



European
Commission



How the EU built the 2030 energy efficiency target

Energy Community
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Institutional process of setting the 2030 target

WHERE WE ARE TODAY	OTHER INSTITUTIONS' POSITIONS	COMMISSION PROPOSAL	NEGOTIATION WITH CO-LEGISLATORS
<p>2020 Framework:</p> <ul style="list-style-type: none"> Indicative national targets for 2020 20% EU target for 2020 	<p>Commission 2014:</p> <ul style="list-style-type: none"> <u>30%</u> indicative EU target for 2030 <p>EUCO Conclusions 2014:</p> <ul style="list-style-type: none"> 'at least <u>27%</u> target for 2030 to be reviewed by 2020 having in mind an EU level of 30%' <p>EP 2015 Resolution:</p> <ul style="list-style-type: none"> Binding <u>40%</u> target 	<p>2030 Framework:</p> <ul style="list-style-type: none"> Indicative national contributions for 2030 30% binding EU target for 2030 	<ul style="list-style-type: none"> EP report: 35% EU binding target, indicative national targets Council General Agreement: 30% EU target, indicative national contributions Preliminary agreement: at least 32.5% EU headline target and indicative national contributions

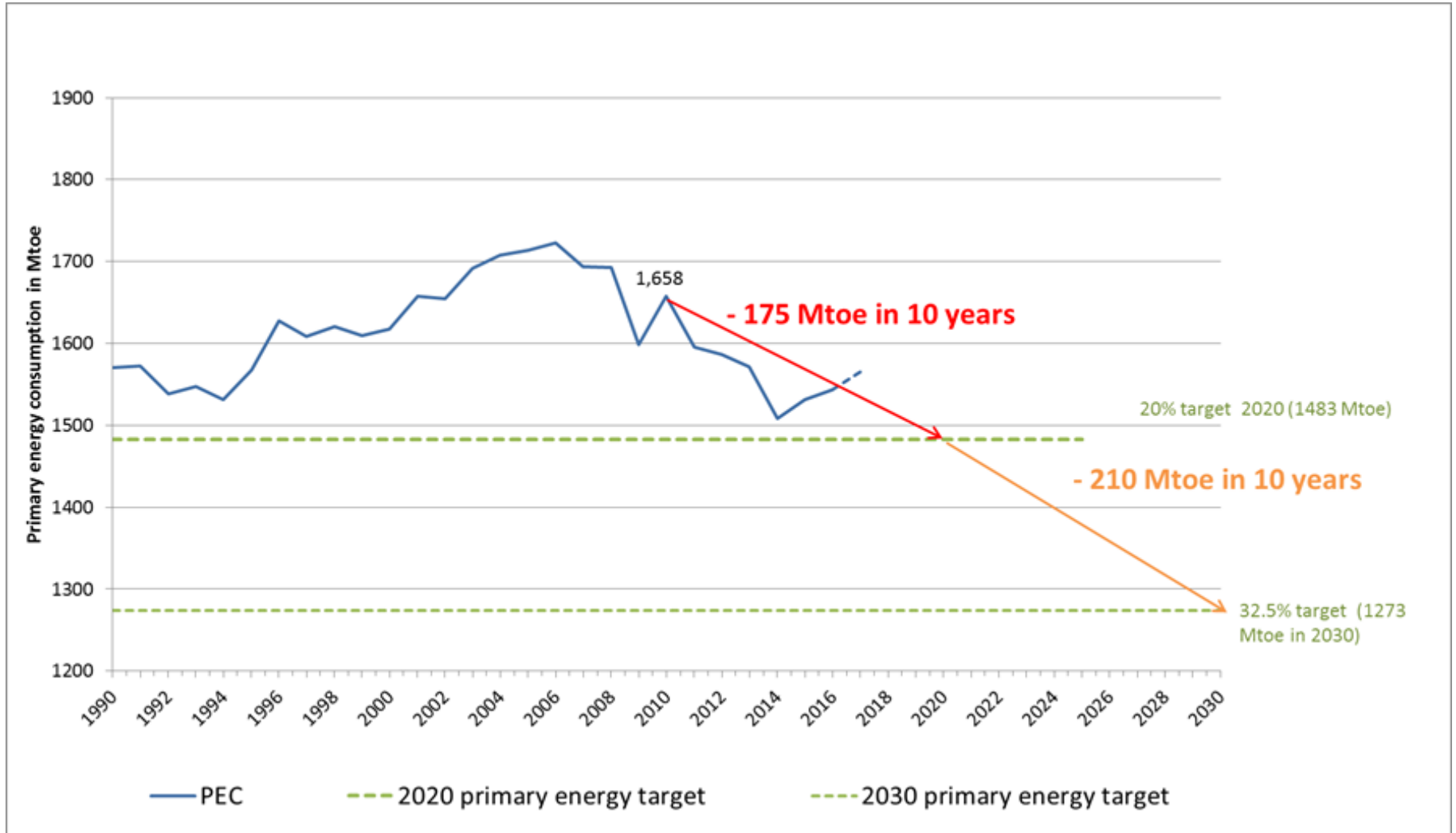
Energy efficiency targets for 2030 (Articles 1 & 3)



Headline target of at least 32.5% to be achieved collectively by the EU in 2030

- ✓ Nature of the target is not specified.
- ✓ The target is calculated relative to the projections from the PRIMES REF2007.
- ✓ The target translates into **1273 Mtoe** of primary energy consumption (**PEC**) and/or **965 Mtoe** of final energy consumption (**FEC**).
- ✓ The Commission is required to assess the target and to **propose revising it upwards by 2023**.

The 2030 target in the provisional agreement – Level of efforts



National energy efficiency contributions (Article 3 & Governance)



Indicative national contributions

- ✓ **National contributions to the Union target** in their energy and climate plans.
- ✓ Assessment by the Commission if the contributions are sufficient to reach the 2030 target.
- ✓ Assumption of the level of national contributions if draft plans are not submitted on time.
- ✓ Recommendations in case of an **ambition gap**.
- ✓ Recommendations in case of **collective delivery gap**.
- ✓ **Member States' delivery gaps** shall be addressed by recommendations.

Impact Assessment

- **What's the problem?** What is the optimal level of ambition for the goal?
- **Baseline:** EUCO27, the lowest common denominator among the three institutions (Commission, Parliament, Council).
- **Other hypotheses:** More ambitious objectives (30%, 33%, 35%, 40%), including elements of renewables, respecting the consistency with Council and Parliament.
- **Multi-dimensional assessment of costs and benefits:** Investments, energy purchases, energy imports, macro-economic effects (GDP, employment), air quality, etc.

Methodology to assess different ambition levels for 2030 in the Impact Assessment of the Commission proposal

The main steps

- ✓ Starting point: EU Reference scenario 2016.
- ✓ Elaboration of various policy scenarios.
- ✓ Assessment of the policy scenarios taking into their impacts (costs and benefits) → modelling.
- ✓ Commission Proposal based on the Impact Assessment.

The starting point

EU Reference Scenario 2016

The starting point – EU Reference Scenario 2016 (I)

- Projecting energy, transport and greenhouse gas emission trends based on adopted policies.
- The time horizon of projections covers the period up to 2050.
- It is not a forecast, but a simulation given certain market conditions and policies adopted until end of 2014.
- It assumes relevant binding 2020 targets are met.
- It uses a range of economic / energy / environment models.

The starting point - EU Reference Scenario 2016 (II)

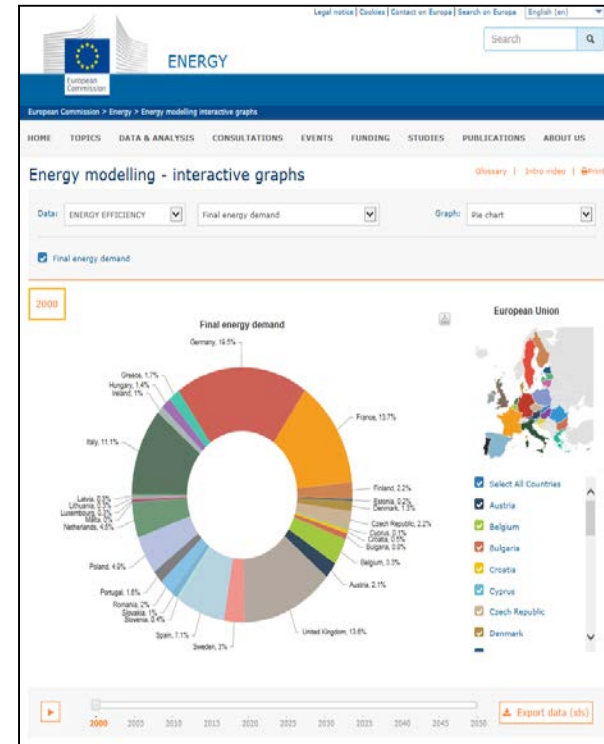
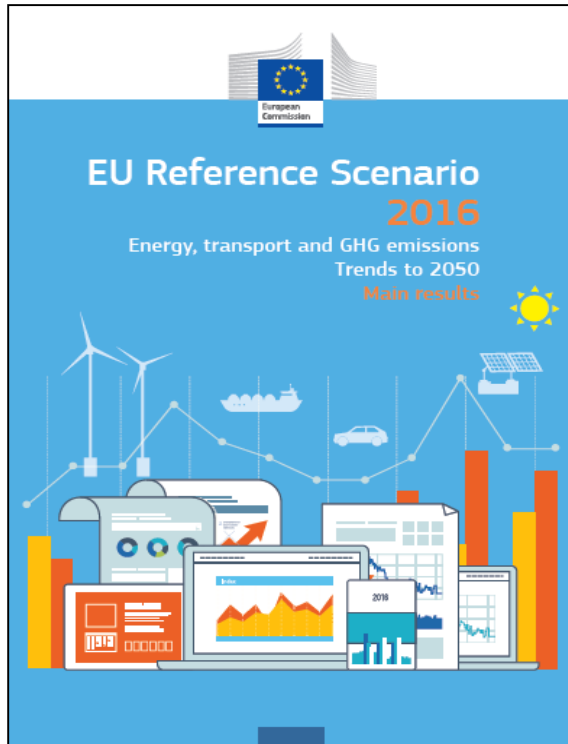
- Results are available for the EU and individual Member States.
- The European Commission develops the Reference Scenario in collaboration with EU Member States and a European modelling consortium.
- It provides a benchmark against which expected impacts of new policies could be analysed (such as for Impact Assessments).
- EU energy trends showed good progress, but more effort needed to meet medium to long term targets and objectives.

Website: <https://ec.europa.eu/energy/en/data-analysis/energy-modelling>

Entry point for all modelling-related information related to EU Reference Scenario and Clean Energy for All Europeans package

Methodology, assumptions and detailed results presented in the EU Reference Scenario 2016 publication

A visualisation tool helps explore the results in a user-friendly way



The Energy Efficiency Impact Assessment

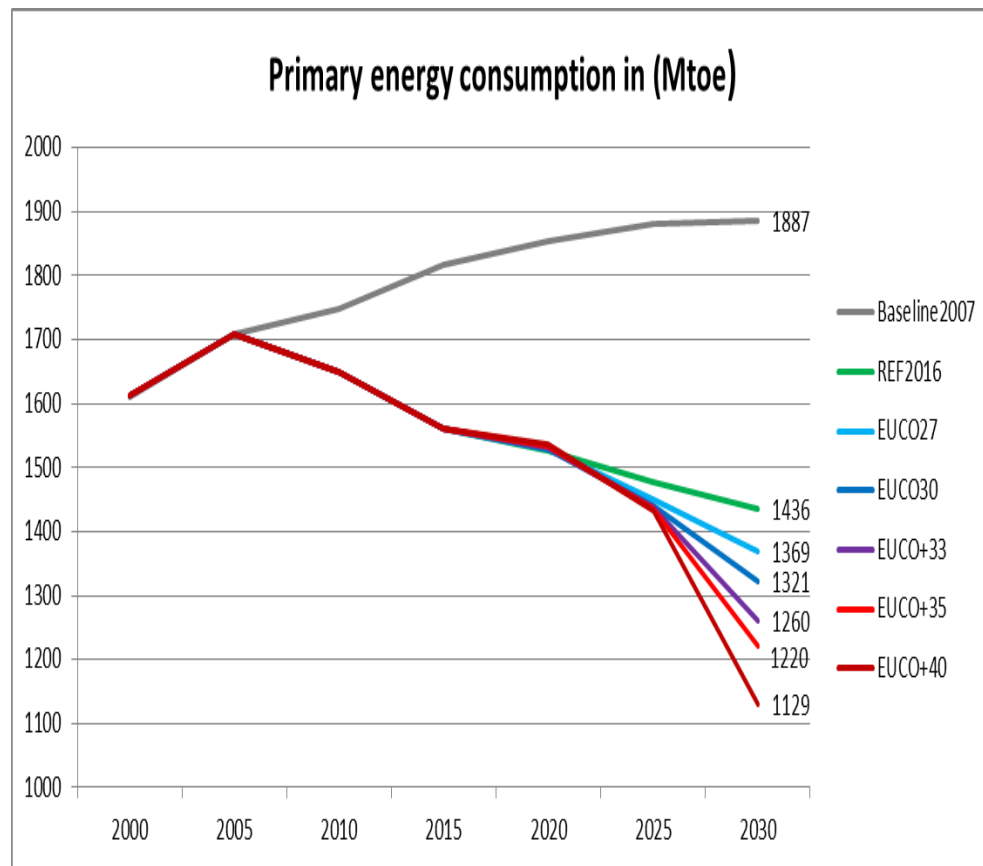
Some insights on modelling related
aspects

The role of modelling in the Impact Assessment

- **Identify the level of energy efficiency ambition** for 2030 in order to fulfil the political mandate.
- An **explicit energy efficiency target** for 2030 already agreed by the European Council and the European Parliament.
- REF2016 projects a **23.9% primary energy consumption reduction** compared to the 2007 baseline projections for 2030.

Construction of scenarios

- The **first policy option**: 27%. EUCO27 baseline scenario.
- Four **further policy options** explore 2030 targets of a **30%, 33%, 35% and 40%**. EUCO30, EUCO+33, EUCO+35 and EUCO+40.
- Other targets agreed by the European Council.



Source: PRIMES

The assessment of the policy scenarios

In the Impact Assessment the following aspects were assessed:

- Energy system impacts – PRIMES model;
- Macro-economic impacts – Two macroeconomic models: E3ME and GEM-E3 to represent two different schools of economic thought;
- Further work on multiple benefits.



Commission proposal

30% energy efficiency target was considered ambitious, representing a realistic, albeit rather cautious, assessment of costs and benefits

Why a higher target is a right move

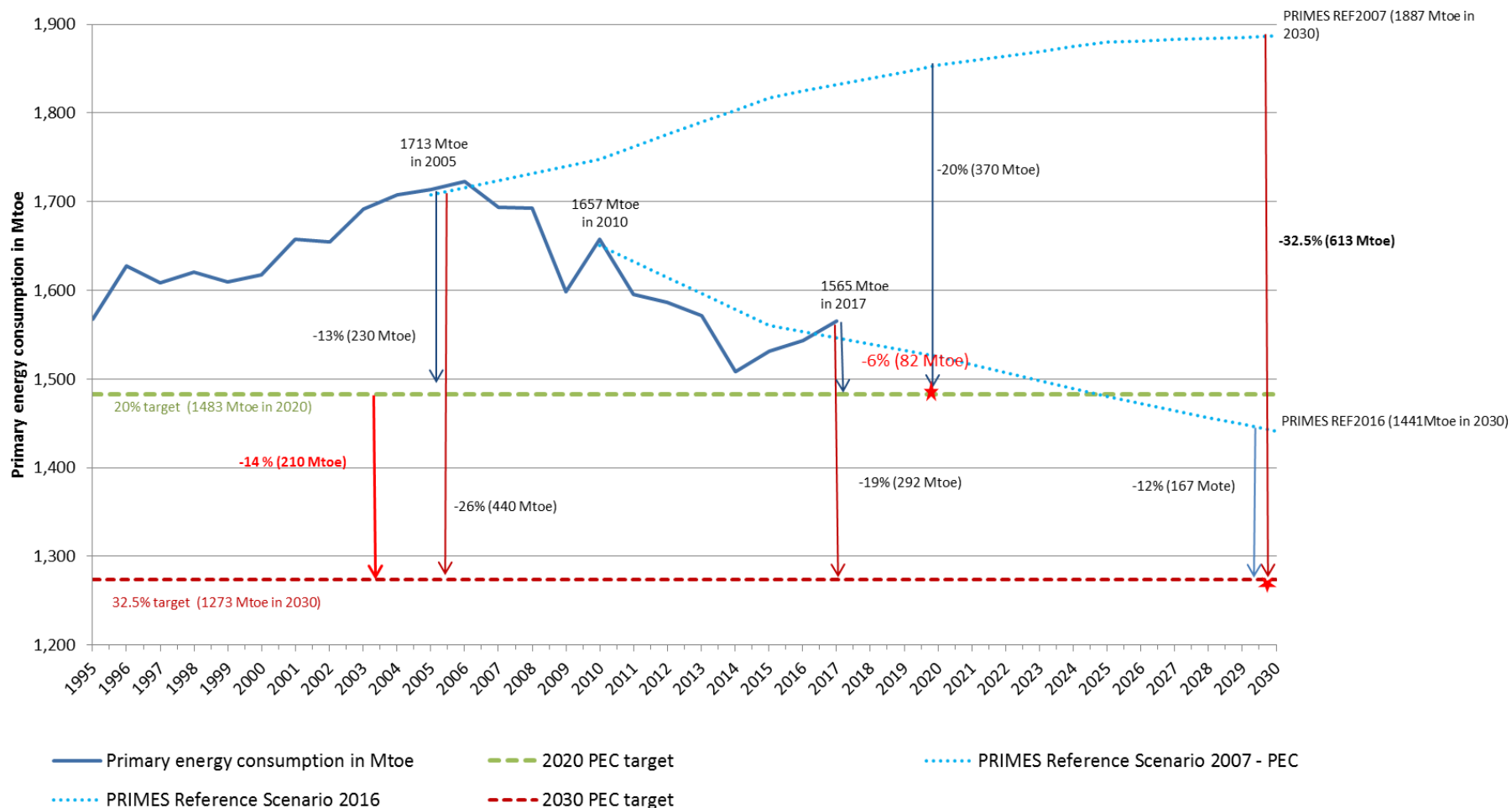
- ✓ Energy efficiency is a cost-effective way to reduce GHG emissions.
- ✓ Tackling climate change asks for more efforts.
- ✓ Any number between 30% and 35% could be justified.
- ✓ Additional investment in energy efficiency is a challenge.



How "32.5%" is to be treated by the Member States

- ✔ Target level compared to the 2007 Reference Scenario projections in 2030 is a convention.
- ✔ The level of ambition for the EU is an outcome of the impact assessment and political decision.
- ✔ Member States shall take into account the level of the EU headline target when setting their indicative contributions.
- ✔ 32.5% is not a benchmark for Member States' level of ambition.
- ✔ No other modelling exercise is a benchmark for Member States' level of ambition.

The 2030 target in the provisional agreement – Various references



Some lessons learned useful for the Energy Community

- ✓ 32.5% is not a good benchmark.
- ✓ The target level should be based on a clear and transparent methodology.

It is useful to have

- A proper Impact Assessment;
 - Realistic projections on future trends.
- ✓ Assessment of energy savings potential and cost-benefit analyses are helpful.
 - ✓ The target needs to be ambitious.



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Thank you!

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DG ENER, European Commission