

# I SETTING THE TARGETS

Part I: provides an overview of the EED and its objectives and targets. It explains how targets should be established and used to drive efficiency measures.

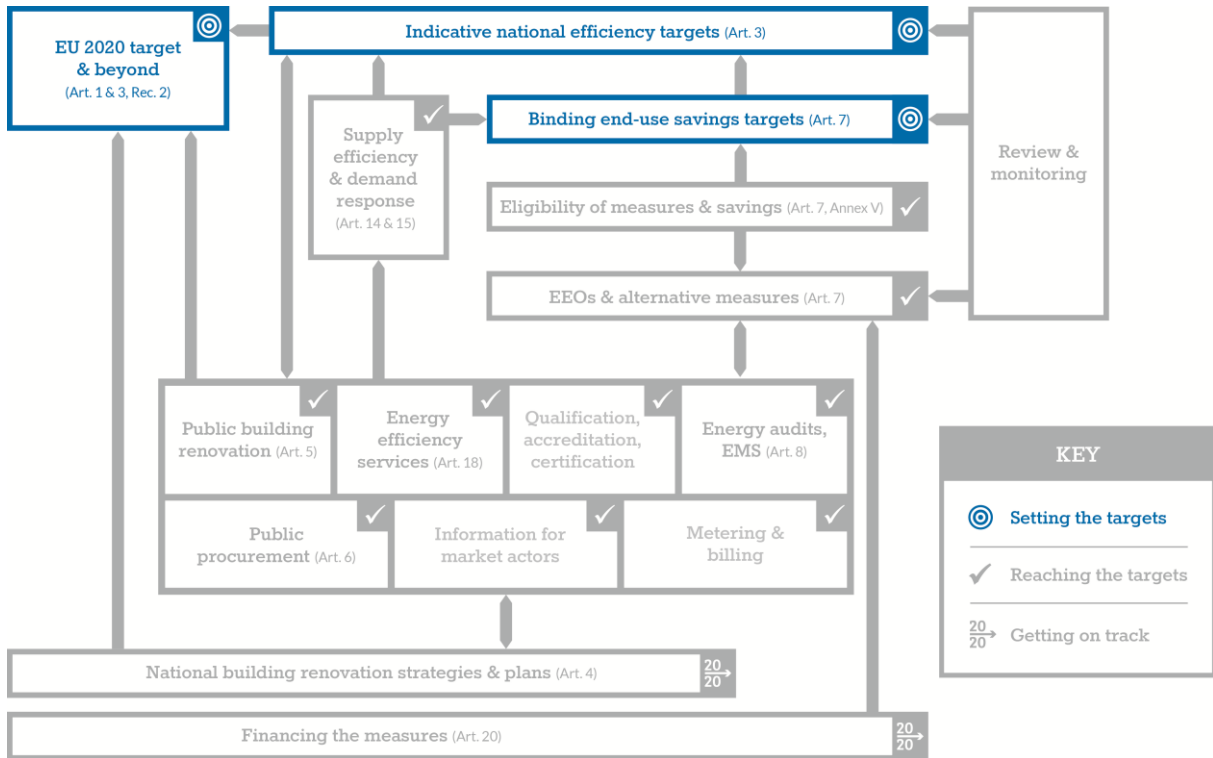


Figure 2 – Guidebook Overview Map: Objectives and targets

## I.1 Summary of Coalition recommendations

Setting robust and coherent targets in a transparent way, as required by the EED, is essential to drive the EED measures, realise the saving potentials and pave the way beyond 2020. Therefore we recommend the following actions:

1. Verify that the 2020 indicative national target (Article 3, reported to the European Commission by 30 April 2013) is:

- Building on existing national energy and climate policies for 2020 and beyond;
- Adequate to realise the national cost-effective potentials of energy savings;
- Making a clear and adequate contribution to the EU 20% target in 2020; and
- Considered a first step towards 2030 and 2050 targets.

**Note:** By the end of June 2014 the Commission will assess whether the EU's 2020 target is likely to be met (Article 3.2). If the Commission concludes that this is not the case, it will make further proposals to ensure the gap is closed (Article 24.7).

2. Ensure that the binding energy end-use savings target (Article 7, which should be defined by 5 December 2013):

- Demonstrates how it will help achieve the indicative national target for 2020 in combination with other measures (Article 3);
- Uses the minimum number of exemptions, namely the exclusion of transport or discounting savings realised in the past (early actions); and
- Takes into account the benefits of putting in place progressively increasing annual energy savings and the targets that are likely to be set for after 2020.

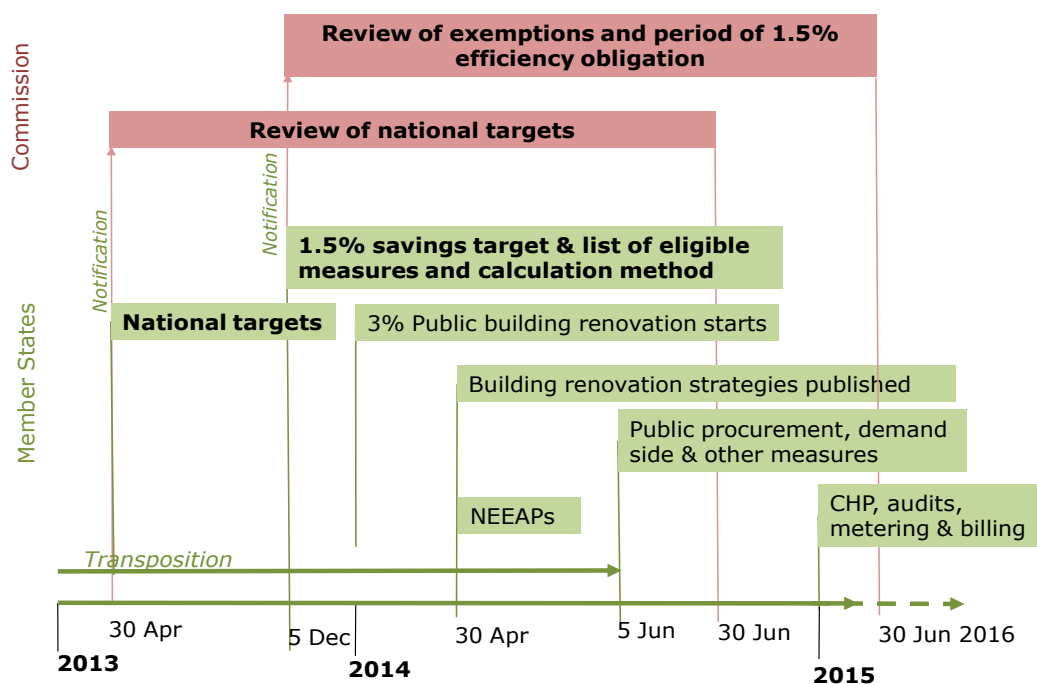


Figure 3 – Relevant deadlines regarding targets (in bold)

## I.2 Background

Measures put in place for implementing the specific EED requirements must, in addition to fulfilling the specific minimum legal requirements for those measures, ensure in their totality that objectives and targets are achieved.

Targets in EU policies and legislation play an important role in:

- Creating high level accountability;
- Allowing benchmarking and monitoring of results;
- Sending long-term signals to investors; and
- Providing guidance for further policymaking.

The EED contains several targets and sets for the first time in its Article 7 a binding energy end-use savings target for MSs. This complements the EU's climate and energy package, which so far only includes legally binding greenhouse gas (GHG) and renewable energy (RES) targets, and goes beyond the 2006 Energy Services Directive (2006/32/EC)<sup>1</sup>.

The EED's three main cross sectoral targets<sup>2</sup> are:

1. **The 20% EU energy savings target.** The EED's overarching objective (Article 1.1) is "to ensure the achievement of the Union's 2020 20% headline target on energy efficiency and to pave the way for further energy efficiency improvements beyond that date". The 20% target is defined in Article 3.1(a) as a maximum of 1483 Mtoe primary energy or 1086 Mtoe final energy consumption in 2020<sup>3</sup>.
2. **The indicative national efficiency targets.** In terms of making this operational, the EED stipulates that MSs must set their own overall indicative national energy efficiency targets, which the Commission will assess as sufficient or not to reach the EU target and thereafter consider proposing a binding target (Article 24.7).
3. **The national binding target for end-use savings.** Article 7 sets a general binding target to deliver 1.5% cumulative annual energy end-use savings.

As these targets are closely linked, MSs will have to account for their interaction and ensure that the measurement and verification methods used for the different targets are coherent and compatible with one another as much as possible. In addition, the setting of the indicative national target must be framed so that the MS makes its full, proportional contribution to the overall EU goal for 2020. The setting of the binding element required by Article 7 can cover a significant percentage of the volume of savings that the indicative national target must deliver.

### Efficiency, savings, consumption targets?

Different terms are used, often with little precision or accuracy, to express targets in the area of energy efficiency policy. The Coalition adheres to the definitions provided in the EED, which establish a clear relation between 'energy savings' and 'energy efficiency'. Specifically, energy savings are defined as the result of improvements of energy efficiency. Savings are measured as the difference in energy consumption before and after the efficiency improvement has taken place, taking into account the impact of external factors such as weather or level of economic activity. Using these definitions, the Coalition calls for a binding energy savings target, as an absolute amount of energy saved, to be achieved principally through efficiency improvements that will result in a reduction of energy consumption compared to a baseline.

<sup>1</sup> The energy savings target set out in Article 4 of Directive 2006/32/EC requires MS to "adopt and aim to achieve" an overall national indicative energy savings target of 9% for the ninth year of application of the Directive. The Article thus requires MS to take measures intended to meet the target. Because most of this Article has not been repealed by the EED, the 9% target for 2016 is still in effect, and the measures adopted to reach it shall be taken into account when implementing the EED.

<sup>2</sup> There is also a quantified sectoral target for central government buildings set in Article 5. MSs must ensure the renovation to minimum standards of 3% of the useful floor area on an annual basis of these buildings, or, alternatively, take other measures providing at least the equivalent energy savings in the buildings.

<sup>3</sup> The target, how it is derived and the remaining gap are illustrated in Figure 5.

### **Important definitions**

The following definitions from Article 2 of the EED are worth recalling here as they are relevant to this section of the Guide:

**'Primary energy consumption'** means gross inland consumption, excluding non-energy uses (*Article 2.2*).

**'Final energy consumption'** means all energy supplied to industry, transport, households, services and agriculture. It excludes deliveries to the energy transformation sector and the energy industries themselves (*Article 2.3*).

**'Energy efficiency'** means the ratio of output of performance, service, goods or energy to input of energy (*Article 2.4*).

**'Energy savings'** means an amount of saved energy determined by measuring and/or estimating consumption before and after implementation of an energy efficiency improvement measure, whilst ensuring normalisation for external conditions that affect energy consumption (*Article 2.5*).

### I.3 The EU energy savings target for 2020 and beyond (Articles 1 and 3 and Recital 2)

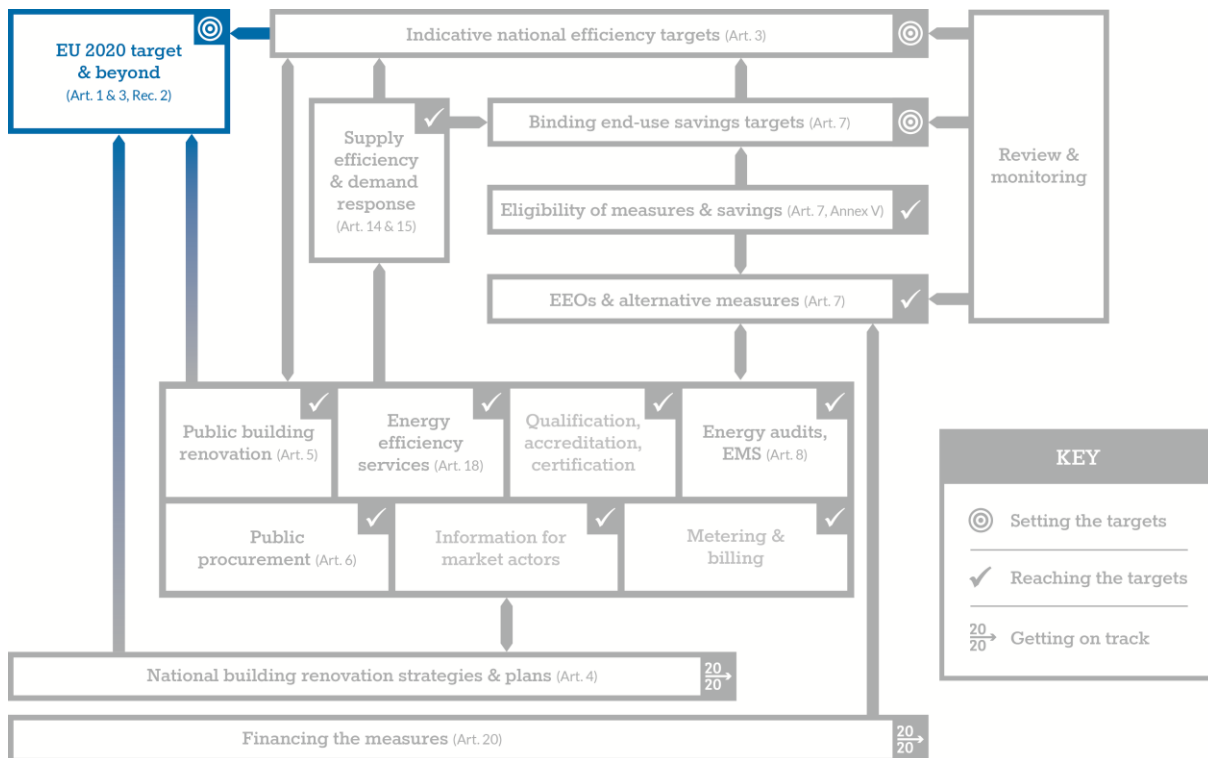


Figure 4 – Guidebook Overview Map: EU energy savings target for 2020 and beyond

The EU energy savings target for 2020 is set in the broader context of a long-term decarbonisation strategy: the EU has committed to an 80-95% reduction of GHG emissions by 2050, and various projections have shown that energy savings have the potential to deliver the lion's share of this reduction<sup>4</sup>. Article 1.1 of the EED explicitly states that the measures of this directive should pave the way for further energy efficiency improvements beyond 2020.

The 20% target is defined in Article 3.1 of the EED as a maximum of 1483 Mtoe primary energy or 1086 Mtoe final energy consumption in 2020 and according to Article 1, its achievement is the objective of the framework of measures established by the Directive.

The derivation of this figure is explained in Council Directive 2013/12/EU<sup>5</sup> as saving 20% primary energy (370 Mtoe) compared to the 2020 projections (1853 Mtoe) made in 2007, when the target was adopted by the EU heads of state and governments. The result of these savings is a maximum primary energy consumption of 1483 Mtoe in 2020.

<sup>4</sup> European Commission Communication 2011/0885 *Energy Roadmap 2050*, 15.12.2011.

Fraunhofer, *Concrete Paths of the European Union to the 2°C Scenario*, 2012.

Greenpeace, *Energy R[evolution] scenario for EU-27*, 2012.

Ecofys, *Renewable energy: a 2030 scenario for the EU*; 02.2013.

International Energy Agency, 'Efficient World Scenario', *World Energy Outlook 2012*, 12.11.2012.

<sup>5</sup> Council Directive 2013/12/EU adapted the EED to make it applicable to Croatia.

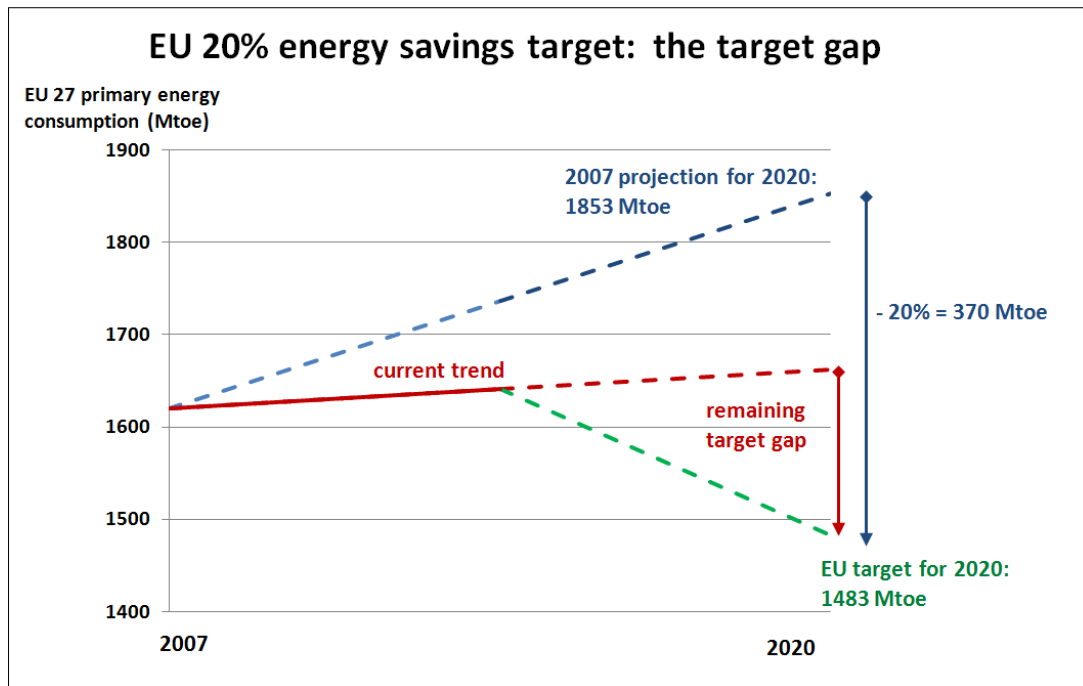


Figure 5 – Illustration of the EU target definition, method and target gap before adoption of the EED (current trend)

The 20% corresponds to the economic savings potential identified based on the PRIMES 2007 model<sup>6</sup>. Derived from a projected use of energy in 2020 it includes assumptions about economic and demographic developments.

It is important to understand that the minimum requirements for the specific efficiency measures as laid down in Articles 4 to 20 will, according to available assessments, be insufficient to reach these objectives and targets. The Coalition’s Gapometer shows that the EED minimum requirements for measures adopted in the EED will not be enough to achieve the EU energy savings target and will, in fact, leave a gap of around 94 Mtoe<sup>7</sup>.

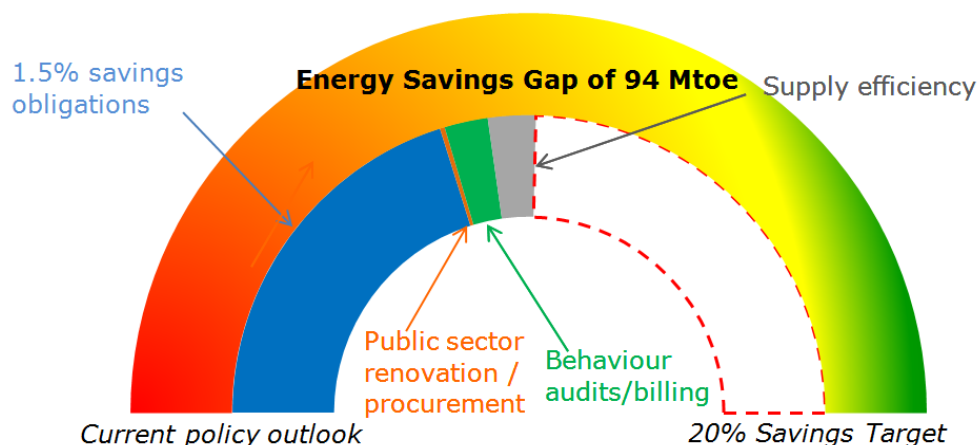


Figure 6 – Coalition for Energy Savings Gapometer showing the impact of the EED on reaching the EU energy savings target for 2020 (energycoalition.eu)<sup>8</sup>

<sup>6</sup> PRIMES is the energy system model used by the European Commission for the EU’s energy projections. The projections were revised in 2009 after it was assessed that the economic crisis would have durable effects. The projections for growth (and energy consumption) were revised down. As a consequence, reaching 1483 Mtoe was made “easier”, although delivering 370 Mtoe of savings became more difficult and expensive, due in part to a lower rate of investment in new, more energy-efficient technologies.

<sup>7</sup> This excludes Croatia because the PRIMES projections for Croatia have not been published.

<sup>8</sup> Figure 6 is based on published data as of 19<sup>th</sup> August 2013. The figure excludes Croatia.

In the EED, MSs are explicitly allowed to go beyond the minimum requirements set for specific measures (see Article 1.2), and they will have to do so, as an adequate and complete implementation of a Directive requires that its objectives and targets are met.

MSs will need other appropriate measures to make sure that the gap between the binding energy end-use savings target and the indicative national energy efficiency target is closed.

This gap is illustrated in Figure 7 below, which shows how the combination of the indicative targets with their measures and the binding savings required by Article 7 must add up to the total amount of savings required by the EU target.

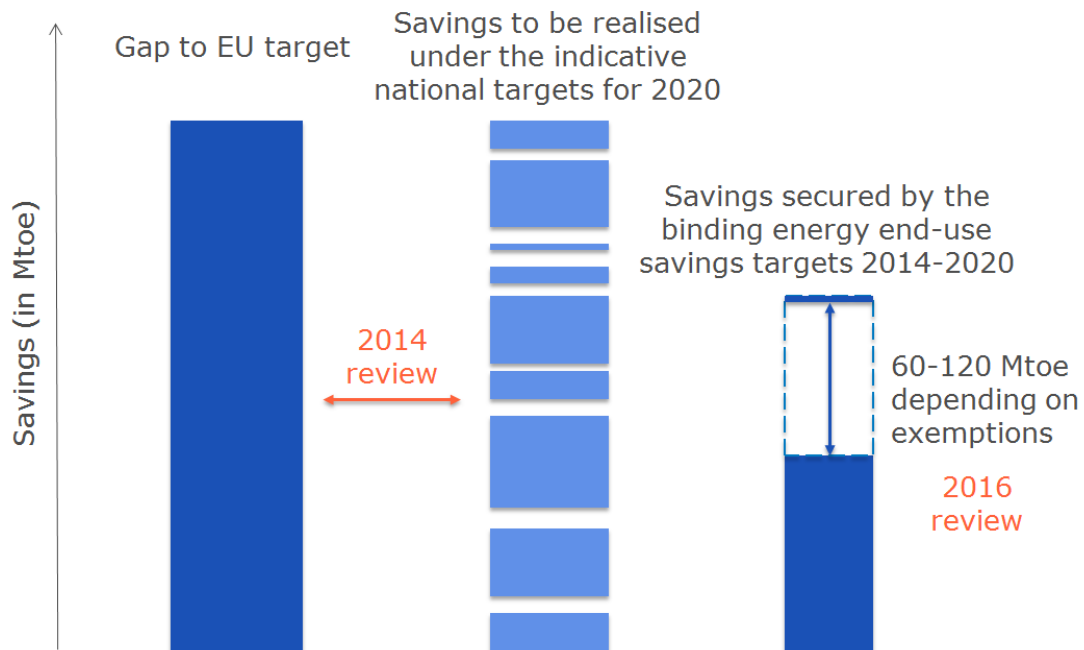


Figure 7 – Illustration of the new targets introduced by the EED and their interaction with the EU target (i.e. target gap) and upcoming reviews