



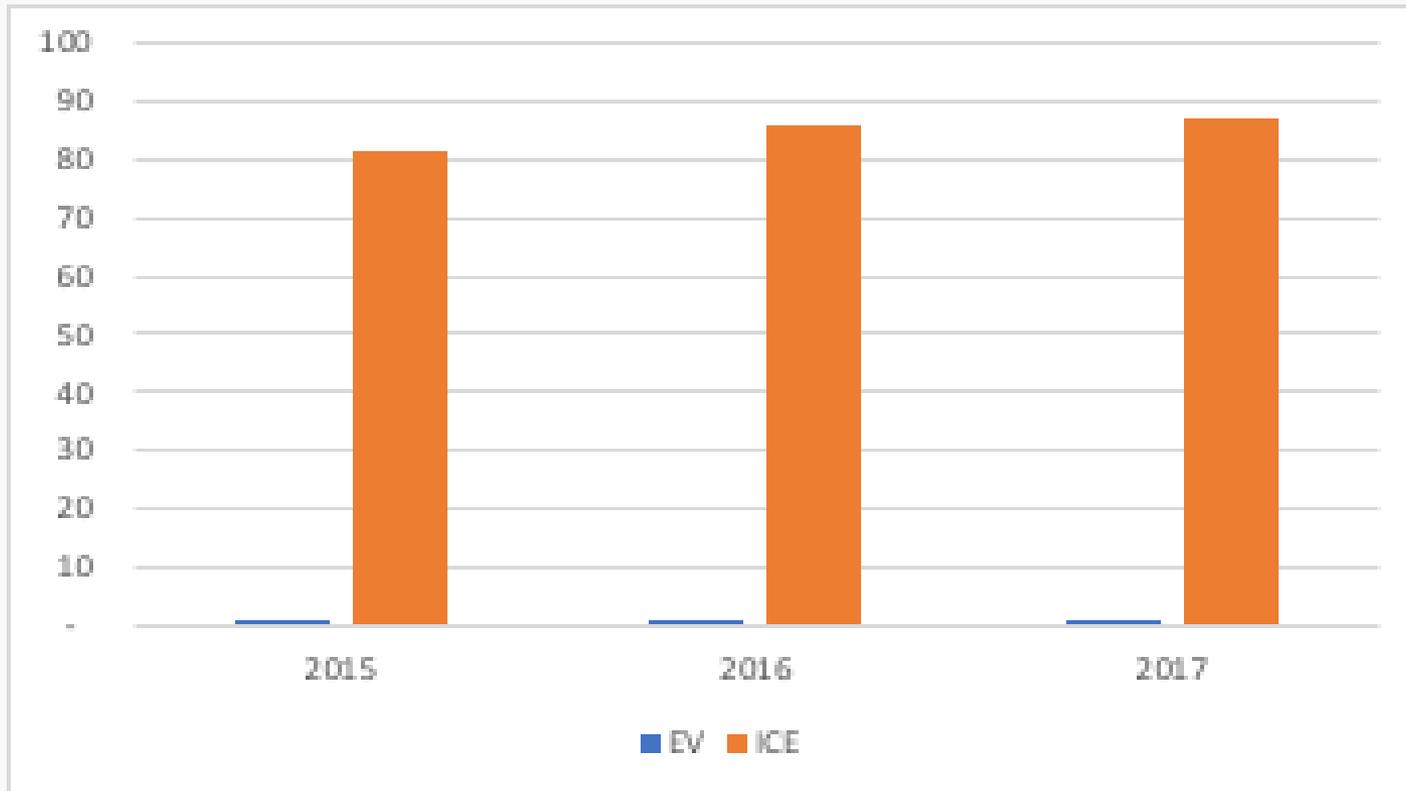
Financial markets and the S curve of EV demand

Presentation to the BIEE

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EV – a drop in the ocean

Car sales m

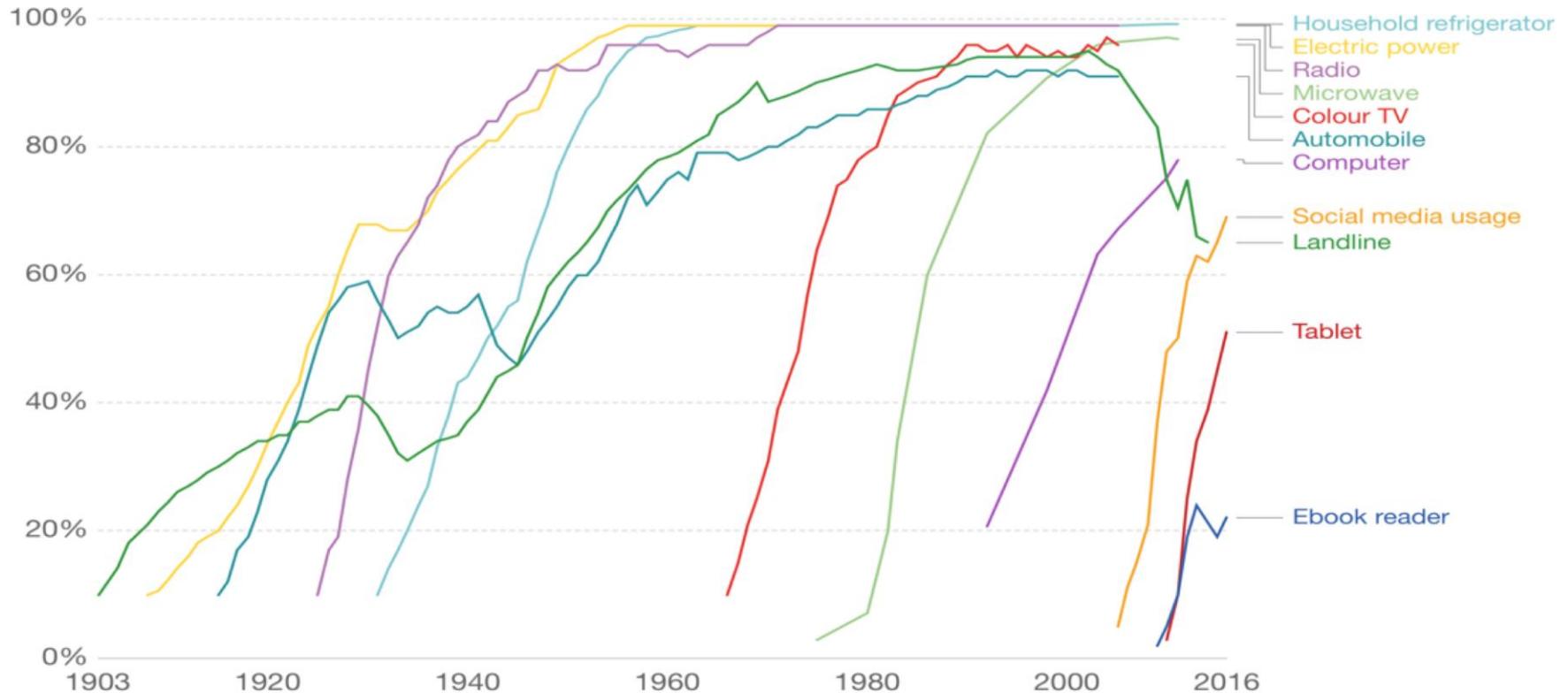


Source: BNEF

S curve technology adoption

Technology adoption by households in the United States

Technology adoption rates, measured as the percentage of households in the United States owning, or the adoption rates of, a particular technology. See the sources tab for definitions of household adoption, or adoption rates, by technology type.

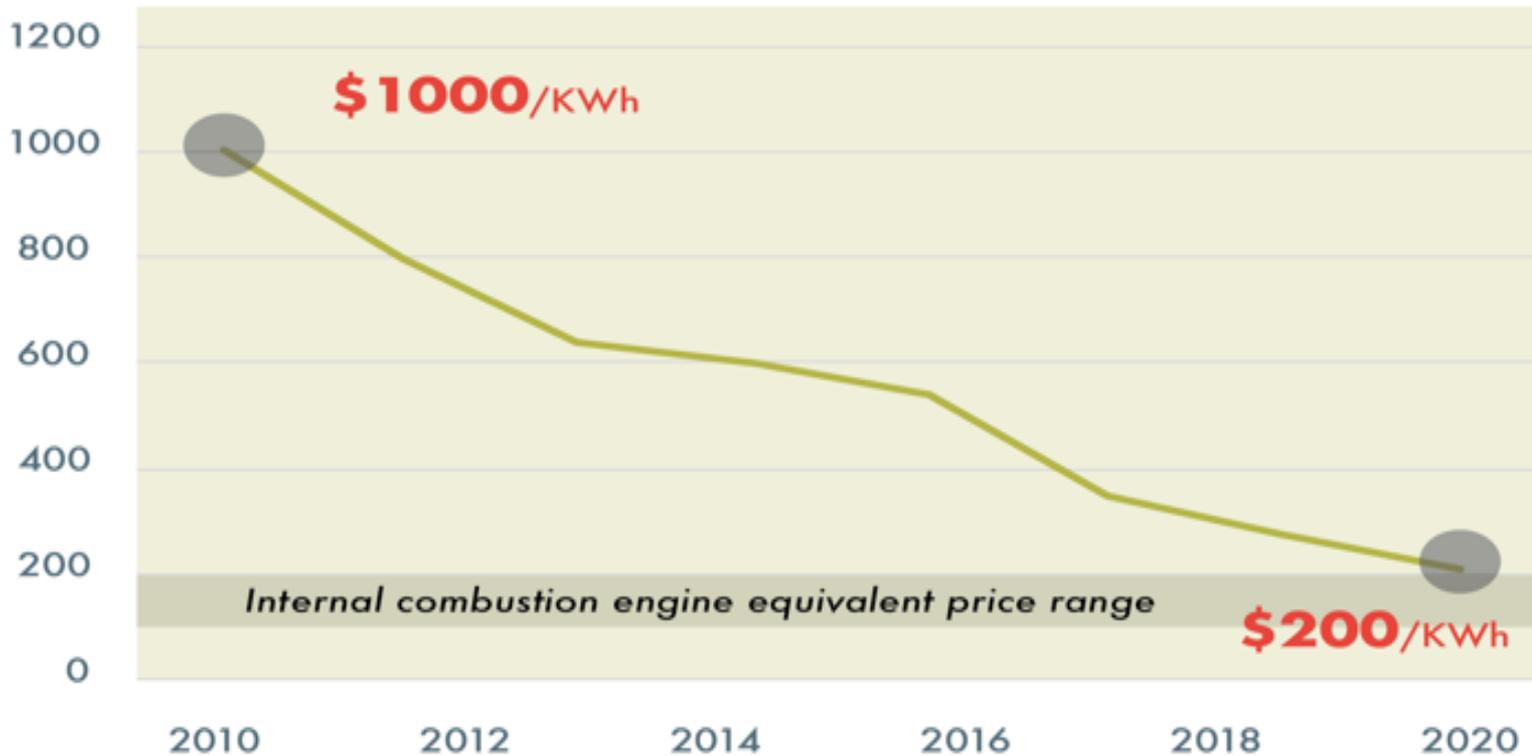


Source: Comin and Hobijn (2004) and others

OurWorldInData.org/technology-adoption/ • CC BY-SA

Continued drivers of the S curve: Technology

Li-ion battery costs (\$/KWh, global average)

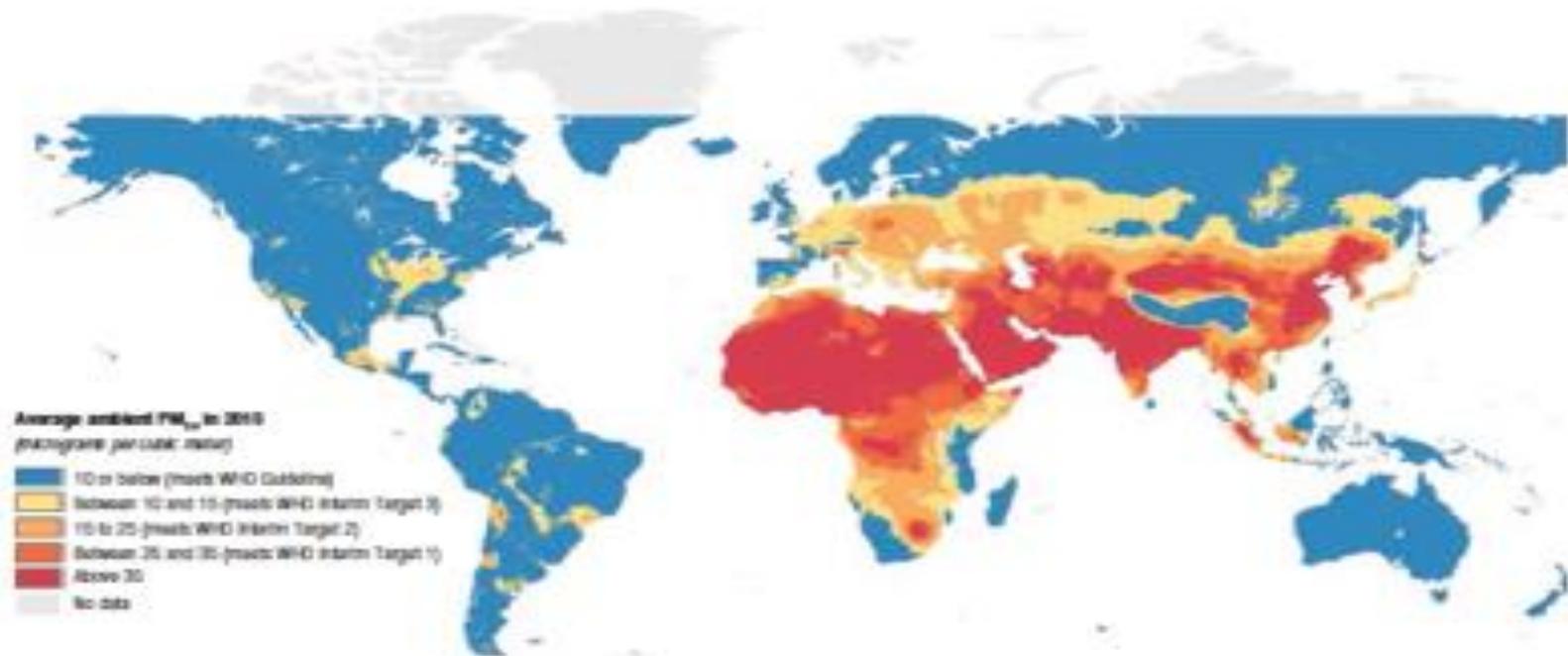


Source: BNEF



Necessity

MAP 9.1 Mean Annual Concentrations of Ambient PM_{2.5} Pollution, 2015

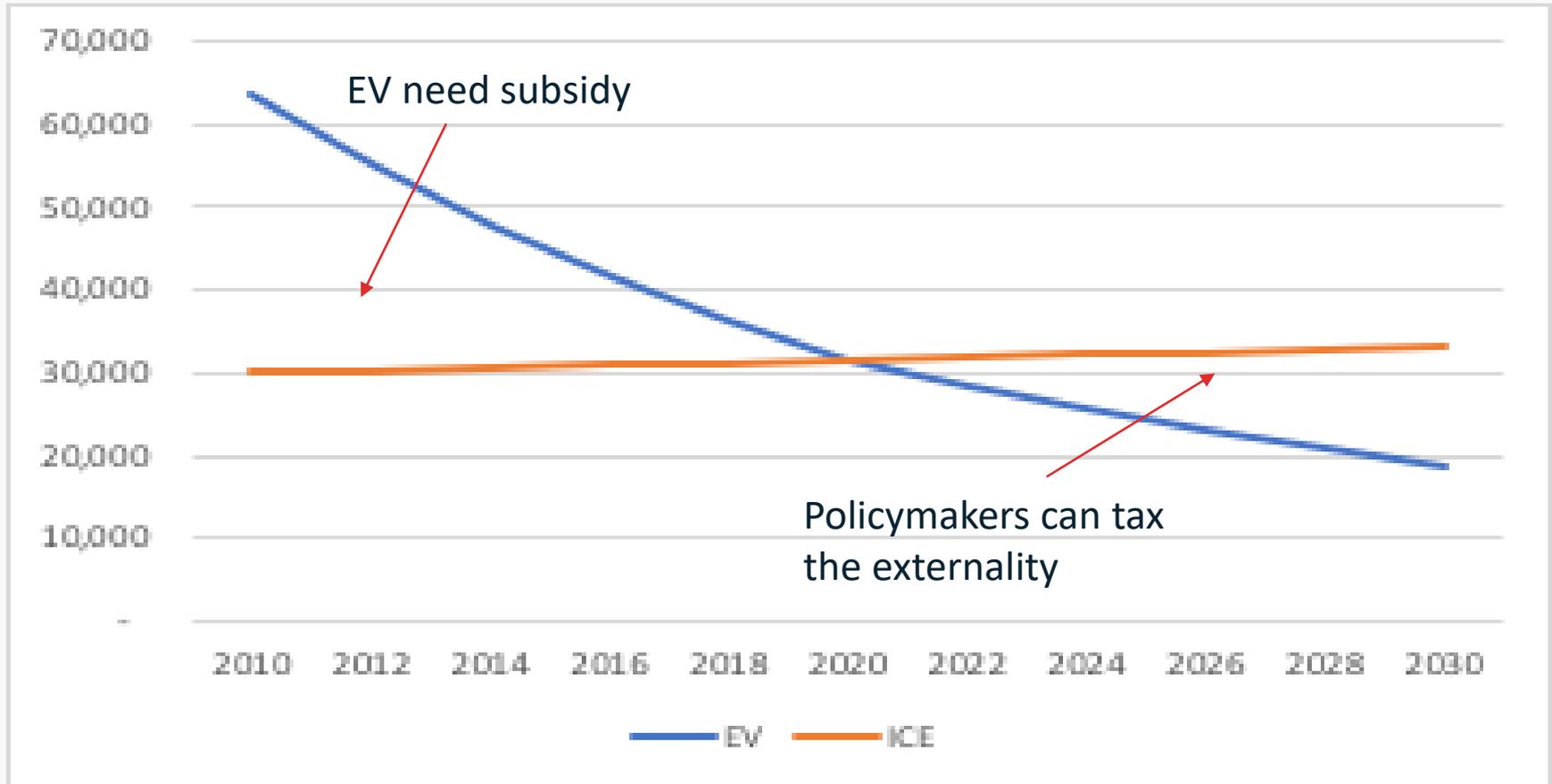


Source: World Bank, using data from van Donkelaar et al. 2016 (http://lizz.phys.dal.ca/~atmos/martin/?page_id=140).

Note: The map includes concentrations of natural windblown dust and sea salt. PM_{2.5} = particulate matter with a diameter of less than 2.5 microns; WHO = World Health Organization.

Policy

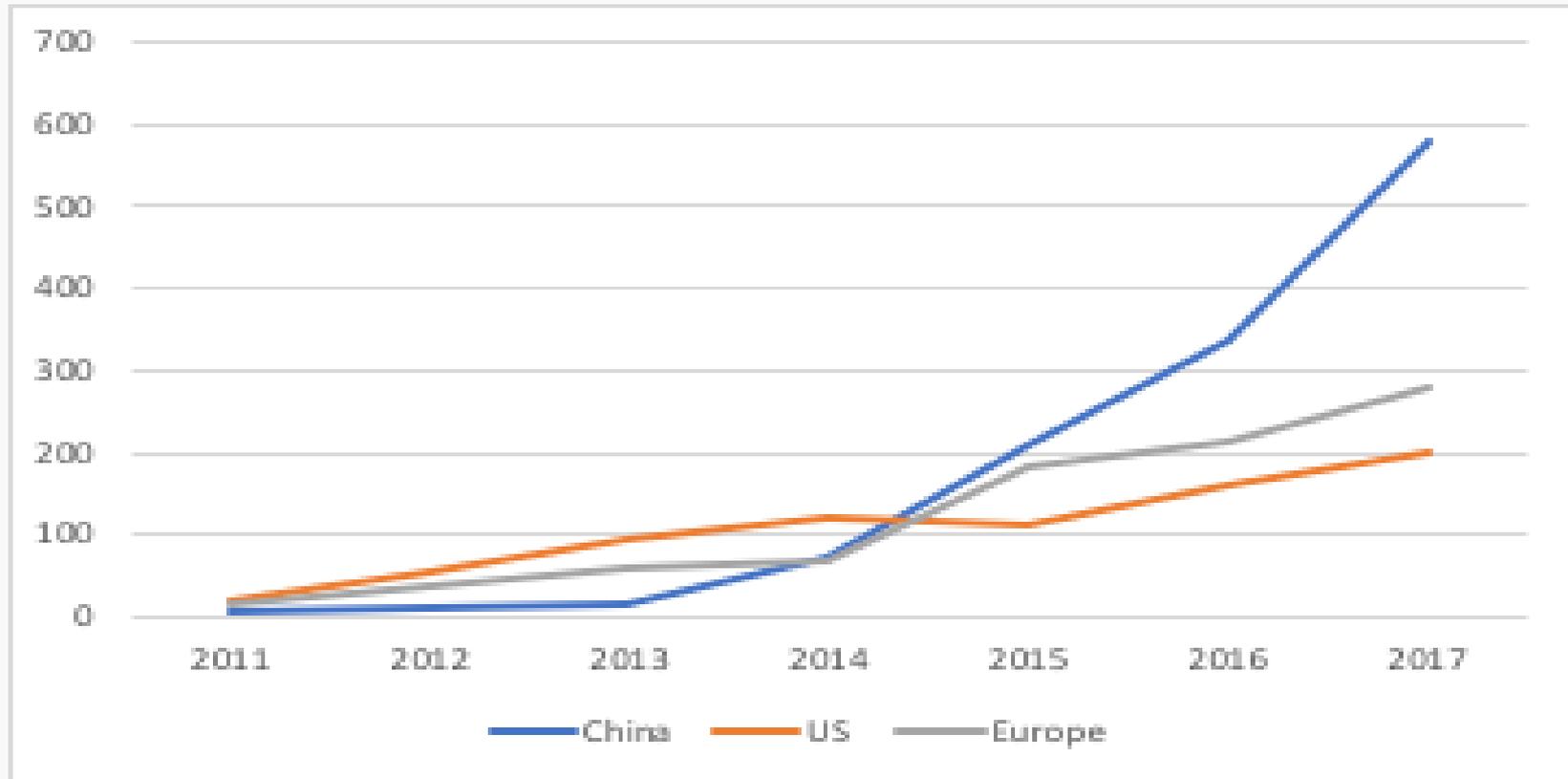
Car price framework \$000



Source: Carbon Tracker

The emerging market leapfrog

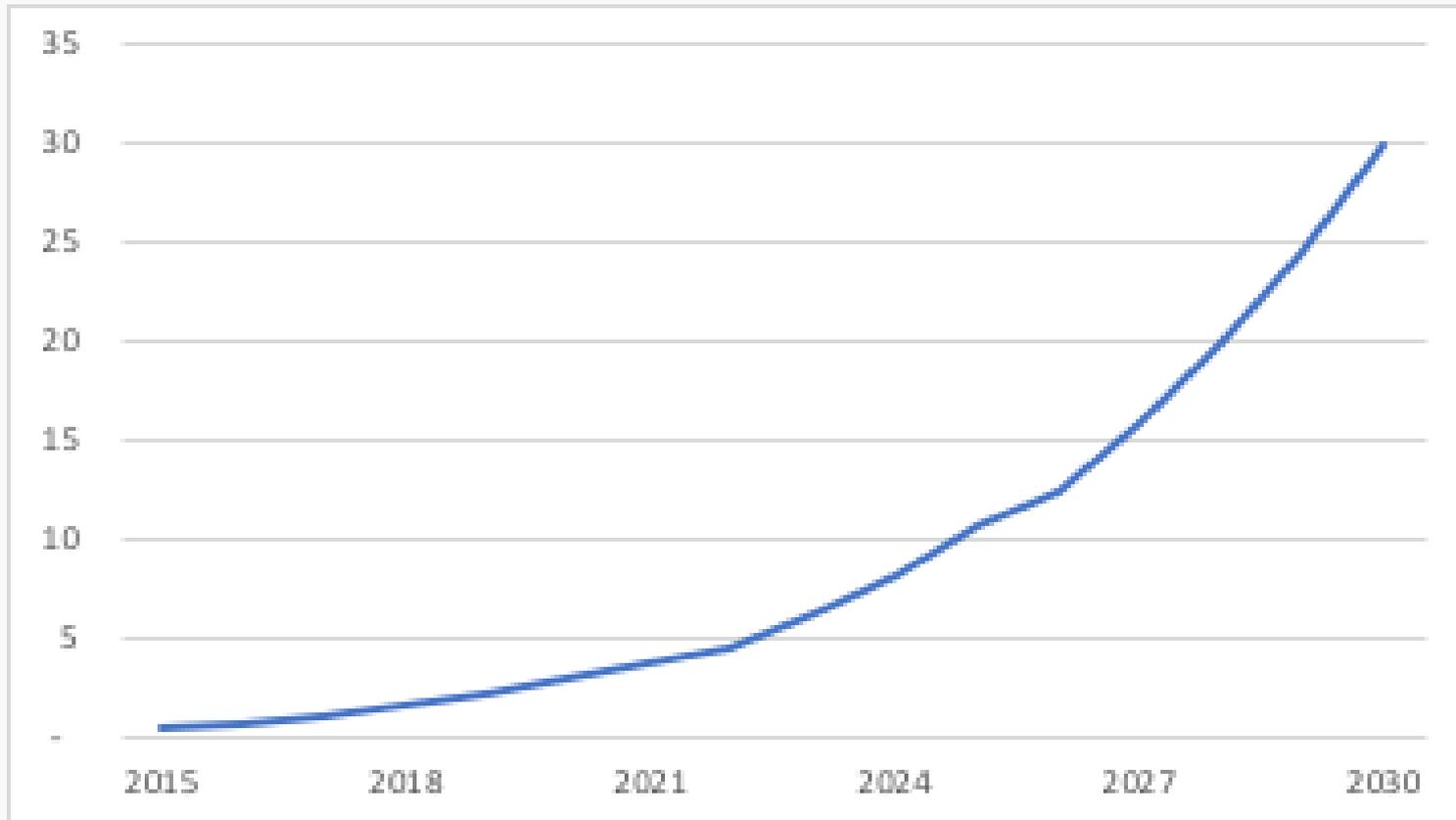
EV sales (000)



Source: IEA

So the S curve will continue

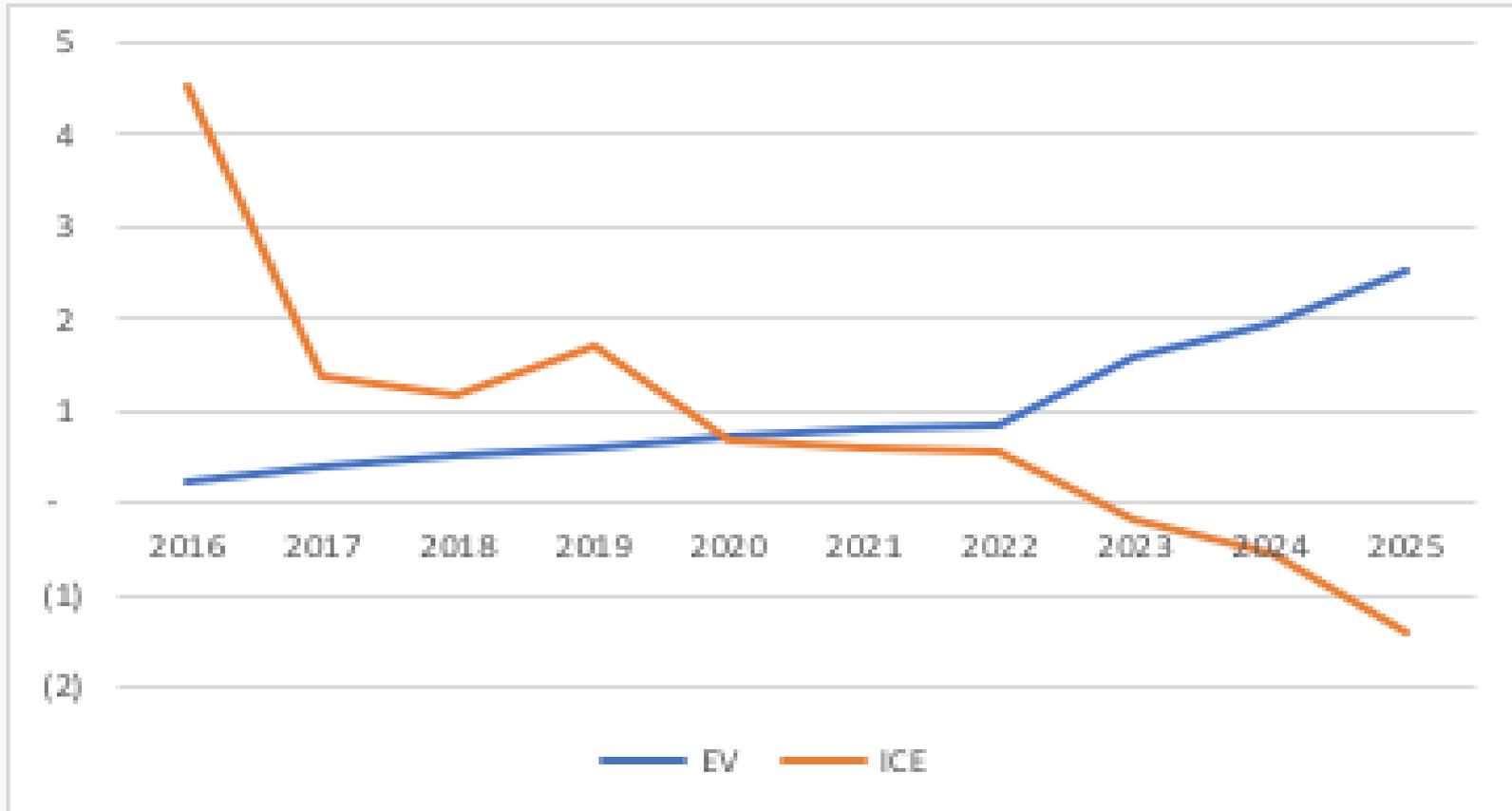
EV sales (m)



Source: BNEF

Meaning peak demand for ICE cars

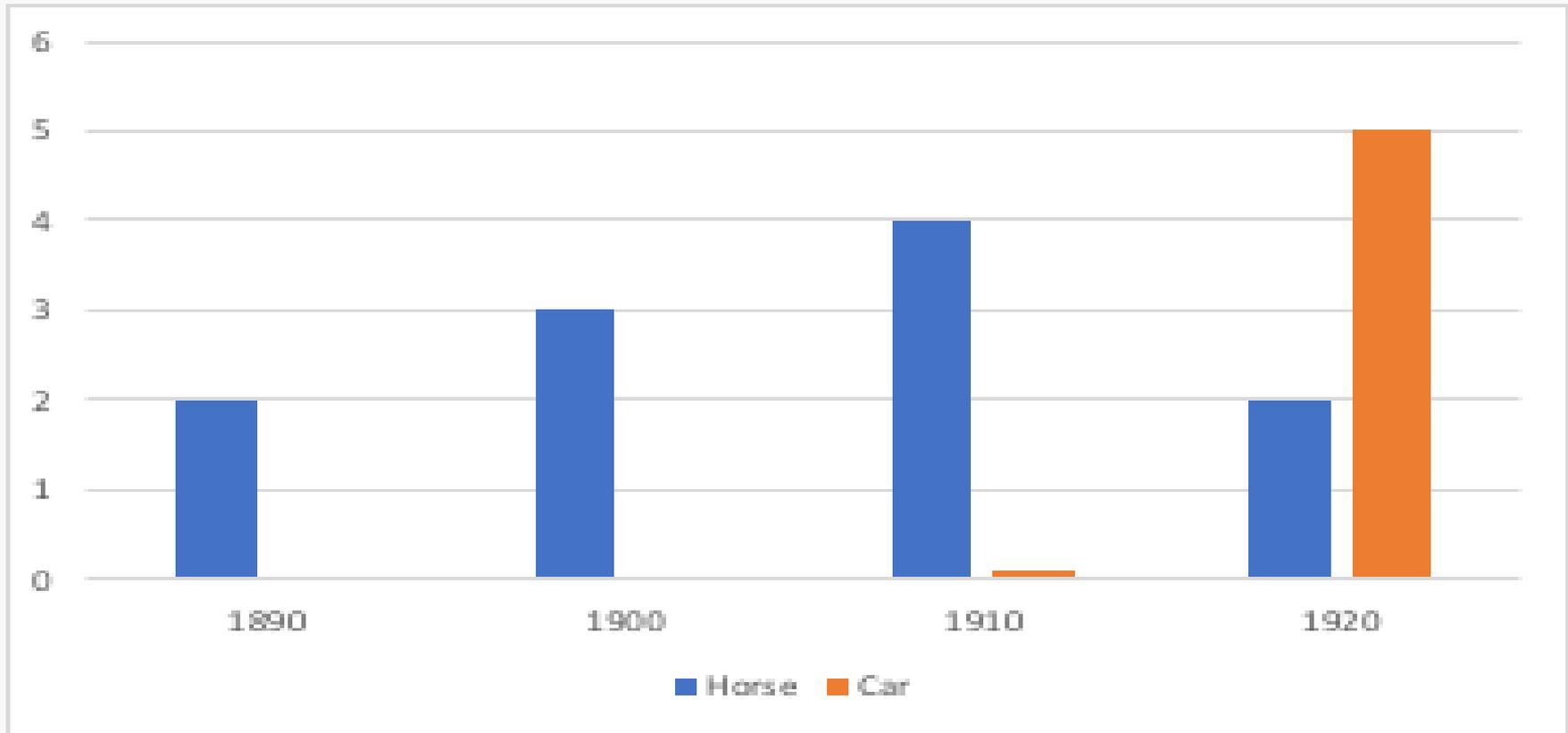
Incremental demand for cars m



Source: BNEF

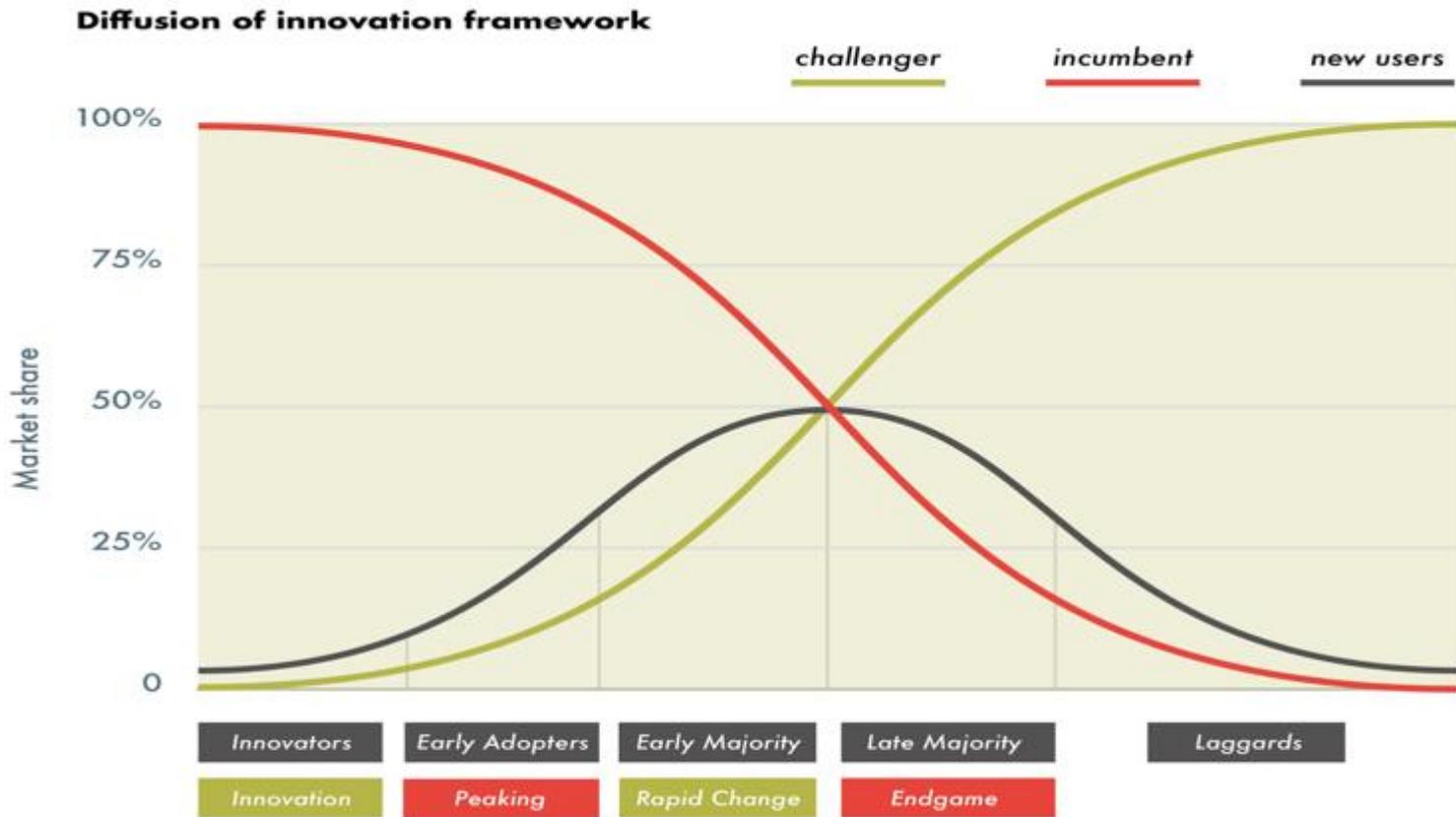
We have seen this before

US horses and cars (m)



Source: Nakinovic, Geels. For non-farm horses

The diffusion of innovation framework



Source: Rogers, *Diffusion of Innovations*, 1962, CTI annotation





For more information please visit:

www.carbontracker.org

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If you are interested in knowing more,
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