

Why EV?

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Agenda

- Why Me?
- Electric Vehicle (EV) Negativity.
- What is an EV?
- The Growth of Electric Vehicles.
- The Rise of the Gas Car.
- The Problem with Emissions.
- What Alternative Transport Energy Options do we Have?
- Questions?

Why Me?

Why me?

- PM on the Jaguar I-Pace EV.
- EV charging network across the UK Jaguar Land Rover Retailer network.
- MD of Veny - EV charging company.
- COO of Urban Fox - EV charging company.
- Group CTO for Project EV & Project Curv
- Consultant on EVs, EV Charging and Renewable Energy.
- Seen as an EV, EV Charging and Renewable Energy specialist on LinkedIn with 17K Followers.
- Speaker at Conferences, Webinars and Round Tables.

Electric Vehicle (EV) Negativity

Electric car owners fighting each other at power points as 'charge rage' hits UK

DAILY EXPRESS

MORE EV BAD NEWS!

Mainstream Media Review: EVs Are Bad! - Daily Mail

THE TIMES

Wednesday May 25 2022 12:00pm (UK) (7p) (40c)

The fashion editors' top buys from M&S

What the Brits behind Succession did next

Streets with one public charging point for every 85 electric cars

As Mail reveals Westminster has more chargers than Birmingham, Manchester, Liverpool, Leeds, Sheffield and Newcastle

PROOF POLITICIANS ARE OUT OF TOUCH ON ELECTRIC CARS

EV owners are increasingly frustrated with home charging, and it should worry every electric car maker

WHY WE HATE ABOUT ELECTRIC CARS

why electric cars won't save us

She joined the eco dream, but read LOUISE ATKINSON's wry diary of nightmare journeys, dead chargers and mind-boggling bureaucracy and you'll see why she says...

Electric cars? They're just SHOCKING

WATCH THE VIDEO

I bought an electric car to help save the environment - but it's ridiculous... here's why you should not get one

Electric drivers face struggle to sell their cars due to crashing prices - are you affected?

TV star ditches Jaguar electric car saying it doesn't go far enough and it's impossible to find chargers

Electric cars catch fire

Electric Cars are Terrible

'I was kidnapped by my runaway electric car'

EV CHARGING BANNED

BANNED

Norwegian Shipping Company Bans Electrified Vehicles Over Fire F Carscoops

carscoops.com • 2 min read

electric vehicles HIDDEN EMISSIONS

EVs have a tire-shredding problem

PUT BRAKES ON 'DAMAGING' 2030 PETROL CAR BAN

EXCLUSIVE by Jack Barrie

10 reasons electric cars still suck

For anyone thinking of buying an electric car, this is the aftermath of two electric cars crashing

INCREASINGLY, I'M FEELING THAT OUR HONEYMOON WITH ELECTRIC CARS IS COMING TO AN END

ROSIAN ATKINSON

NETZERO



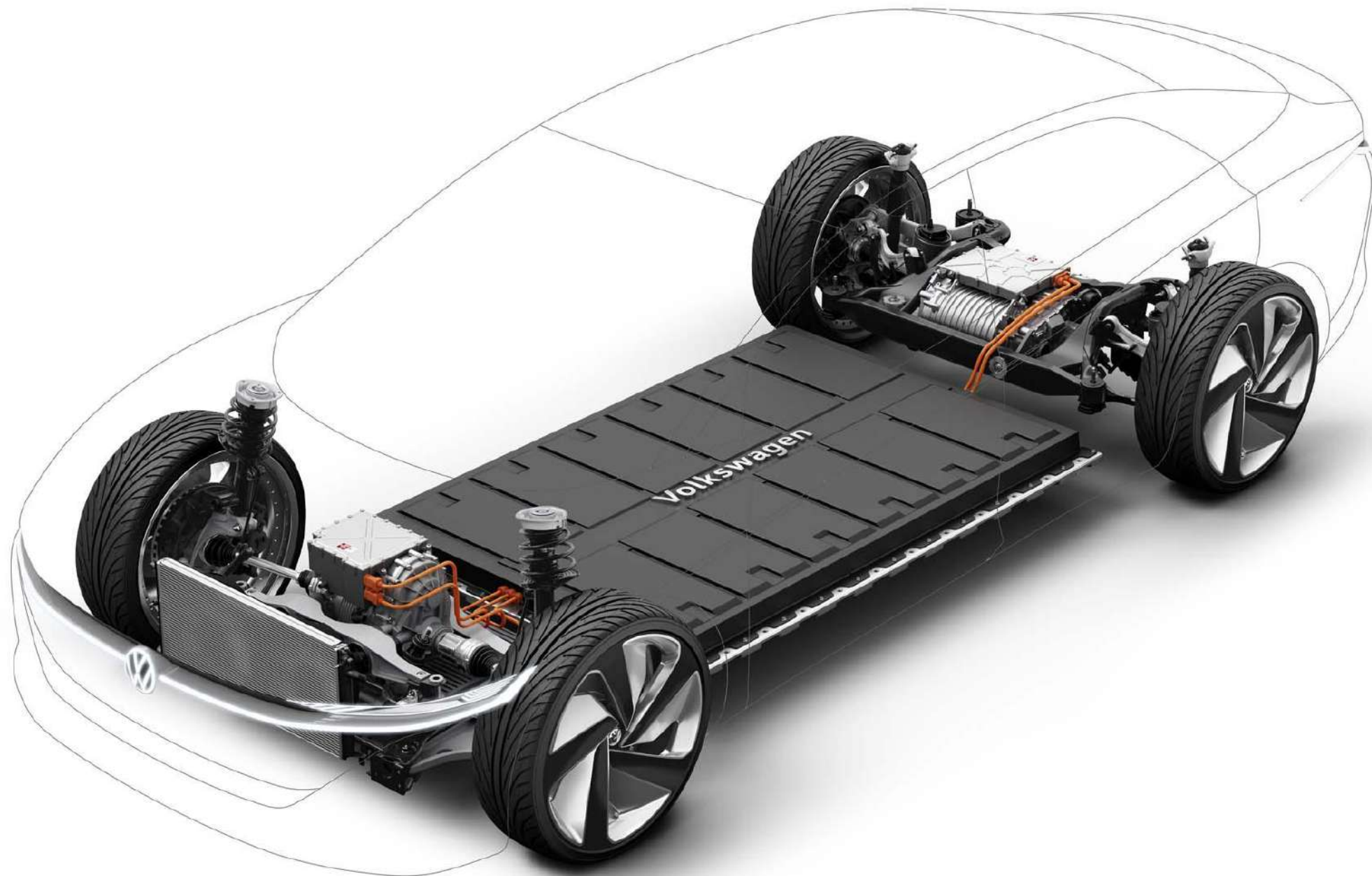
A lie told once remains a lie, but a lie told a thousand times becomes the truth.

Yuval Noah Harari

“ quoteofnday



What is an EV?



The Growth of Electric Vehicles

The Growth of Electric Vehicles (EVs)

- 1832 – Robert Anderson of Scotland.



1832 – First Electric Vehicle

The Growth of Electric Vehicles (EVs)

- 1832 – Robert Anderson of Scotland.
- 1890s – EVs outsold gas cars 10:1.



1894 - Electrobat



1895 – Electric Car



1897 – Bersey Electric Cab

The Growth of Electric Vehicles (EVs)



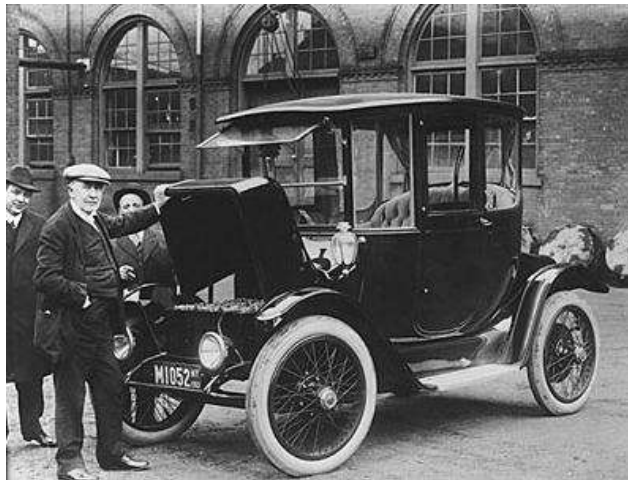
1904 – Hansom Electric Cab



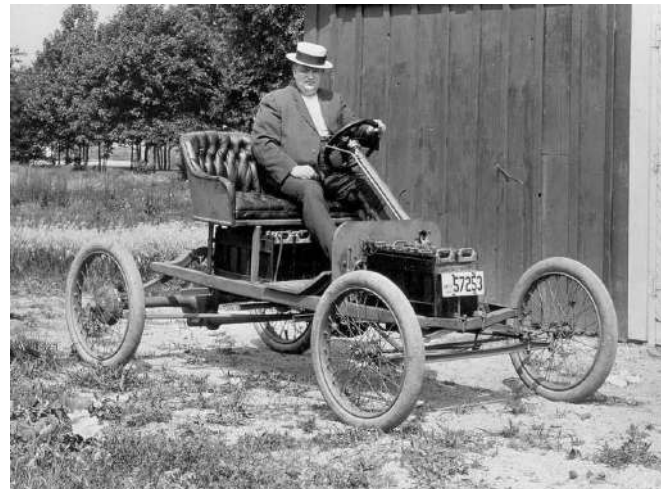
1909 – Electric Car & Charger



1910 Electric Car



1913 Thomas Edison & Electric Car



1914 - Ford Electric



1916 Detroit Electric

The Growth of Electric Vehicles (EVs)




1907 – Auto Electric Truck



1935 - Walker Electric Van

THE COSMOPOLITAN.

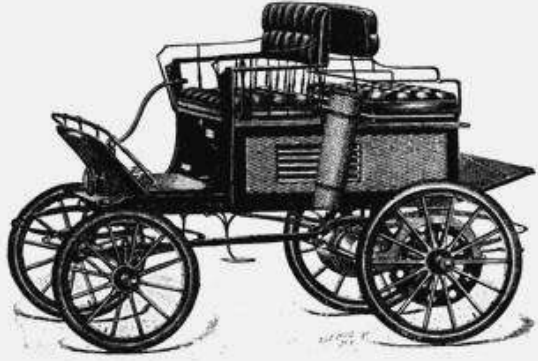


Leaders

in Mileage Capacity
in Economy of Power
in Simplicity of Construction
in Lowness of Cost of Maintenance

In every latest and important
feature of Electric Automobile Construction

**ELEVEN TYPES of VEHICLES
For BUSINESS or for PLEASURE**



Golf Trap

We have made and are making **DELIVERY WAGONS** for
some of the most careful and discriminating firms in America.
Delivery Wagons will be built to suit the needs of any customer

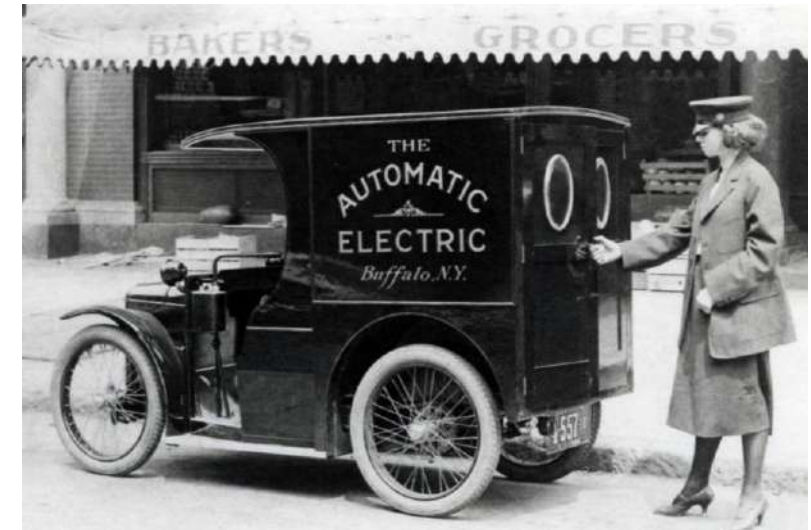
Representatives Wanted Write for Catalogue

GENERAL OFFICES AND REPOSITORY
132 West 38th Street, near Broadway, **NEW YORK**

1890 – Electric Delivery Wagons



1913 - Baker Electric Truck

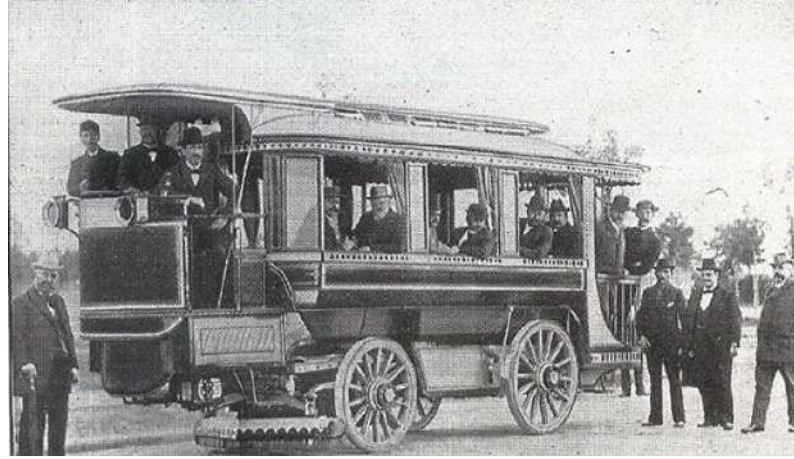


1921 American Automatic Electric Van

The Growth of Electric Vehicles (EVs)



1898 Electric Bus



1899 Electric Bus



1904 – Electric Bus



1905 – Electric Bus Tour



1907 Electrobus

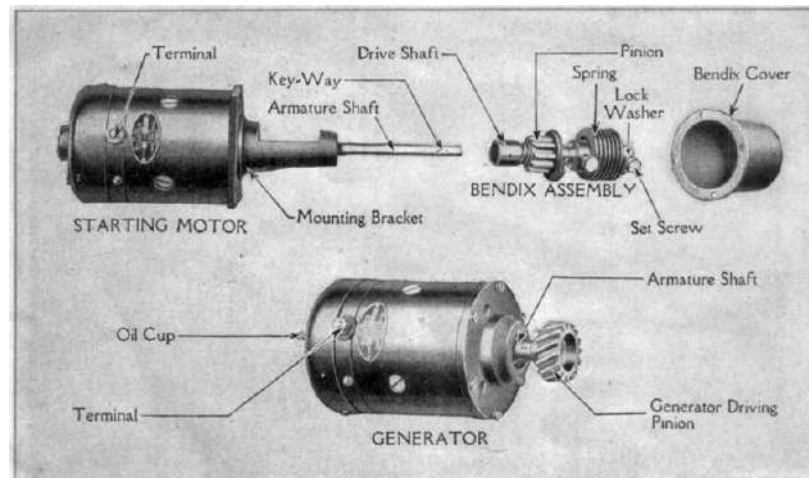


1915 – Edison Electric Bus

The Rise of the Gas Car

The Rise of the Gas Car

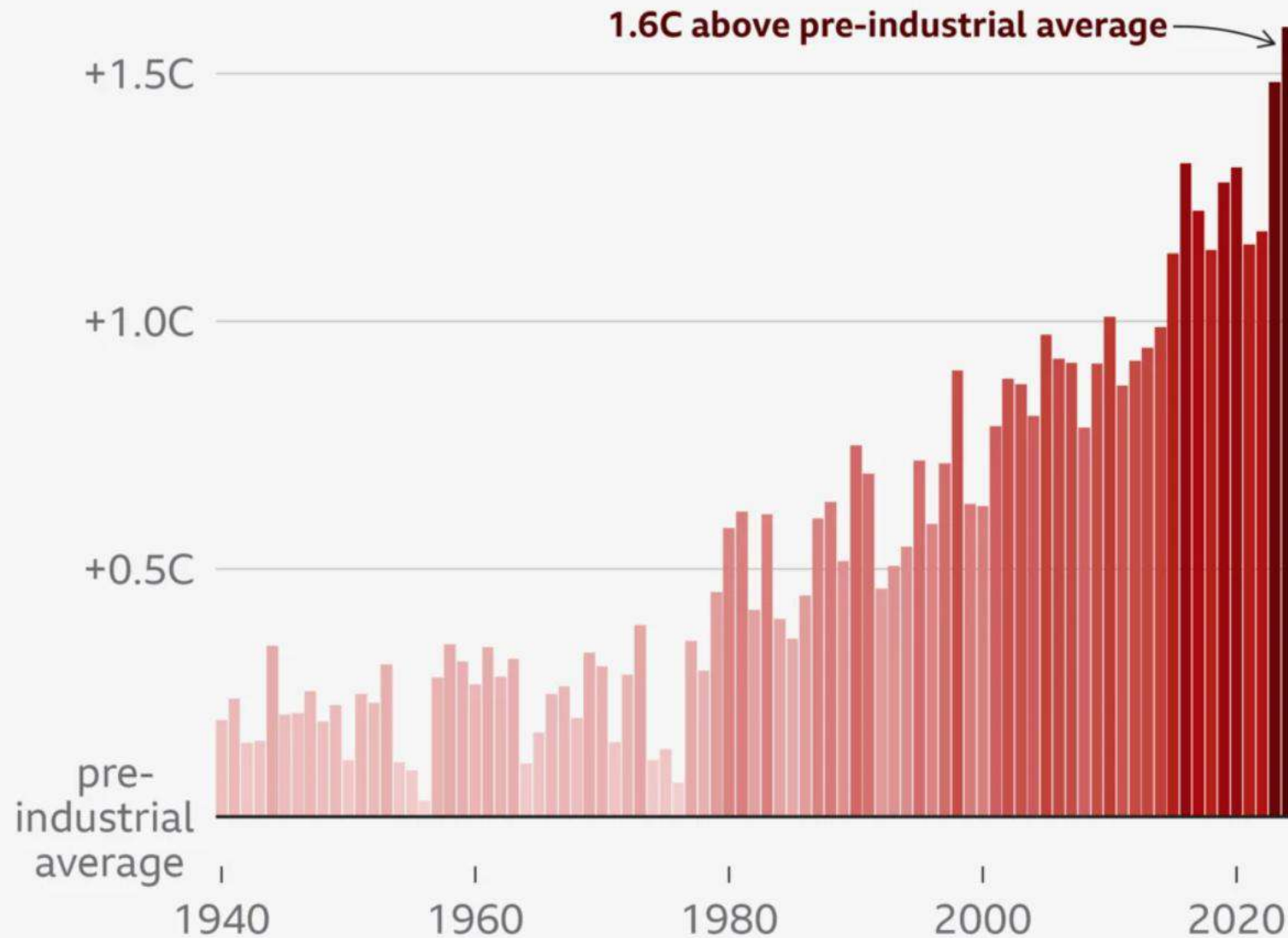
- First gas car invented in 1885 by Carl Benz.
- Model T Ford mass production - 1908.
- Electric starter motor - 1912.
- Gas filling station network.



The Problem with Emissions

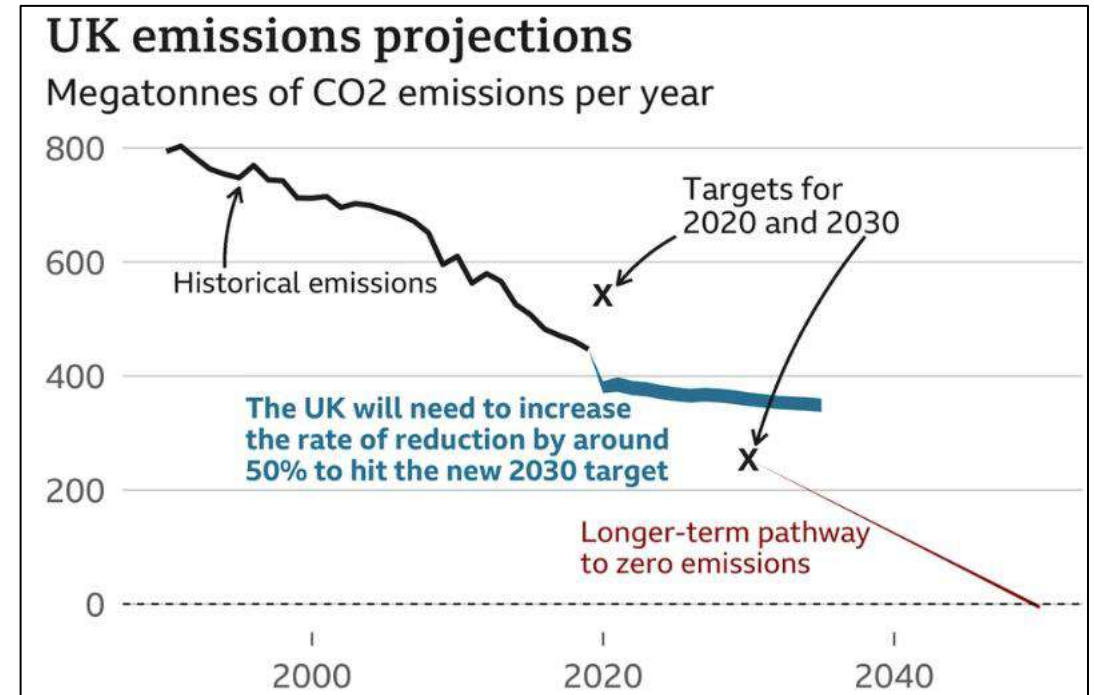
2024 was the first year above 1.5C

Global average temperature by year, compared with the pre-industrial average (1850-1900)



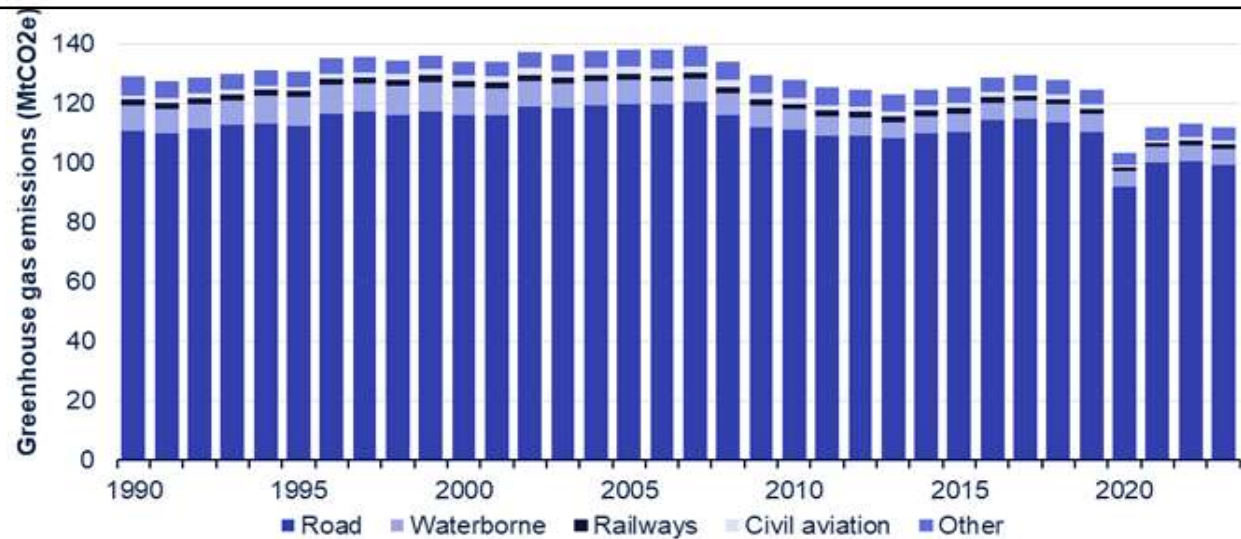
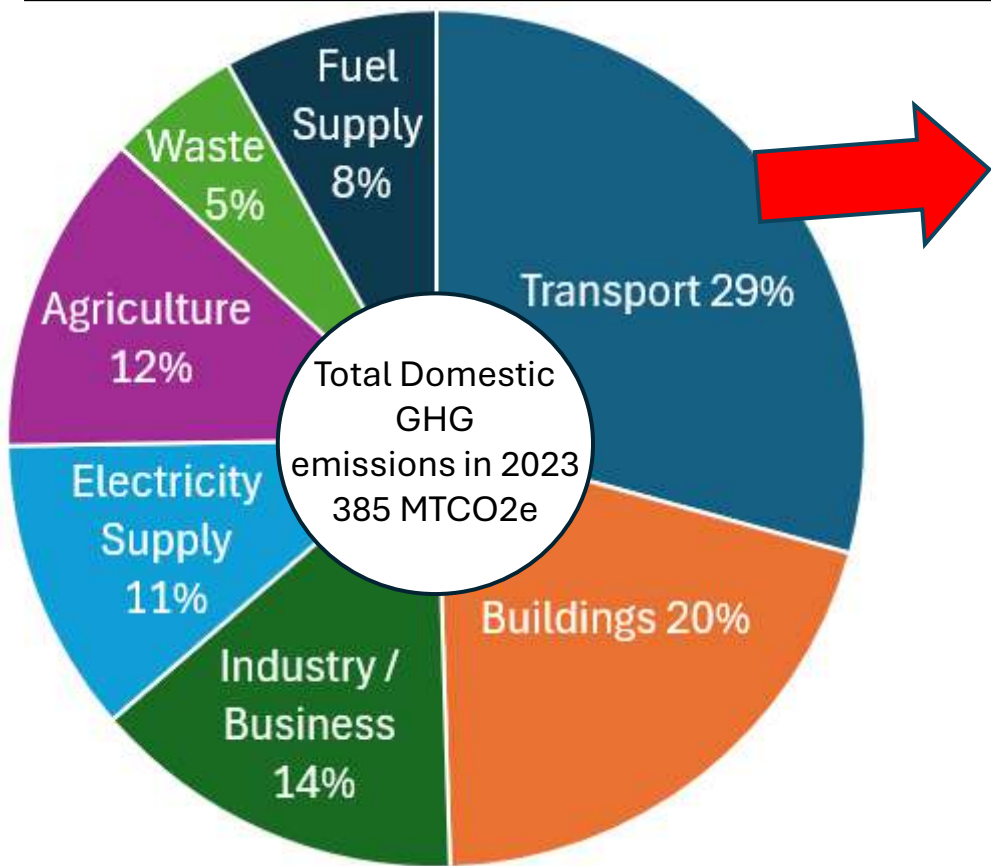
Greenhouse Gas (GHG) Emissions

- UK Government target to achieve net zero GHG emissions by 2050 against 1990 levels.

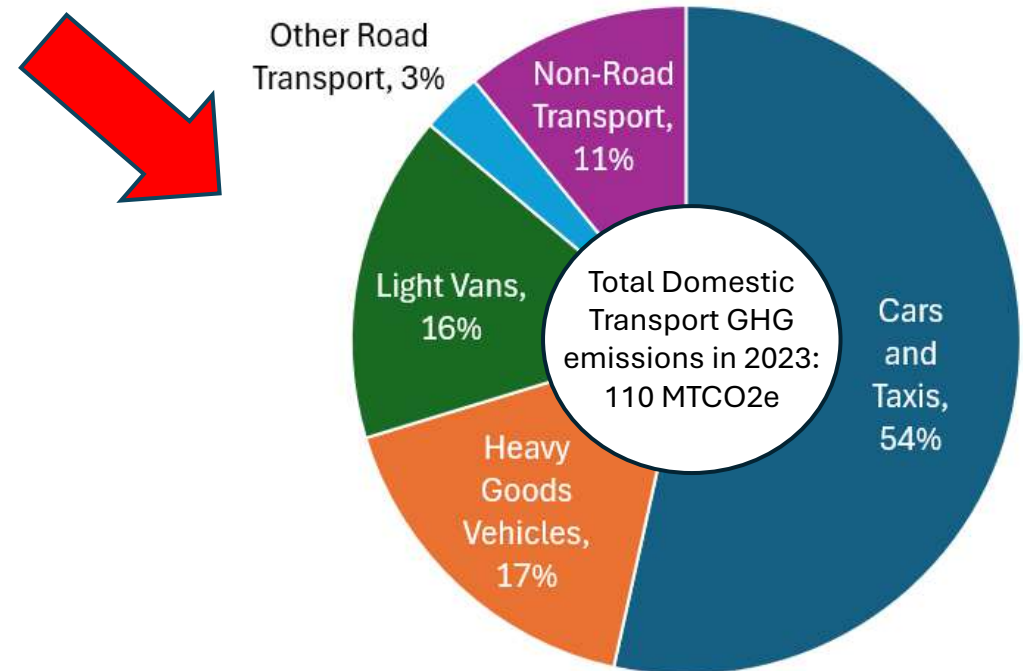


- Paris Agreement 2015 to keep global warming to well below 2.0°C, preferably 1.5° C above pre-industrial levels.

UK Greenhouse Gas Emissions by Sector (2023)



Greenhouse Gas Emissions from Domestic Transport



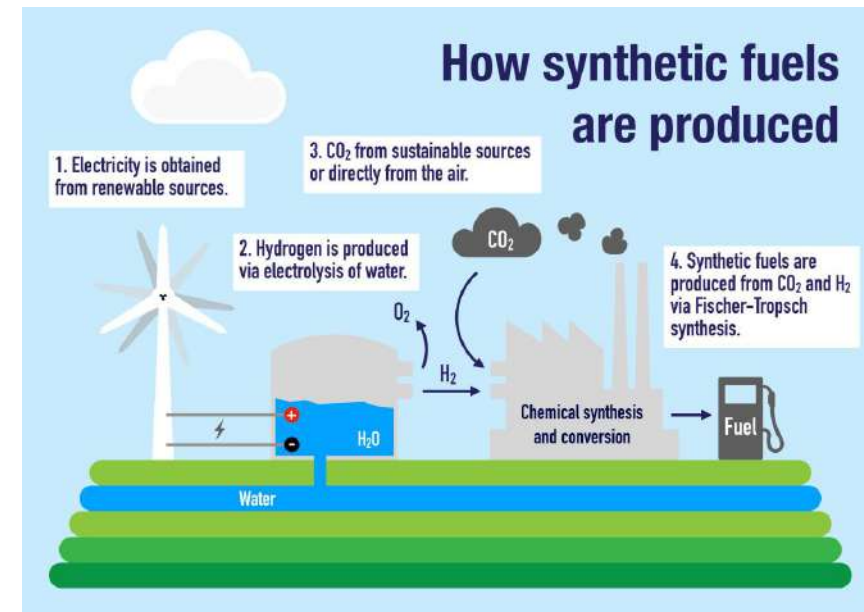
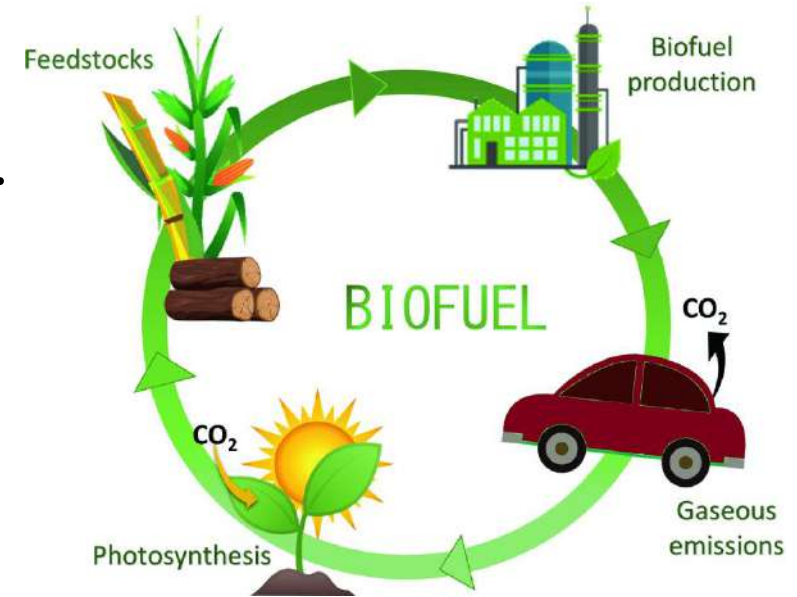
What Alternative Transport Energy Options do we Have?

What options do we have?

- Biofuels and e-fuels
- Hydrogen
- Electric

Biofuels and e-Fuels

- **Biofuels**
 - Made from oil seed, sugar, starch crops, animal fat etc.
 - Most widely used is bioethanol.
- **E-Fuels**
 - Synthetic alternative to fossil fuels.
 - e-methanol, e-diesel, e-kerosene etc.
- **Disadvantages**
 - Still cause emissions.
 - Cost.
 - Stop gap solution?



Hydrogen

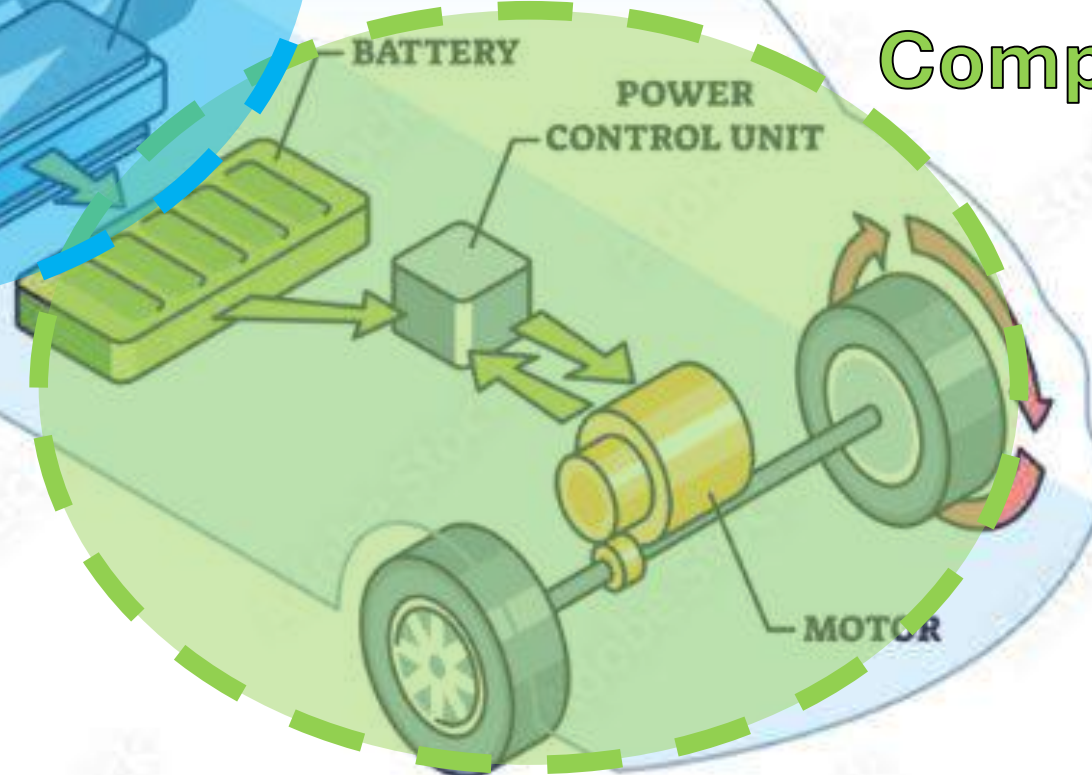
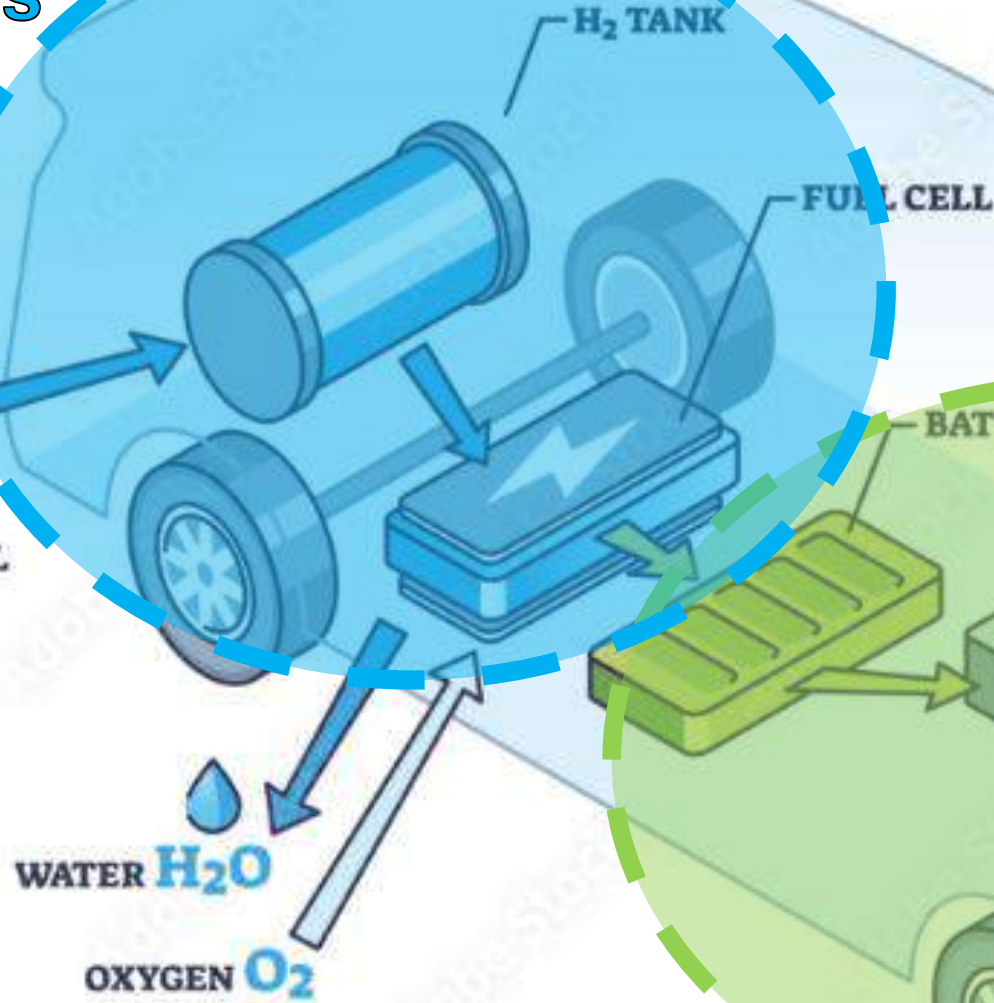
- Very abundant.
- The next big thing?
- Very energy intensive to be a viable option.



Hydrogen Components

Hydrogen Fuel Cell Car

EV Components



Electric

- All around us.
- Renewable energy.



Hydrogen vs Electric

Aviation



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Cars



Hydrogen

Electric

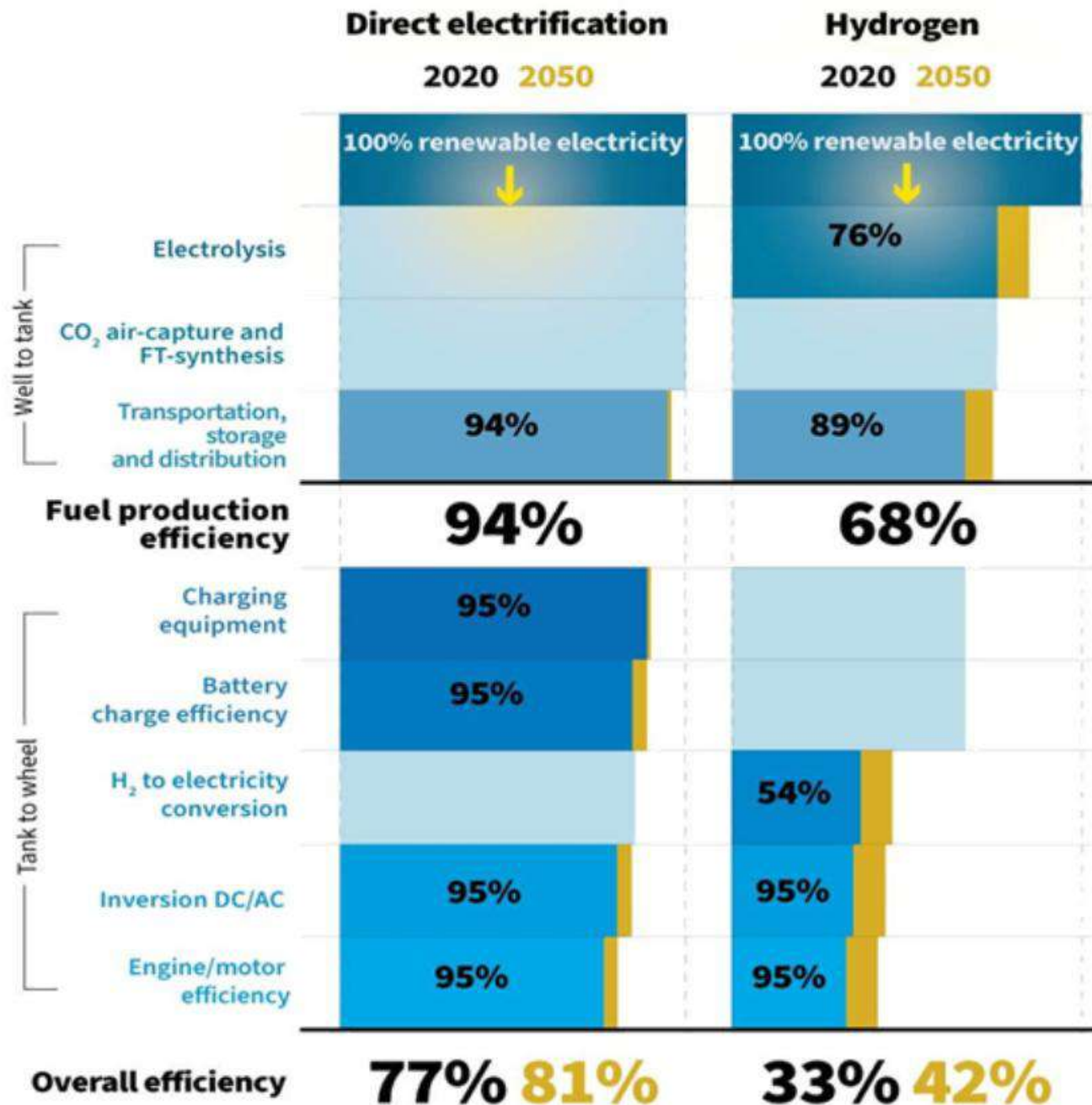


Trucks



Buses

Energy Efficiencies for Cars



**EVs are currently the most efficient
alternative transport energy
option for cars**

Questions?

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