

RES: a global picture

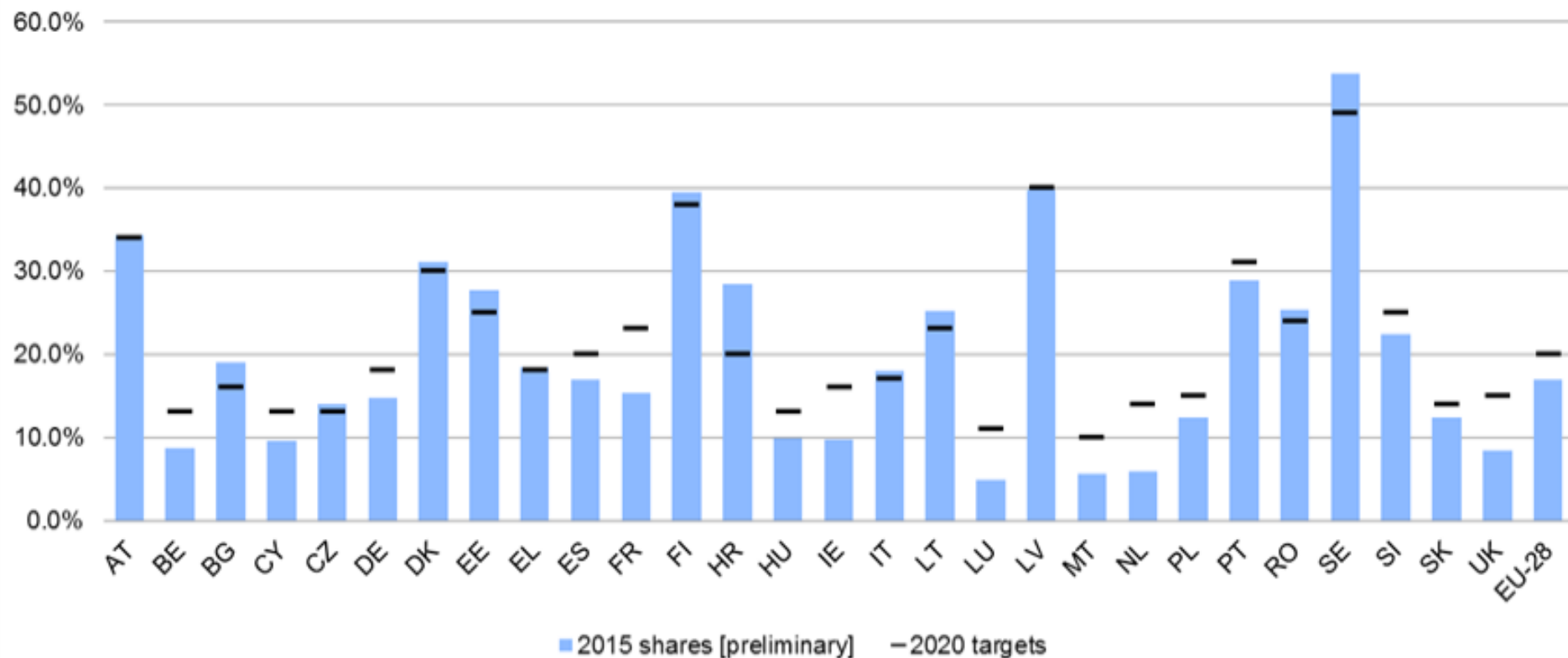
- Global RES capacity at the end of 2016: 2,006GW
 - Hydro: 1,122GW (75% large-scale, i.e. over 10MW)
 - Wind: 467GW
 - Solar: 296GW
 - Bioenergy: 110GW
 - Geothermal: 13GW
 - Ocean: 500MW
- RES in 2016: +161GW ($\sim +8-9\%$ yearly since 2009)
 - Solar: +71 GW (+32%)
 - Wind: +51 GW (+12%)
 - Bioenergy: +9GW (+9%)
 - Hydropower: +30GW (+3%)
 - Geothermal: +1GW
- $\sim 80\%$ of the world's energy still comes from fossil fuels

RES in Europe

- RES growth in 2016:
 - Europe +4.4%
 - Asia +58% (now 41% of global capacity)
 - North America +7.8%
- EU-wide share of RES use: 15% in 2013; 16% in 2014; 16.7% in 2015
- In 2015 RES accounted for the majority (77%) of new capacity for the 8th year in a row
- 22 MS (all except FR, IE, MT, NL, PL and PT) on track to achieve or exceed their 2020 RES targets
- RES progress allowed the EU to cut fossil fuel by 11% and GHG emissions by 10% (over 2005-2015)

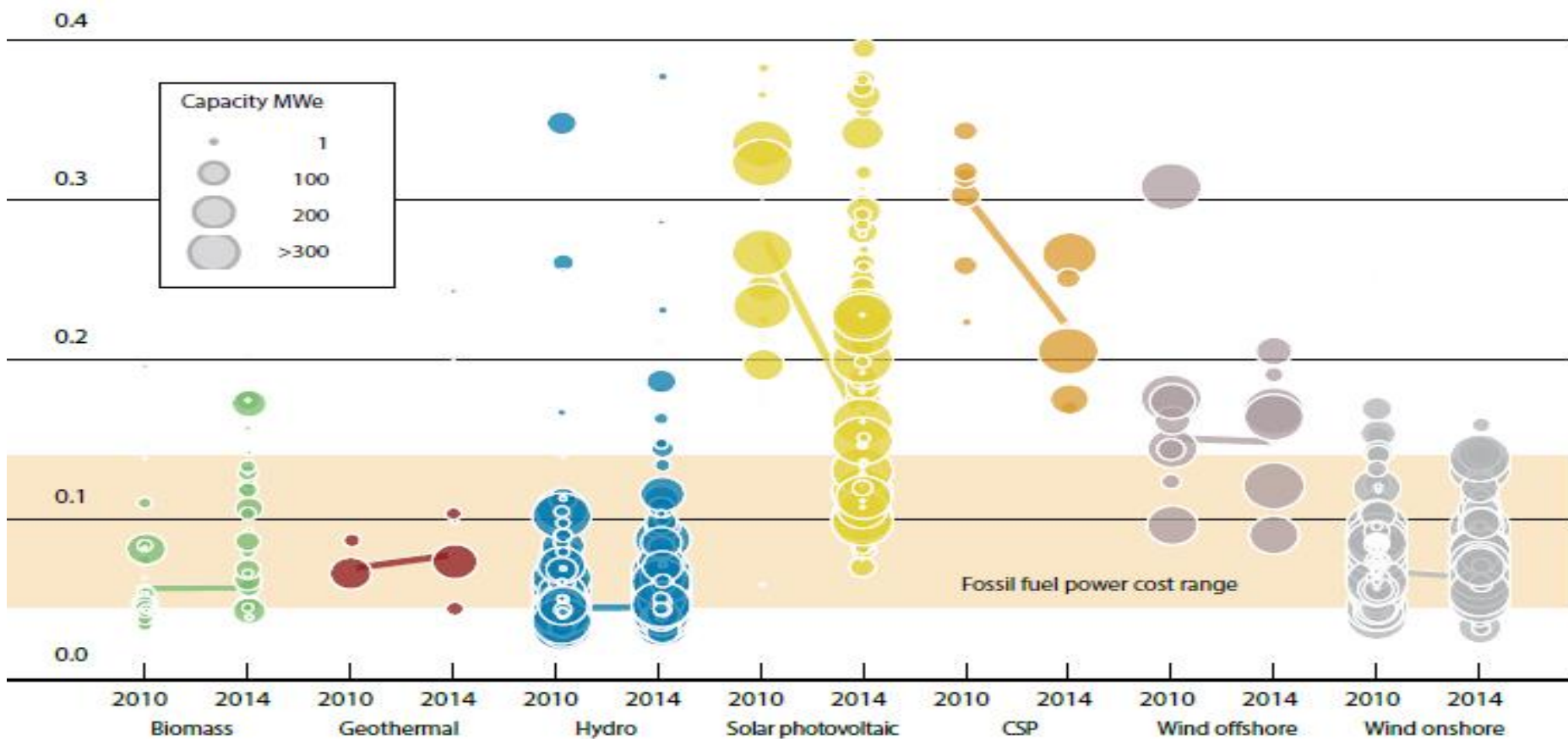
RES penetration and 2020 targets

2015 RES-shares [preliminary] vs. 2020 targets
source : Öko-Institut



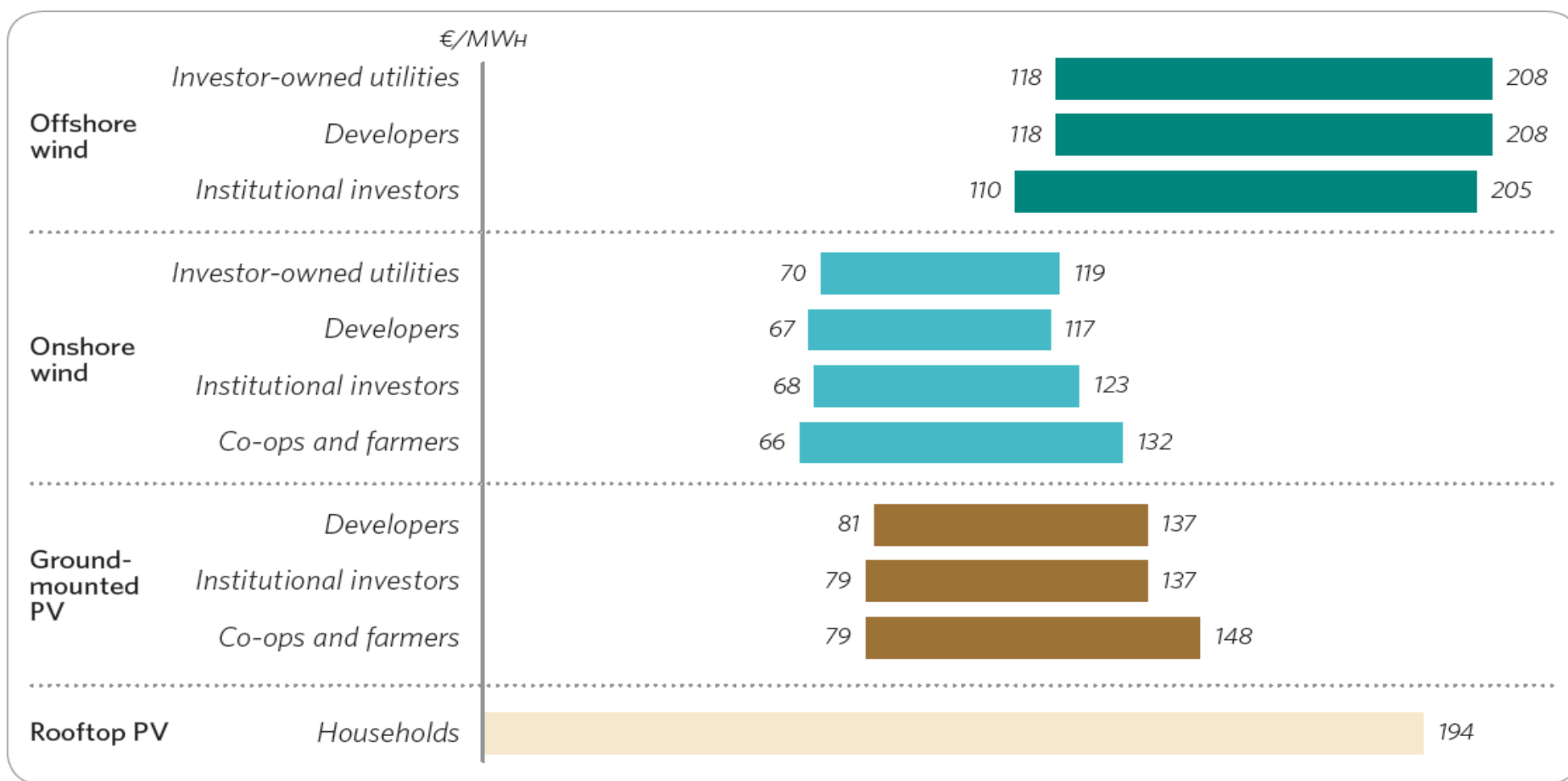
Cost of RES (I)

2014 USD/kWh



Cost of RES (II)

Figure 3: Levelized cost of electricity (potential auction prices) by investor type and technology



RES consumption by sector

Gross final renewable energy consumption per MS (ktoe)

