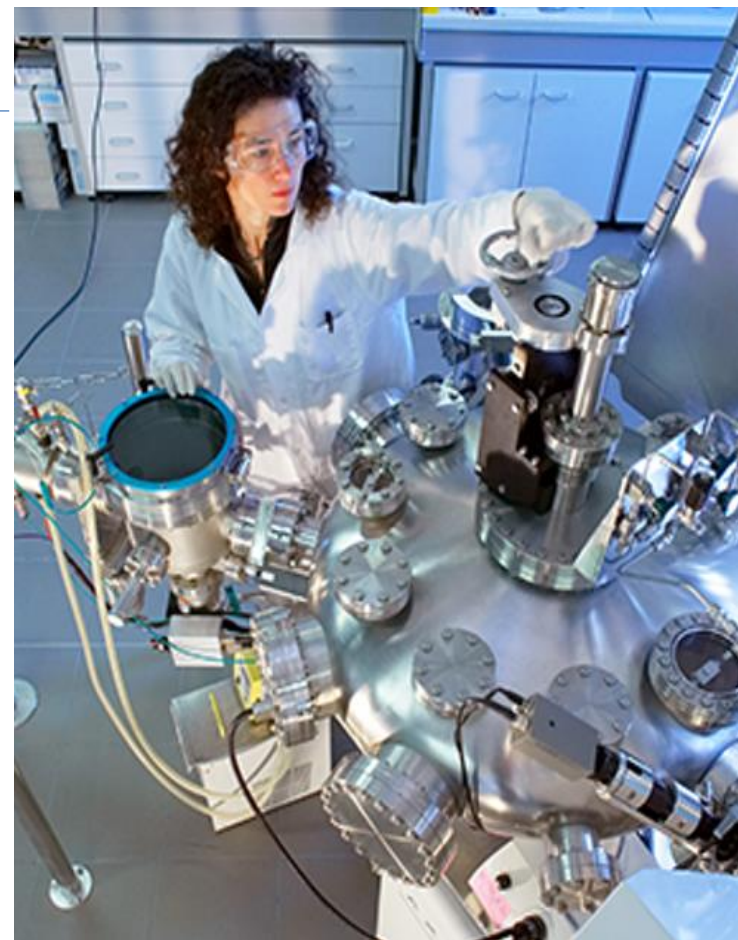
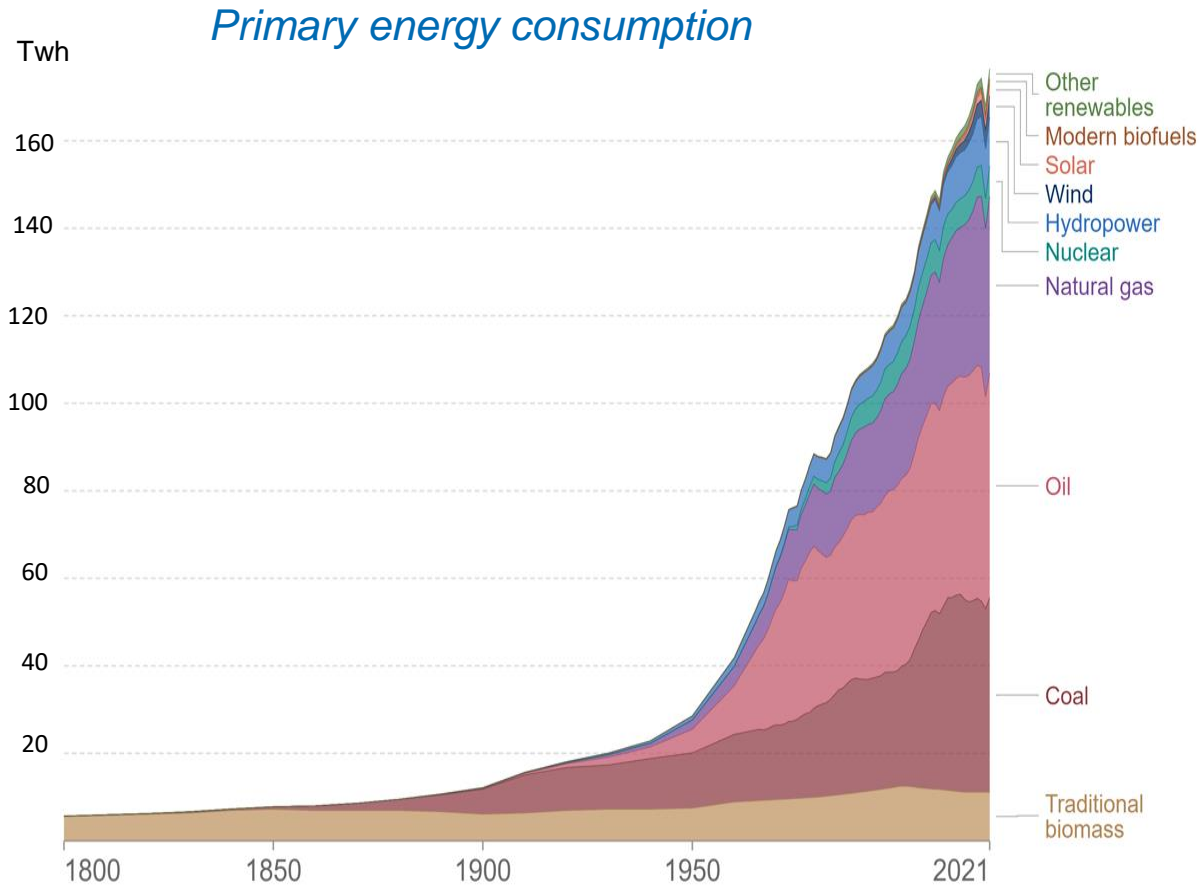


**Technologies & Policies for Decarbonization :
the European case**

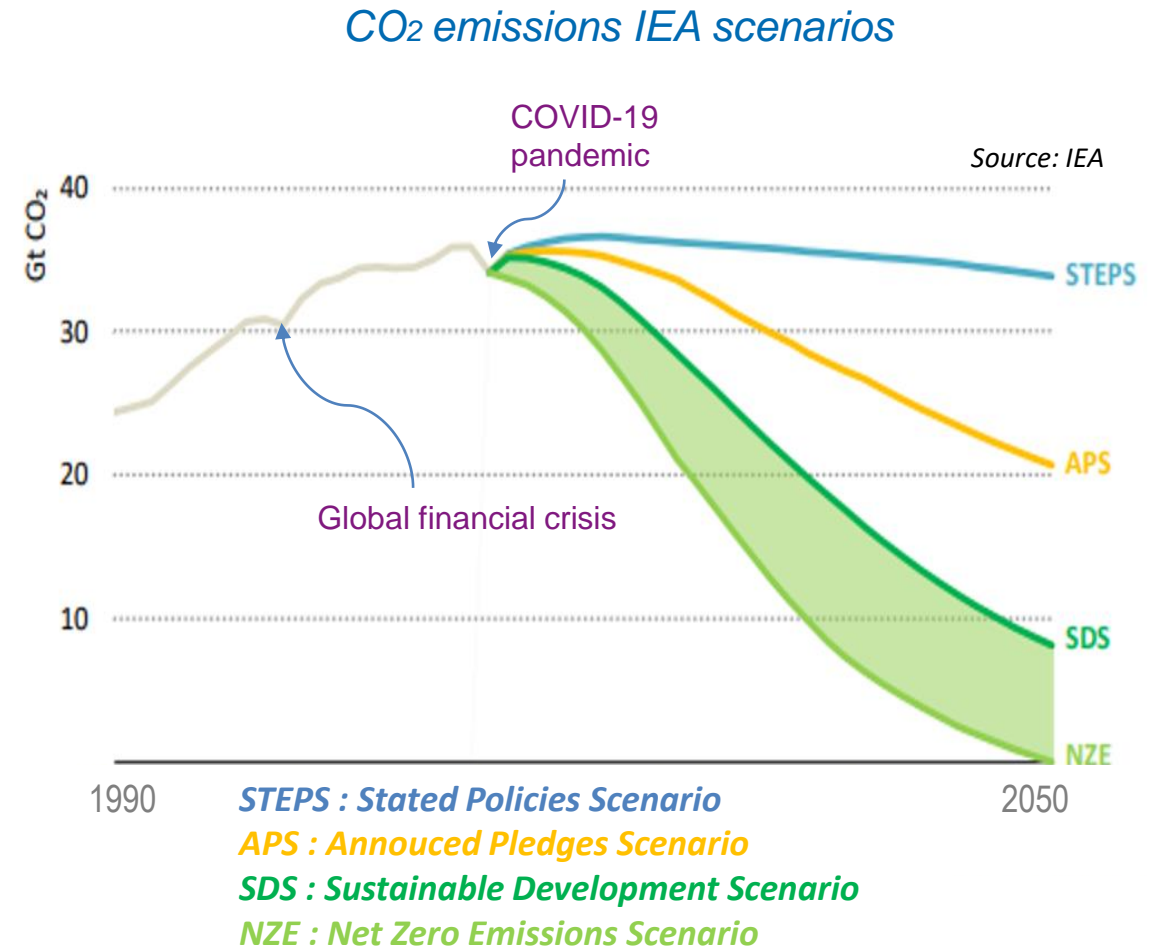
Dr. Saïd Nchet
Director, International Relations
IFPEN



Climate emergency calls for rapid and massive action to reduce CO₂ emissions



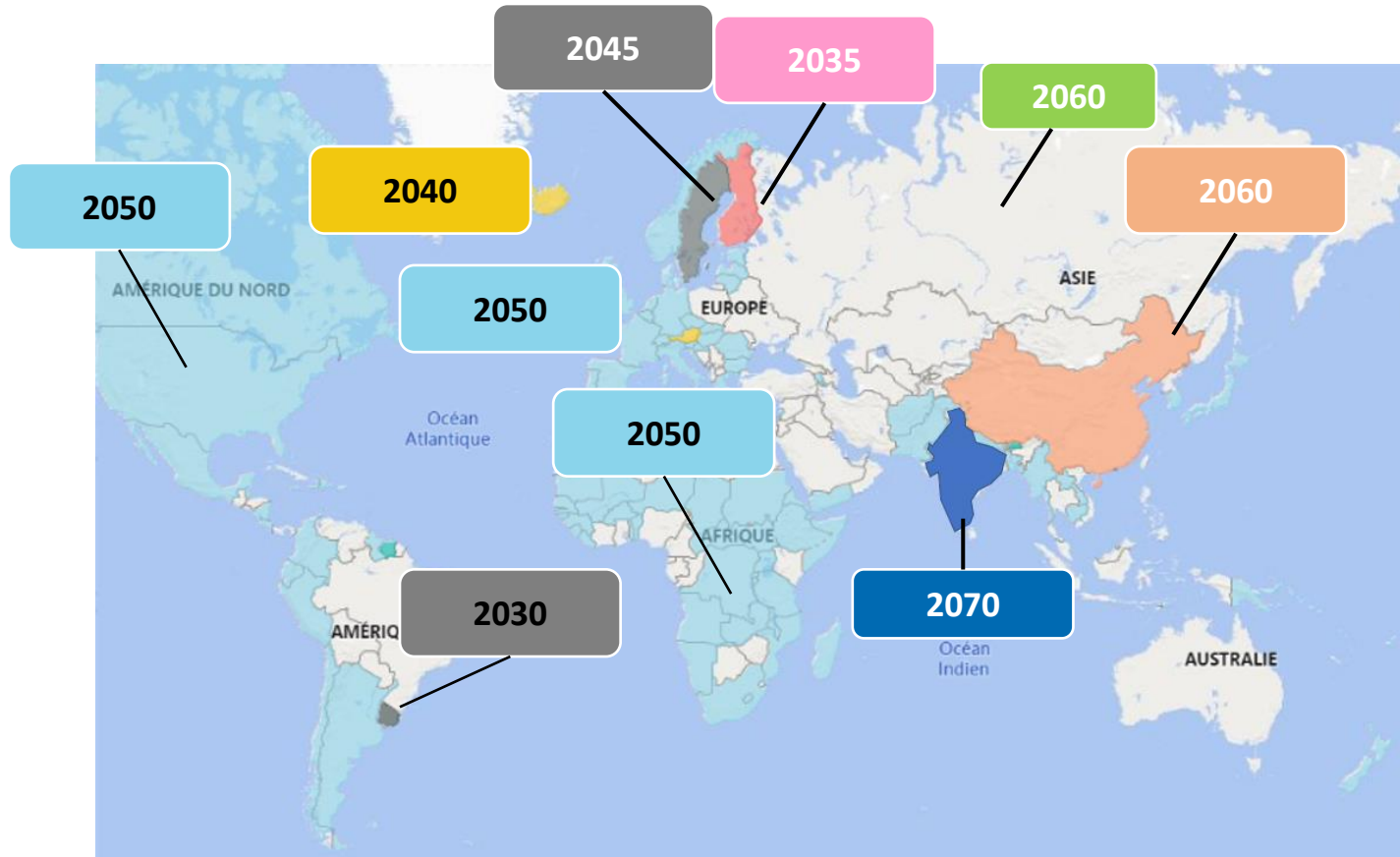
Source: BP Statistical Review of World Energy



Fossil fuels have been the engine of economic growth and poverty alleviation.

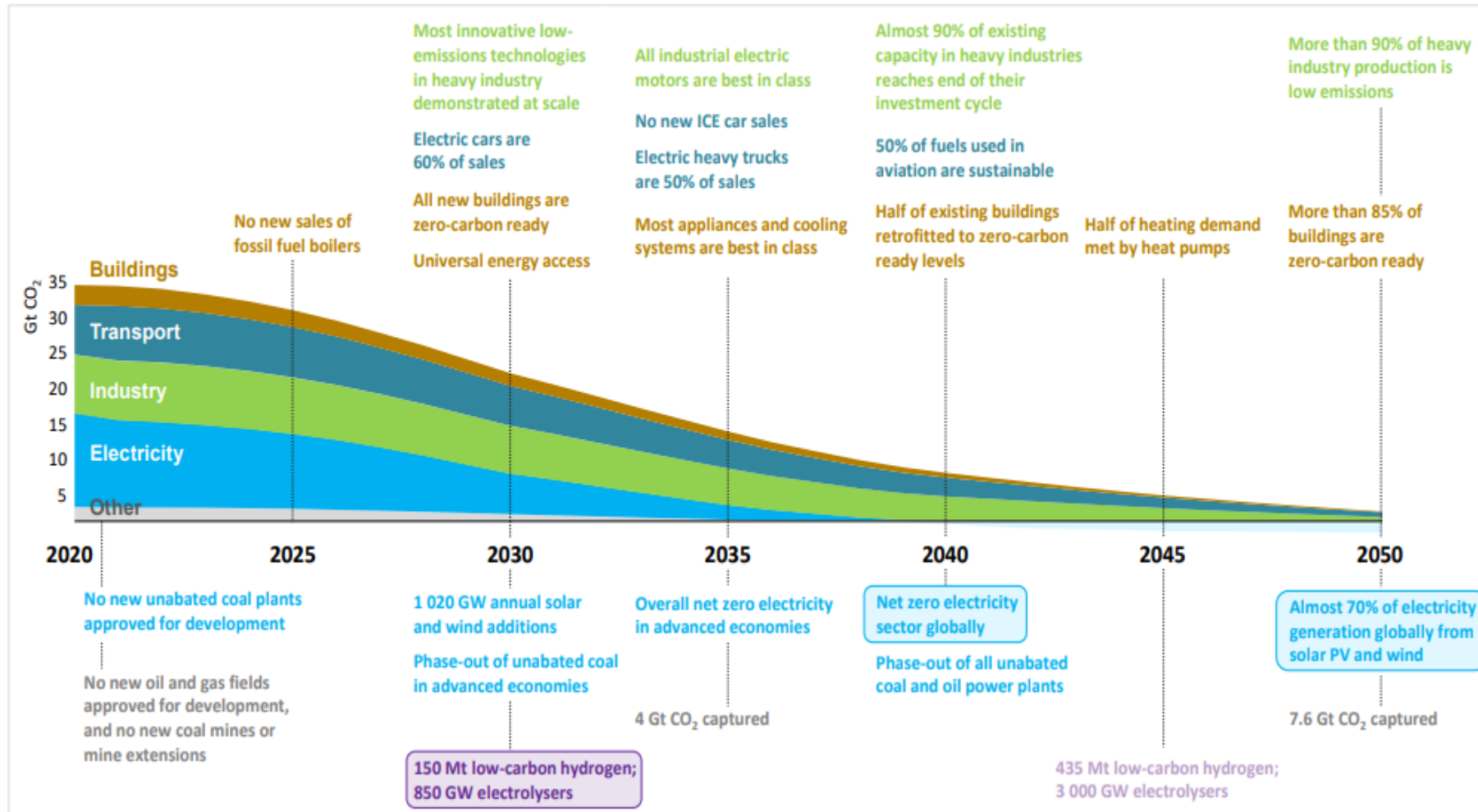
CO₂ concentration in the atmosphere led to significant change in earth climate and will continue to do so if left unsolved.

Pledges net zero emissions by 2050



Achieving net-zero emissions by 2050 would entail a fundamental transformation of the global economy.

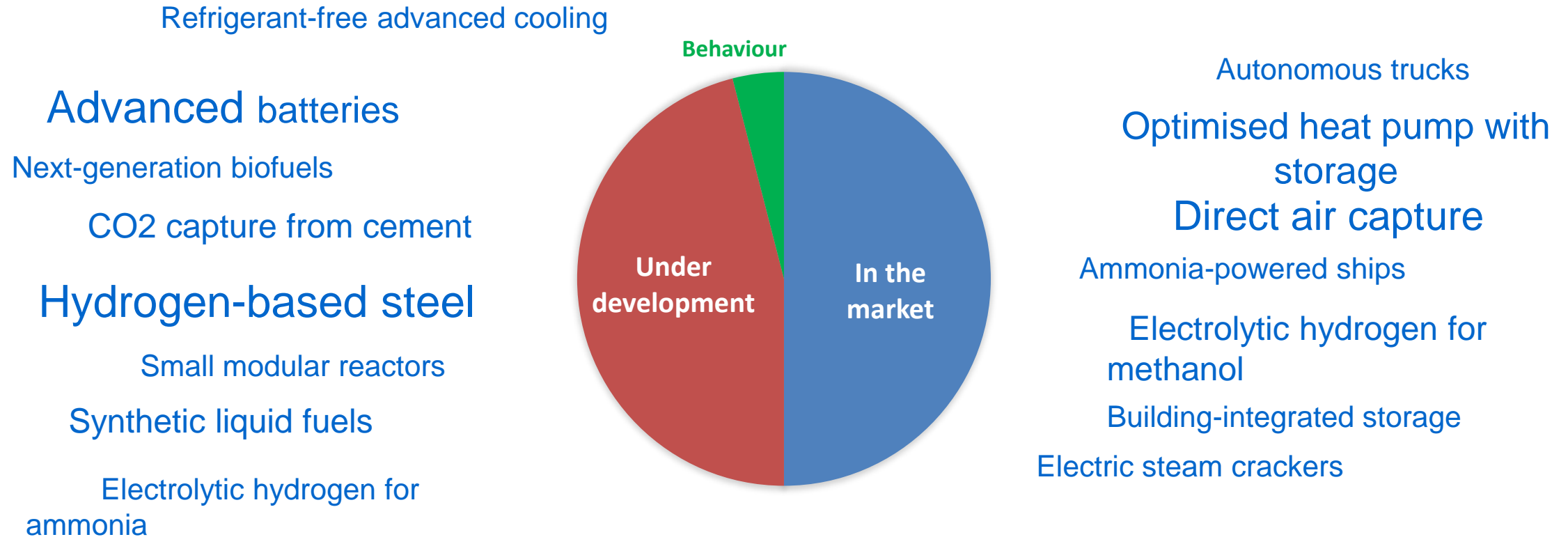
Carbon neutrality : a massive transformation



Source: IEA

Carbon neutrality will only be achieved with significant shifts in policies and technology deployment

CO2 savings by technology maturity in 2050



Most of the required technologies are available, but accelerated innovation will be critical

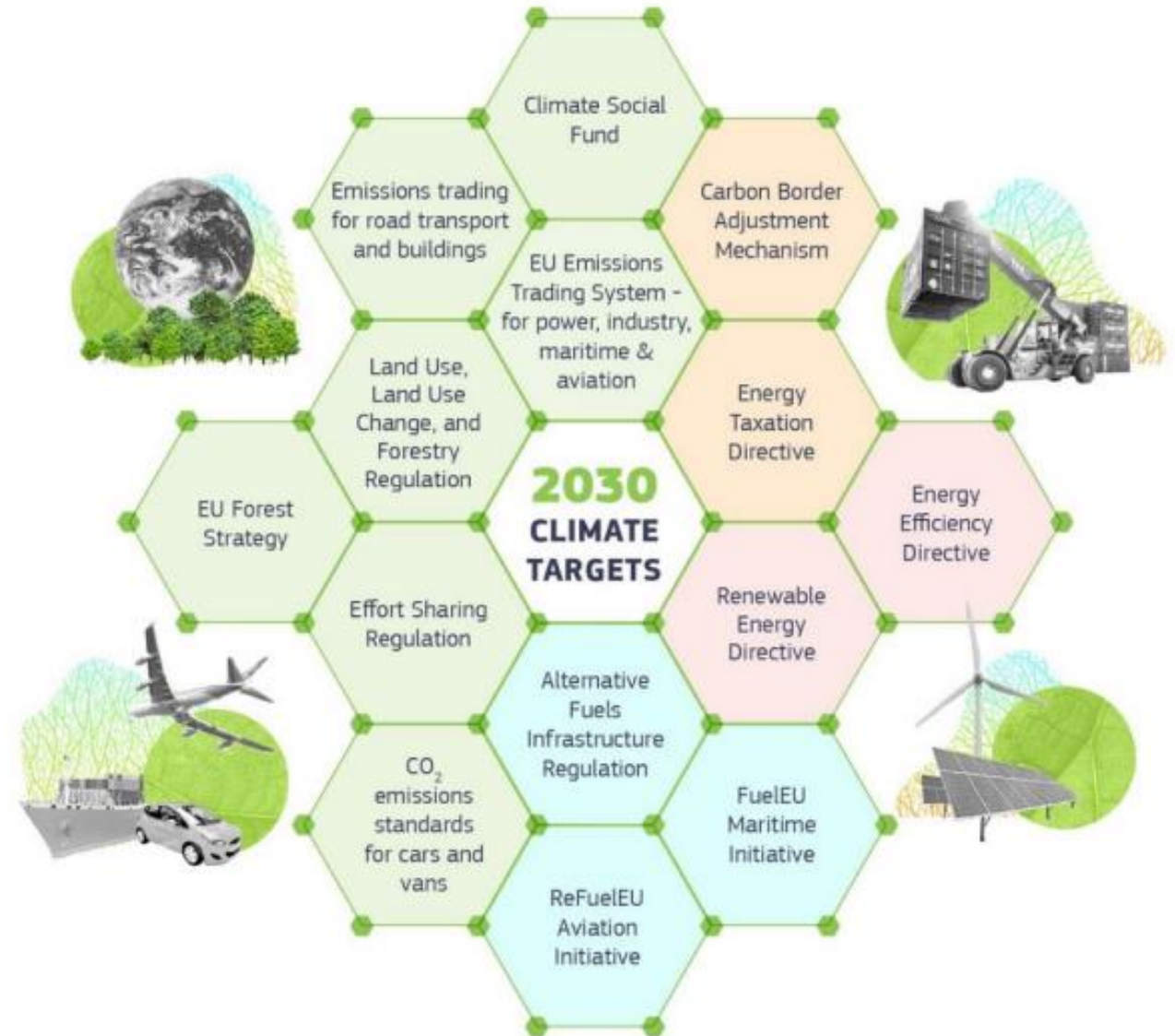
European Green Deal : Policy areas



Source : EU Commission, KPMG (2019)

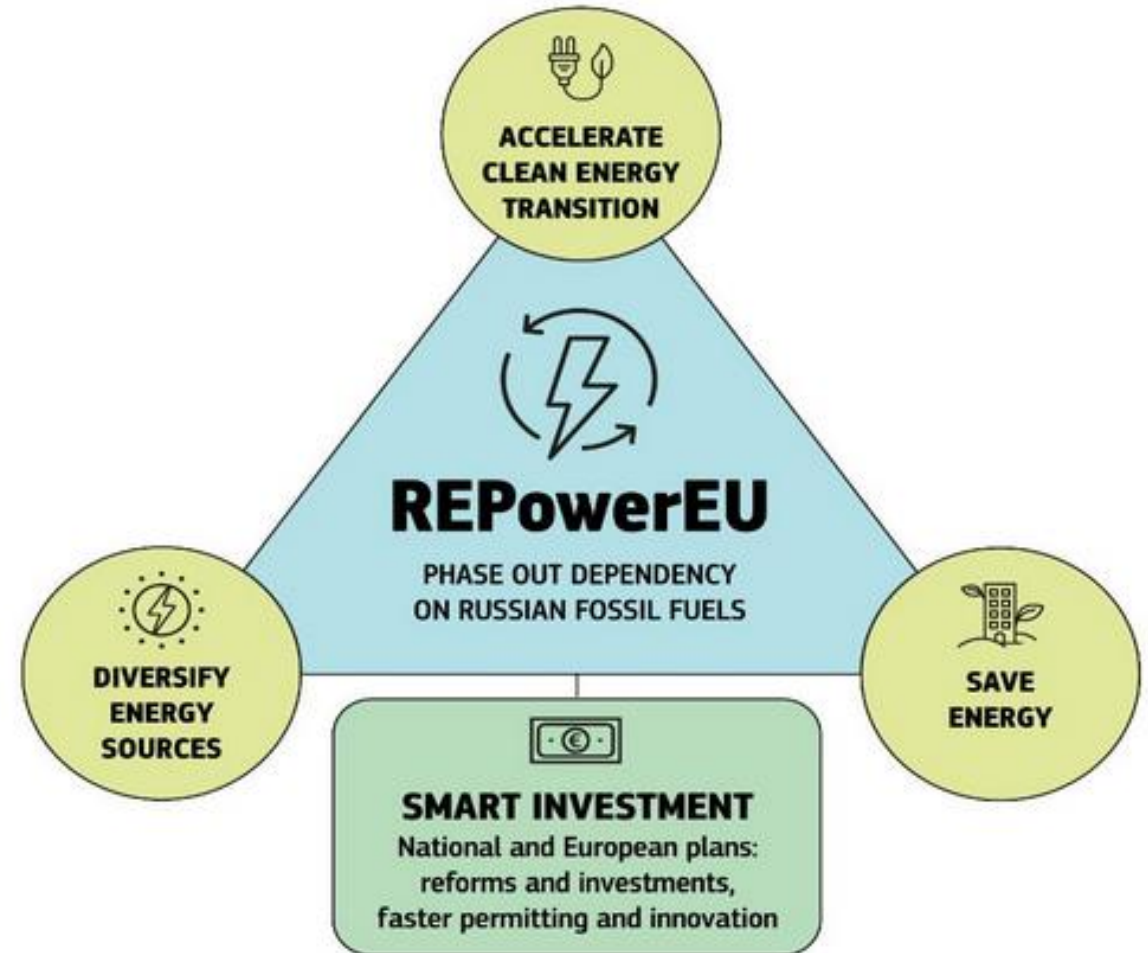
“Fit for 55” package : EU steps to achieve carbon neutrality by 2050

- European Commission adopted “Fit for 55”, The package aims to make the EU able to deliver the transformational change needed in a fair, cost efficient and competitive way.
- The set of policy proposals in “Fit for 55” aims at preparing the implementation of the European Green Deal.
 - *A minimum of 55 percent in cuts in **GHG** by 2030 ;*
 - *Above a 32% share of **renewable energy**, increased later to 40% ;*
 - *At least a 32.5% improvement in **energy efficiency** increased later to 36–39%*

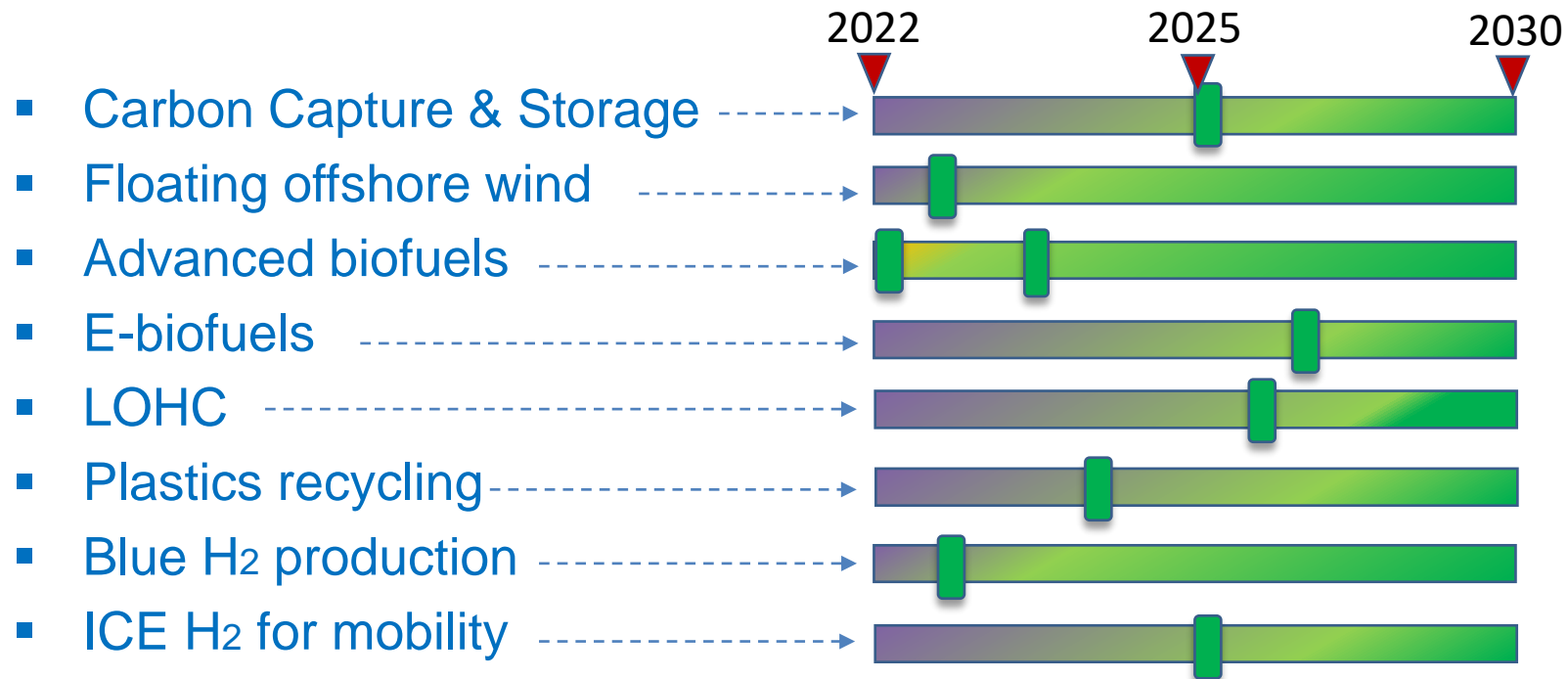


REPowerEU : a combination of short- and long-term measures

- Russia invasion of Ukraine and following threats to EU energy supplies acted as a wake up call up for diversification of origin of energy imports and substitution of fossil fuels (more renewables) ;
- EU will favour diversification strategies that encompass both gas and green hydrogen investments ;
- Green energy transition as (the only) way to simultaneously ensure sustainable, secure, and affordable energy ;
- Additional investments of €210 billion are needed between now and 2027 to phase out Russian fossil fuel imports ;
- EU aims at ensuring that energy transition is just and inclusive (a fund to support the most affected citizens and businesses).



IFPEN technologies : serving energy transition



***IFPEN on the market technologies,
and technologies to be brought to market before 2030***

Innovating for energy

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