



CPPA - new standard in EU

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NECP

- investment catalogue
- 3 aspects:
 1. how many MWs installed by 2030
 2. measures to remove administrative barriers for CPPA
 3. premium model
- Under the new Renewable Energy Directive, EU governments have duty to remove barriers
- Only 2 of the NECP mention PPA and none comply with the agreed legislation





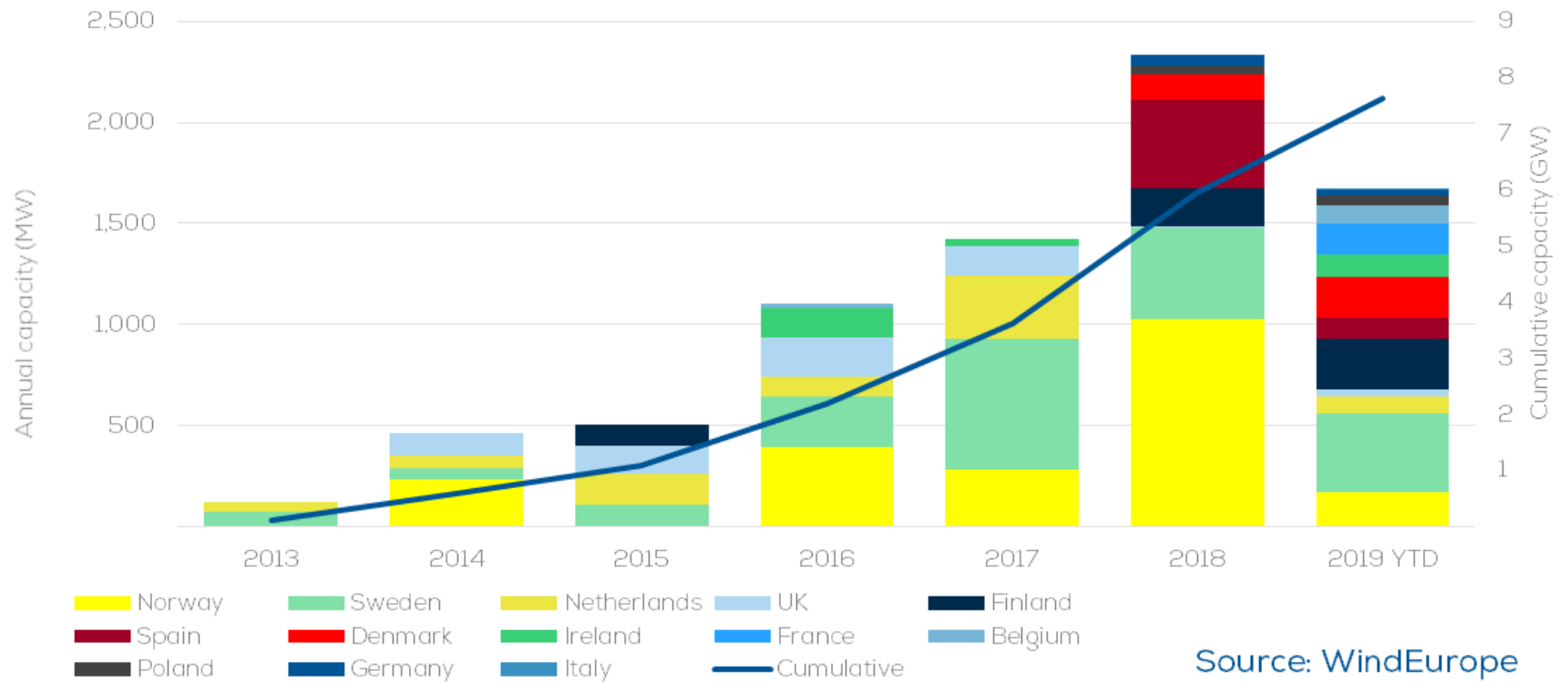
Corporate power purchase agreement

- contract on renewable corporate power purchase agreement directly from the producers
- industry and business in Europe – consume more than half of the EU electricity
- CPPA a business model in Europe – reduces the CO2 emissions and manages the variable costs of EE
- industry and business have fixed price of energy on a longer period
- RE-SOURCE platform: first and only platform that gathers different interests in EU with the aim to perform energy transition to a smarter, sustainable energy system

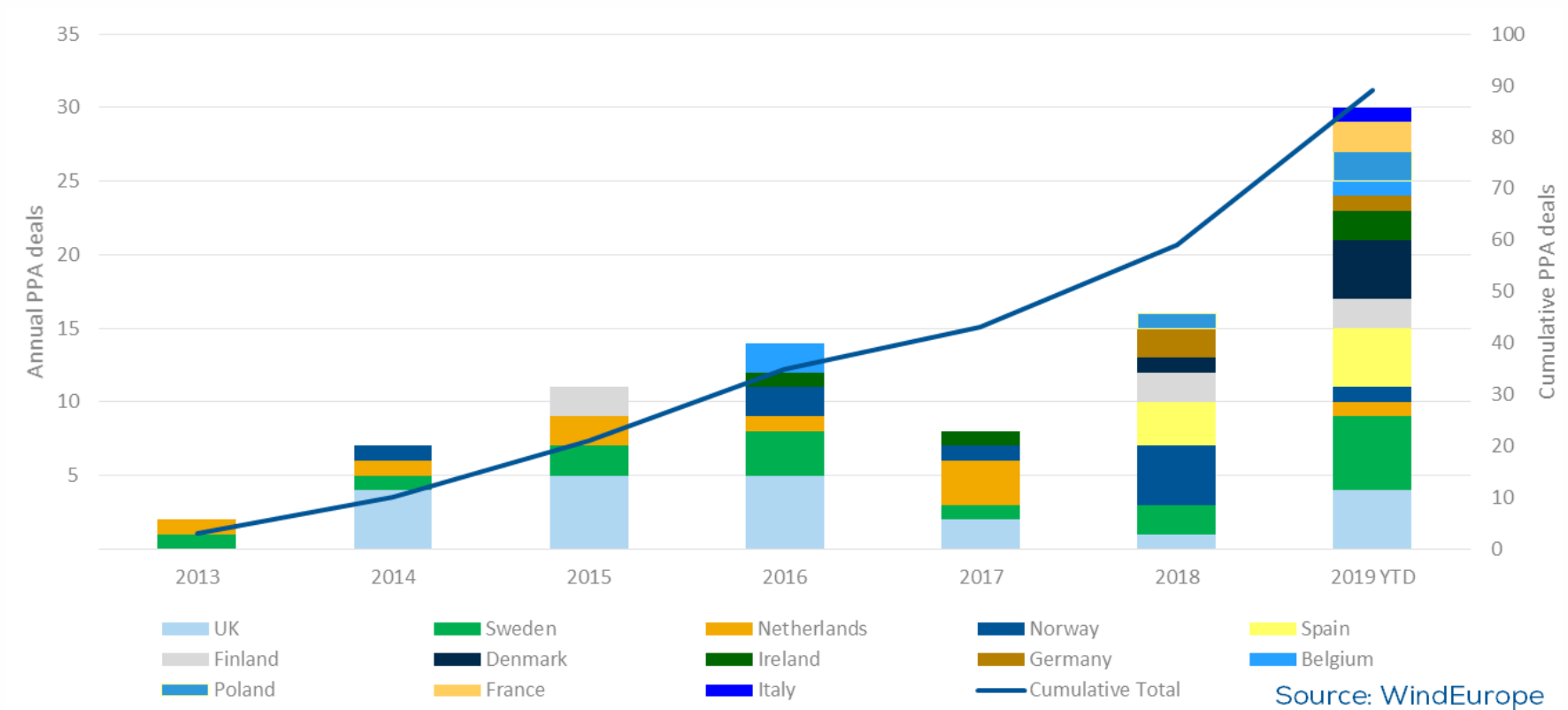




Corporate PPA capacity contracted

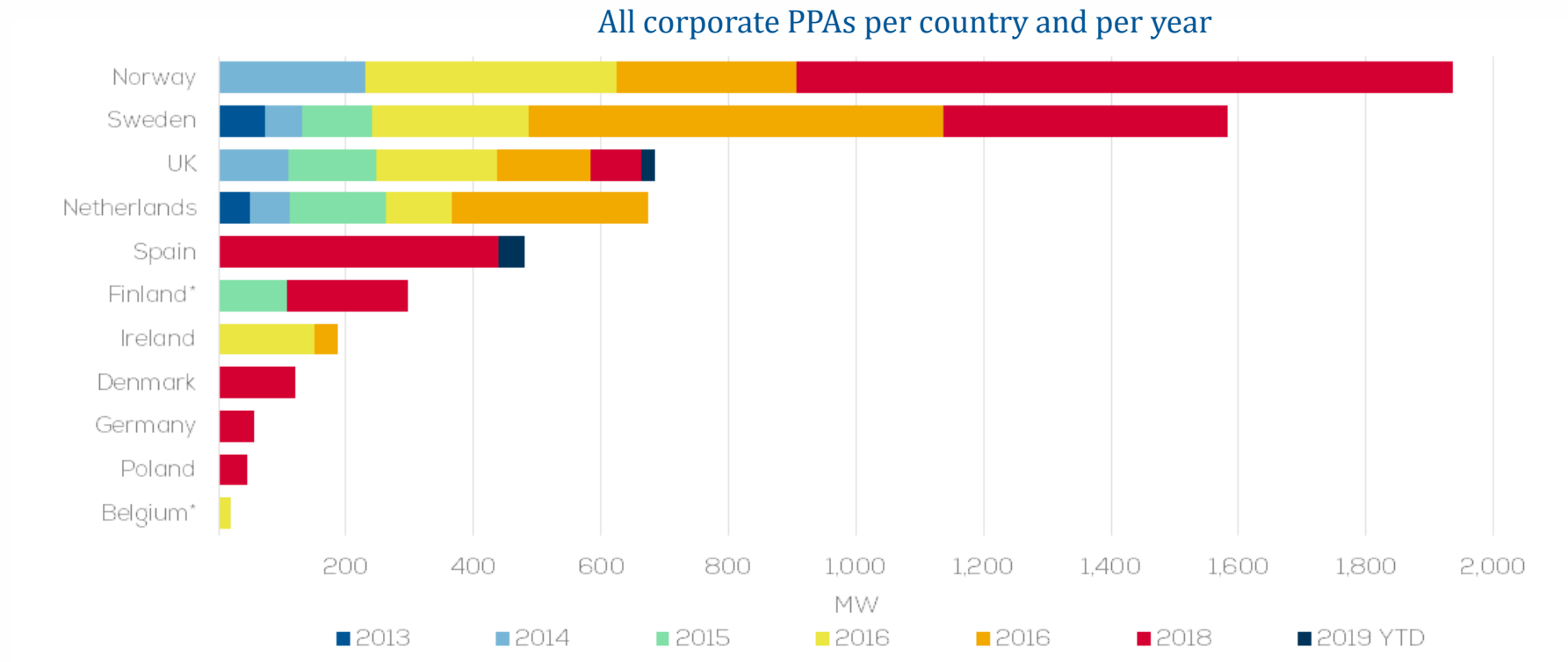


Number of PPAs signed per year





Corporate PPAs per country and per year

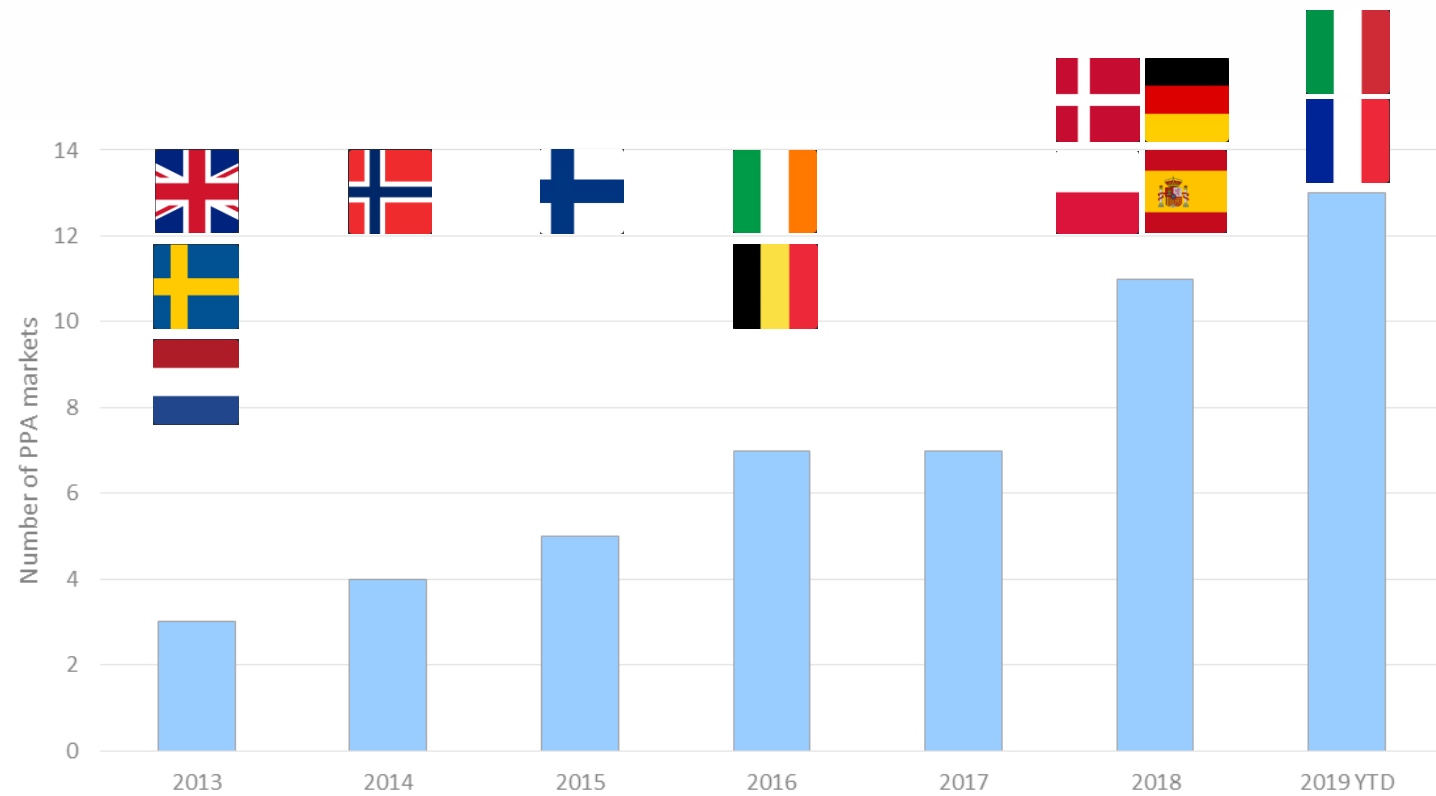


* Cross border PPAs





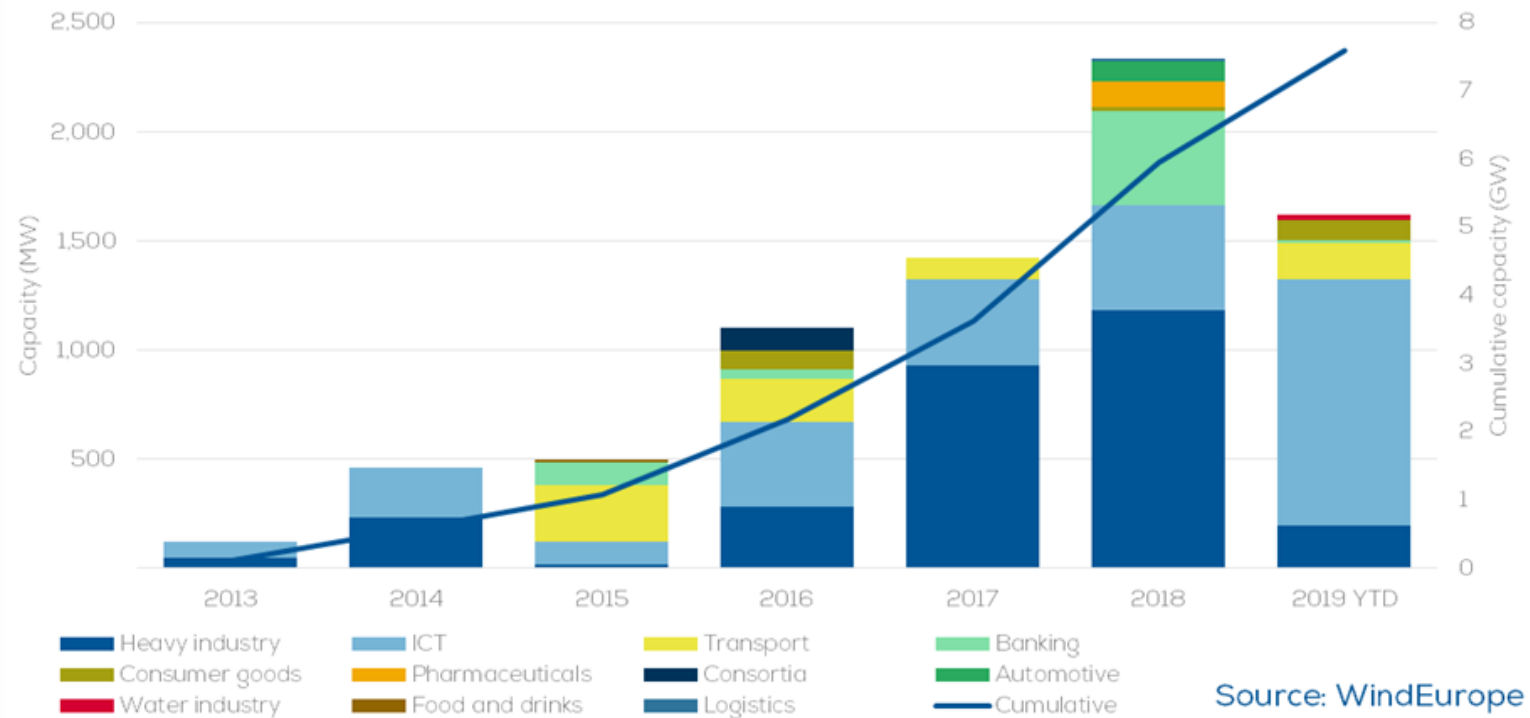
European corporate PPA markets



Source: WindEurope

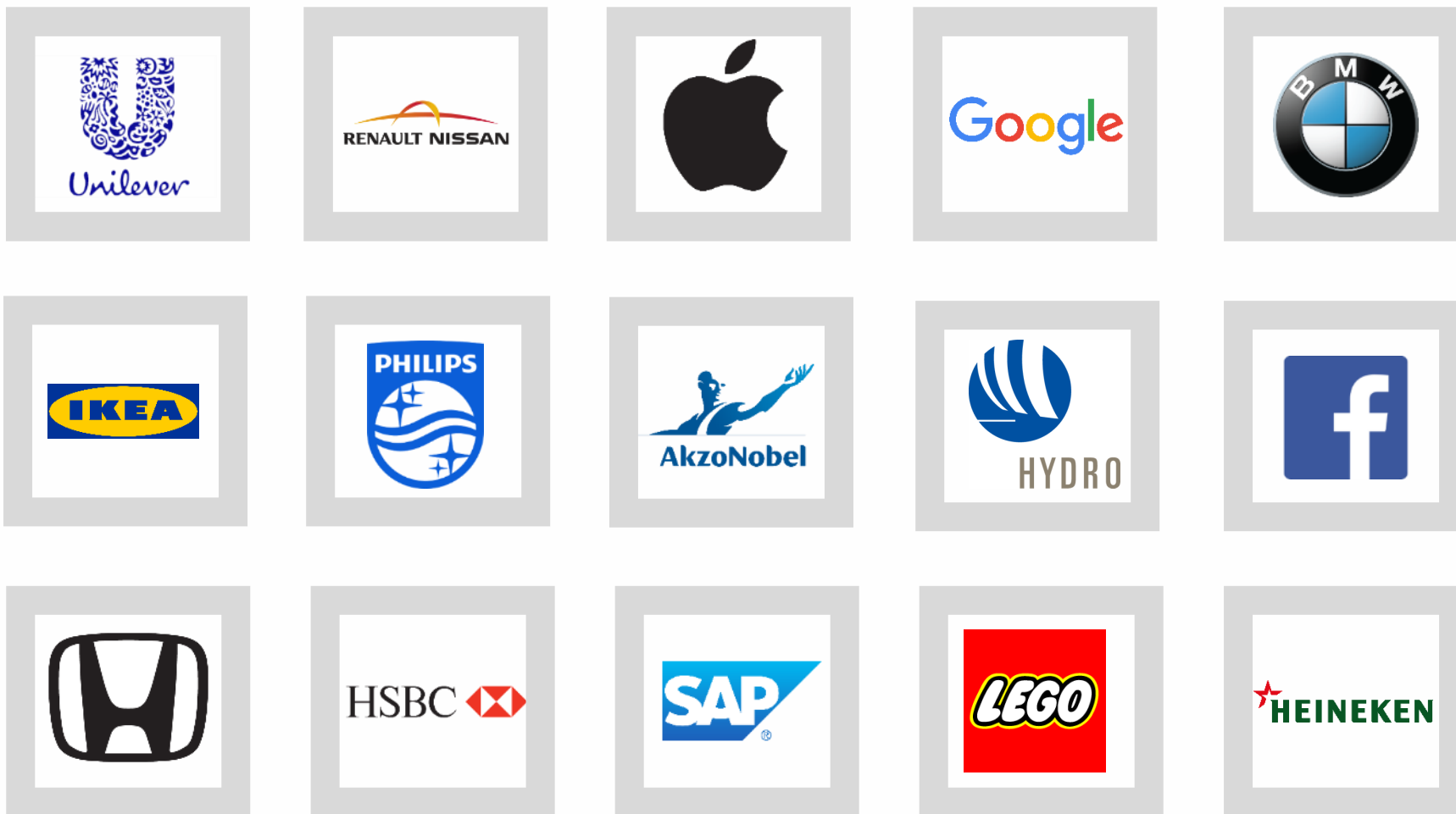


Corporate PPAs by off-taker type





Corporates investing directly in wind





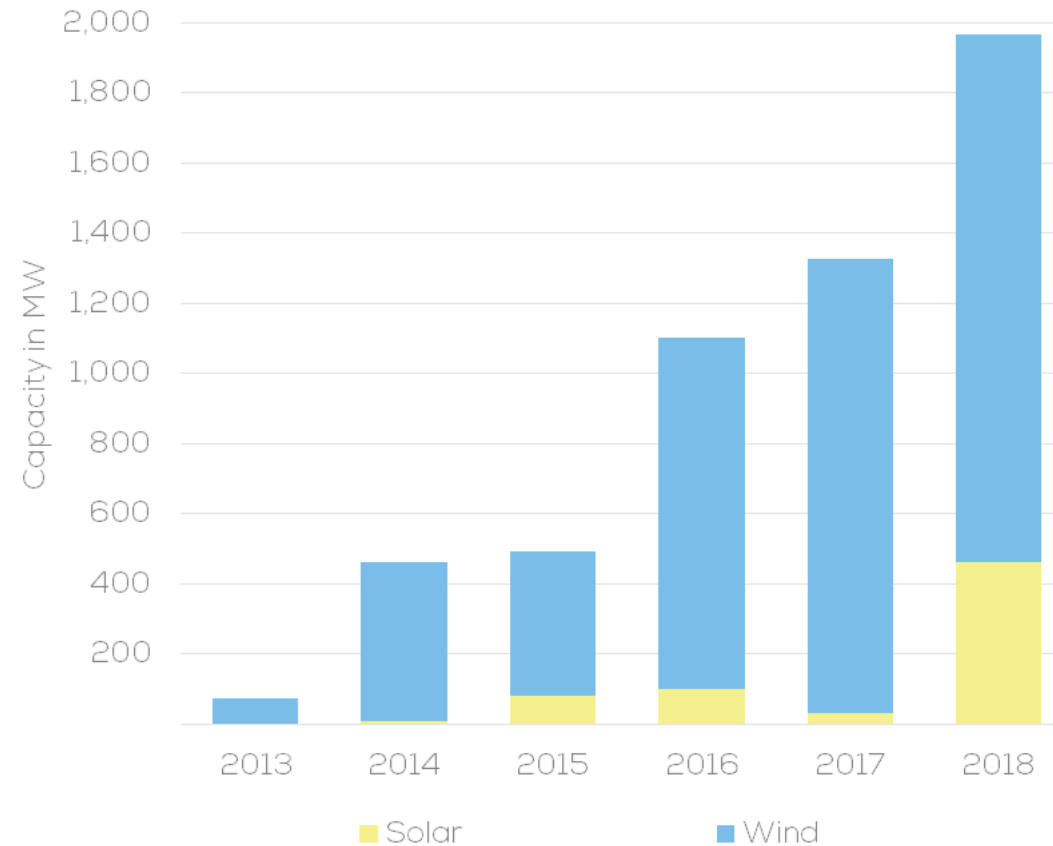
Corporates in 2019

- 200 RE100 initiative – to source 100% RE electricity for their global operations
- active role for private sector to meet EU's 2030 RE target
- CPPA a key vector to modernise industries and shift towards neutrality
- Google - announced 800 MW in Europe
- Amazon – 100% by 2030
- Airports Council (ACI Europe) – achieve 2050. net zero commitment
- 13 countries - PPAs in 2019
- EC study – 30% of total electricity demand by 2030 – EU renewable sector would generate more than 750 bn euros in gross added value and 220,000 new jobs





Share of wind and solar

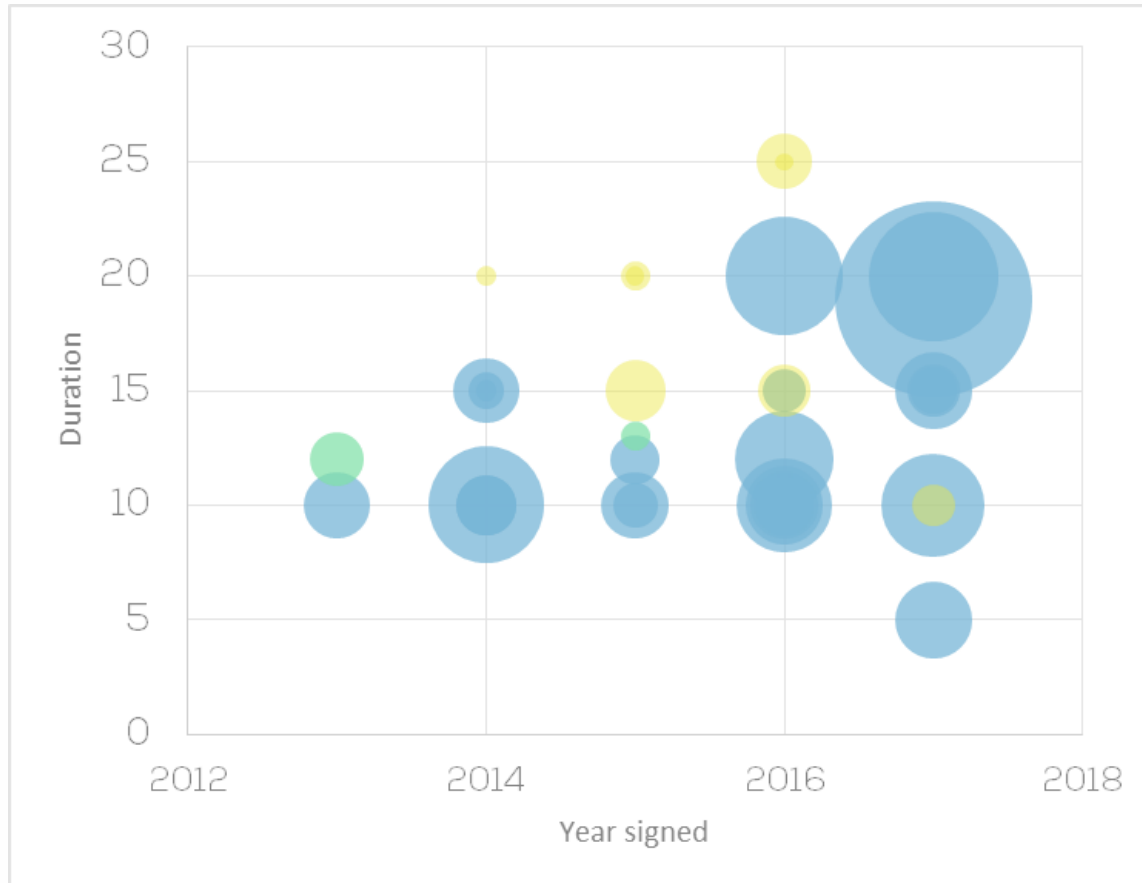


Wind energy accounts for 85% of corporate PPAs in Europe to date





Duration and capacity trends



- Capacity and duration of PPA contracts increasing
- Recently seen a 29 year corporate PPA signed, the longest so far





Premium model in Croatia

- from feed in system transition towards market is premium model of producing electricity from RES
- basic principles:
 - ✓ RES producer sells EE directly to the market
 - ✓ difference between the expenses of the production and the market price is paid by HROTE (electricity market operator) through premium on 12 years
 - ✓ balancing of energy (difference between the prognosed production a day ahead and the realised production is paid by a producer)
 - ✓ cost of energy balancing is calculated into the price of EE paid by the consumer





Premium model in Croatia

Interest of the producer

- find a consumer on minimum 12 years and sign CPPA
- achieve price better than on a spot market
- reduce maximum mistake in production prediction to reduce balancing of energy

Interes buyer-consumer

- long term secure electricity purchase with clearly defined costs
- achieve lower price than is currently bought via supplier on a spot market
- readiness to join the system of reducing costs of energy balancing using joint management of EE consumption i.e. demand side management





Premium model in Croatia

- clearly, producer and consumer have complementary interest to start direct relationship via CPPA
- producer will provide maximum price and long term safety of production
- consumer will minimise the cost of purchase through CPPA and will offer demand side management of consumption as a auxiliary service of balancing
- premium model with the obligation to secure energy balancing, there is a clear need to have 12 years CPPA
- In a transition period to full market liberalisation, HROTE as an intermediary between producer and consumer, key buyer of all produced RES electricity
- HROTE has experience from FIT and can quickly transform to introduce CPPA in a premium model (energy intensive industry) big consumers by intermediary position in providing the service of responsible balance group for producer and consumer via energy balancing calculation







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