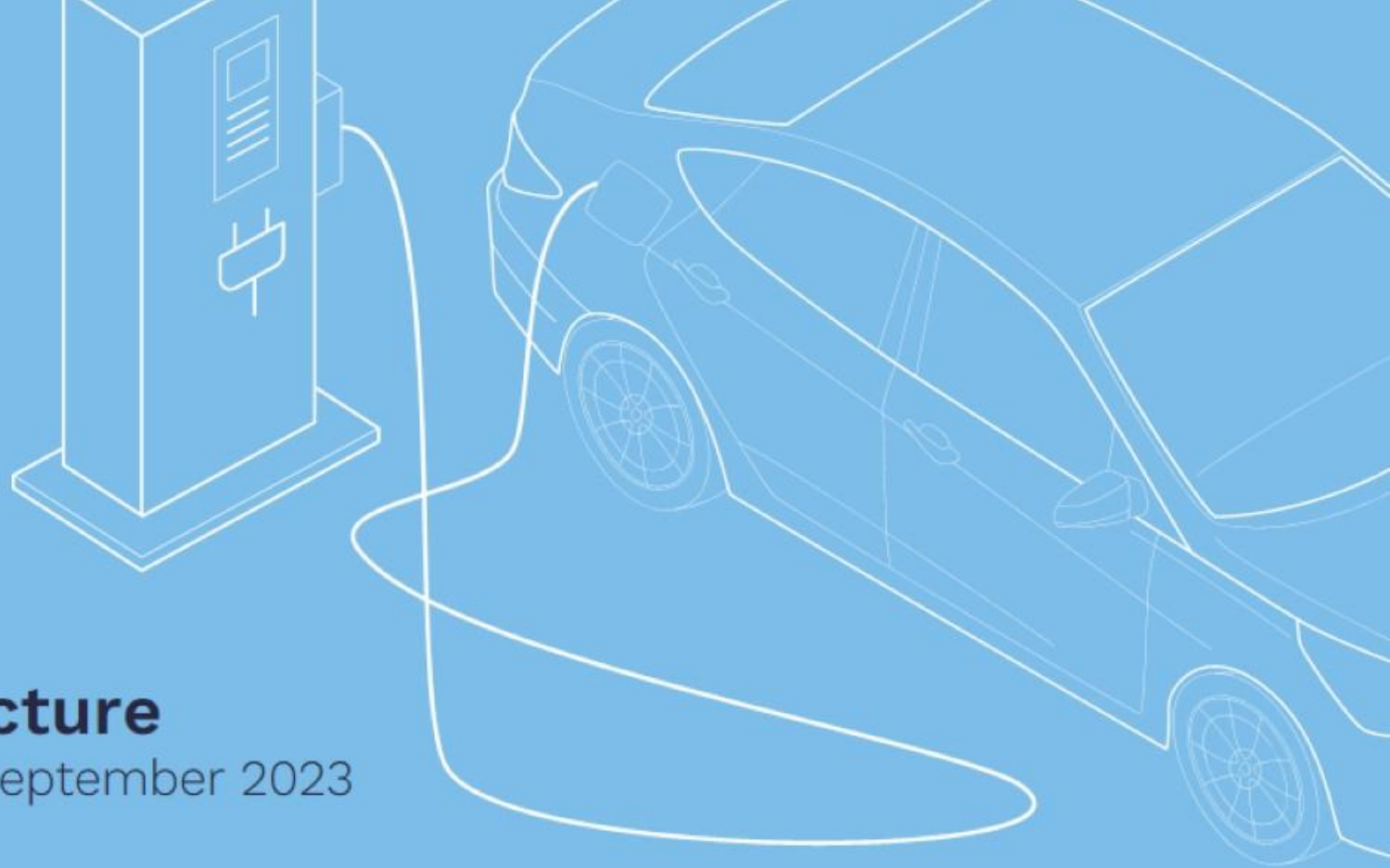


rho
motion



Charging Infrastructure

Battery Tech Expo | 28th September 2023



Shan Tomouk
Senior Research Analyst

www.rhomotion.com

rho
motion

Events and
magazine

Single client
consultancy and
advisory

Multi-client
subscription
and focus
reports

Membership

ABOUT RHO MOTION

Rho Motion offers the
**most comprehensive
and well-informed
forecasts and analysis
for the energy transition**

www.rhomotion.com

PRODUCTS

**Our suite of
regular reports
and data provide
detail and context
with long-term
outlooks**

→ MONTHLY ASSESSMENTS & QUARTERLY DATABASES



→ QUARTERLY DATABASES OUTLOOKS



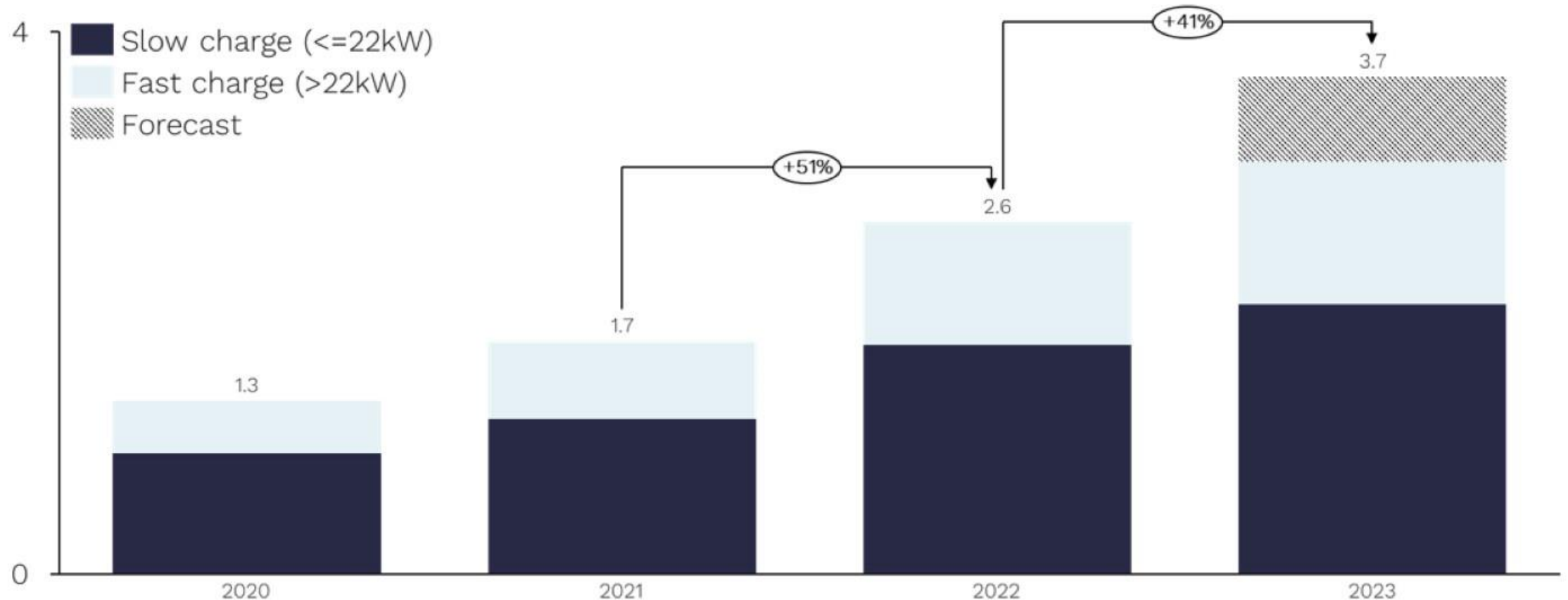
→ FOCUS REPORTS



EV charging market update and outlook

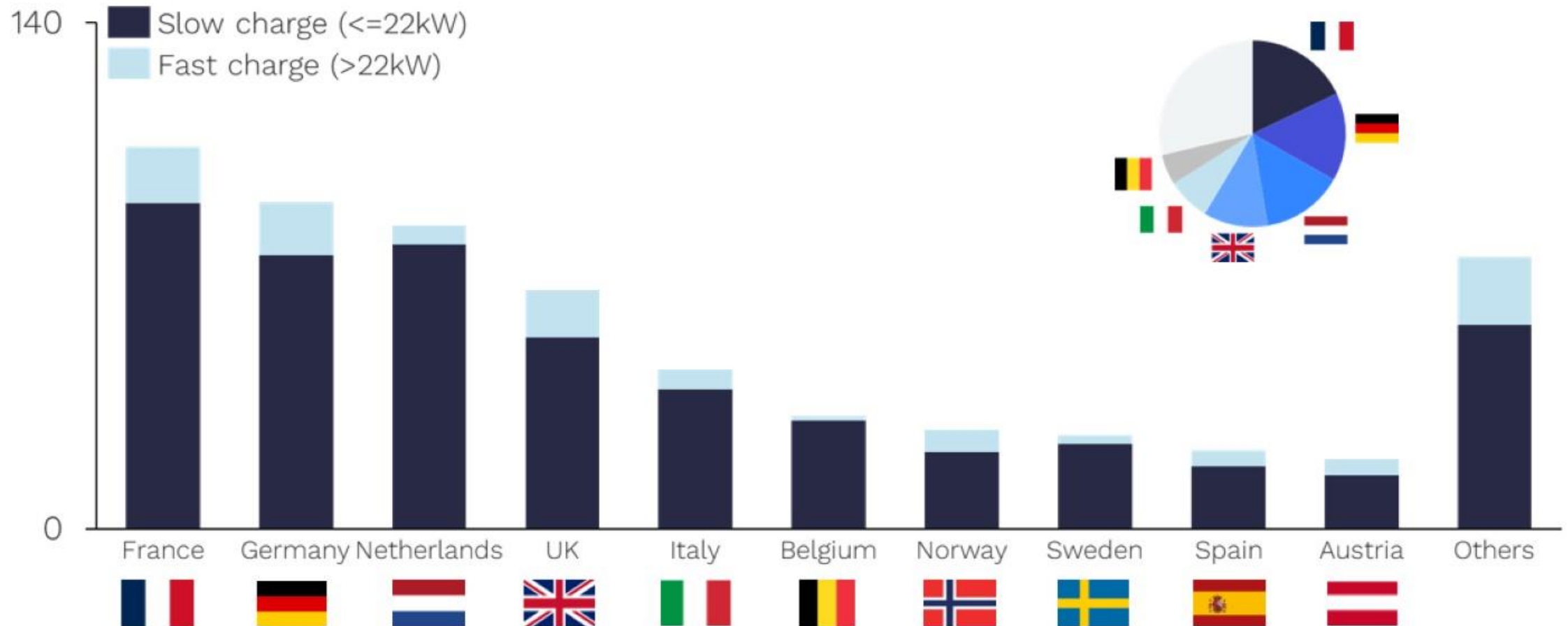
Global public EV charging points, 2020 – 2023

Million units



European disparities

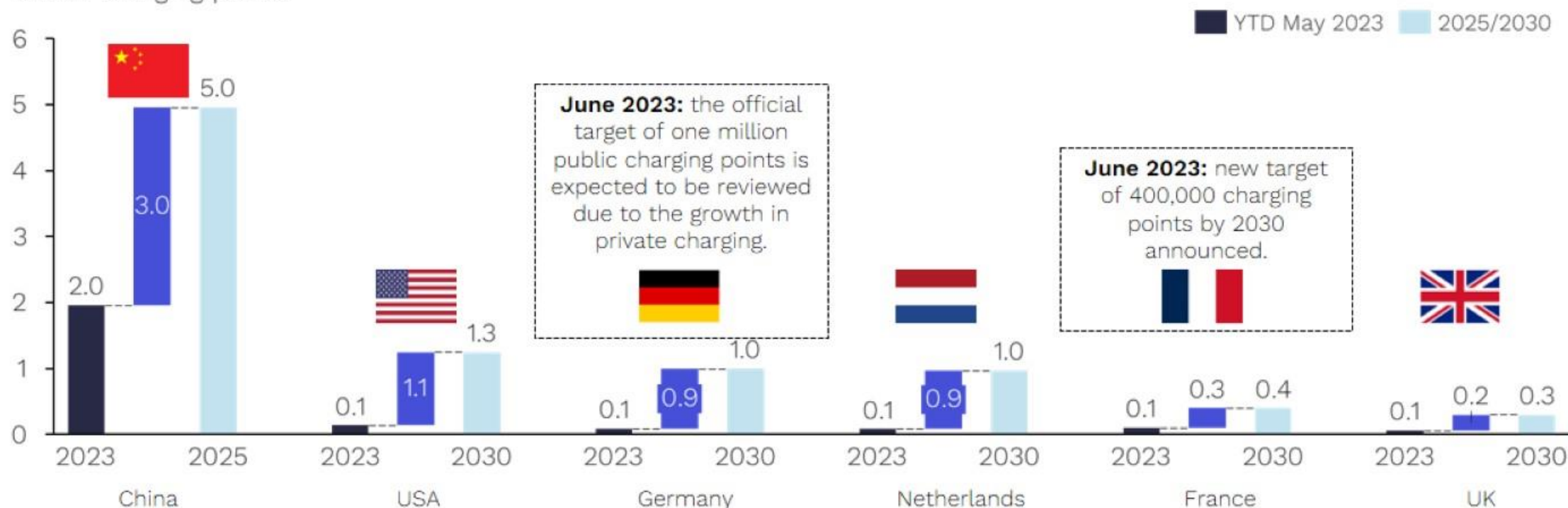
European public EV charging points by country as of May 2023



Moving targets

Public EV charging points in YTD 2023 vs 2025/2030 targets by country

Million charging points



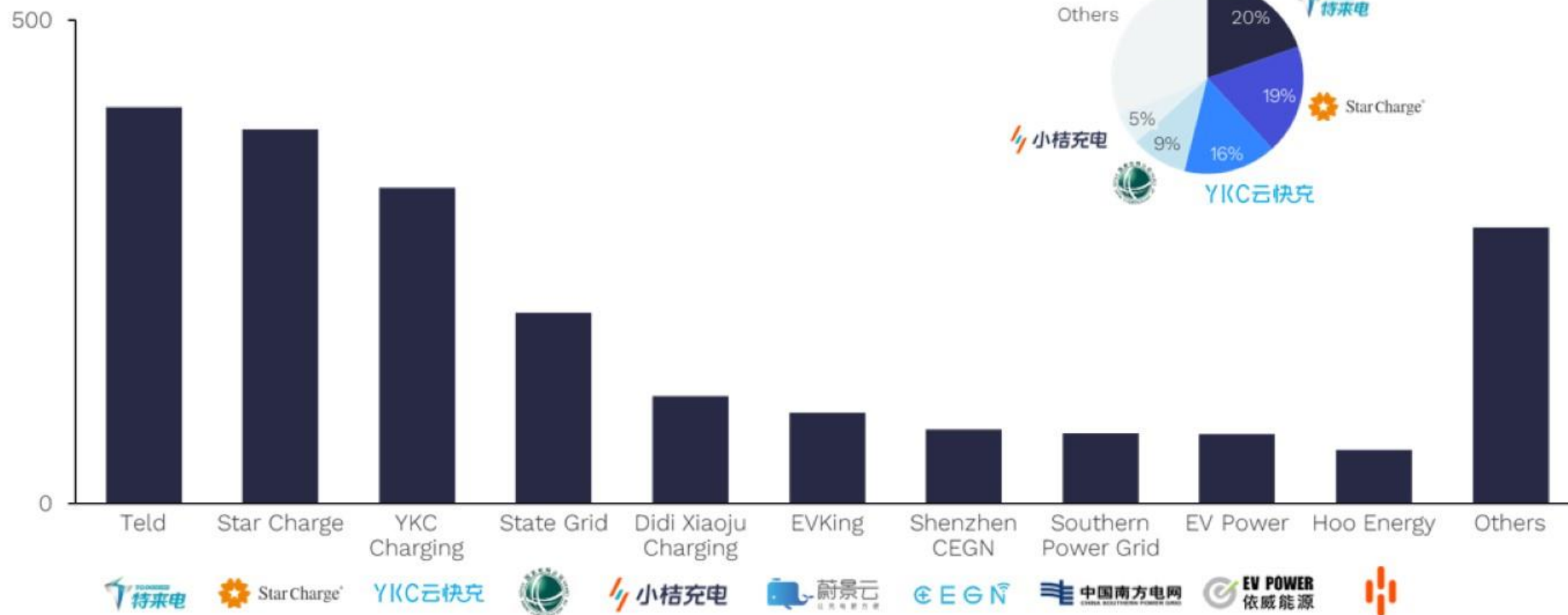
Notes:

1. China EV charging target is the sum of 28 provincial targets announced to date. The provinces include Beijing, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Shandong, Guangdong, Hainan, Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi (by 2023), Henan, Hubei, Hunan, Inner Mongolia, Guangxi, Chongqing, Sichuan, Yunnan, Shaanxi, Gansu, Guizhou (by 2023), Ningxia, Tianjin and Xinjiang.
2. Public charging target for Shanghai is estimated based on the region's current private (77%) and public (23%) charging share.
3. The US EV charging target is calculated by multiplying 2.5 with 500,000 EV charging stations. The multiply factor is an average number of charging points per charging unit based on the country's EV charging data for the period December 2022 to February 2023.

Chinese market saturation

TOP 10 public EV charging players in China

'000 charging points

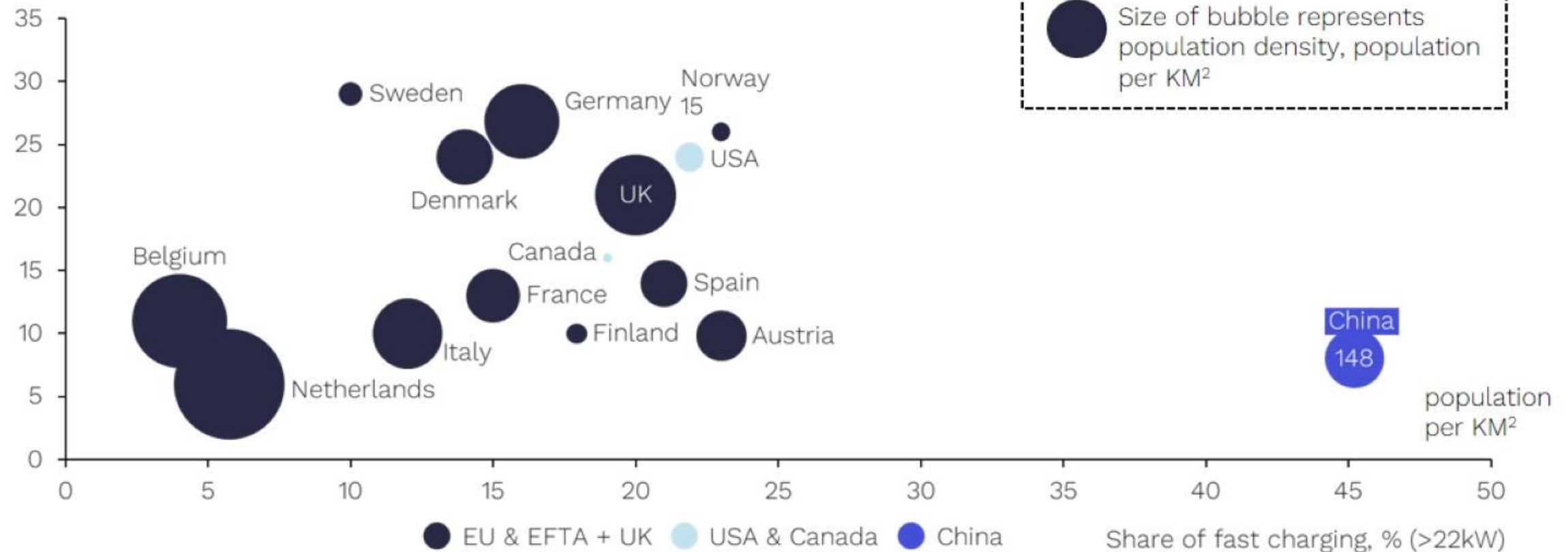


Public EV charging demand varies by region and is shaped by several key market dynamics

rho
motion

The number of EVs to charging points by country, % of fast charging, YTD Feb-23

EVs to charger ratio

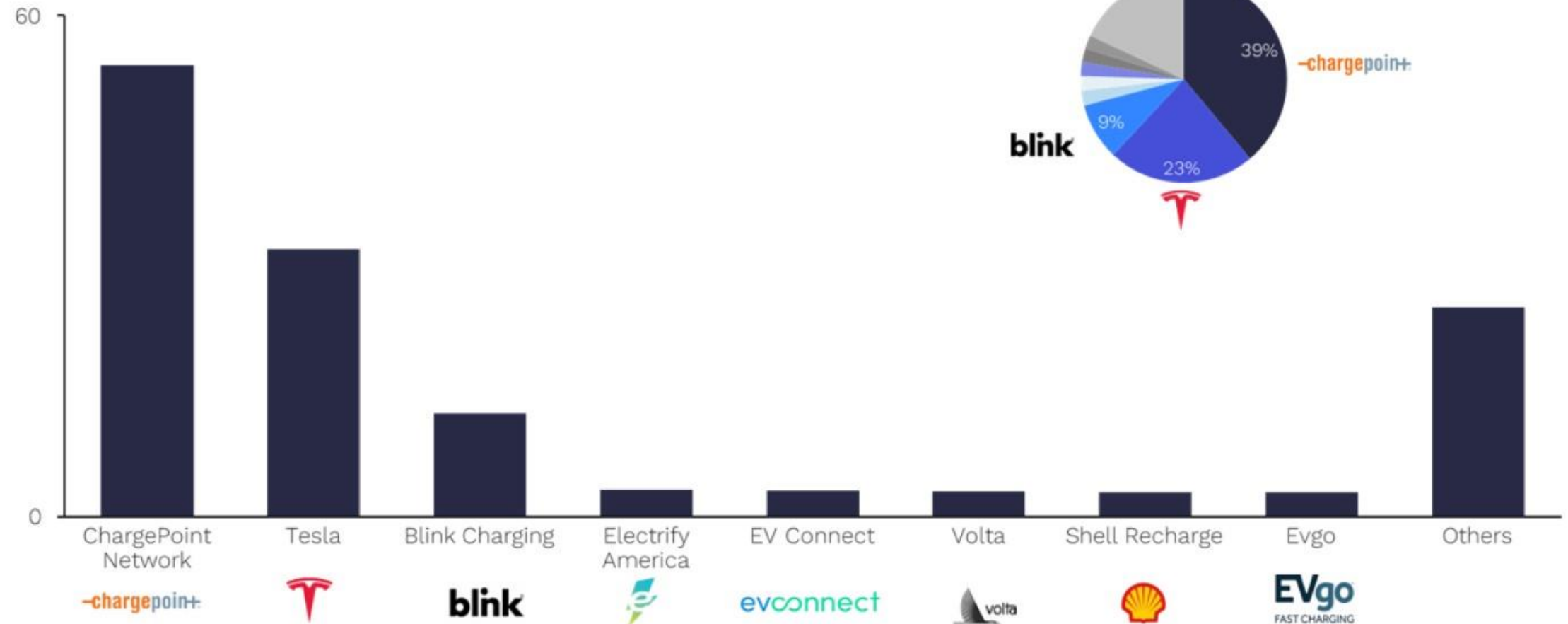


ChargePoint and Tesla dominate public EV charging market in the US

rho
motion

North America public EV charging points by company

'000 charging points



North American Charging Standard

2022

Nov



- Consolidation of market to a more space efficient port
- Access to Tesla's API and partial access to Supercharger network
- Increased utilization of Superchargers, while maintaining exclusivity in high-traffic areas

2023

May



June



July



August



Present
day



rho
motion

Thank you

Contact:

info@rhomotion.com

+44 (0) 203 960 9986

www.rhomotion.com

