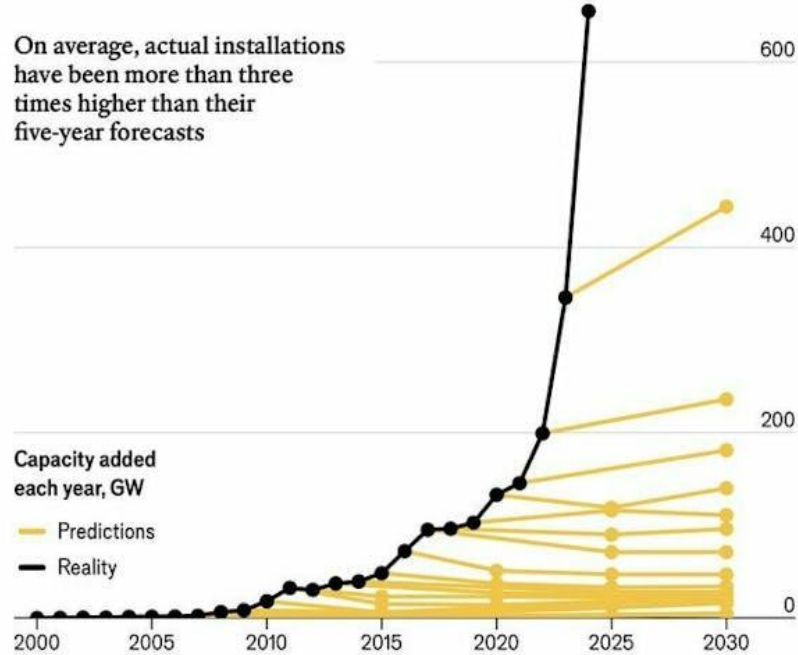


Source: IEA, IVASA, RMI analysis, Adapted from Prof. Tomas Kåberger. Note: Solar and wind's 100% efficiency represents the fact that there are no conversion losses from primary to secondary energy.



↓ EASY PV
how solar outgrew expectations

On average, actual installations have been more than three times higher than their five-year forecasts



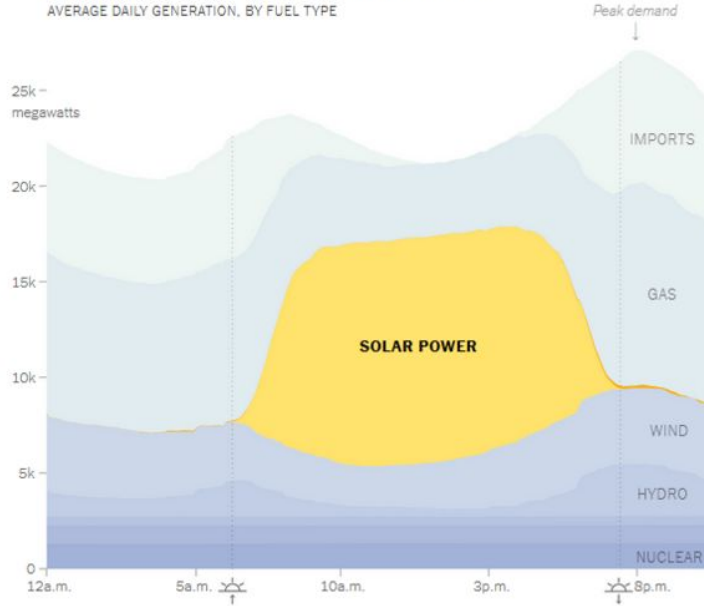
Sources: IEA; Energy Institute; BloombergNEF

Quelle: The Economist

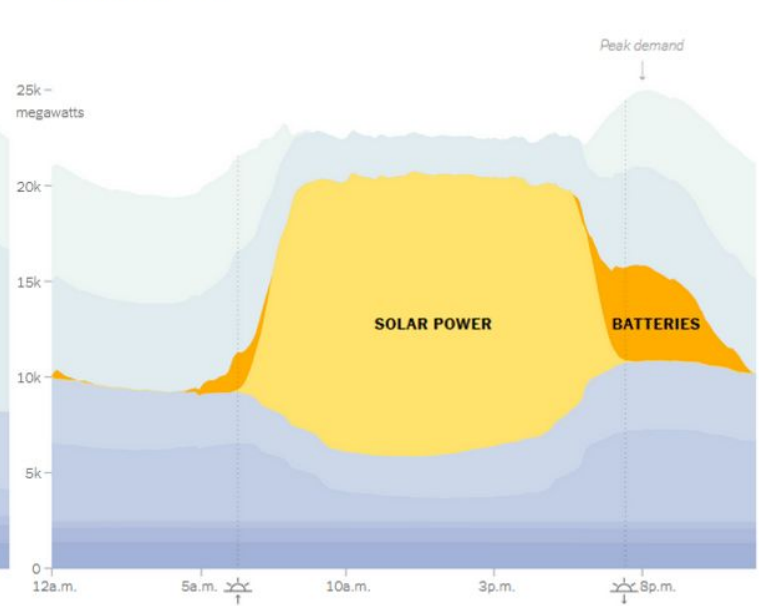


How California powered itself in April 2021 ...

AVERAGE DAILY GENERATION, BY FUEL TYPE



and in April 2024.



Source: California Independent System Operator via [Grid Status](#) - Please see the bottom of this page for notes. - By The New York Times

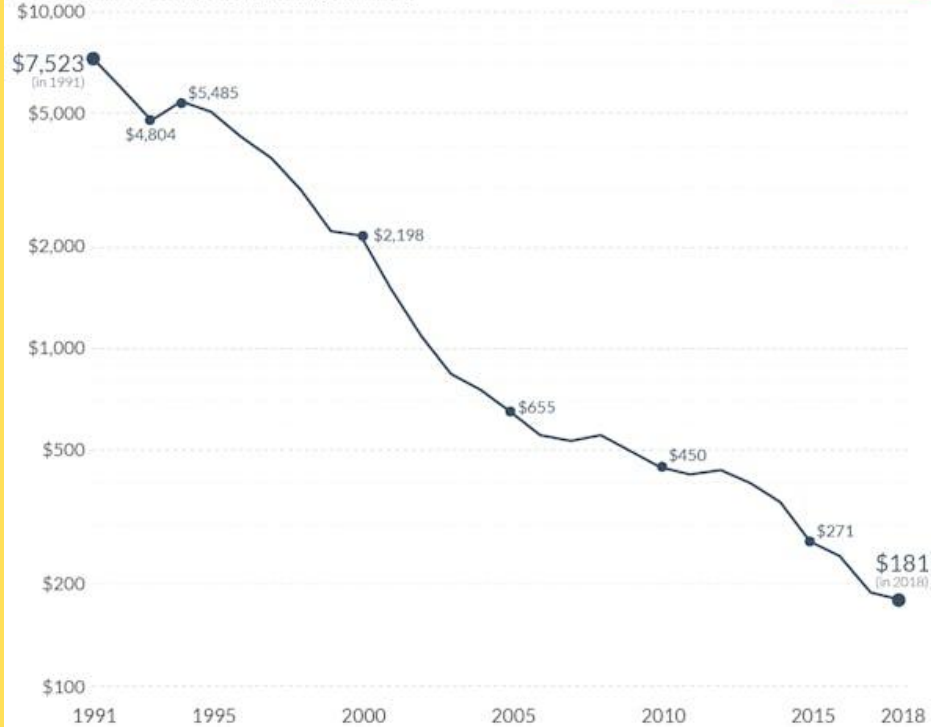
Quelle: NYTimes



The price of lithium-ion batteries fell by 97%

Our World
in Data

Price of lithium-ion battery cells per kWh (logarithmic axis)



Prices are adjusted for inflation and given in 2018 US-\$ per kilowatt-hour (kWh).

Source: Micah Ziegler and Jessica Trancik (2021). Re-examining rates of lithium-ion battery technology improvement and cost decline.

OurWorldInData.org - Research and data to make progress against the world's largest problems. Licensed under CC-BY by the author Hannah Ritchie.

Quelle: OWD

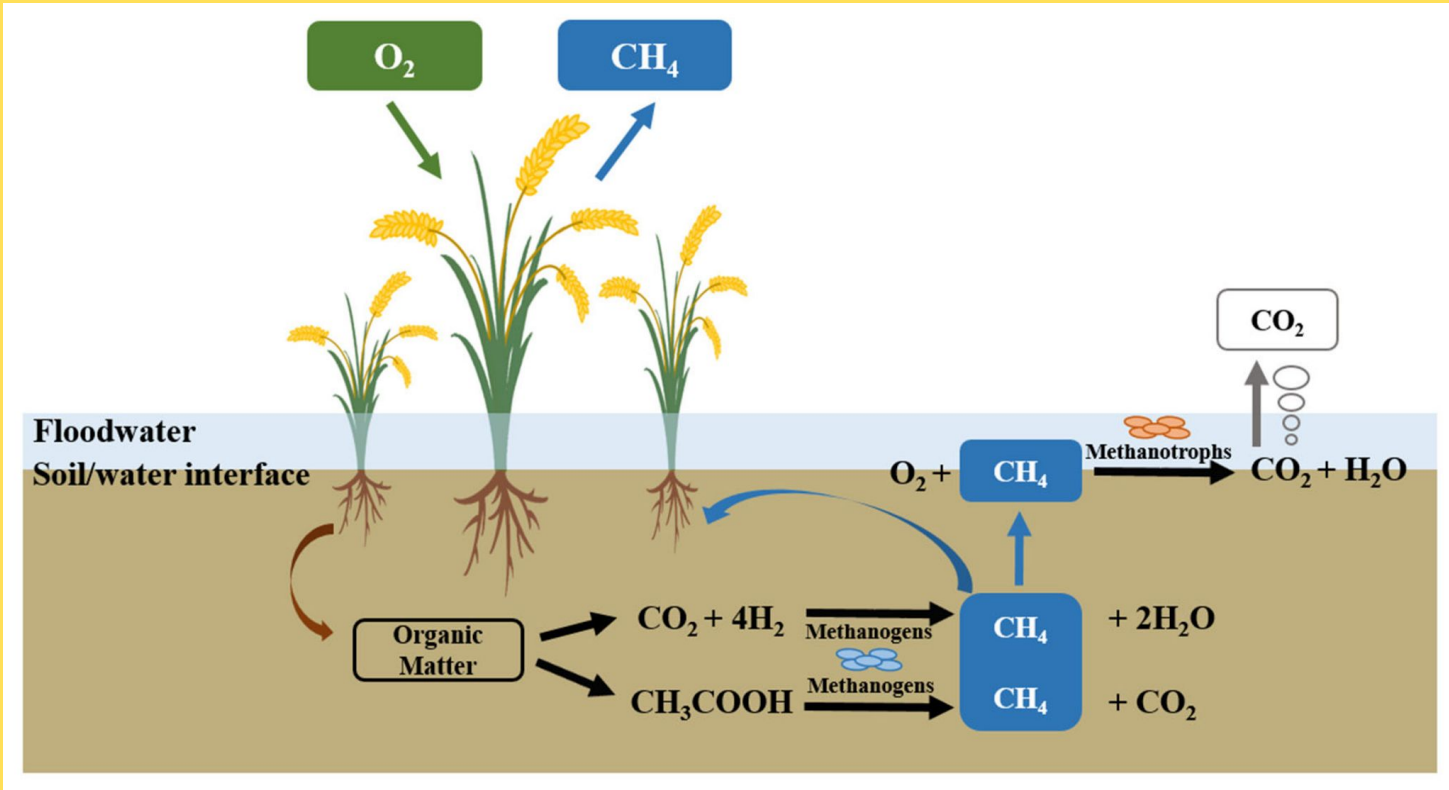


100% Erneuerbare sind
nicht mehr die teuerste
Option.



ABER!

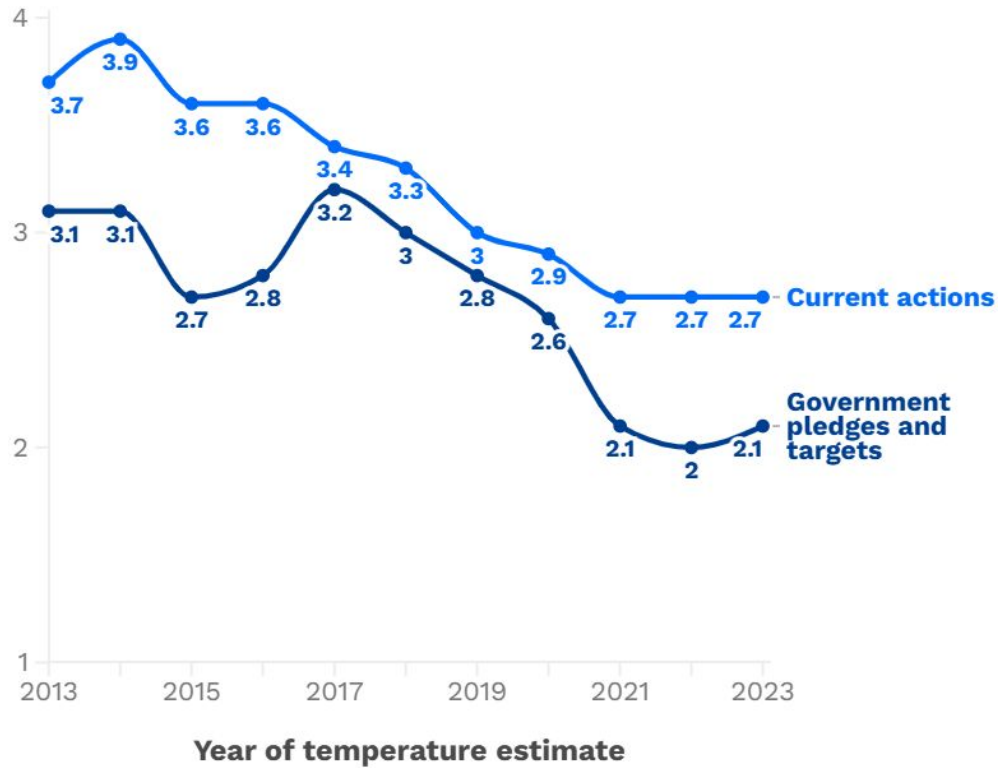




Quelle: MDPI



Projections of global temperature increase by 2100, Celsius



Quelle: CIPHER, Climate Action Tracker



Ein Anfang ist gemacht.





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