



Horizon 2020 Work Programme for Research & Innovation 2018-2020

Remy Denos

New Energy Technologies and Clean Coal

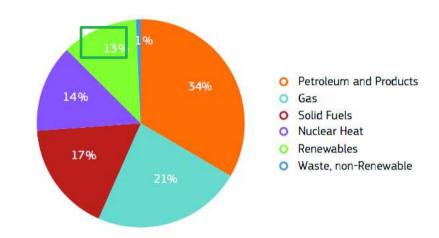




The European Union and Energy

TOTAL PRIMARY 2014: 1604.6 Mtoe

(Total Primary and Secondary 2014: 1605.9 Mtoe)



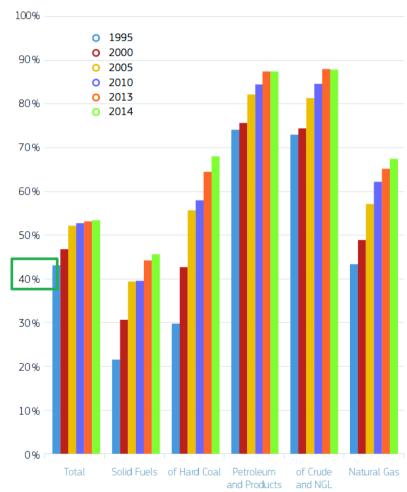
Pillars of EU energy policy:

- Sustainability / Renewable
- Security of supply
- Affordability

COP 21 Agreement: limiting the temperature increase to 1.5°C by 2100

Import Dependency



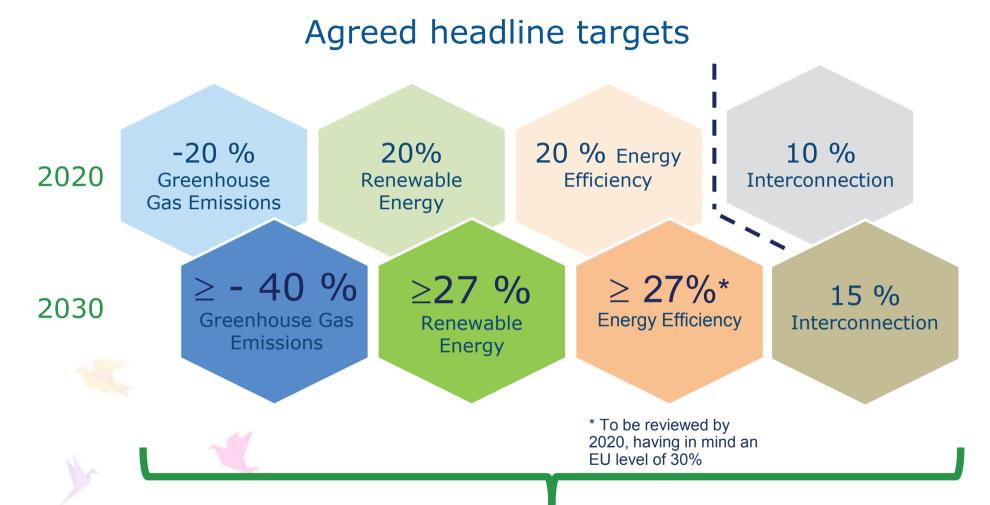


400 bEur per year (~1 bEur per day)





2030 Framework for Climate and Energy



New governance system + indicators



Clean Energy for All Europeans

- Clean Energy for All Europeans
- Electricity market and consumers
- Energy Efficiency Directive (EED)
- Energy Efficiency of Buildings (EPBD)
- Ecodesign
- Renewables & bioenergy sustainability (RED II)
- Energy Union Governance
- Energy prices and costs
- Energy funding
- Accelerating Clean Energy Innovation (ACEI)
- European strategy on cooperative, intelligent transport system





H2020 Challenge: Secure, clean and efficient energy system

Energy Efficiency









Products



Global Leadership in renewables

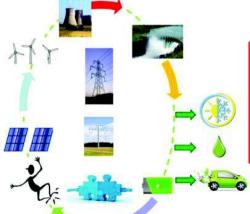


Smart and Clean Energy for Consumers



Smart Cities and Communities





Smart Citizen
Centered Energy
system



Near-zero CO2
emission
from fossil fuel / carbon
intensive industries



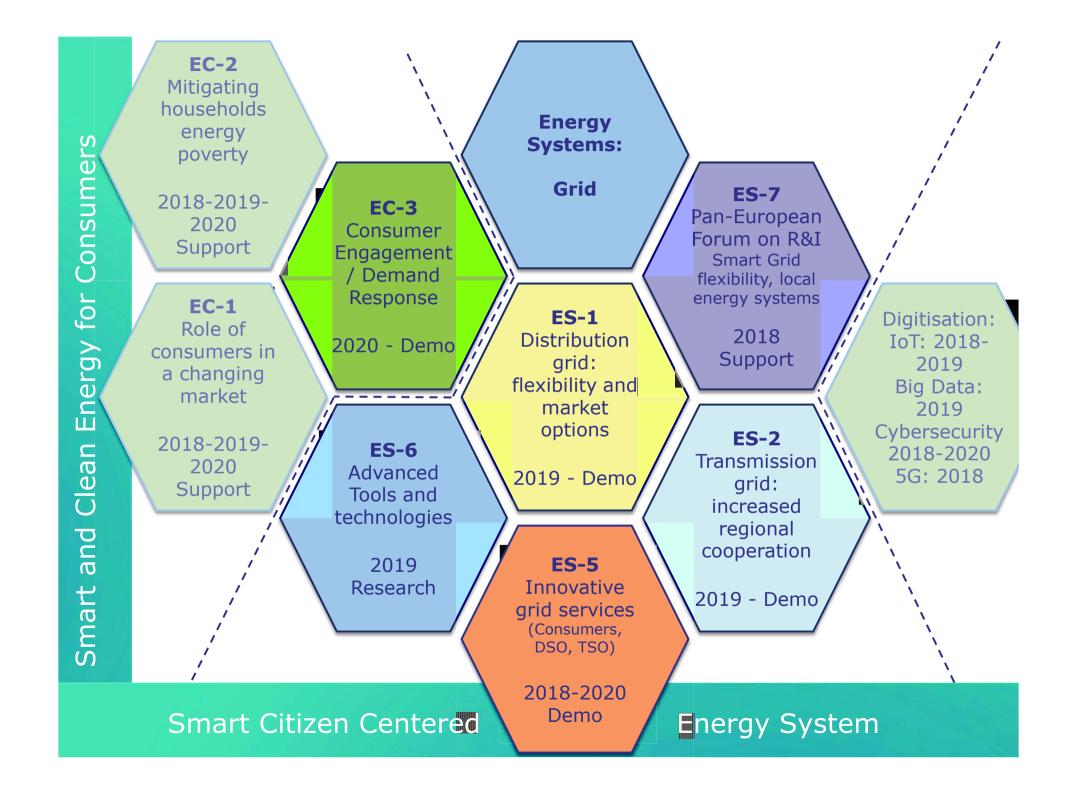
European Commission

Overall Indicative budget for 2017 ~ 540 MEur

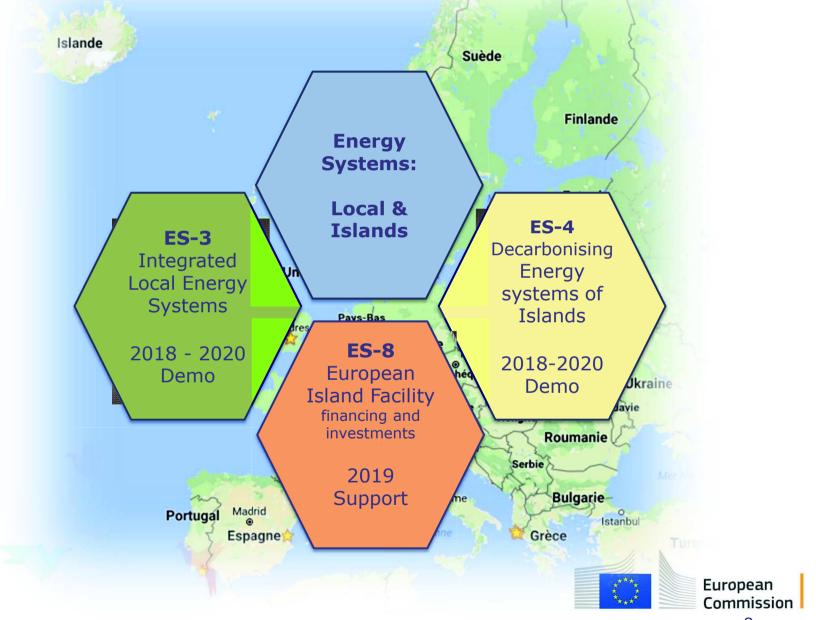
Electricity system will be central

- Today, 22% of our energy is consumed under the form of electricity
- 30% of electricity is produced from renewables,
 11% from wind and solar
- Electric vehicles have the potential to decarbonise the transport sector
- Progressively, buildings will require less and less energy for heating and cooling
- Heat pumps / power to heat have the potential to decarbonise the heating sector





Smart Citizen Centered Energy System







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