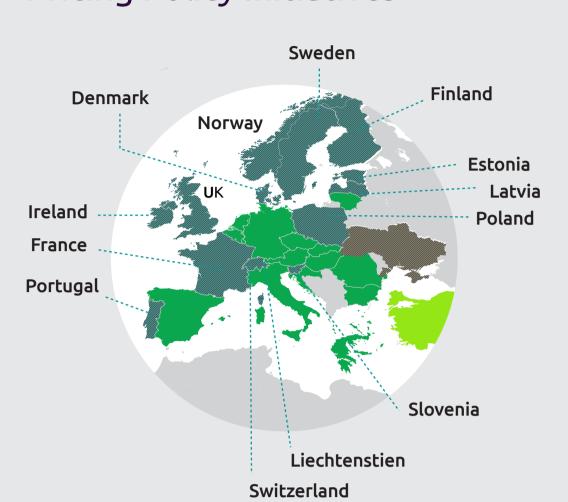


World Energy Markets Observatory

Map Of Europe Carbon **Pricing Policy Initiatives**



- ETS implemented or scheduled for implementation
- Carbon tax implemented or scheduled for implementation
- ETS or carbon tax underconsideration
- ETS and carbon tax implemented or scheduled
- Carbon tax implemented or scheduled, ETS under consideration

Source : Carbon Pricing Watch, Ecofys, World Bank,

May 2017 - WEMO2017



EUROPE

- Europe leads the way in energy transition
- CO2 target will be reached and
- surpassed in 2020
- Renewables are becoming cost competitive
- market take off. ■ Gas and electricity retail prices falling

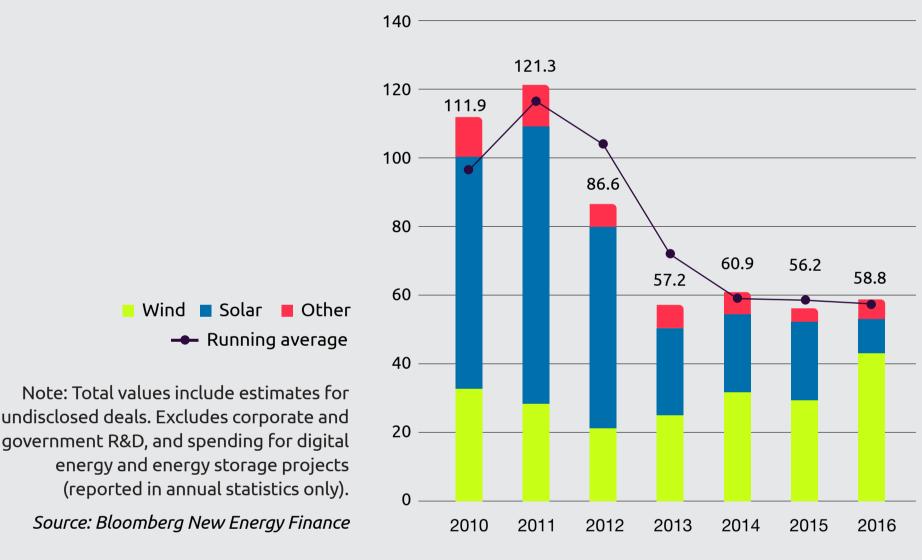
Battery energy storage is ready for

- but moderately for residential electricity price Customers seeking more
- involvement and price efficiency
- Smarter grids allow renewable increase in the electricity mix
- Use of massive data, mobility, robotics and AI, should lead to plants performance improvement

Investment in renewables rose

modestly to nearly €59 billion in 2016 compared to €56 billion in 2015

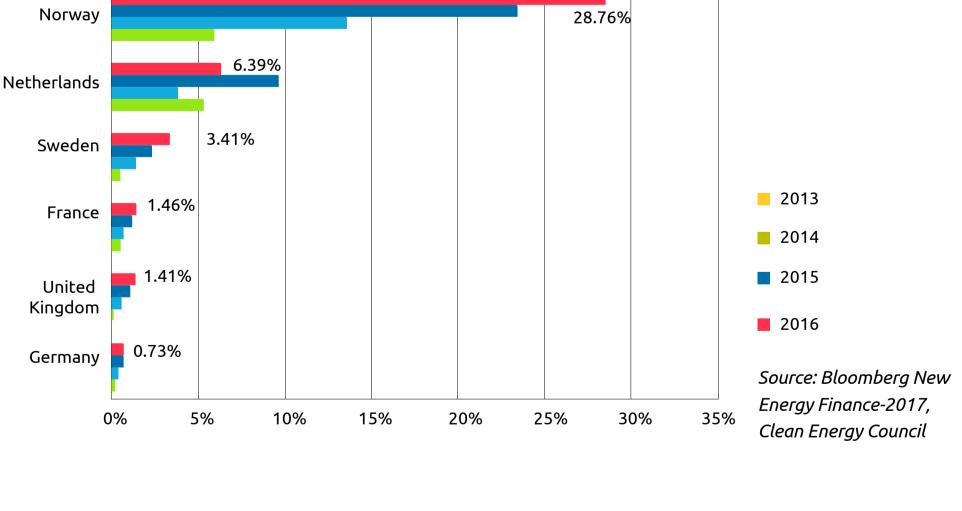
New investments in clean energy in Europe: 2004 - 2016 (\$Bn)



Wind ■ Solar ■ Other Running average Note: Total values include estimates for undisclosed deals. Excludes corporate and

Electric vehicles become more popular in Europe

Market share of electric passenger cars (battery electric and plug-in hybrid)



with other smart home players and ecosystems

Utilities are collaborating

to build and push new offers to customers.

Revenue in the Smart Home Market in Europe in million US\$ 25

