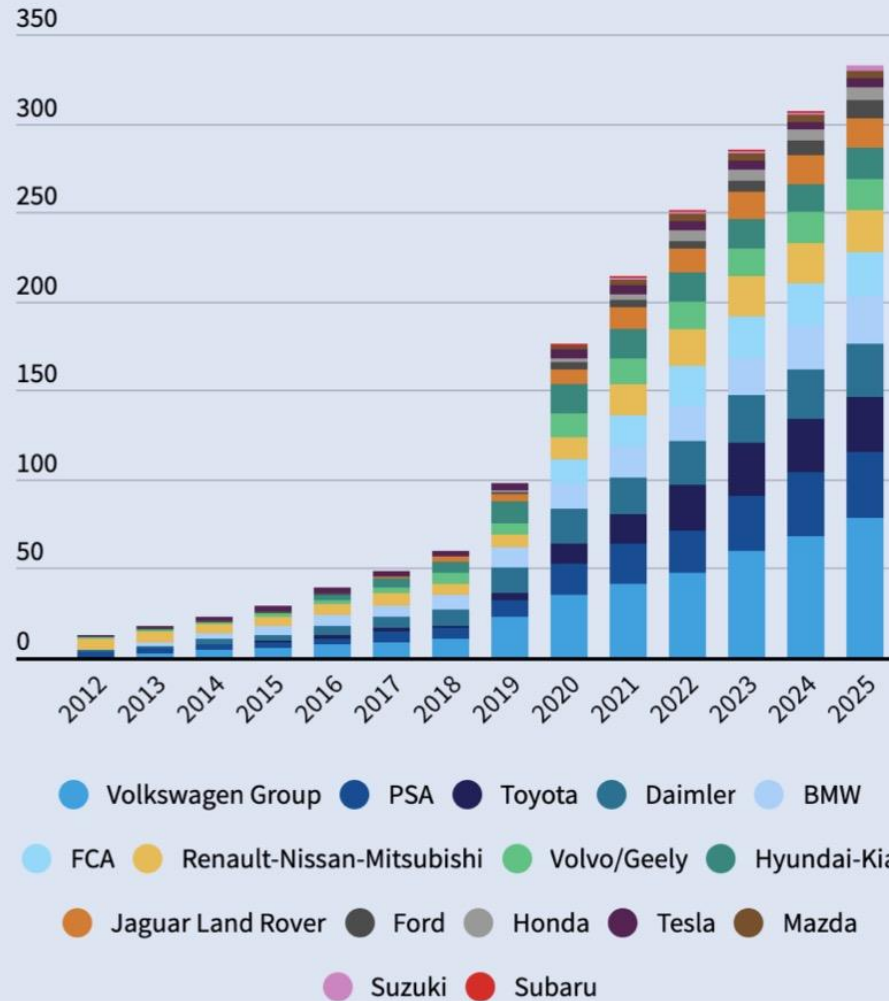




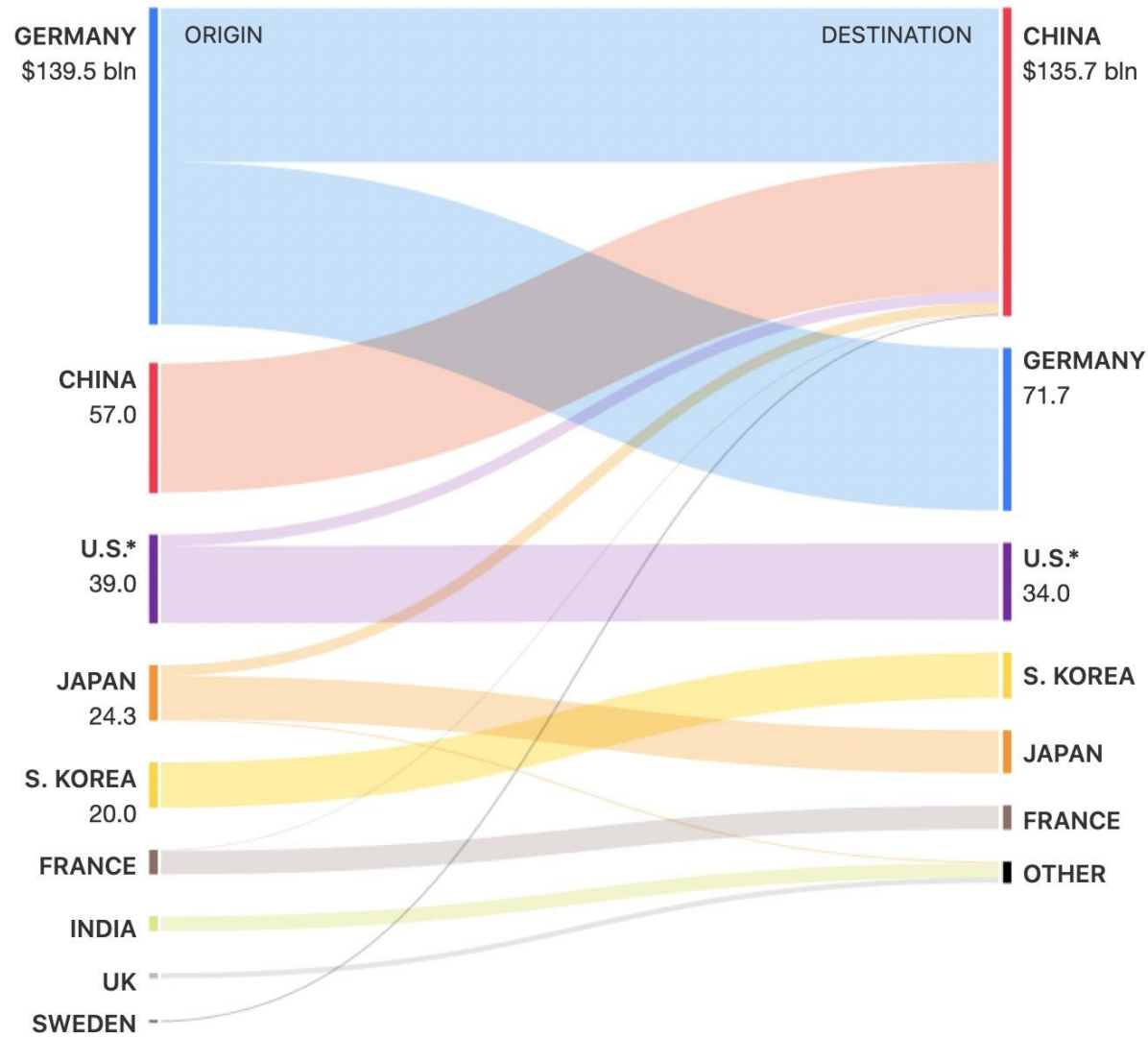
Electric car models coming to market in Europe 2019 - 2025



Source: Transport & Environment

EV INVESTMENT FLOWS BY COUNTRY OF ORIGIN OF AUTOMAKER

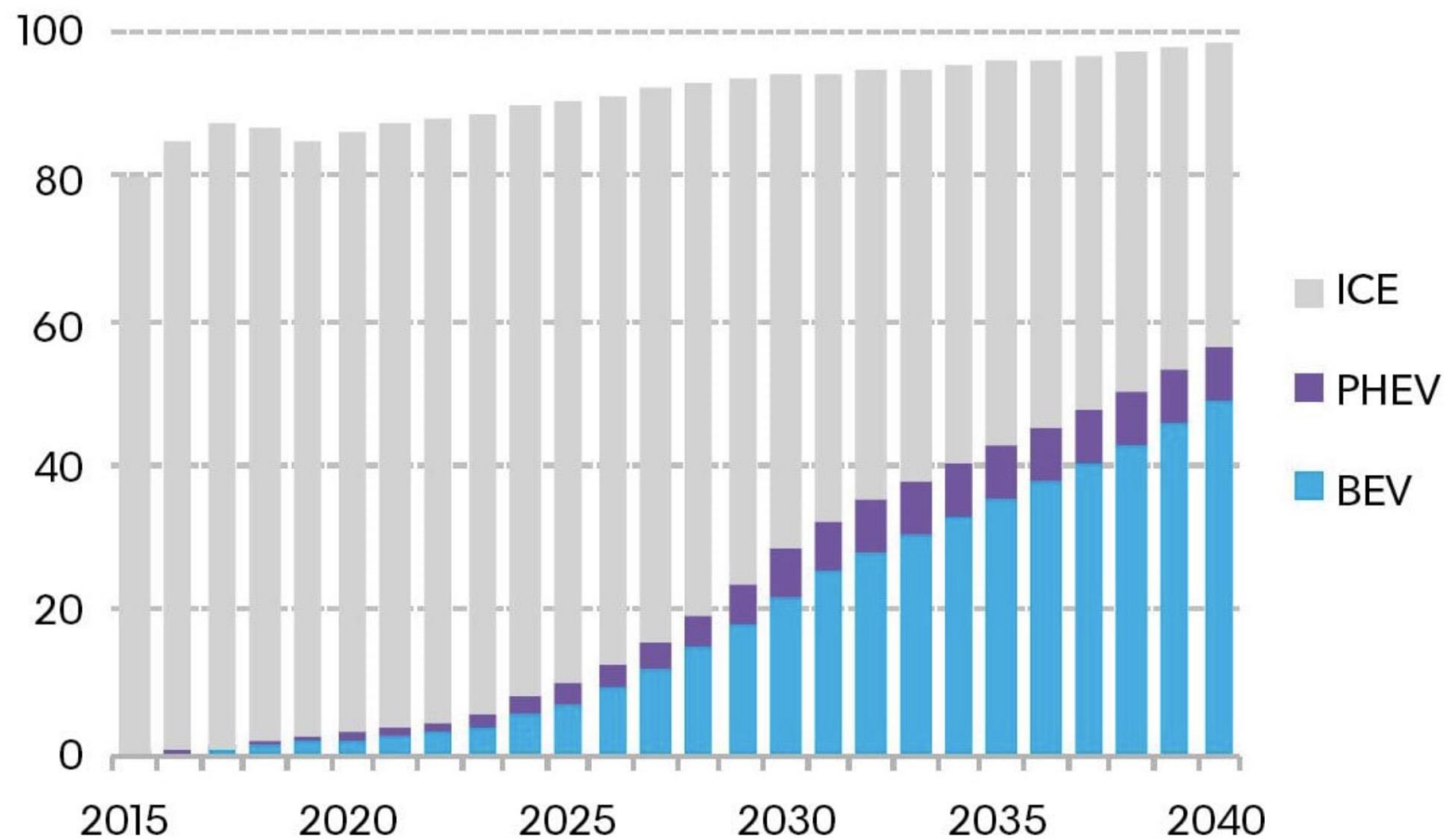
In billions of dollars



*U.S. includes Fiat Chrysler.

Global long-term passenger vehicle sales by drivetrain

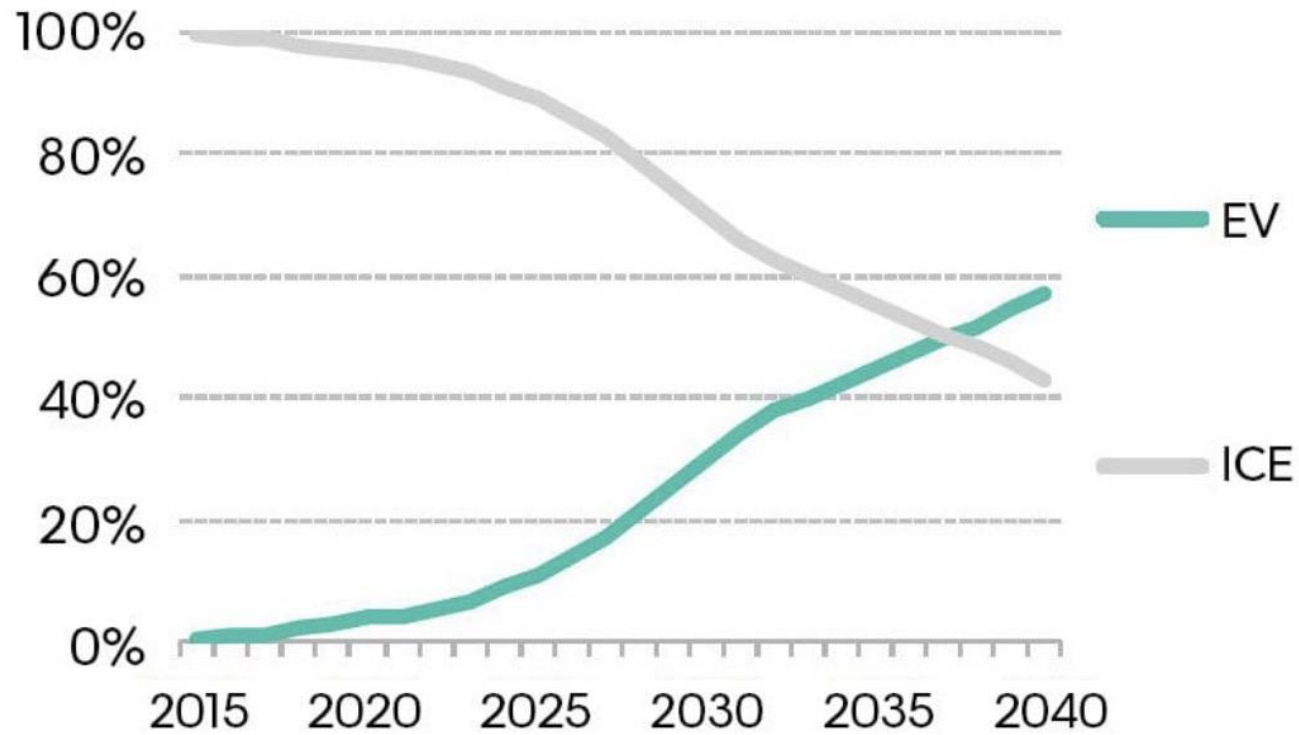
Million vehicles



Source: BloombergNEF

Global EV and ICE share of long-term passenger vehicle sales

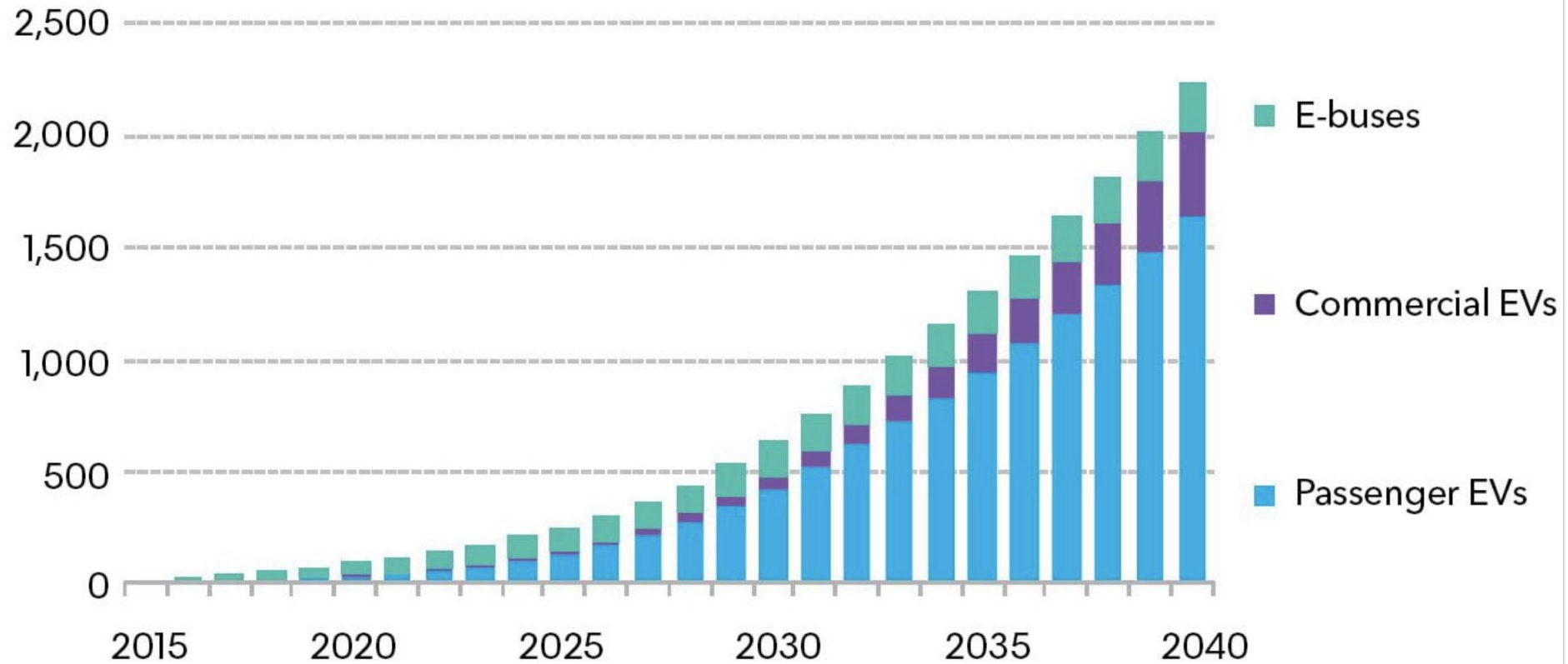
Share of annual sales



Source: BloombergNEF

Yearly electricity consumption from passenger EVs, commercial EVs and e-buses

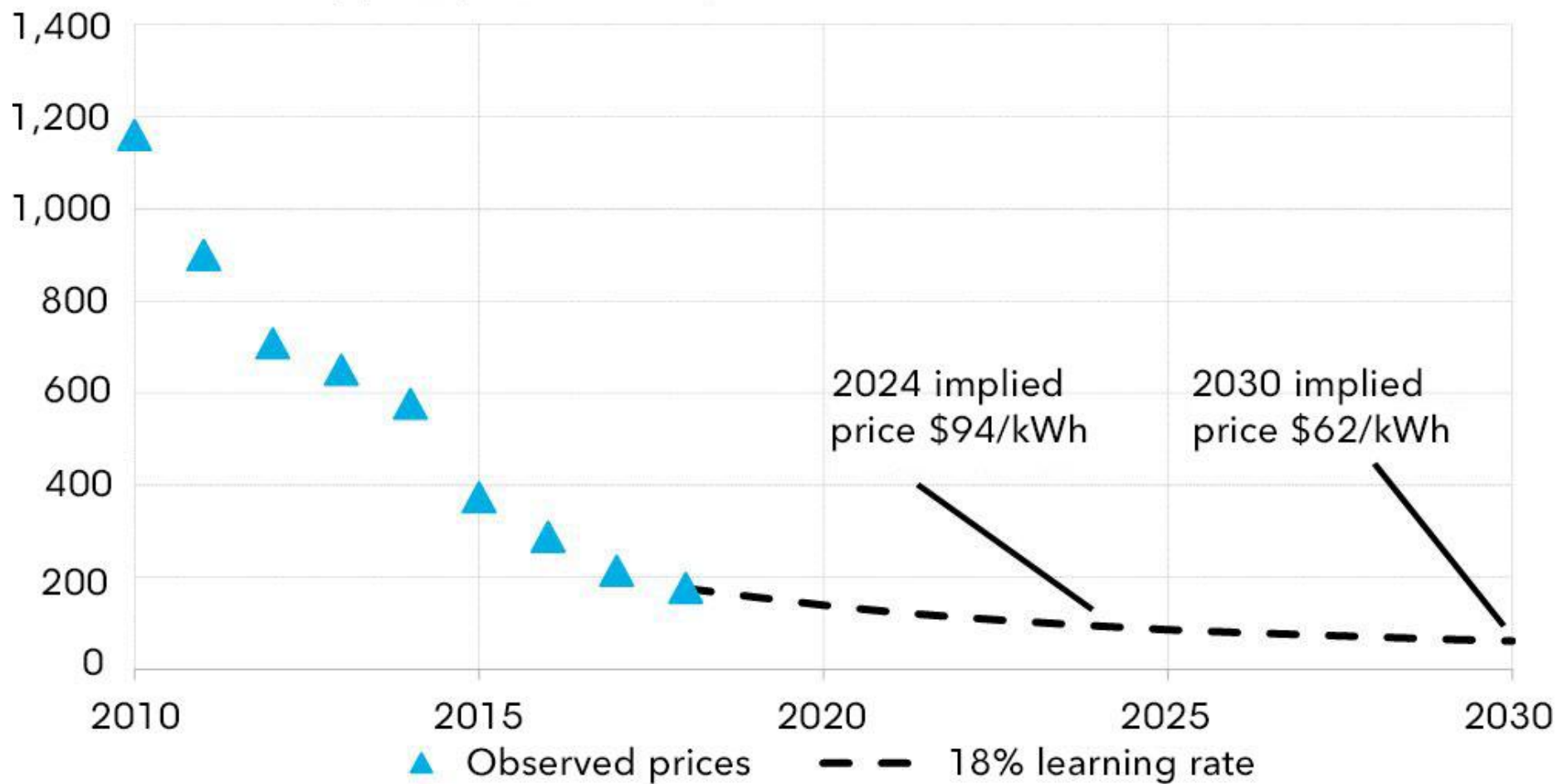
TWh



Source: BloombergNEF

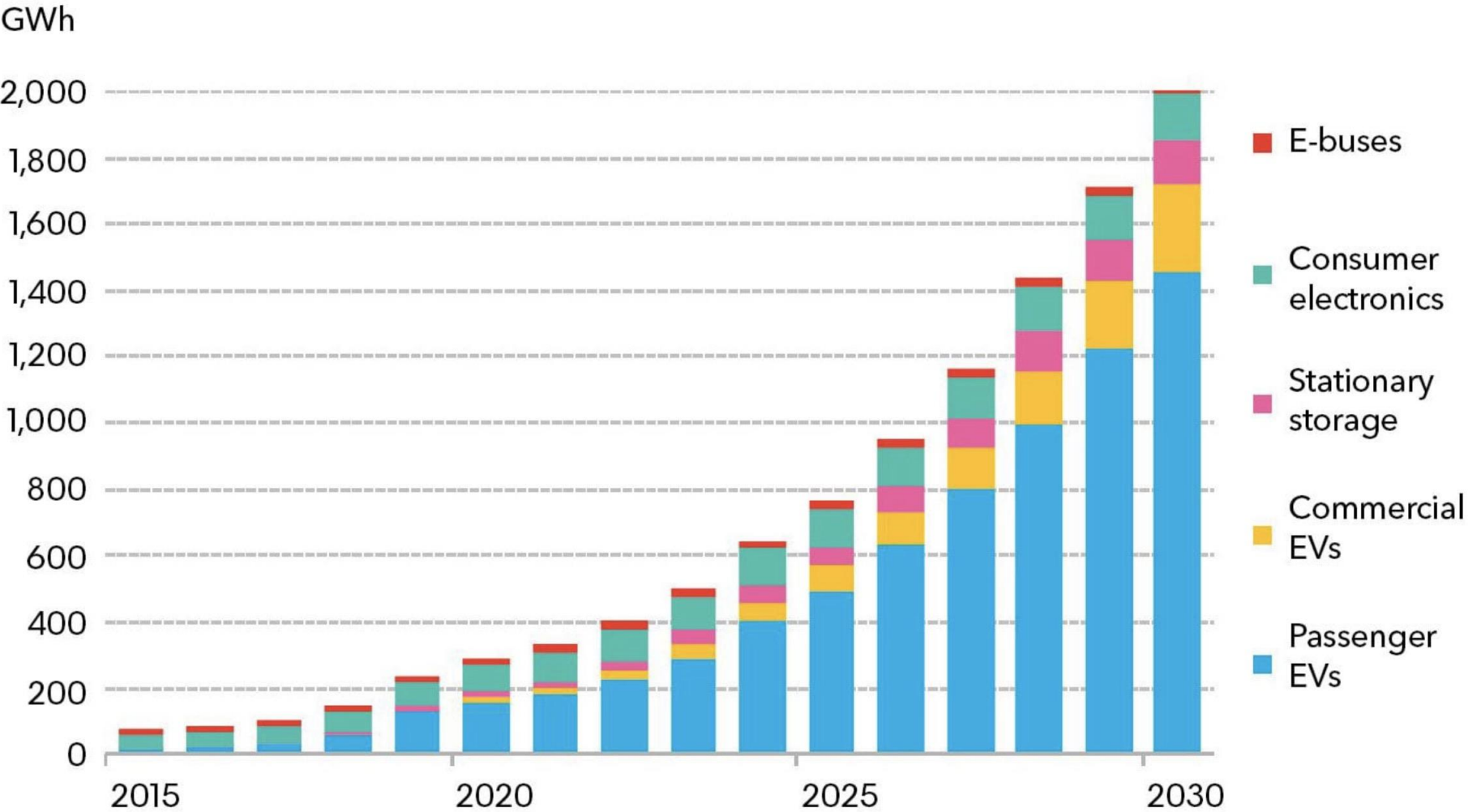
Lithium-ion battery price outlook

Lithium-ion battery pack price (real 2018 \$/kWh)



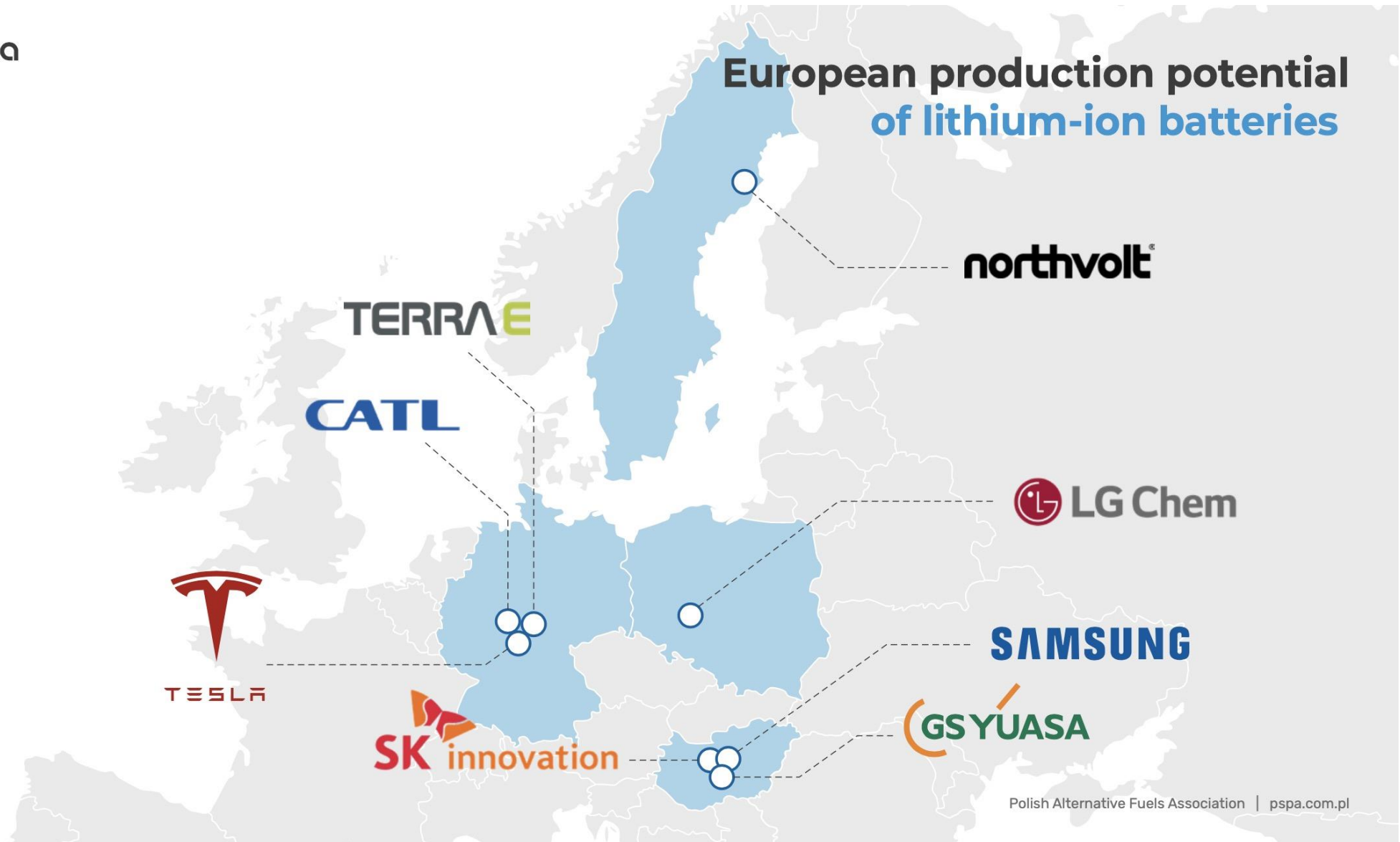
Source: BloombergNEF

Annual lithium-ion battery demand



Source: BloombergNEF, Avicenne

European production potential of lithium-ion batteries



Investments in lithium-ion batteries in Poland

SK Innovation | Dąbrowa Górnicza

- > Separators for lithium-ion electric vehicle batteries
- > The value of the investment: PLN 1.4 bn (ca. USD 360 mln)
- > Commencement of production: 2021

Daimler | Jawor

- > High voltage batteries for electric cars from the EQ line
- > 300 new work places
- > Commencement of production: beginning of the new decade

LS EV Poland | Dzierżoniów

- > Electronic components for electric vehicle batteries
- > The plant will be able to supply components for 1 million electric cars per year
- > Commencement of production: 2019

Impact Clean Power Technology | Warsaw

- > Battery systems for electric vehicles
- > The company supplies battery systems to markets in Poland, the United States, Germany, Spain, Turkey, and Italy
- > The customers for the company's batteries include manufacturers of electric buses such as Solaris, Irizar, and Temsa



Northvolt | Gdańsk

- > Battery modules
- > Initial capacity: 10,000 modules per year
- > Reaching the target capacity: in 2021

BMZ | Gliwice

- > Batteries for buses, scooters and electric bicycles
- > The value of the investment: EUR 9 million
- > Commencement date: 2017

PCC Rokita i Shida | Brzeg Dolny

- > Organic carbonates for electric vehicle batteries
- > Initial production value: 20,000 tonnes per year
- > Value of the first stage of the investment: EUR 22 million