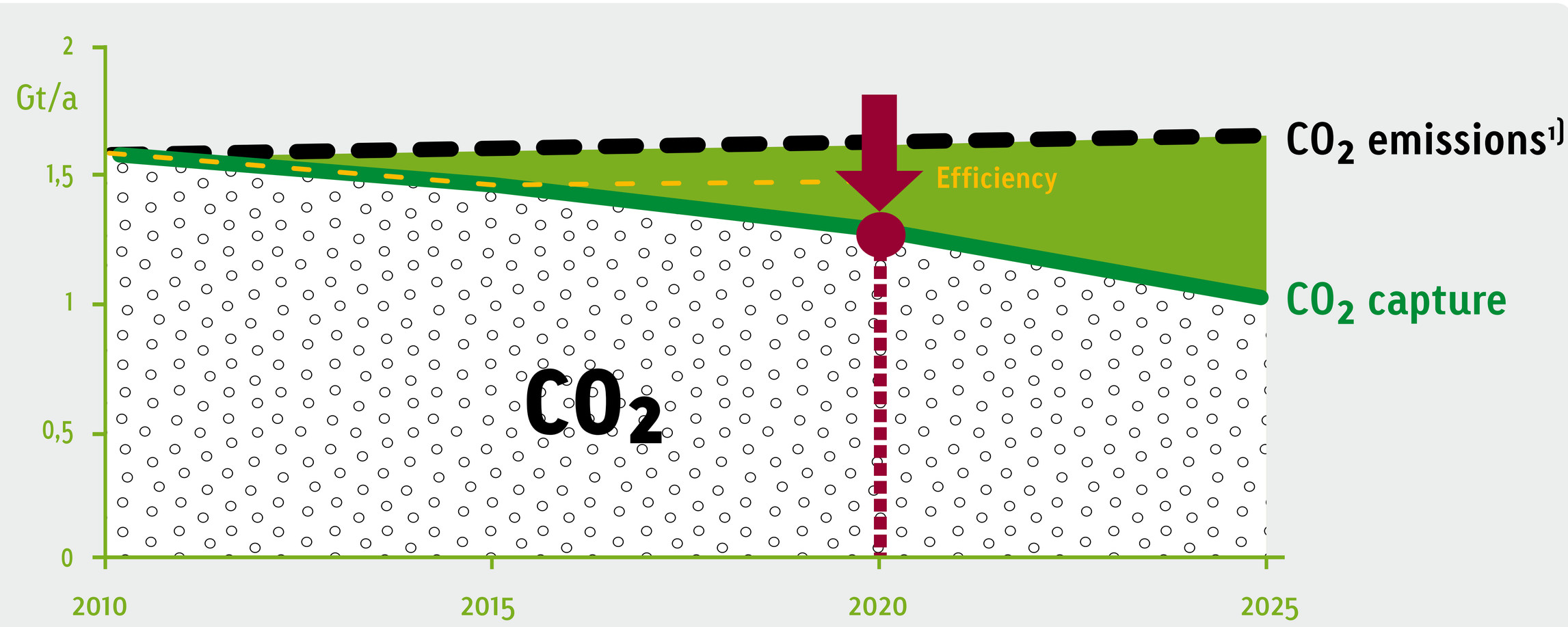
European Power Plant Suppliers Association

Developing the Future

CO_2 emissions must decrease to meet 2020 targets



To meet the 2020 targets 50 % of new plants have to be equipped with CO_2 capture in the period of 2015–2020

How many power plants need to be equipped with CO_2 capture?

Target 2020 (Period 2015-2020)

Fuel	GW	Units
Coal	24	30 800 MW each
Gas	25	63 400 MW each

Potential 2025 (Period 2020-2025)

Fuel	GW	Units
Coal	52	65 800 MW each
Gas	48	120 400 MW each

- CCS technologies will contribute more to a reduction of greenhouse gas emissions than a switch to renewables[2]
- Efficiency improvement in BAT[3] power plants vs. European average compensates for the energy penalty of CCS
- Industry is addressing full CO_2 chain, from capture to storage

149 GW of coal and gas power plants equipped with CO_2 capture need to be built between 2015 and 2025 compared to 131,5 GW of coal and gas power plants built between 2000 and 2010

1) Source: EU-27 Energy Baseline scenario Trends to 2030 – update 2007, DG TREN, European Commission
2) Source: International Energy Agency, World Energy Outlook 2009
3) Best Available Techniques, as defined in the IPPC / IED