Energy efficiency

2011/0172(COD) - 18/11/2015 - Follow-up document

The Commission presents a report giving an assessment of progress made towards the energy efficiency target of 20% by 2020, which was confirmed by the energy union strategy. The report also covers implementation of the Directive 2012/27/EU (the Energy Efficiency Directive).

To recall, the Commission concluded in its Communication of 2014 on energy efficiency that the EU would achieve energy savings of around 18-19 % in 2020. Since then Member States have made improved efforts to implement EU energy efficiency legislation and have set more ambitious energy efficiency targets (now adding up to 17.6 % primary energy saving in 2020 - last year the targets added up to only 16.4 %). On this basis the Commission remains optimistic that the 20 % target will be achieved provided existing EU legislation is fully implemented, Member States increase their level of ambition and the investment conditions for energy efficiency continue to improve across Europe.

Progress towards the 2020 EU energy efficiency target: the report shows that Member States, in addition to a range of EU policy measures (e.g. eco-design, labelling, EU ETS, car standards), have introduced energy efficiency measures in the industry, residential, service, transport and generation sectors. The national energy efficiency action plans (NEEAPs) analysed by the Commission show that most Member States have increased their effort and either strengthened existing energy efficiency measures or introduced new ones.

Primary energy consumption: the report recalls that the EU-28 needs to reduce primary energy consumption annually on average by 11.9 Mtoe from the 2013 level to achieve its 2020 targets. It states that additional efforts are needed, in particular, in the buildings, transport and generation sectors. Whilst there are big variations between Member States, most have improved at European level. The main exceptions are:

- an increase in final energy consumption from 2012 to 2013; and
- a decrease in heat generated by CHP plants by 9 % from 46 Mtoe in 2005 to 42 Mtoe in 2013.

Even though some Member States increased their indicative energy efficiency targets expressed in primary energy consumption recently (to a combined total of 17.6 %), the EU- 28 as a whole falls short of the required 20 % level. To close the remaining gap towards the 2020 target expressed in primary energy consumption, Member States should accelerate their efforts in order to achieve their national energy efficiency targets for 2020 or to go beyond them.

The report notes that:

- Austria, Belgium, France, Germany, Malta, the Netherlands, Sweden and the United Kingdom have already set themselves particularly ambitious targets.
- Croatia, Finland, Greece and Romania, which have set less ambitious targets for 2020 in light of expected GDP growth in 2014-2020, could benefit from assessing again how an increased level of energy efficiency could increase their security of supply, competitiveness and sustainability.
- Belgium, Estonia, France, Germany, the Netherlands, Poland and Sweden will all need to reduce their primary energy consumption at a higher rate in 2014- 2020 than in the period 2005-2013 to meet their indicative primary energy consumption targets by 2020.

Final energy consumption: overall, final energy consumption decreased by 7 % between 2005 and 2013. Besides energy efficiency policies, the economic crisis has contributed to this trend. Austria, Belgium, Estonia, France, Germany, Lithuania, Malta and Slovakia have set themselves final energy consumption targets in 2020 that require rates of final energy consumption reduction in 2014-2020 which are higher than the reduction rate achieved in 2005-2013. These countries will depend on a strong implementation of their obligations under the Energy Efficiency directive schemes or alternative measures that enable consumers to save final energy and money in the short and long term.

Sectors at national level:

Industry: the report notes that the overall positive trend in final energy intensity in industry in most Member States is encouraging. However, with regard to energy intensity, there is a seven-fold difference between the Member State with the highest and lowest energy intensity in industry: there could be scope for Cyprus, Ireland, Greece, Hungary and Latvia to draw on positive examples in other Member States to reverse their own increasing trend in final energy intensity in industry.

Residential: final energy consumption decreased by 3 % in 2013 compared to the level of 2005. The energy efficiency obligation schemes focus mostly on the residential sector to achieve the 1.5 % annual end-use energy savings required by Article 7 of the EED. In total, 16 countries have adopted or plan to adopt an energy efficiency obligation scheme. The Commission recognises a weak implementation of this article in some countries as many Member States rely on old measures, expected savings are overestimated or overlapping effects of different policies are not taken into account correctly. The Commission states it will follow the further implementation of this article closely.

Most Member States reduced energy demand in recent years by implementing energy efficiency measures targeting this sector. The report states that:

- consumers could benefit from a stronger focus on policies to reduce the energy consumption in the residential sector in Belgium, Estonia, Italy, Latvia, Malta, Poland, Romania and Slovenia where the energy consumption per capita increased on average over the past years;
- to empower consumers to reduce their energy consumption, all Member States need to better inform them about energy efficiency options and further improve investment conditions for them to accelerate the currently very low renovation rates for the existing building stock in Europe;
- more focused measures are needed for consumers to address fuel poverty effectively.

Services: overall, the energy intensity of the EU services sector (normalised with heating degree days) decreased by 4 % between 2005 and 2013, mainly in Austria (20 %), Hungary (26 %), Ireland (37 %) and Portugal (21 %) which is a very positive trend. This sector is expected to grow, and targeted energy efficiency measures could help counterbalance the increase of final energy consumption and continue the sector's positive trend of decreasing energy intensity at EU level. In particular, Cyprus, Belgium, Finland France, Greece, Italy, Luxembourg and Spain could try to set up or increase the intensity of appropriate measures to counterbalance the recent increase in energy intensity in their services sector.

Transport: the shift towards a higher use of collective transportation for passengers and share of railway and inland waterways for freight transport needs to be encouraged through further efforts in the transport sector. Despite recent progress on energy efficiency and the reduction in transport energy demand, transport's overall high share in final energy consumption at EU-28 level makes further energy efficiency action needed to meet the 2020 objectives. The Commission recommends that Member States implement forcefully the transport measures described in their NEEAPs and take further action to decrease energy consumption in the transport sector. Member State action for promoting alternative fuels, vehicles/vessels and deploying the related infrastructure should further support energy efficiency improvements in transport. The Commission has announced that there will be a Communication on actions needed to decarbonise the transport sector.

Conclusion: Member States need to increase their energy efficiency efforts to ensure that they achieve their indicative targets by 2020 or go even beyond them to ensure that the European Union meets its 20 % reduction target by 2020. This underlines the need to fully implement the European legislative framework for energy efficiency, which enables energy efficiency service markets to develop and ensures the removal of existing market barriers for energy efficiency investments. The implementation of the legislative framework related to greenhouse gas reductions e.g. in the non-ETS sector and the recently adopted Market Stability Reserve for the ETS sector are key as the two policy areas are interlinked and reinforce each other.

With a view to the 2030 targets, the Commission will assess in 2016 how the energy efficiency framework might be further improved, bearing in mind the significant contribution of (i) the Energy Performance of Buildings Directive and (ii) the Energy Efficiency Directive (especially its Article 7). This review should help all stakeholders (national governments, regions, local authorities, energy efficiency companies, financial institutions, consumers) to exploit cost-efficient energy saving potentials in the long-term with regard to the 2030 and 2050 EU climate and energy targets and objectives.

The Commission will continue to closely follow Member States' progress towards their indicative national energy efficiency targets for 2020 and the implementation of the EED and update its assessment annually as part of the State of the Energy Union. The Commission invites the European Parliament and Council to express their views on this assessment.