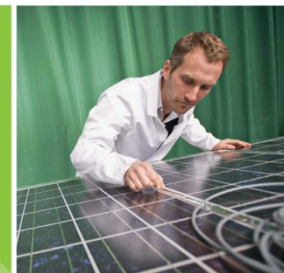




European  
Commission



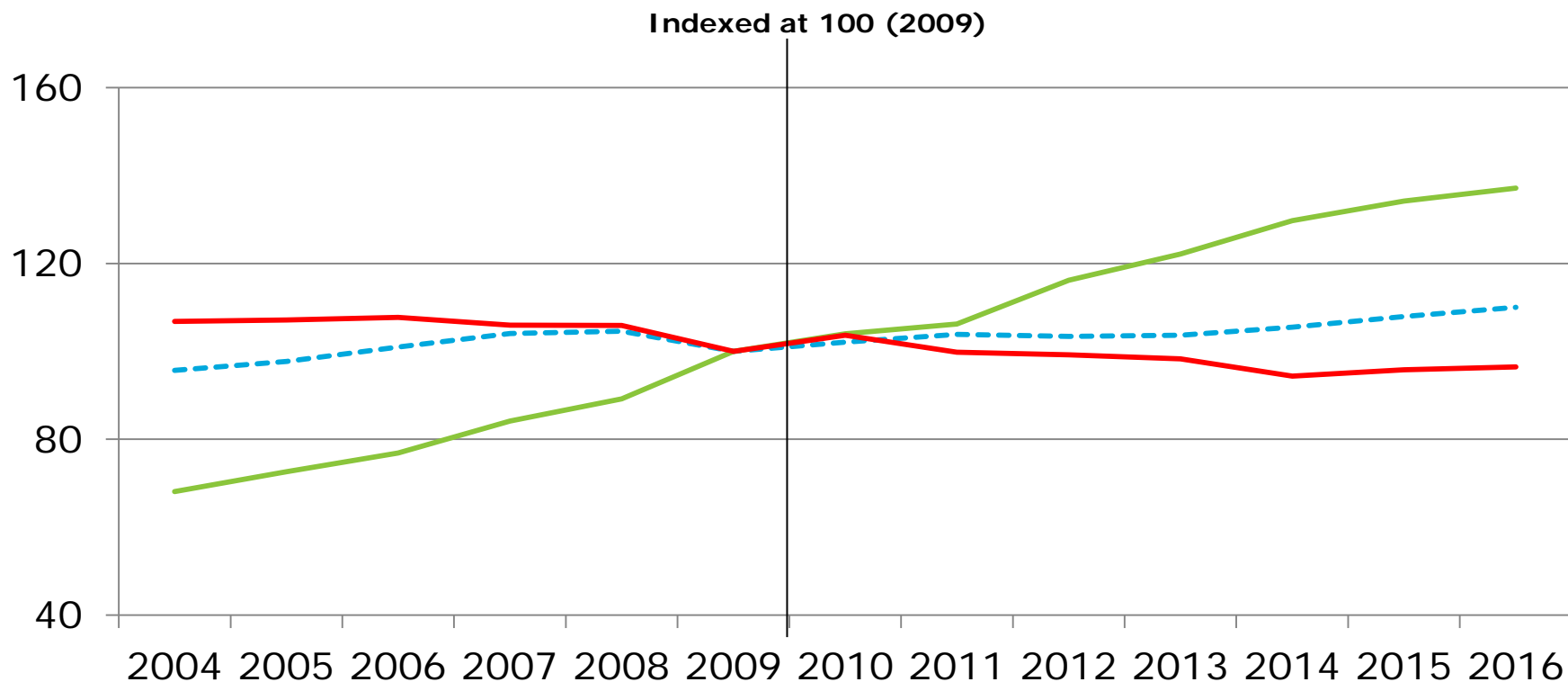
# Energy efficiency and renewable energy: The EU Experience

Impact of Energy Efficiency and Renewable Energy Policies,  
Paris, Tuesday 27 March 2018

European Commission – DG ENERGY

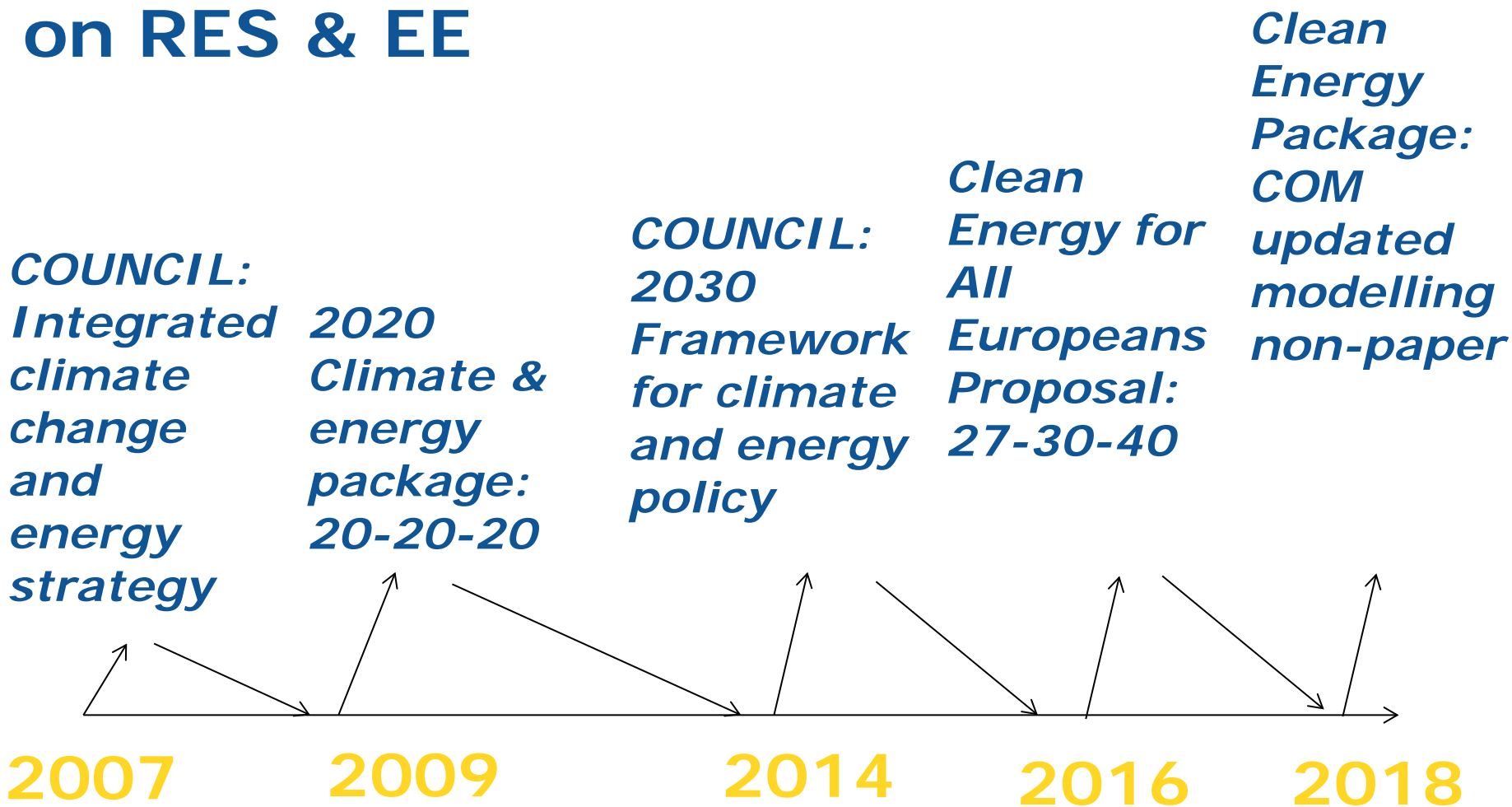


# EU historical trends: energy efficiency and renewable energy



- GDP2010 [Mrd EUR at 2010 exchange rates]
- Overall RES share (%)
- Primary Energy Consumption (Mtoe)

# EU joint policy making process on RES & EE



# Coherent policy proposal for RES & EE for 2020-2030

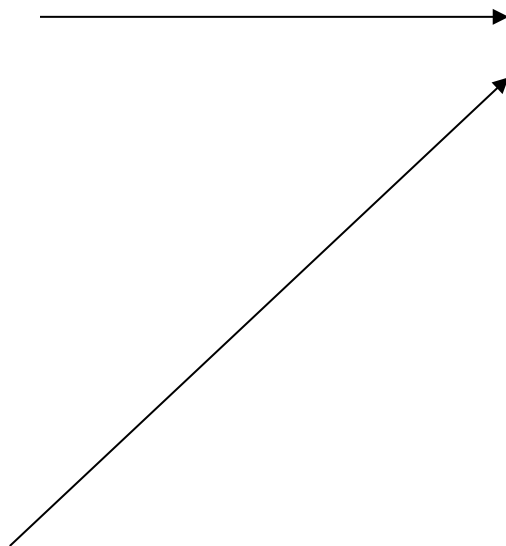
## THE REGULATORY FRAMEWORK FOR POST – 2020



# Integrated approach for RES & EE planning and reporting

National  
Renewable  
Energy  
Action Plans  
2009-2020

National  
Energy  
Efficiency  
Action Plans  
2009-2020



National Integrated Energy and  
Climate Plans (2021 to 2030)

National progress reports

European Commission monitoring

# Energy efficiency and renewable energy in buildings

*Improving the energy performance means both more energy efficiency and renewable solutions*



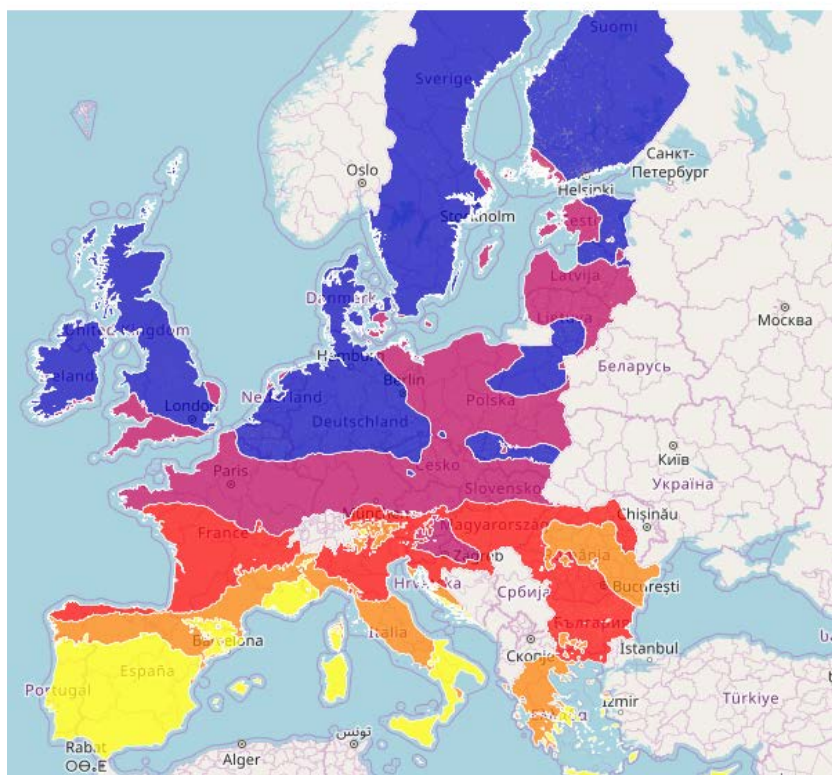
## EPBD: reduction of energy demand & use of RES

- calculation of cost-optimal levels of minimum requirements
- definition NZEB
- calculation of energy performance

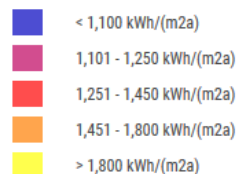
## Decarbonisation of the buildings stock:

- building renovation
- on-building renewable energy;
- renewable energy from the system

# Energy efficiency and renewable energy in district heating systems



Solar energy potential  
Global irradiation on an optimally inclined surface.



- Improve energy efficiency of DHC
- Increase access of renewable energy to DHC
- Support decision tools to invest into energy efficiency measures and increase the use of locally available residual waste and renewable energy sources

# Electric vehicles

*increasing energy savings and benefiting from renewable energy*



EVs are more energy efficient, generate lower CO2 emissions and could supply flexibility to a system with a large share of RES

## **Policies supporting recharging infrastructure and EV:**

- EPBD - targeted requirements to support the deployment of recharging infrastructure in car parks of residential and non-residential buildings.
- Directive on the deployment of alternative fuels infrastructure and the clean mobility package
- Research - European Interoperability Centre for Electric Vehicles and Smart Grids