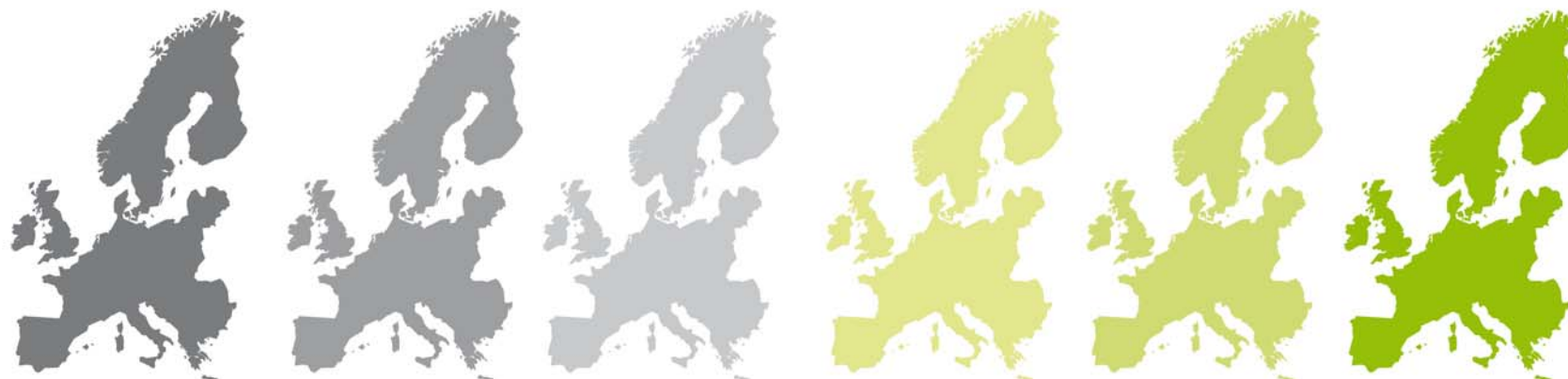


ENERGY SAVINGS 2020

HOW TO TRIPLE THE IMPACT

OF **ENERGY SAVING** POLICIES IN EUROPE

3X



An Ecofys & Fraunhofer ISI study

Commissioned by the European Climate Foundation and the Regulatory Assistance Project

15 September 2010

Why Energy Savings? 20% by 2020

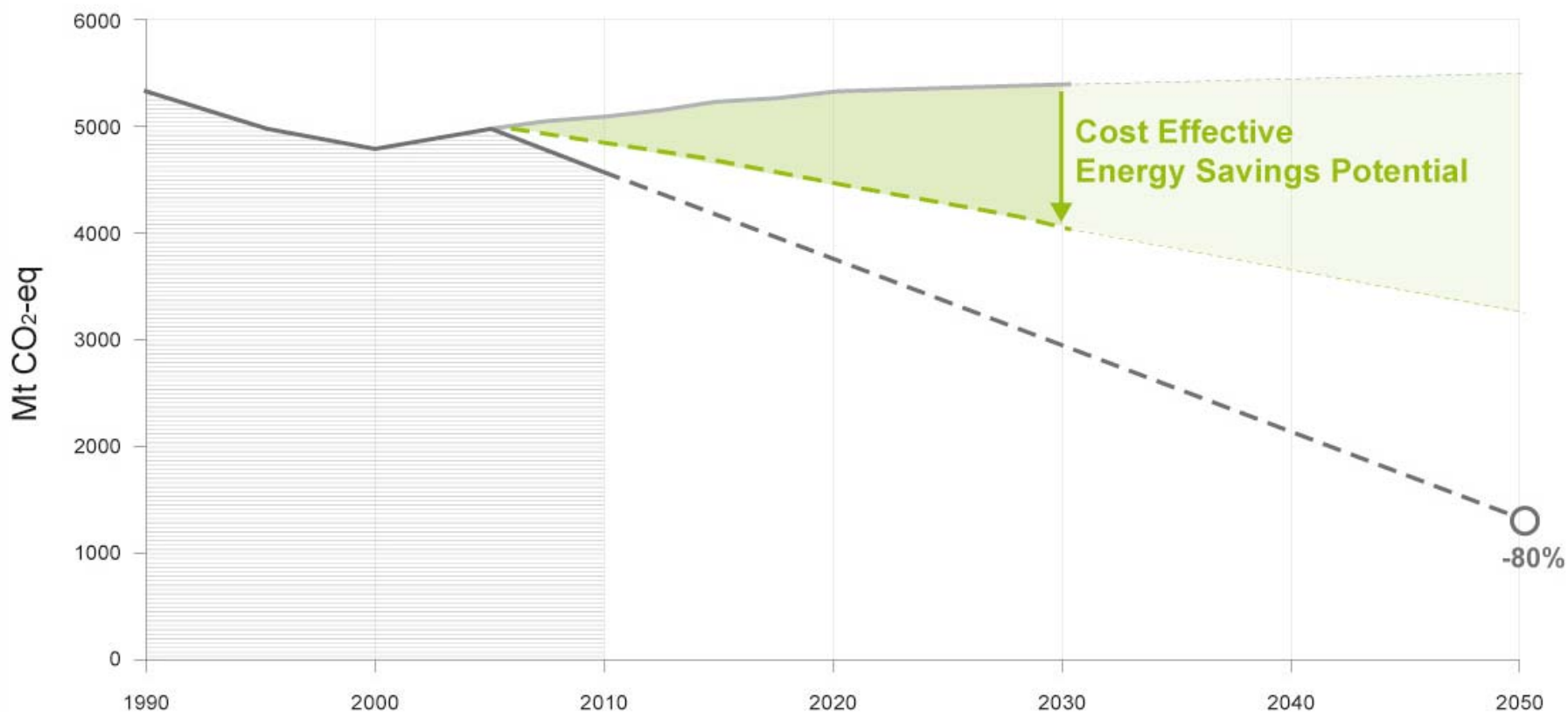
Benefits:

- Cutting energy bills by €78 billion for European consumers and businesses annually by 2020
- Creates local jobs (over one million new jobs by 2020)
- Reduces EU energy import dependency
- Contributes to the achievement of the 20% RES target
- Puts the EU on track to achieve 80-95% GHG reduction by 2050 at lowest costs



Why Energy Savings?

Energy Savings have the potential to cover half the EU's 80% GHG emissions reductions target by 2050



GHG EMISSIONS EU27

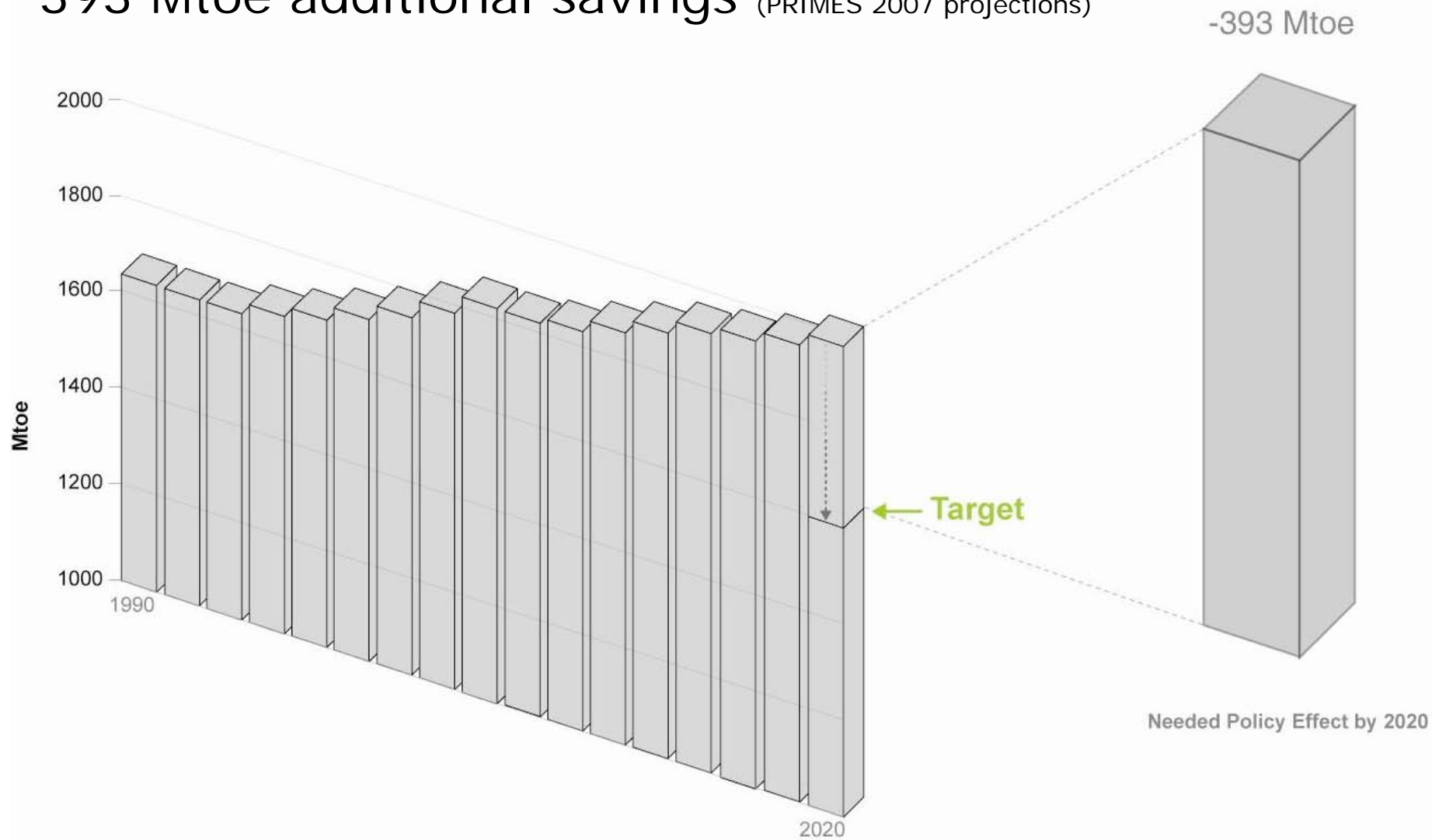
— BASELINE

- - - Energy Saving Potential

- - - Linear Trajectory to 2050 Target

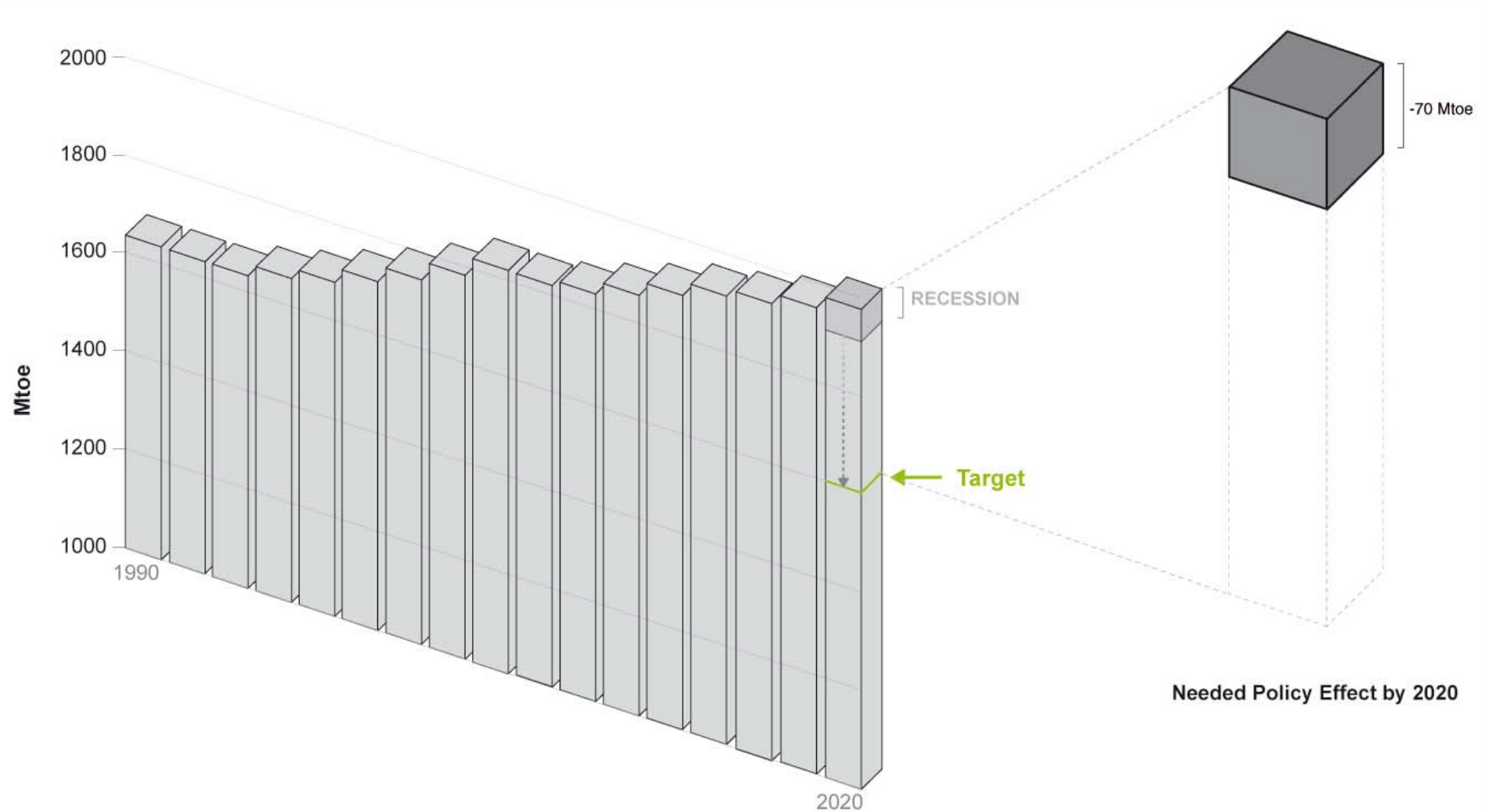
The 20% energy savings target

393 Mtoe additional savings (PRIMES 2007 projections)



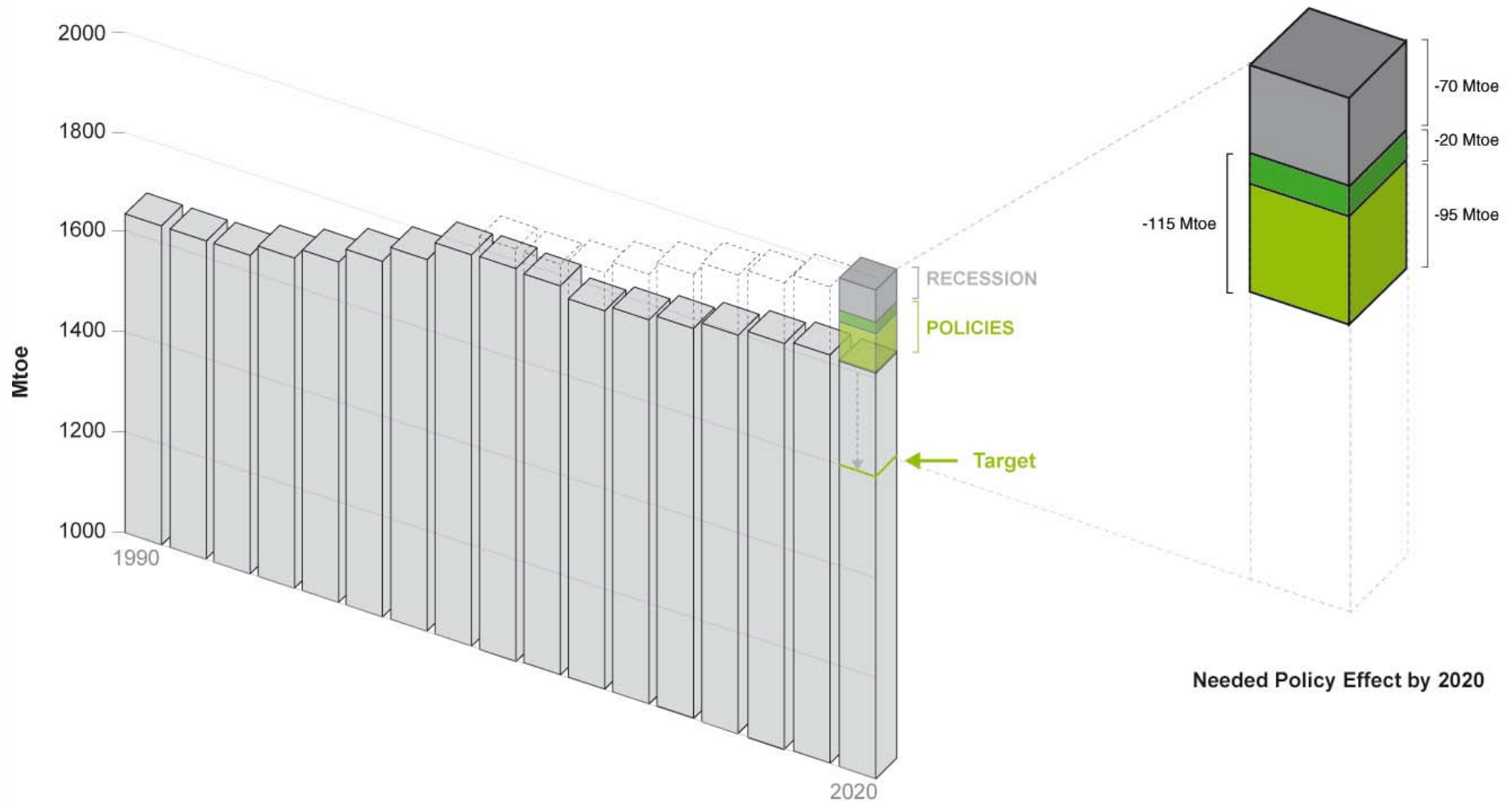
Identifying the policy gap

Impact of the recession



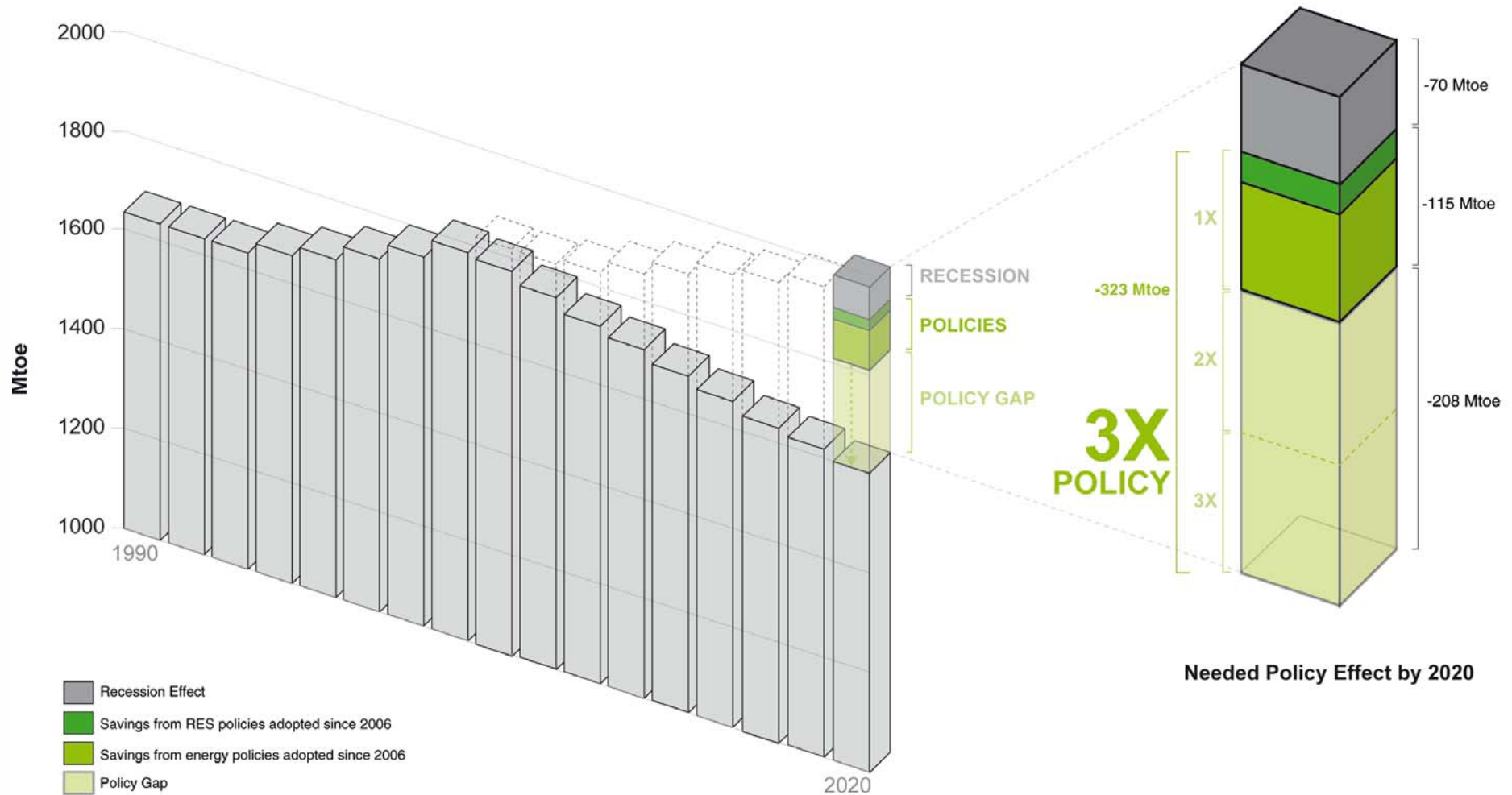
Identifying the policy gap

Impact of existing policies



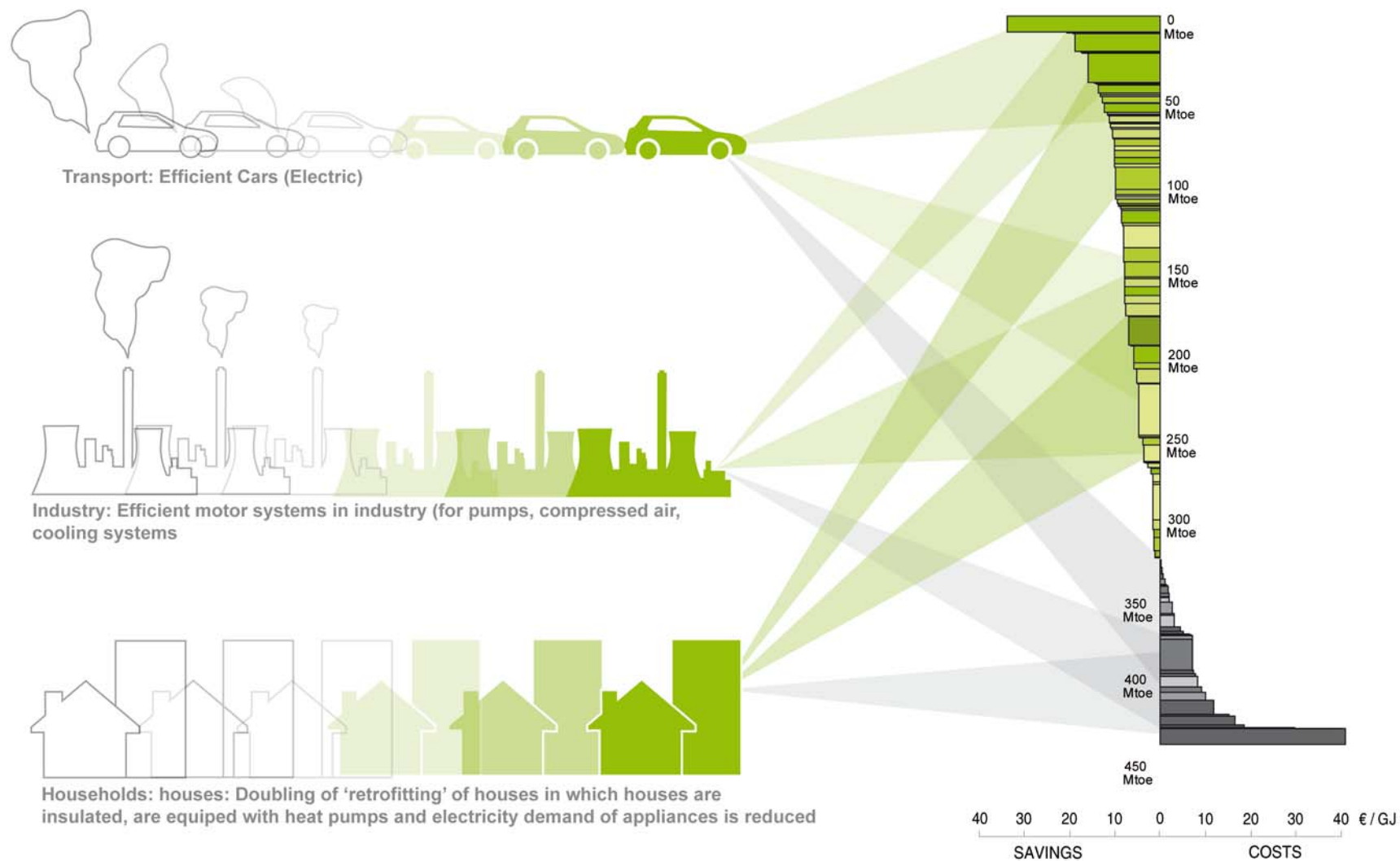
Identifying the policy gap

A gap of 208 Mtoe: policy impact needs to triple



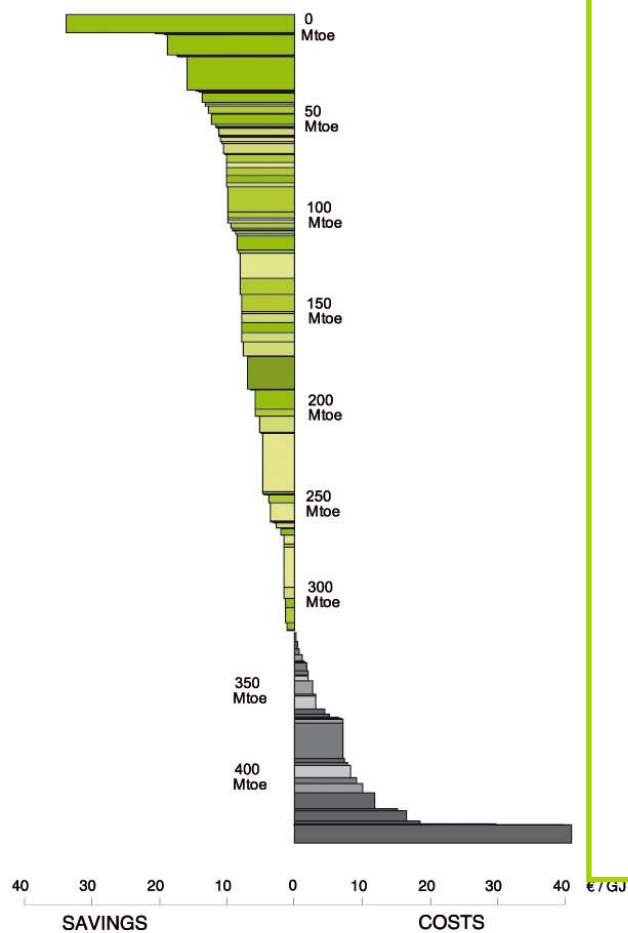
The potential to close the gap

Capturing the existing savings potential requires ambitious action across all end-use sectors



Capturing available energy savings requires a mix of policy instruments

EU 2020 Marginal Abatement Cost Curve for End-Use Sectors



Key Barriers

Consumers do not respond rationally to price signals

The private investment perspective is different

Lack of market Investments in new technologies

Decisive Instruments

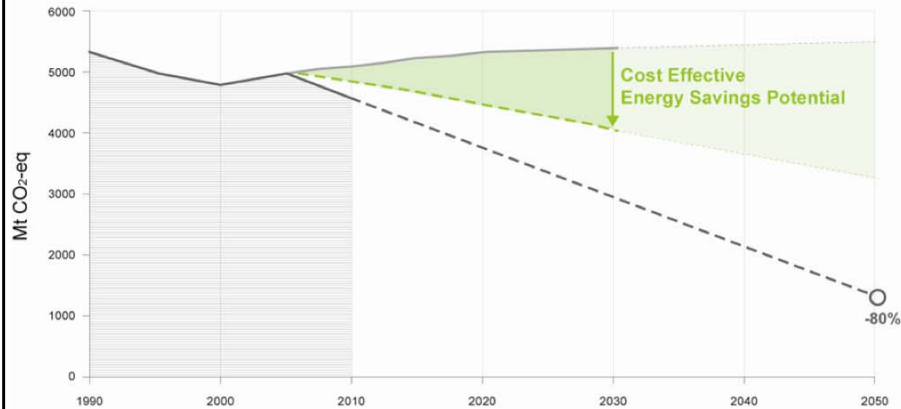
- Efficiency standards
- Energy performance labeling
- Energy Audits
- Technical assistance
- Installation programs
- Suppliers obligations
- Tax rebates
- Investment grants
- Green loans
- Emissions trading
- Energy tax
- Fiscal measures
- R&D project subsidies

Examples of Relevant EU Legislation

- Energy End-use Efficiency and Energy Services Directive (ESD)
- EU Emissions Trading Scheme Directive (EU ETS)
- Renewable energy Directive

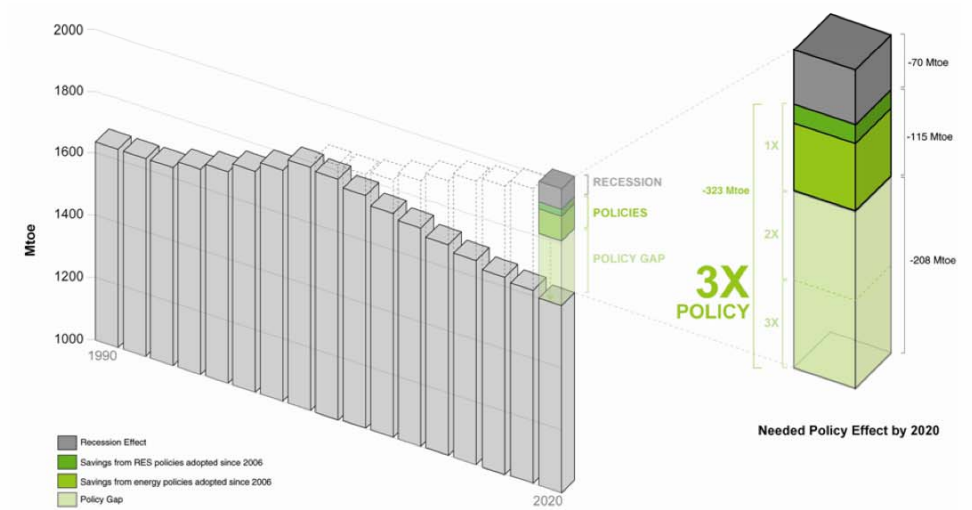
4 step summary:

Why Energy Savings?

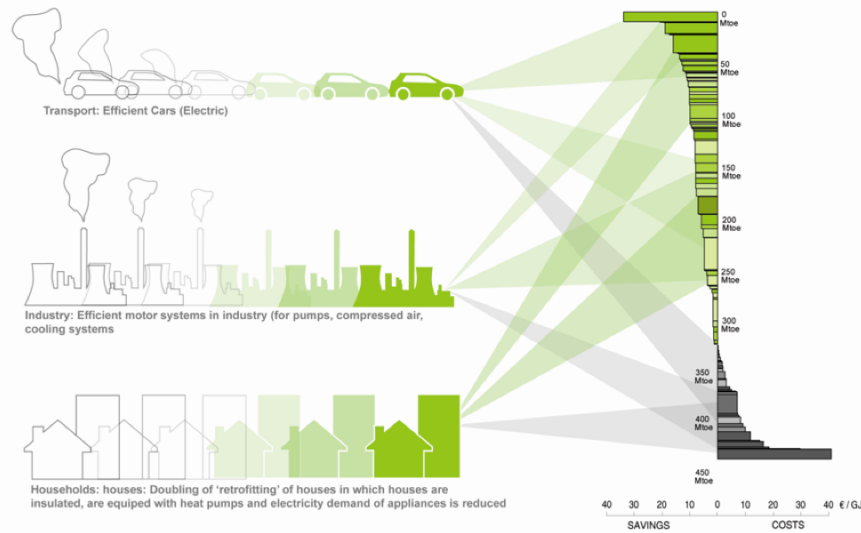


GHG EMISSIONS EU27

Identifying the policy gap

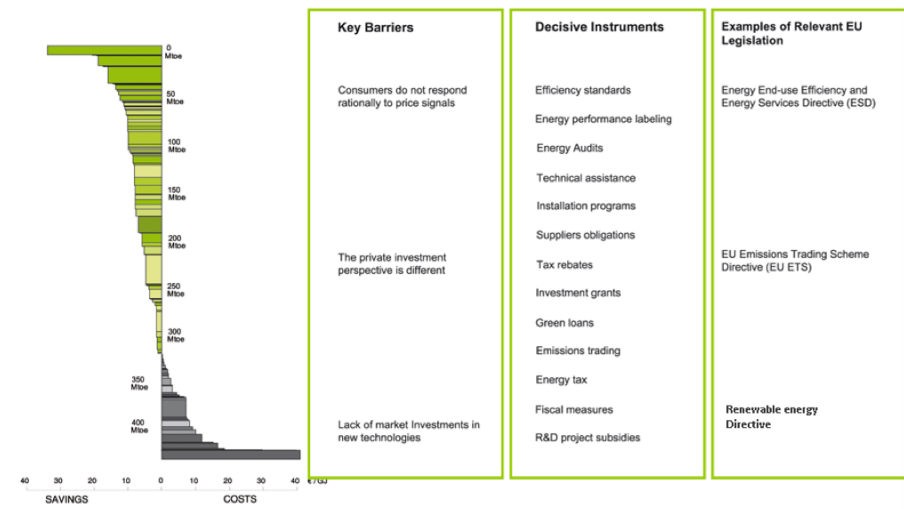


The potential to close the gap



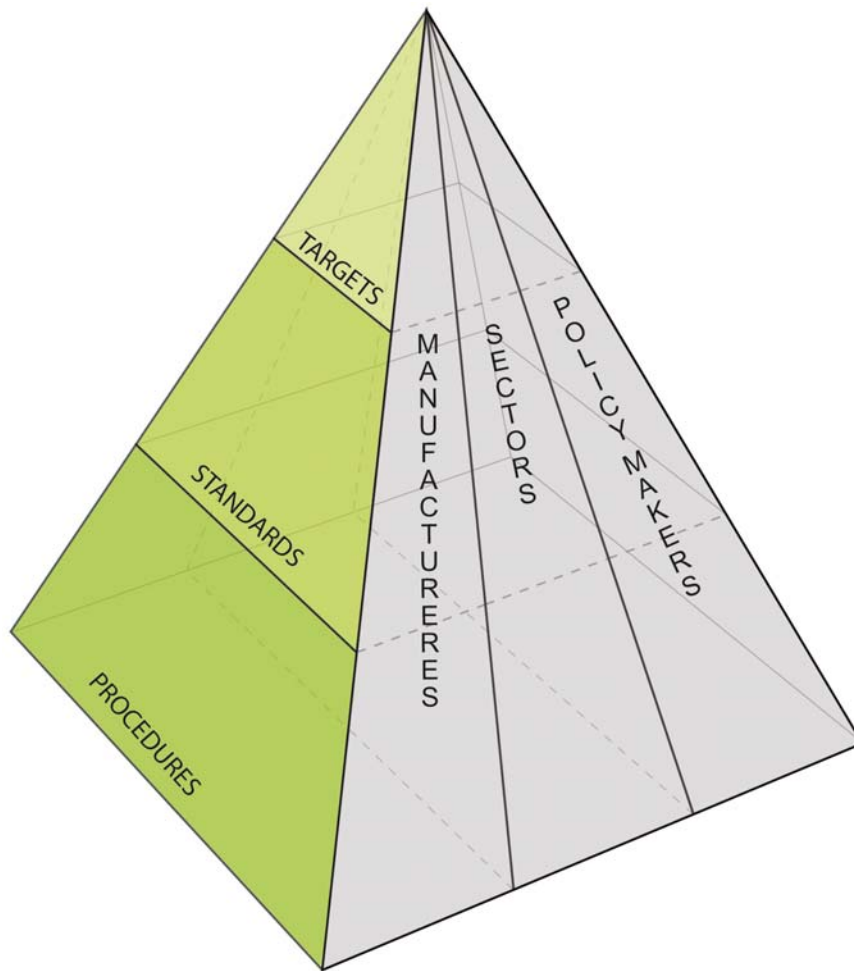
A mix of policy instruments is required

EU 2020 Marginal Abatement Cost Curve for End-Use Sectors

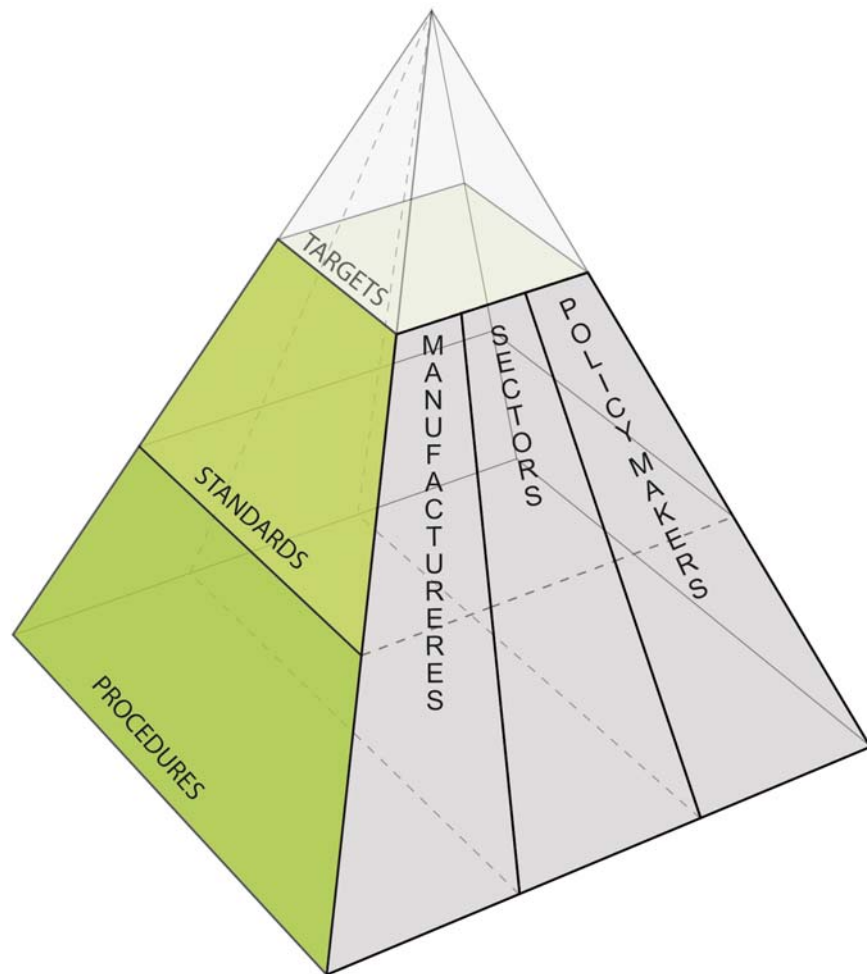


EU policy architecture

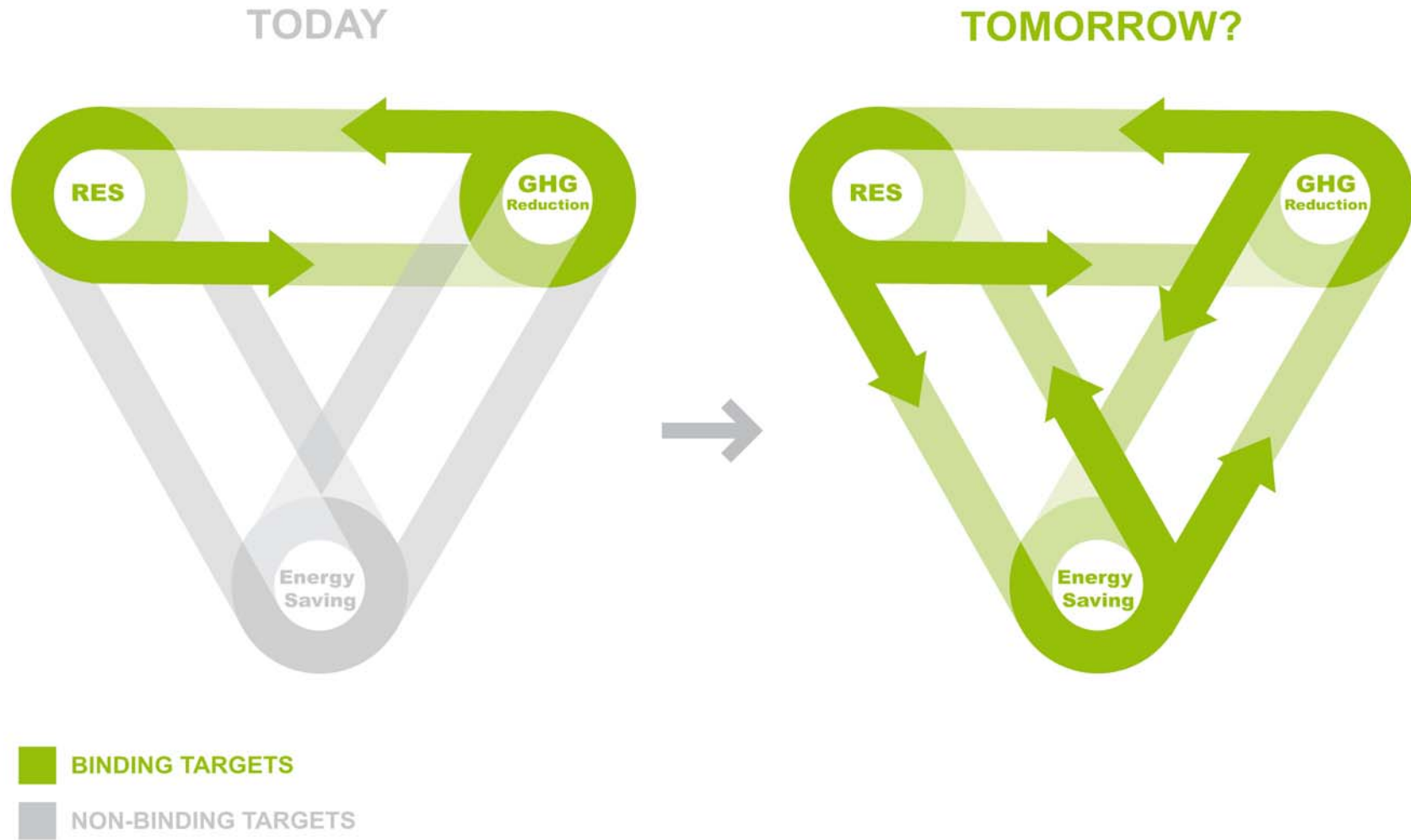
Air pollution and
GHG policies



Energy saving
policies



EU policy architecture



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