

# Electric Vehicles

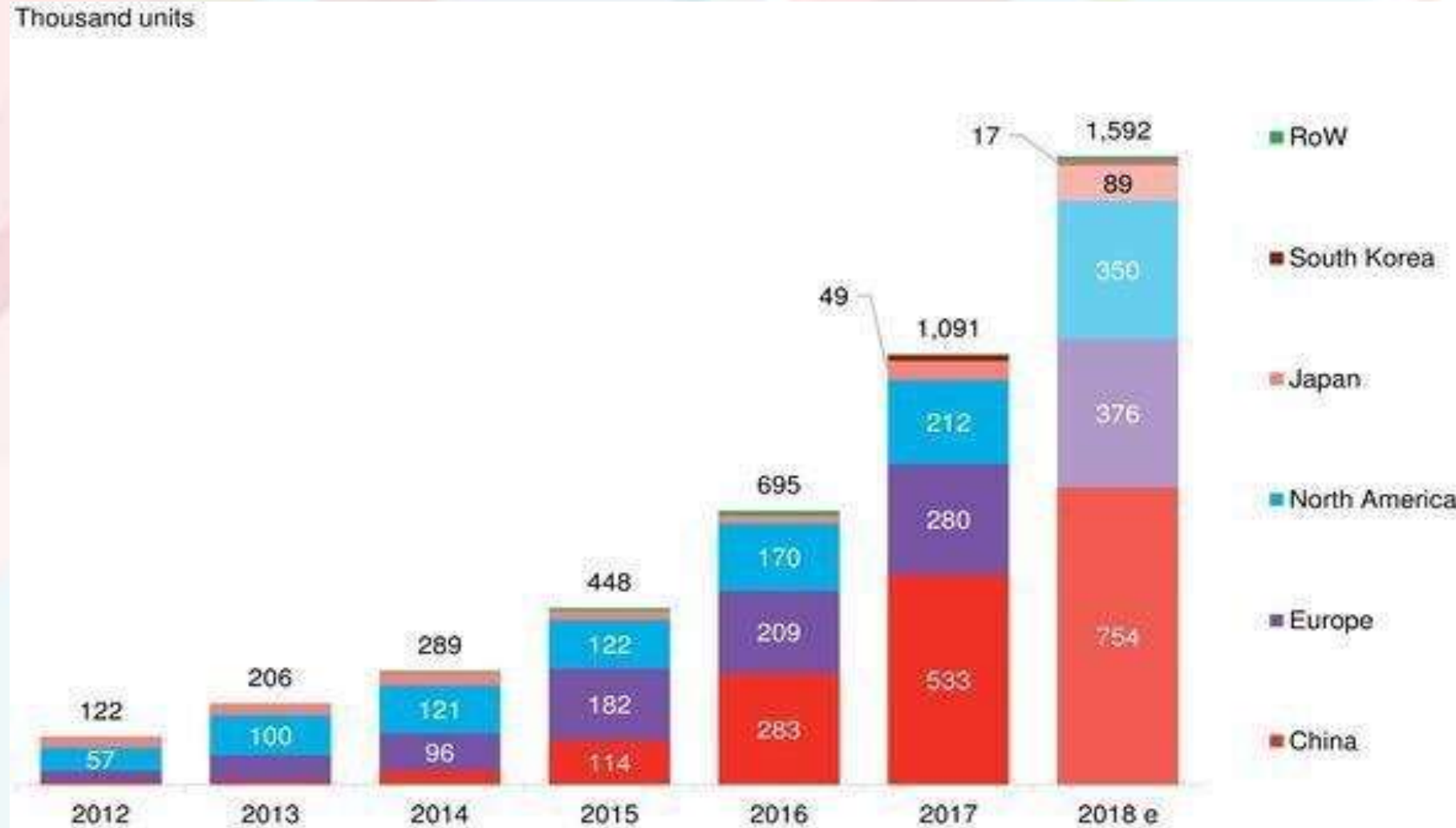
**David Beeton**



27th CAREC ESCC MEETING

13-14 March 2018, Yyldyz Hotel Ashgabat, Turkmenistan

# Global EV Markets are Accelerating



Source: BNEF

# Why Invest in EVs?

## Emissions and air quality

90%

Nearly 90% of deaths linked to air quality occur in low- and middle-income countries.



# Why Invest in EVs?

Reduced dependence on oil

**\$190  
million**

Estimated annual savings in the cost of oil imports from a 10% EV fleet in Pakistan, Afghanistan, Kyrgyzstan and Georgia



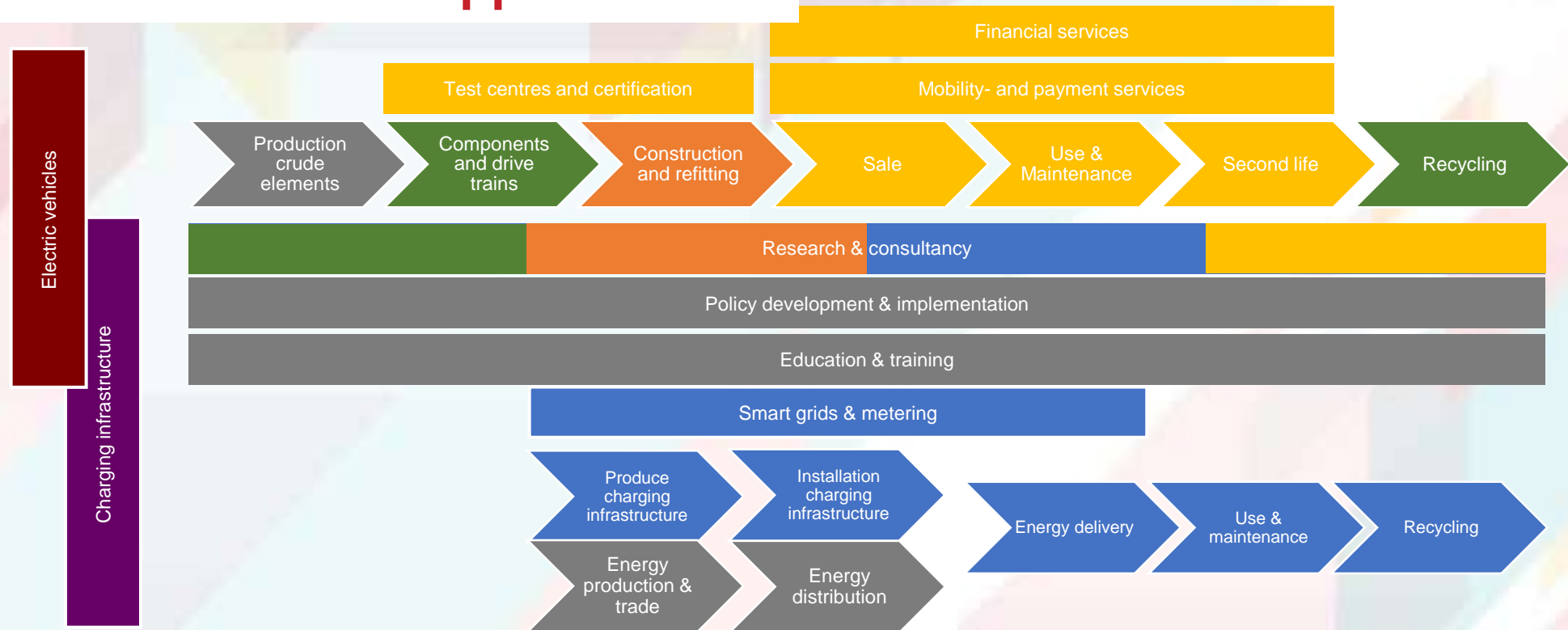
# Why Invest in EVs?

Exploiting renewable resources



# Why Invest in EVs?

## Job creation & economic opportunities



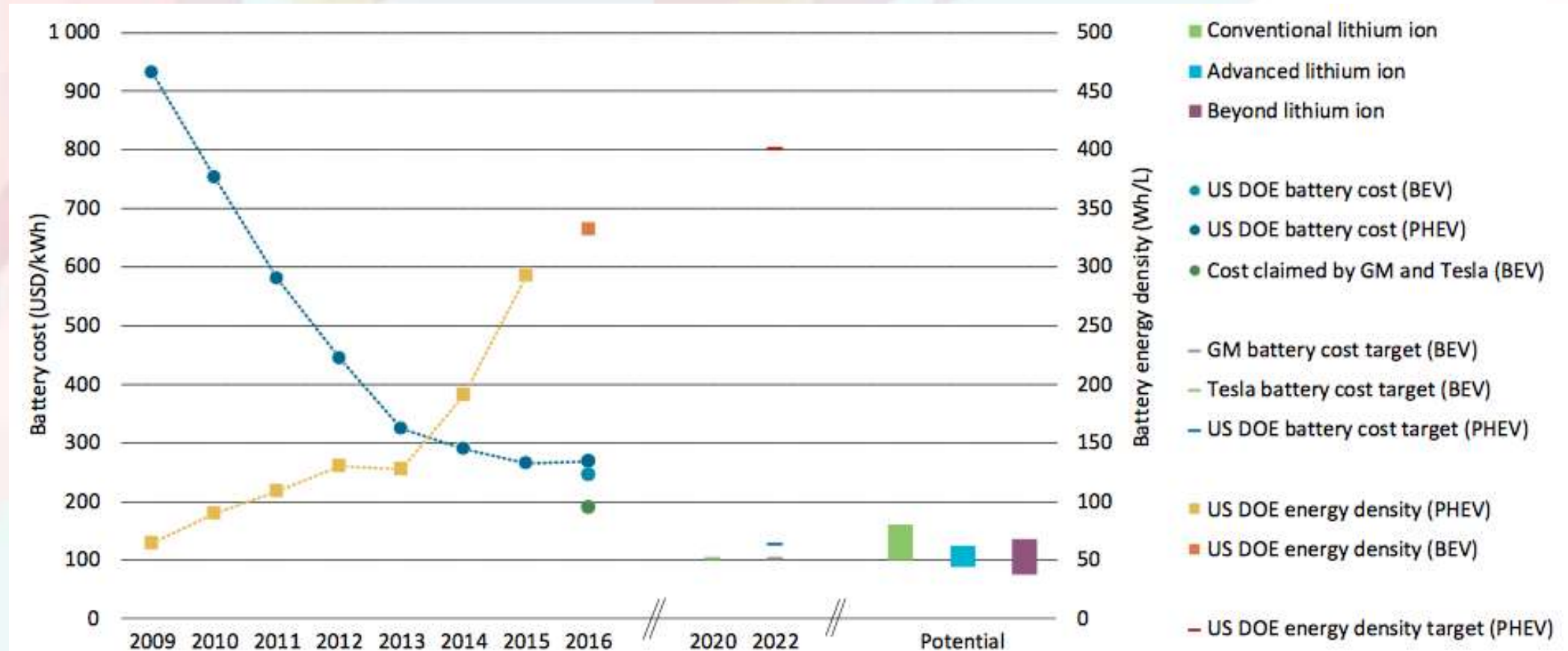
# Why Invest in EVs?

Connectivity



# What are the trends & opportunities?

## Decreasing costs of lithium ion batteries

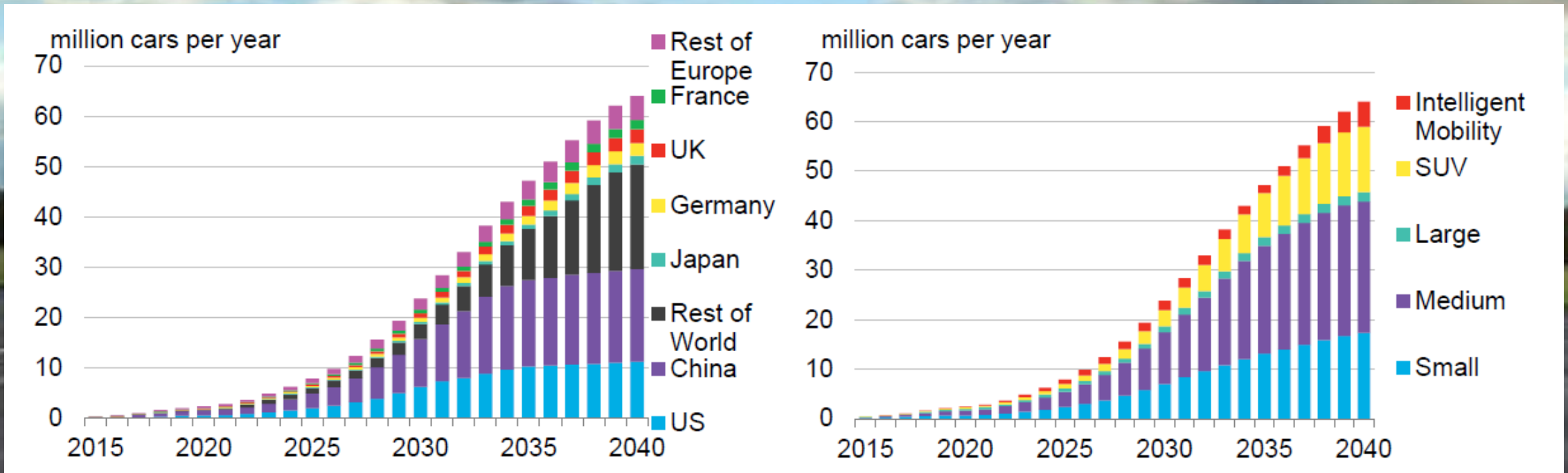


Source: IEA/ US DoE



# What are the trends & opportunities?

## Electric cars



Source: BNEF



# What are the trends & opportunities?



## Buses

Nearly half of the municipal buses on the road worldwide will be electric within seven years (BNEF, 2018)

Target for 10,000 electric buses in India

16,759 electric buses in Shenzhen



## Taxis

Target for 67,000 electric taxis in Beijing

Opportunities for electric quadricycles and tricycles in CAREC countries



## Motorcycles & scooters

Asia-Pacific electric scooters and motorcycles market \$9.1 billion in 2016

Forecasted to reach \$14 billion by 2025

# How can this happen in CAREC countries?

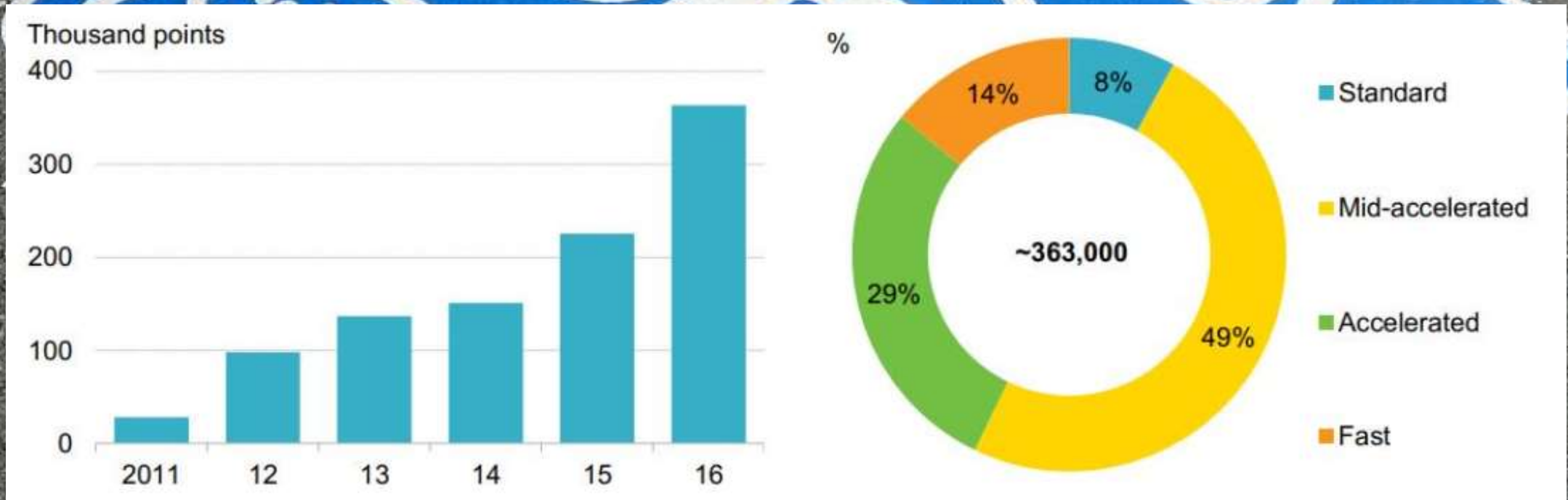


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**Lessons from  
leading EV markets**

# How can this happen in CAREEC countries?

## Infrastructure



Numbers of charge points globally and by type (source: BNEF)

# How can this happen in CAREEC countries?

## Incentives



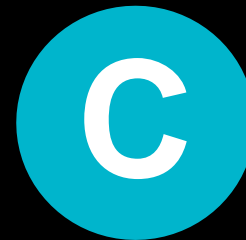
PARKING



INFRASTRUCTURE  
PROVISION



PLANNING



ROAD ACCESS  
AND CHARGING



ECONOMIC  
DEVELOPMENT  
& TOURISM



PILOTS & TRIALS



TAXIS &  
PRIVATE HIRE  
VEHICLES



INTEGRATION  
WITH WIDER  
TRANSPORT



CAR SHARING



PROCUREMENT



EDUCTAION &  
PROMOTION



FINANCIAL  
MEASURES

# How can this happen in CAREEC countries?

## Communications



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