

Beyond the 2020 horizon:

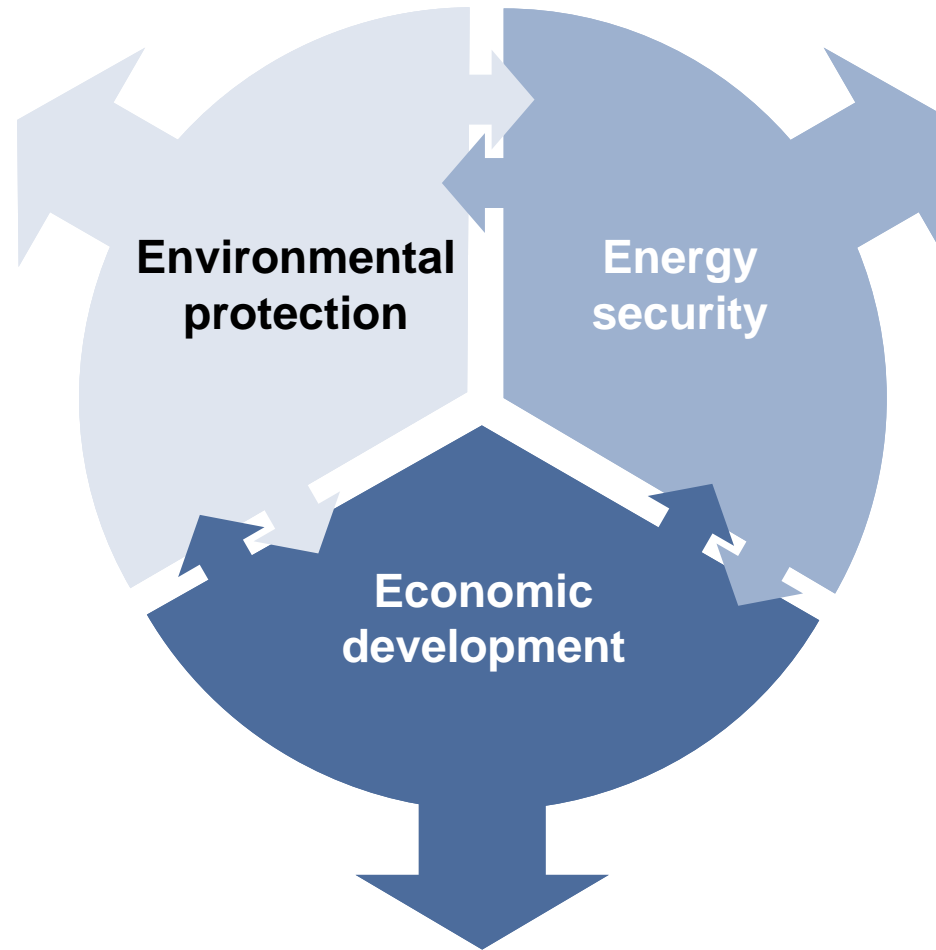
Moving Towards a Common EU energy policy

Giovanni Brianza – 10 June 2013



3 targets: need to find the right balance

Emission reduction,
landscape protection,
energy efficiency

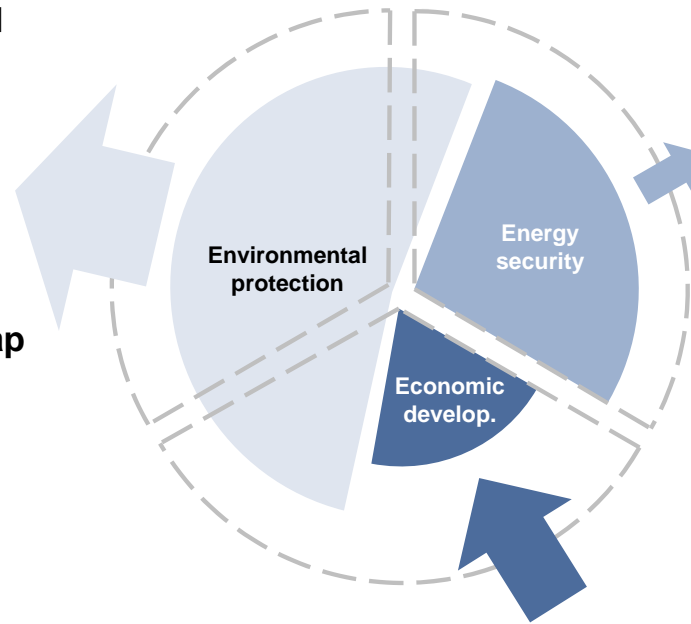


Energy independence,
appropriate
infrastructures, public
safety considerations

Encouraging growth, competitiveness, affordability,
industrial innovation and development

Shortcoming of current national and EU policies

- **20-20-20 targets will likely be achieved with current measures**
 - But major role played by crisis
- **Energy efficiency is progressively contributing to reach the targets**
- **CO₂ price drop and availability of cheap coal contributed to the resurgence of coal generation**

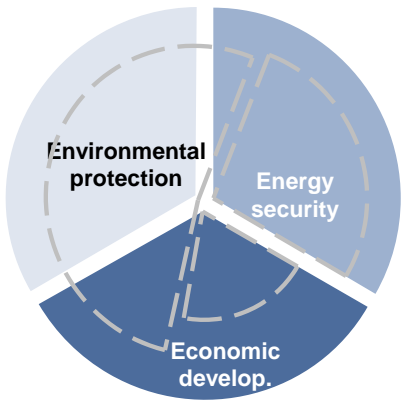


- **RES development and gas supply infrastructures contributed to increase EU energy independence**

- **RES incentives induced relevant additional costs**
 - Mainly borne by final consumers (industrials and retail)
- **Early RES adoption prevented some countries (e.g. Italy, ...) to benefit from economies of experience (high capex)**
- **CO₂ penalizes more polluting technologies rather than reducing the cost of less polluting (e.g. gas)**
- **High energy prices contributed to carbon leakage**

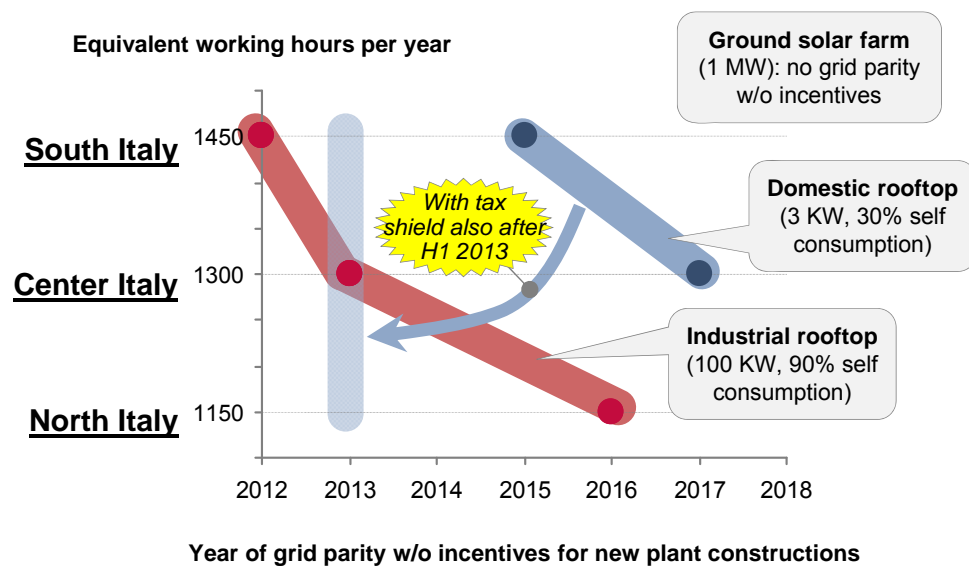
Working on EU competitiveness is crucial

Renewables to remain one of the pillars of EU energy policies

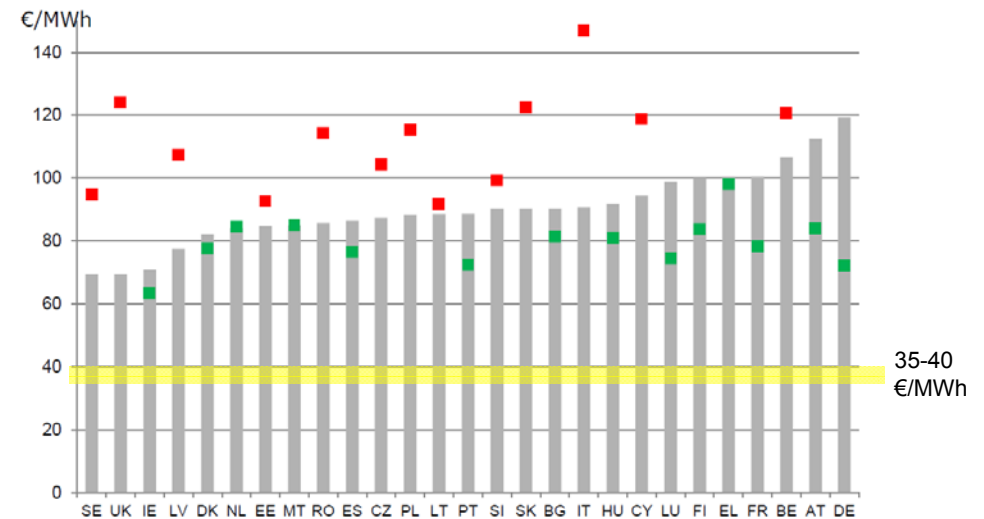


- **EU is at the point of no return: RES could turn from subsidized to merchant business**
 - PV is already at grid parity in some EU markets (for ex. Italy)
 - Wind as new “run of river”, provided that the full technical life is exploited
 - Further liabilities charged on RES will lead to further subsidies
 - Scale effects and technology breakthroughs will reduce installation costs
- **Still need for specific RES targets?**
 - Market equilibrium vs. the “optimal” mix vs. cost efficiency

PV: year of grid parity w/o incentives

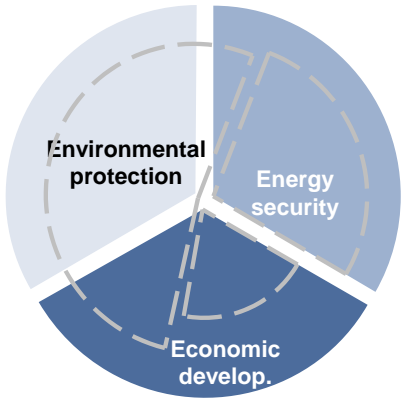


On-shore wind



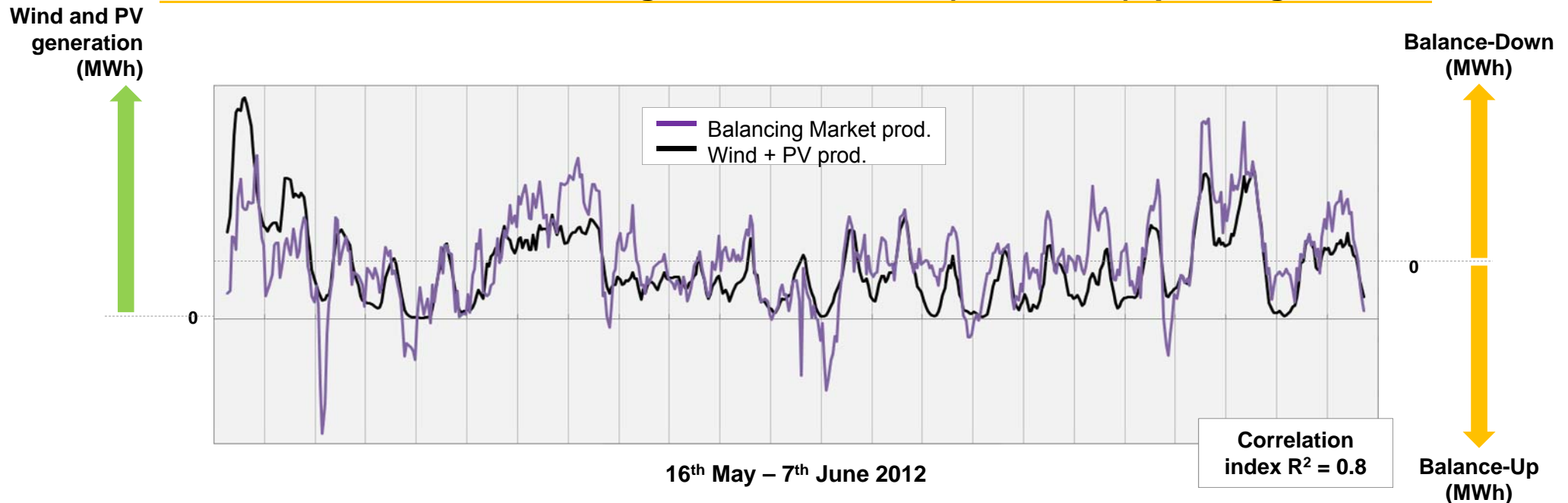
Need to invest in technology innovation

CCGTs – RES complementarity is a good alternative



- **Volatility generated by RES creates business opportunities for mid-merit players, that have been hit until now**
 - CCGTs will hardly produce volumes, but may effectively compensate RES volatility (ancillary and balancing markets)
- **CCGTs – RES complementarity is a good alternative**
 - But gas vs. coal generation competitiveness to be tackled
 - May power to gas be an opportunity?

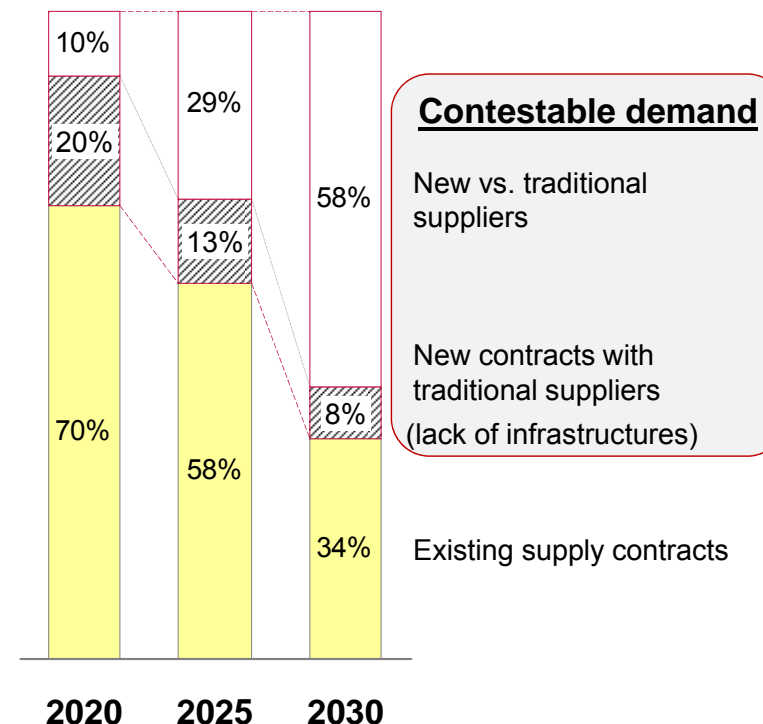
Correlation between Balancing Market and RES (wind + PV) power generation



CCGT competitiveness mainly depends on supply

- In a RES – CCGT target model, it is essential to improve gas competitiveness, being CCGTs the price setters
- 3 main levers to improve gas competitiveness:
 - 1 **Access to competitive gas sources**
 - Indigenous production (conventional and non)
 - Captive suppliers?
 - 2 **Suppliers diversification**
 - Existing suppliers will play a major role in any scenario
 - Opportunities to reduce the dependency on historical gas suppliers arise from the progressive expiry of current LT gas supply contracts
 - 3 **Adequate level of infrastructures is the enabler for supply diversification**
 - While LNG infrastructures play a key role in supply diversification and flexibilization (no more “point to point”), long term joint initiatives with historical partners / suppliers are needed to ensure security of supply

EU import volumes



Need to develop a long term policy and regulatory framework at the EU level