



The Role of Cogeneration in Reducing Energy Consumption

*COGEN Europe, CIAA, CEFIC and CEPI
at EUSEW 2011*

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Climate Action Network Europe

14 April 2011, Brussels

Who is CAN-Europe?



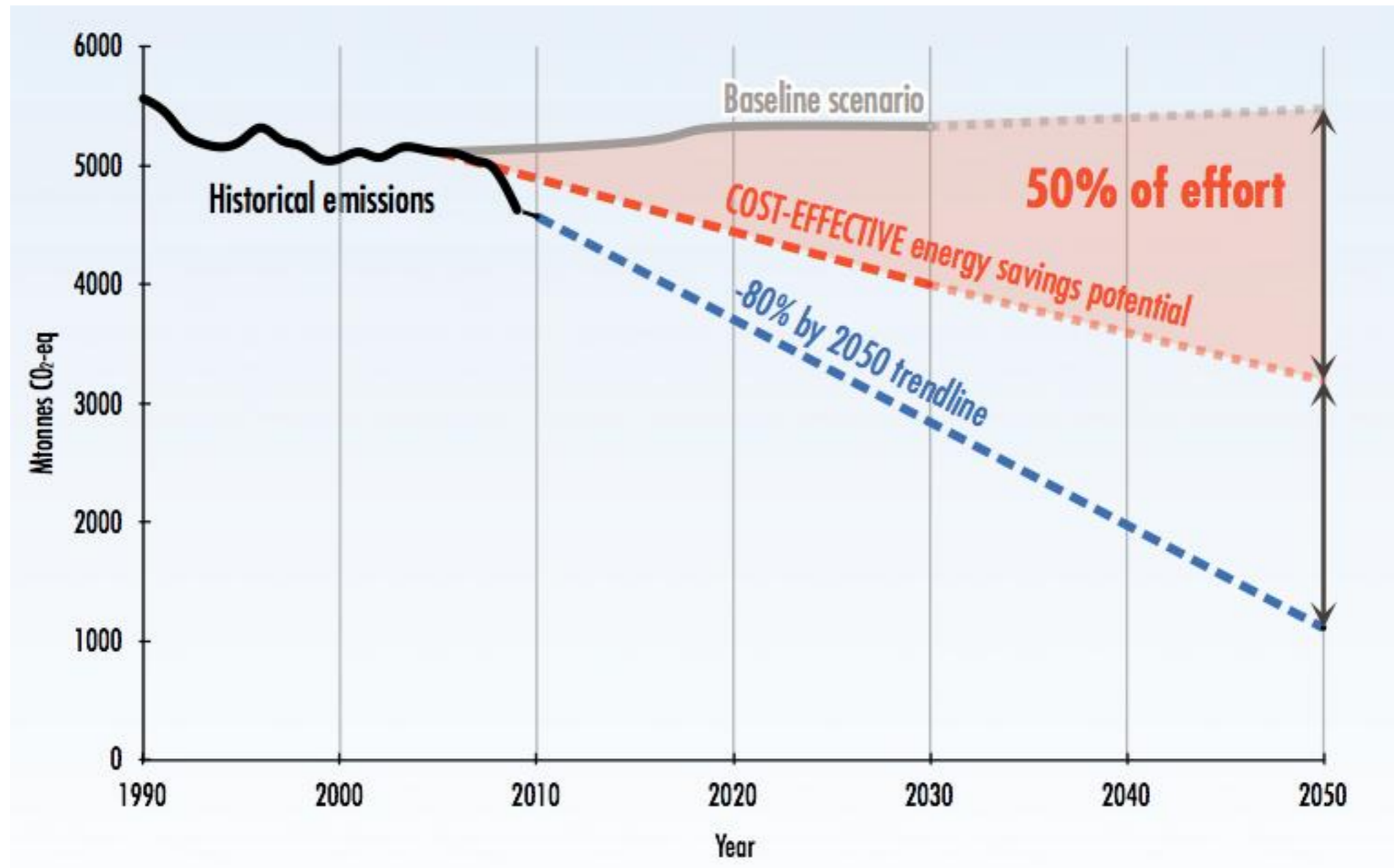


‘CAN’s mission is to support and empower civil society organisations to influence the design and development of an effective global strategy to reduce greenhouse gas emissions and ensure its implementation at international, national and local levels in the promotion of equity and sustainable development.”



*“The Coalition’s purpose is to make the case for a European energy policy that places a **much greater, more meaningful emphasis on energy efficiency and savings.** In particular it is arguing for the current 20% energy efficiency target to be binding.”*

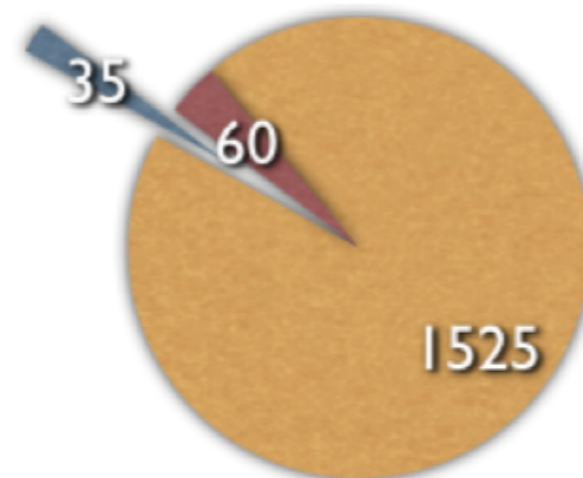
Cost-effective energy savings measures show the potential to achieve a significant part of both the 2020 and the 2050 climate targets of the EU



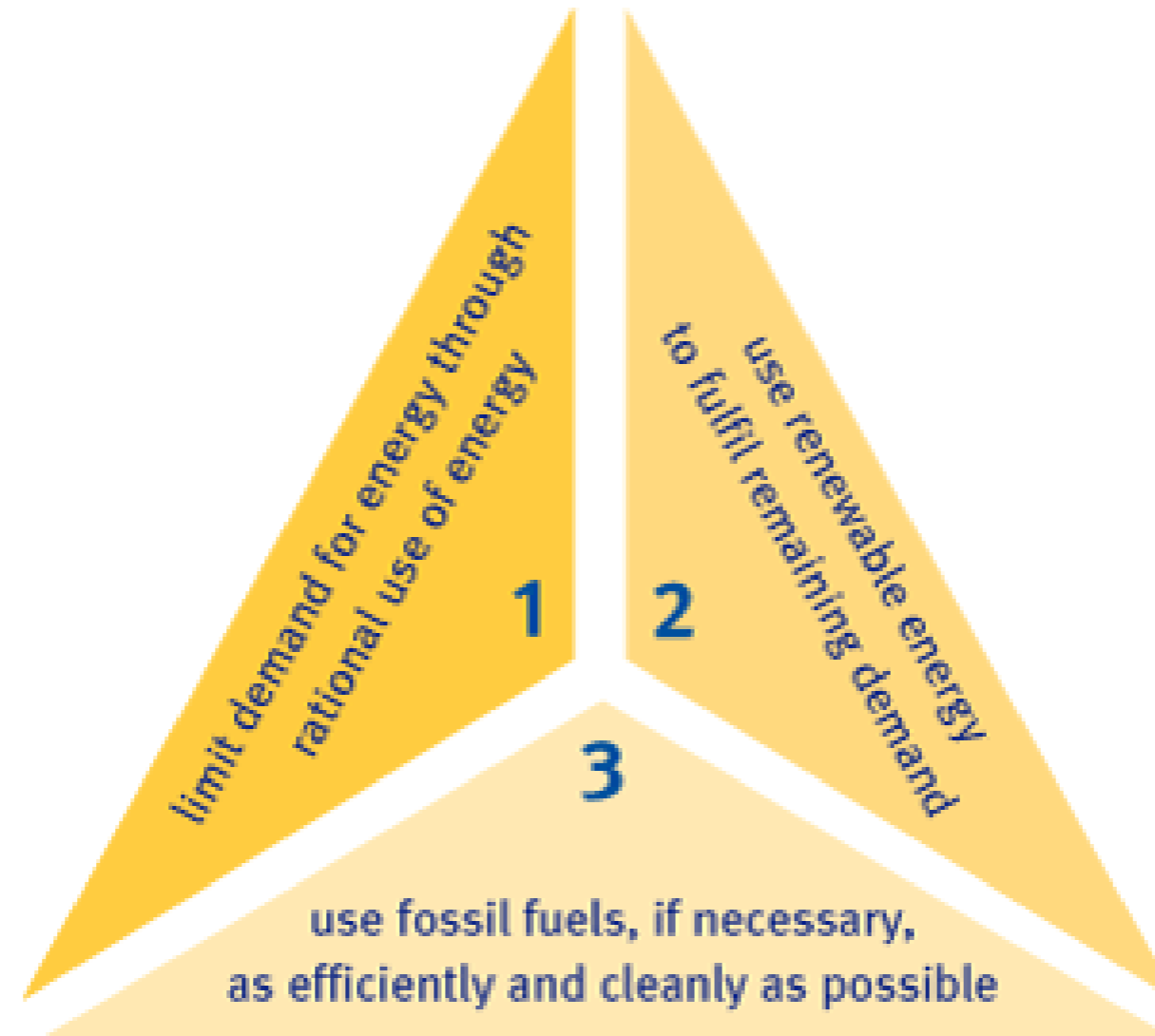
CHP: cutting waste!

- Get the most out of the fuel you burn - use heat that would otherwise be dumped
- Intelligent, decentralised siting of plants reduces transmission losses
- ==>
- *Economic potential to contribute **35 Mtoe** of energy savings to EU target of 368 Mtoe by 2020*

● CHP ● Renewables
● End uses



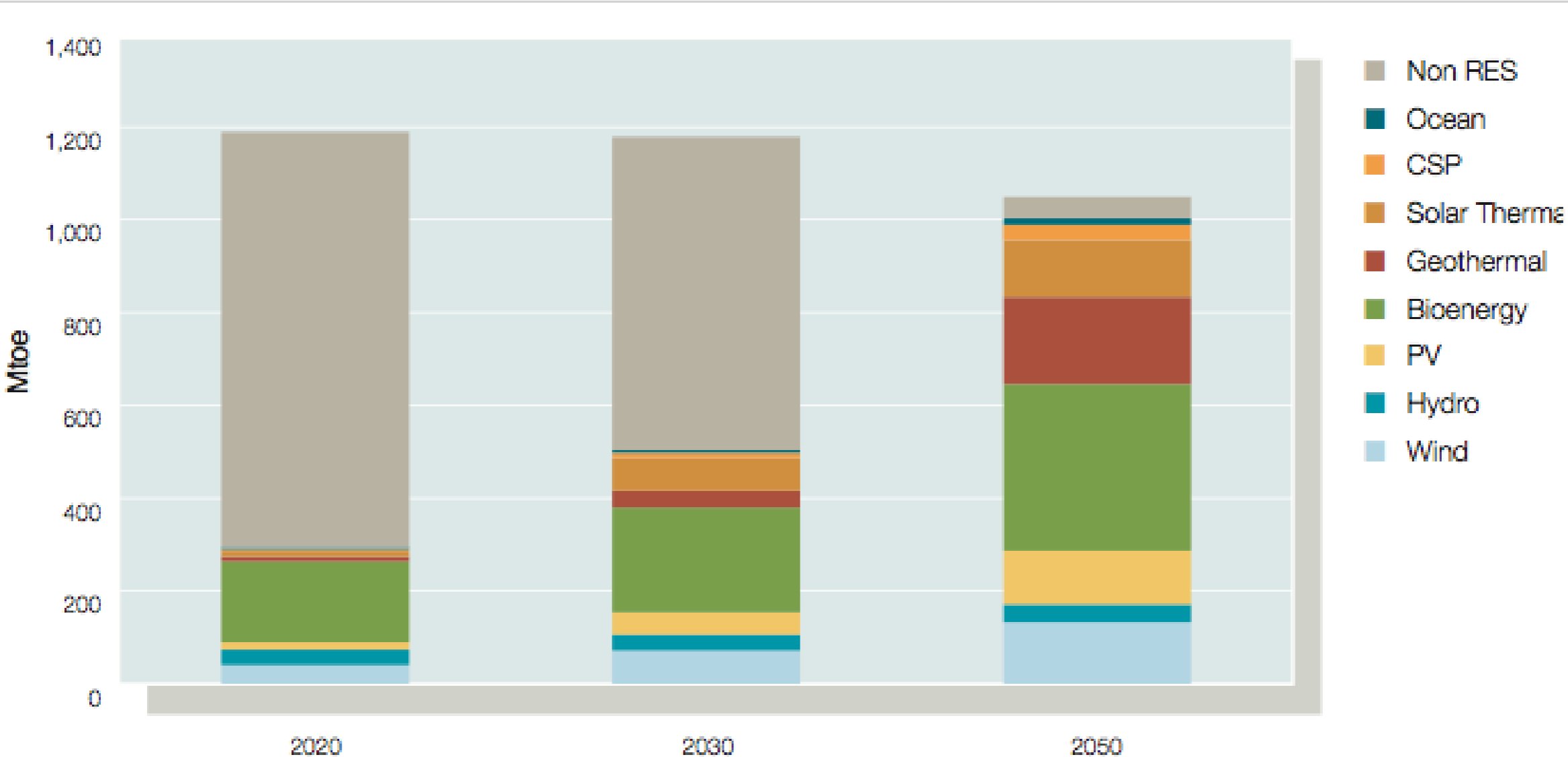
The Trias Energetica



Trias Energetica

2050: A Renewable Future

Figure 1 Contribution of Renewable Energy Technologies to Final Energy Consumption



Source: EREC

What is the Long Term Role for CHP (1)

- We need to cut GHG emissions by 80% by 2050
- This means heat and power must decarbonise by at least 90%
- **Standard gas CHP does not fit well in this system - risk of lock-in?**

What is the Long Term Role for CHP? (2)

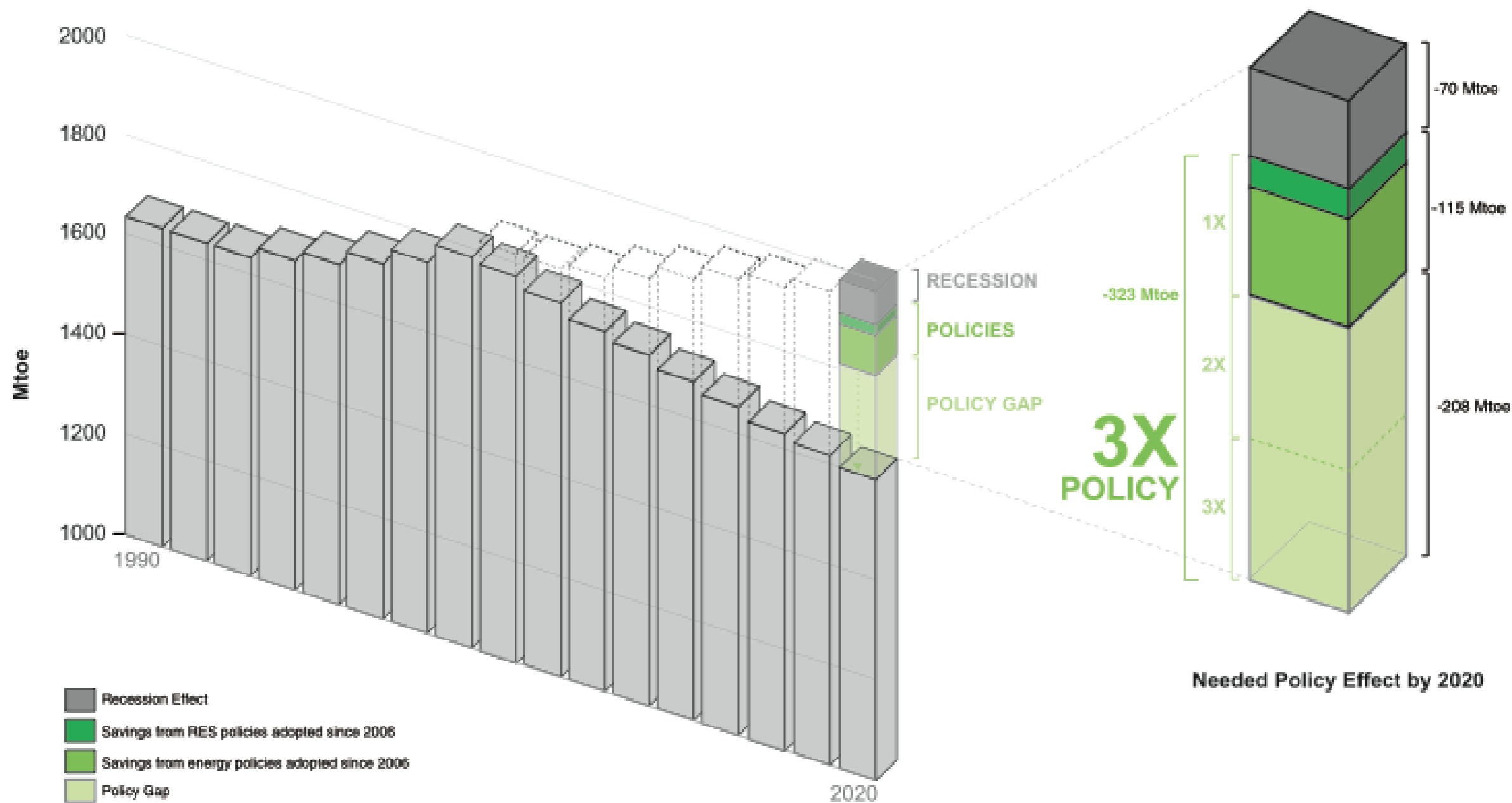
- **District Heating** - gives flexibility
- **Low Carbon Fuels** - sustainable biomass, heat geothermal, ground source heat pumps...?
- Maximise **grid balancing function** for a power system with high levels of renewables

Policy Implications

- Consider the place of CHP in the **long-term, 2050** framework
- Ensure CHP is **environmentally sound** - *no oil / coal / waste / peat / unsustainable biomass*
- Design CHP to be **flexible** - *so as to respond to the availability (or not) of wind and solar power, and to changes in demand*
- Also: ensure the new **Directive** is properly structured *so as to give proper dedicated attention to end use, CHP and transformation*

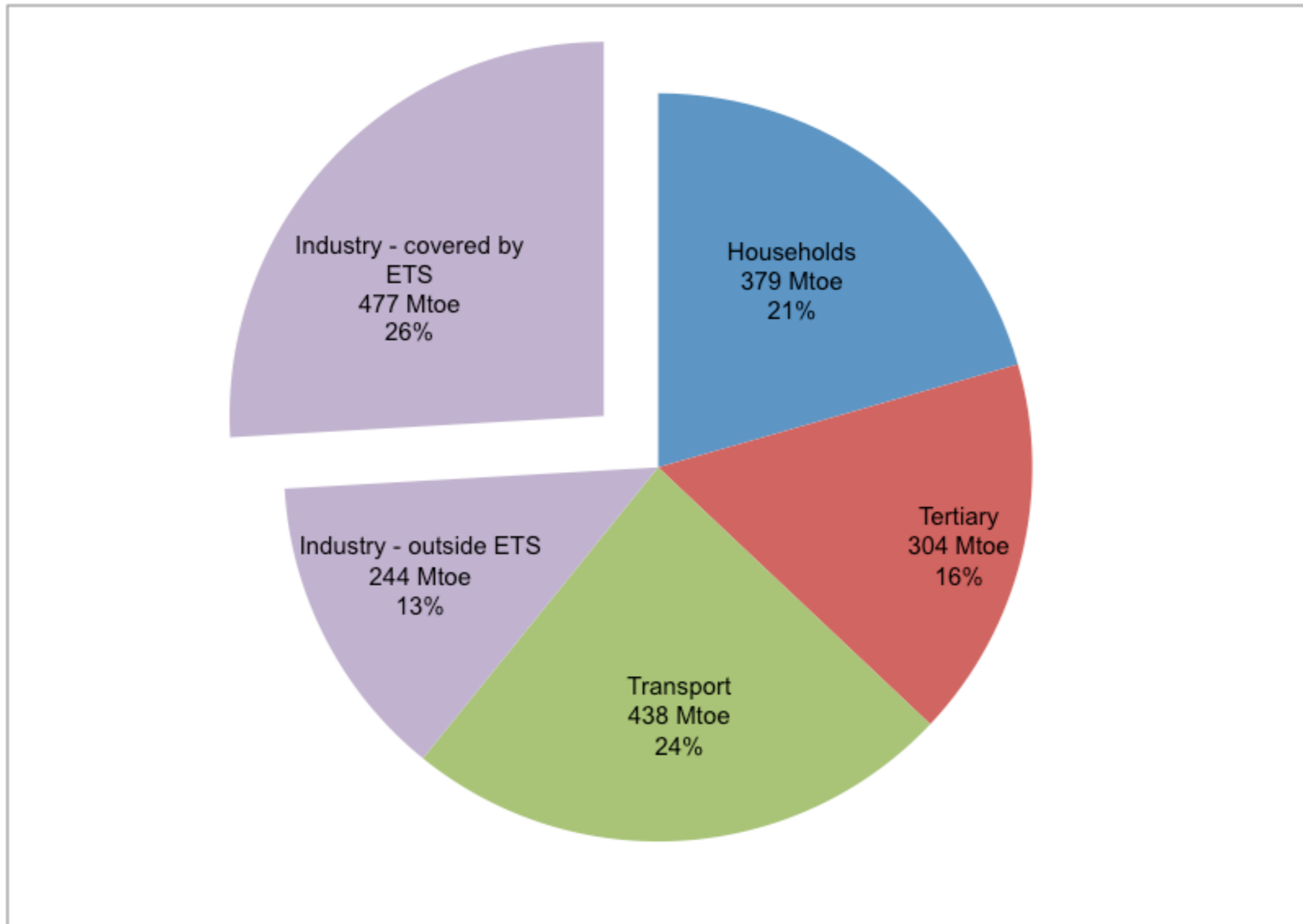
- Thank you!

A Tripling of Policy Impact is required to meet the EU's 20% Energy Savings Target



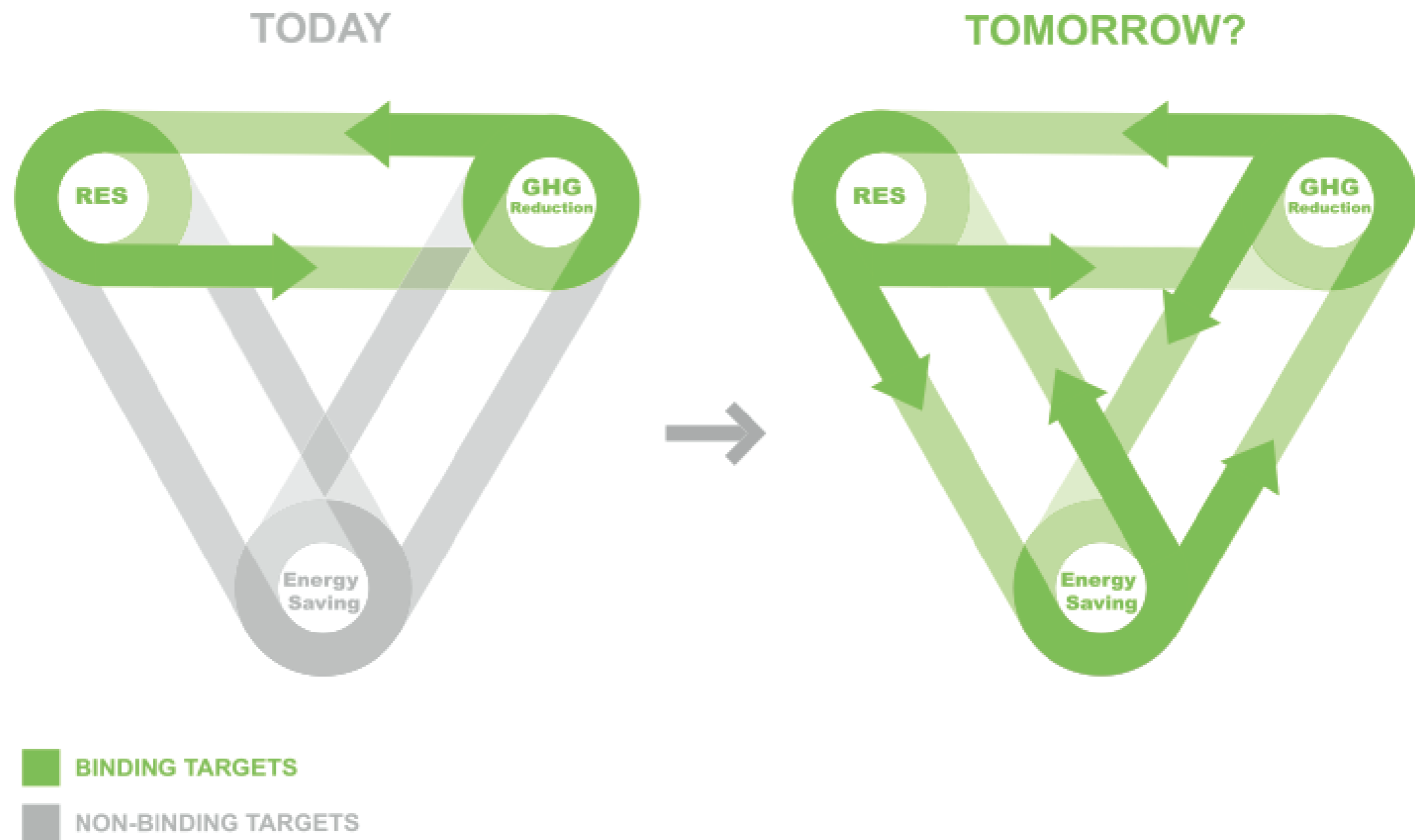
Source: Ecofys and Fraunhofer ISI

EU Energy End Use in Primary Energy in 2020 (PRIMES 2007)



Commitment to Energy Savings is essential to meet EU Climate & Energy Goals

Integrated policies are an effective way to reach 80-95% decarbonisation



Source: Energy Savings 2020, ECORYS/Transtechnica, September 2019

- SSource