



# Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Directive	2011/0172(COD) Procedure completed
Energy efficiency  Repealing Directive 2004/8/EC <a href="#">2002/0185(COD)</a> Repealing Directive 2006/32/EC <a href="#">2003/0300(COD)</a> Amending Directive 2009/125/EC <a href="#">2008/0151(COD)</a> Amending Directive 2010/30/EU <a href="#">2008/0222(COD)</a> See also <a href="#">2015/2232(INI)</a> Amended by <a href="#">2016/0375(COD)</a> Amended by <a href="#">2016/0376(COD)</a> See also <a href="#">2018/0385(COD)</a>	
Subject 3.60.08 Energy efficiency	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	<b>ITRE</b> Industry, Research and Energy		13/07/2011
		Verts/ALE <a href="#">TURMES Claude</a>	
		Shadow rapporteur	
		PPE <a href="#">PIEPER Markus</a>	
		S&D <a href="#">THOMSEN Britta</a>	
	ALDE <a href="#">HALL Fiona</a>		
	ECR <a href="#">FORD Vicky</a>		
	EFD <a href="#">PROVERA Fiorello</a>		
	Committee for opinion	Rapporteur for opinion	Appointed
	<b>ENVI</b> Environment, Public Health and Food Safety		27/07/2011
		PPE <a href="#">LIESE Peter</a>	
	<b>FEMM</b> Women's Rights and Gender Equality		03/10/2011
		S&D <a href="#">ESTRELA Edite</a>	
Council of the European Union	Council configuration	Meeting	Date
	<a href="#">Employment, Social Policy, Health and Consumer Affairs</a> 3188		04/10/2012
	<a href="#">Transport, Telecommunications and Energy</a>	<a href="#">3175</a>	15/06/2012
	<a href="#">Transport, Telecommunications and Energy</a>	<a href="#">3127</a>	24/11/2011
European Commission	Commission DG	Commissioner	
	<a href="#">Energy</a>	OETTINGER Günther	
European Economic and Social Committee			
European Committee of the Regions			

Key events			
22/06/2011	Legislative proposal published	<a href="#">COM(2011)0370</a>	Summary

07/07/2011	Committee referral announced in Parliament, 1st reading/single reading		
24/11/2011	Debate in Council	<a href="#">3127</a>	Summary
12/07/2012	Vote in committee, 1st reading/single reading		
30/07/2012	Committee report tabled for plenary, 1st reading/single reading	<a href="#">A7-0265/2012</a>	Summary
11/09/2012	Results of vote in Parliament		
11/09/2012	Debate in Parliament		
11/09/2012	Decision by Parliament, 1st reading/single reading	<a href="#">T7-0306/2012</a>	Summary
04/10/2012	Act adopted by Council after Parliament's 1st reading		Summary
25/10/2012	Final act signed		
25/10/2012	End of procedure in Parliament		
14/11/2012	Final act published in Official Journal		

### Technical information

Procedure reference	2011/0172(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Directive
	Repealing Directive 2004/8/EC <a href="#">2002/0185(COD)</a> Repealing Directive 2006/32/EC <a href="#">2003/0300(COD)</a> Amending Directive 2009/125/EC <a href="#">2008/0151(COD)</a> Amending Directive 2010/30/EU <a href="#">2008/0222(COD)</a> See also <a href="#">2015/2232(INI)</a> Amended by <a href="#">2016/0375(COD)</a> Amended by <a href="#">2016/0376(COD)</a> See also <a href="#">2018/0385(COD)</a>
Legal basis	Treaty on the Functioning of the EU TFEU 194-p2
Other legal basis	Rules of Procedure EP 159
Mandatory consultation of other institutions	<a href="#">European Economic and Social Committee</a> <a href="#">European Committee of the Regions</a>
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/7/06352

### Documentation gateway

Legislative proposal	<a href="#">COM(2011)0370</a>	22/06/2011	EC	Summary
Document attached to the procedure	<a href="#">SEC(2011)0779</a>	22/06/2011	EC	
Document attached to the procedure	<a href="#">SEC(2011)0780</a>	22/06/2011	EC	

Committee draft report		<a href="#">PE472.358</a>	04/10/2011	EP	
Economic and Social Committee: opinion, report		<a href="#">CES1610/2011</a>	26/10/2011	ESC	
Amendments tabled in committee		<a href="#">PE475.873</a>	16/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.874</a>	16/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.929</a>	16/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.932</a>	17/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.954</a>	17/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.955</a>	17/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.982</a>	18/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.983</a>	18/11/2011	EP	
Amendments tabled in committee		<a href="#">PE475.997</a>	22/11/2011	EP	
Amendments tabled in committee		<a href="#">PE476.055</a>	22/11/2011	EP	
Committee of the Regions: opinion		<a href="#">CDR0188/2011</a>	14/12/2011	CofR	
Committee opinion	FEMM	<a href="#">PE475.925</a>	21/12/2011	EP	
Committee opinion	ENVI	<a href="#">PE472.304</a>	18/01/2012	EP	
Committee report tabled for plenary, 1st reading/single reading		<a href="#">A7-0265/2012</a>	30/07/2012	EP	Summary
Text adopted by Parliament, 1st reading/single reading		<a href="#">T7-0306/2012</a>	11/09/2012	EP	Summary
Commission response to text adopted in plenary		<a href="#">SP(2012)665</a>	11/10/2012	EC	
Draft final act		<a href="#">00035/2012/LEX</a>	25/10/2012	CSL	
Follow-up document		<a href="#">COM(2013)0225</a>	18/04/2013	EC	Summary
Follow-up document		SWD(2013)0143	18/04/2013	EC	
Follow-up document		<a href="#">COM(2015)0574</a>	18/11/2015	EC	Summary
Follow-up document		SWD(2015)0245	18/11/2015	EC	
Follow-up document		<a href="#">COM(2017)0056</a>	01/02/2017	EC	Summary
Follow-up document		<a href="#">COM(2017)0687</a>	23/11/2017	EC	Summary
Follow-up document		<a href="#">COM(2019)0224</a>	09/04/2019	EC	Summary
Follow-up document		<a href="#">COM(2020)0326</a>	20/07/2020	EC	
Follow-up document		<a href="#">COM(2020)0954</a>	14/10/2020	EC	

#### Additional information

National parliaments

[IPEX](#)

European Commission

[EUR-Lex](#)

#### Final act

Final legislative act with provisions for delegated acts

## Delegated acts

[2015/2910\(DEA\)](#)

Examination of delegated act

[2019/2599\(DEA\)](#)

Examination of delegated act

## Energy efficiency

**PURPOSE:** to ensure the objective of achieving 20% primary energy savings in 2020 and to prepare the way for new improvements in energy efficiency beyond that date.

**PROPOSED ACT:** Directive of the European Parliament and of the Council.

**BACKGROUND:** energy efficiency is one of the key features of the flagship initiative [‘A resource-efficient Europe’](#) announced in the Europe 2020 strategy. Energy efficiency is the most cost-effective and fastest way to increase security of supply, and is an effective way to reduce the greenhouse gases emissions responsible for climate change. As outlined in the Commission Communication [‘A Roadmap for moving to a competitive low carbon economy in 2050’](#), energy efficiency can help the EU achieve and even outperform its greenhouse gas emission reduction target.

The EU has set itself the objective of achieving 20% primary energy savings in 2020. The Commission’s latest estimations suggest that the EU will achieve only half of the 20% target in 2020. The current framework which governs energy efficiency, in particular Directive 2006/32/EC on energy services and Directive 2004/8/EC on cogeneration, has failed to fully tap the energy saving potential. The measures already adopted at Member State level are also insufficient to overcome the remaining obstacles on markets and in regulation.

The European Council and the European Parliament have called on the Commission to adopt a new ambitious strategy in the area of energy efficiency for determined action to tap the considerable potential. To give fresh momentum to energy efficiency, on 8 March 2011 the Commission put forward a new [Energy Efficiency Plan](#) (EEP) setting out measures to achieve further savings in energy supply and use.

This legislative proposal transforms certain aspects of the EEP into binding measures. It also looks beyond the 20% target and seeks to set a common framework to promote energy efficiency in the Union beyond 2020.

**IMPACT ASSESSMENT:** the impact assessment explores a series of options broken down into three levels:

First-level policy options analyse ways to improve the current policy framework. This analysis focuses primarily on issues of whether the current approach of the ESD to target setting should be extended until 2020, whether national energy savings targets should be added to achieve the EU 20 % target and if so, whether they should be binding or merely indicative. The analysis concludes that the ESD targets should be maintained for end-use sectors until their deadline in 2016, but to reach the 20 % energy efficiency target they need to be complemented with more ambitious energy savings targets under the Europe 2020 process.

Second-level policy options explore different measures to tackle the remaining economic potential on the demand and supply side. The IA looks at [energy savings obligation](#) schemes as a possible option for yielding energy savings in end-use sectors. Another set of policy options examine measures involving the public sector. Other options with a considerable positive impact compared to their costs are those that aim to promote the energy services market, provide improved and more frequent information to households and companies on their actual energy consumption through billing and smart meters, and mandatory energy audits for large companies. Other options to promote energy efficiency via voluntary measures are assessed as insufficient to tap all the available potential for savings.

The IA also analyses which measures could help tap energy efficiency potential in energy transformation and distribution, as well as options for national reporting and monitoring of implementation.

[Third-level policy options](#) assess the legal form of the selected first- and second-level measures. It concludes that, in order to reach the level of ambition of the EU 20% energy efficiency target, EU policies need to reap the energy saving potential in every sector, including in those sectors excluded from the scope of the ESD. This is why it is proposed to adopt a new legislative proposal that covers the scope of the two Directives and extends it to all sectors with energy saving potential.

**LEGAL BASIS:** Article 194(2) of the Treaty on the Functioning of the European Union (TFEU).

**CONTENT:** the proposed Directive establishes a common framework for promoting energy efficiency in the Union to ensure the target of 20 % primary energy savings by 2020 is met and to pave the way for further energy efficiency afterwards. It lays down rules designed to remove barriers and overcome some of the market failures that impede efficiency in the supply and use of energy.

**End-use sectors:** the proposed Directive focuses on measures that lay down requirements on the public sector, both as regards renovating the buildings it owns and applying high energy efficiency standards to the purchase of buildings, products and services.

The proposal:

- requires Member States to establish national energy efficiency obligation schemes;
- requires regular mandatory energy audits for large companies and lays down a series of requirements on energy companies regarding metering and billing.

**Energy supply sector:** the proposal requires Member States:

- to adopt national heating and cooling plans to develop the potential for high-efficiency generation and efficient district heating and cooling, and to ensure that spatial planning regulations are in line with these plans;
- to adopt authorisation criteria that ensure that installations are located in sites close to heat demand points and that all new electricity generation installations and existing installations that are substantially refurbished are equipped with high-efficiency CHP units. Member States should however be able to lay down conditions for exemption from this obligation where certain conditions are met;
- to establish an inventory of energy efficiency data for installations undertaking the combustion of fuels or the refining of mineral oil and gas.

The proposal also sets requirements on priority/guaranteed access to the grid, priority dispatch of electricity from high-efficiency cogeneration and the connection of new industrial plants producing waste heat to district or cooling networks.

Other measures proposed include efficiency requirements for national energy regulatory authorities, information and awareness-raising actions, requirements concerning the availability of certification schemes, action to promote the development of energy services, and an obligation for Member States to remove obstacles to energy efficiency, notably the split of incentives between the owner and tenant of a building or among building owners.

Lastly, the proposal provides for the establishment of national energy efficiency targets for 2020 and requires the Commission to assess in 2014 whether the Union can achieve its target of 20% primary energy savings by 2020. The Commission is required to submit its assessment to the European Parliament and the Council, followed, if appropriate, by a legislative proposal laying down mandatory national targets.

It should be noted that the scope of two Directives: the Cogeneration Directive (2004/8/EC, CHP Directive) and the Energy Services Directive (2006/32/EC, ESD) overlap with this proposal. It is therefore proposed that these two Directives are repealed when the new Directive enters into force, except for Articles 4(1) to (4) and Annexes I, III and IV to the ESD. These provisions concern the achievement by 2017 of an indicative energy saving target of 9% of the final energy consumption of each Member State in the 5 years before the implementation of the ESD. This target – albeit different in scope and level of ambition – contributes to the realisation of the EU's 20% energy efficiency target by 2020, and should therefore remain applicable until 2017.

**BUDGETARY IMPACT:** the Directive will be implemented using the existing budget and will not have an impact on the multi-annual financial framework.

**DELEGATED ACTS:** the proposal contains provisions giving the Commission the power to adopt delegated acts in accordance with Article 290 of the Treaty on the Functioning of the European Union.

## Energy efficiency

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The Council took note of a progress report on a proposal for a directive on energy efficiency. The proposal follows on from the Commission communication presented in March 2011 on an [energy efficiency plan 2011](#).

On the basis of that document, the Council adopted conclusions in June 2011, outlining actions in the following sectors: the public sector, buildings, industry and the energy sector, and ways to support favourable consumer choices.

From the intensive work done so far it appears that delegations support the aim of the proposal and additional measures for energy efficiency. However they also underline the importance of flexibility for member states to apply the most cost-efficient measures, consistency with existing legislation and respect for the subsidiarity principle.

The presidency report covers the main issues that will need more in-depth consideration:

**Energy efficiency targets:** at delegations' request, the Presidency suggested an alternative option for expressing and illustrating the EU's 2020 20% energy efficiency target. A two-step assessment of progress achieved, to be carried out in 2013 and 2015, has been included. As a method to compare Member States' progress, the Presidency suggests as one of the possible options – that the Commission come forward with a draft delegated act by 31 December 2014. It is the Presidency's understanding that a methodology should include a projection for absolute energy consumption in the EU.

**Public bodies:** many delegations questioned the scope, financial feasibility and appropriateness of the proposed annual 3% refurbishment target for all buildings owned by public authorities. There were requests for better coherence with Directive 2010/31/EU on the energy performance of buildings, including on possible exclusions. Several delegations have stated the view that any such obligation should be backed by additional sources of financing. One way to define and delimit more clearly the scope of this provision that was suggested during discussions in the Working Party would be to focus the obligation on buildings owned by central government, whereby Member States could at the same time be required to incentivise the retrofitting or upgrade of the energy performance of the buildings owned by regional and local authorities and in social housing. The Presidency text includes a first suggestion for an alternative approach to the annual renovation target, which was called for by the Council in its conclusions of June 2011.

**Purchasing by public bodies:** for many delegations, the current text as proposed by the Presidency, including Annex III, does not give rise to major objections at this stage. There have, however, been calls for wider aspects of sustainability for public procurement to be considered, and for further analysis of Annex III and the compatibility of the proposed provisions with EU public procurement legislation.

**Energy efficiency obligation schemes:** in response to requests by delegations, the Presidency text sets a time horizon for the scheme to run until the end of 2020 and suggests higher thresholds for possible exemptions.

On the basis of the Presidency text, delegations have suggested in the Working Party to provide for a gradual increase of the target, starting from a lower level in order to ramp up the system and reach higher saving rates over time, or to leave flexibility for Member States to set longer periods (e.g. three years) for a cumulative target.

**Energy audits and energy management systems:** while there is broad agreement on the usefulness of energy audits to tap additional saving potential, some delegations do not view favourably a mandatory requirement for larger companies to conduct energy audits, on grounds of proportionality, administrative burden and the creation of unnecessary peak demand for auditors. They hold that it would be more useful to

focus on the actual implementation of recommendations stemming from energy audits, including through energy management systems. The changes proposed in the Presidency text respond to some of the concerns, in that they clarify the conditions under which in-house experts can perform the audits and extend both the deadline for the obligation to come into effect and the frequency of the audits.

Metering and informative billing: while delegations generally support the aim of delivering energy savings through behavioural change, a number of delegations expressed concerns about the relationship between suggested obligations on informative billing and what is laid down on the roll-out of smart meters in the third internal energy market package legislation, which Member States are currently implementing. On the other hand, the Commission has stated that the suggested obligations on informative billing do not rely on smart meters.

Proposed requirements for individual heat consumption meters or individual heat cost allocators in multi-apartment buildings are viewed as not always cost-effective by a number of delegations.

Promotion of efficiency in heating and cooling: many delegations found the proposed requirements aimed at developing the potential of high efficiency cogeneration and district heating and cooling too rigid, and several Member States object to the obligations with regard to spatial planning on subsidiarity grounds. Delegations generally welcomed the suggestions made in the Presidency text as improvements. They streamline the provisions and provide greater flexibility for Member States. Some delegations asked for the deletion of conditions on the location of installations where waste heat can be used by heat demand points, and several Member States do not support the idea that industrial installations should be required to make use of waste heat and be connected to DHC networks.

Energy transmission and distribution: in the view of a number of Member States, the role to be given to CHP in terms of access and dispatching needs further analysis, in particular in comparison with renewable energy sources and in relation to Directive 2004/8/EC on cogeneration and requirements flowing from internal energy market legislation.

Review and monitoring: many delegations expressed hesitations on the ensuing administrative burdens and the timing of certain reporting obligations, stating that reliable statistical data would not be available.

## Energy efficiency

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The Committee on Industry, Research and Energy adopted the report by Claude TURMES (Greens/EFA, LU) on the proposal for a directive of the European Parliament and of the Council on energy efficiency and repealing Directives 2004/8/EC and 2006/32/EC.

The committee reached informal agreement on the text with the Council and it recommends that the European Parliament's position in first reading following the ordinary legislative procedure should amend the Commission proposal as follows:

Indicative national energy efficiency target: each Member State will be obliged to set an indicative national energy efficiency target, based on either primary or final energy consumption, primary or final energy savings or energy intensity. By 30 June 2014, the Commission will assess the progress achieved and whether the Union is likely to achieve energy consumption of no more than 1474 Mtoe of primary energy and/or no more than 1078 Mtoe of final energy in 2020.

Exemplary role of public bodies' buildings: public bodies will need to play an exemplary role, as Member States will have to ensure that as from 1 January 2014, 3% of the total floor area of heated and/or cooled buildings owned by their central government is renovated each year.

Building renovation: Member States shall establish a long-term strategy for mobilising investment in the renovation of the national stock of residential and commercial buildings, both public and private.

Energy efficiency obligation schemes: Member State must set up an energy efficiency obligation scheme, ensuring that obligated energy distributors and/or retail energy sales companies achieve a cumulative end-use energy savings target by 31 December 2020. That target shall be at least equivalent to achieving new savings each year from 1 January 2014 to 31 December 2020 of 1.5% of the annual energy sales to final customers of all energy distributors or all retail energy sales companies by volume, averaged over the most recent three-year period prior to 1 January 2013.

However, to achieve this target, Member States will have the option of using a bundle of flexibility measures as well as equivalent alternative measures such as:

- the possibility of achieving 1.5% target in three stages, reaching the 1.5% in 2018;
- excluding energy sales from ETS-covered industries;
- the counting of energy savings in the energy transformation, distribution sectors and counting early actions as from 31 December 2008.

The use of these flexibility measures should not lead to a reduction of more than 25% of the amount of the energy savings target.

Energy audits: Member States shall ensure that large enterprises are subject to an energy audit carried out in an independent and cost-effective manner by qualified and/or accredited experts or implemented and supervised by independent authorities under national legislation within three years after the entry into force of this Directive and at least every four years from the date of the previous energy audit.

Billing of customers based on actual consumption: in order to enable final customers to regulate their own energy consumption, billing should take place on the basis of actual consumption at least once a year, and billing information should be made available at least quarterly, on request or where the consumers have opted to receive electronic billing or else twice yearly. Gas used only for cooking purposes may be exempted from this requirement.

Promotion of efficiency in heating and cooling: by 31 December 2015, Member States shall carry out and notify to the Commission a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling. For the purpose of this assessment, Member States shall carry out a cost-benefit analysis covering their territory based on climatic conditions, economic feasibility and technical suitability.

## Energy efficiency

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The European Parliament adopted by 632 votes to 25 against with 19 abstentions a legislative resolution on the proposal for a Directive of the European Parliament and of the Council on energy efficiency and repealing Directives 2004/8/EC and 2006/32/EC.

Parliament adopted its position on first reading following the ordinary legislative procedure. The amendments are the result of a compromise negotiated between Parliament and Council. The main amendments are as follows:

Indicative national energy efficiency target: each Member State will be obliged to set an indicative national energy efficiency target, based on either primary or final energy consumption, primary or final energy savings or energy intensity. By 30 June 2014, the Commission will assess the progress achieved and whether the Union is likely to achieve energy consumption of no more than 1474 Mtoe of primary energy and/or no more than 1078 Mtoe of final energy in 2020.

Building renovation: Member States shall establish a long-term strategy for mobilising investment in the renovation of the national stock of residential and commercial buildings, both public and private. The strategy will encompass certain factors specified in the text. A first version of the strategy shall be published by 30 April 2014 and updated every three years thereafter and submitted to the Commission as part of the National Energy Efficiency Action Plans.

Exemplary role of public bodies' buildings: according to the amended text, public bodies will need to play an exemplary role, as Member States will have to ensure that as from 1 January 2014, 3% of the total floor area of heated and/or cooled buildings owned by their central government is renovated each year to meet at least the minimum energy performance requirements that it has set in application of Directive 2010/31/EU.

The 3% rate shall be calculated on the total floor area of buildings with a total useful floor area over 500 m<sup>2</sup> owned and occupied by the central government of the Member State concerned that, on 1 January of each year, do not meet the national minimum energy performance requirements. That threshold shall be lowered to 250 m<sup>2</sup> as of 9 July 2015.

Member States may opt for an alternative approach, whereby they take other cost-effective measures, including deep renovations and measures for behavioural change of occupants, to achieve, by 2020, an amount of energy savings in eligible buildings owned and occupied by their central government that is at least equivalent to that required above, reported on an annual basis.

Energy efficiency obligation schemes: Member States must set up an energy efficiency obligation scheme, ensuring that obligated energy distributors and/or retail energy sales companies achieve a cumulative end-use energy savings target by 31 December 2020.

That target shall be at least equivalent to achieving new savings each year from 1 January 2014 to 31 December 2020 of 1.5% of the annual energy sales to final customers of all energy distributors or all retail energy sales companies by volume, averaged over the most recent three-year period prior to 1 January 2013. The sales of energy, by volume, used in transport may be partially or fully excluded from this calculation.

However, to achieve this target, Member States will have the option of using a bundle of flexibility measures as well as equivalent alternative measures such as:

- the possibility of achieving 1.5% target in three stages, reaching the 1.5% in 2018;
- excluding energy sales from ETS-covered industries;
- the counting of energy savings in the energy transformation, distribution sectors and counting early actions as from 31 December 2008.

The use of these flexibility measures should not lead to a reduction of more than 25% of the amount of the energy savings target.

The public policy measures may include: i) energy or CO<sub>2</sub> taxes; ii) financing schemes and instruments or fiscal incentives; iii) regulations or voluntary agreements that lead to the application of energy-efficient technology or techniques; iv) standards and norms that aim at improving the energy efficiency of products and services; v) energy labelling schemes; and vi) training and education, including energy advisory programmes. As an alternative to setting up an energy efficiency obligation scheme, Member States may opt to take other policy measures to achieve energy savings among final customers, provided those policy measures meet the criteria set out in the Directive.

Energy audits: Member States shall ensure that large enterprises are subject to an energy audit carried out in an independent and cost-effective manner by qualified and/or accredited experts or implemented and supervised by independent authorities under national legislation within three years after the entry into force of this Directive and at least every four years from the date of the previous energy audit.

Billing of customers based on actual consumption: in order to enable final customers to regulate their own energy consumption, billing should take place on the basis of actual consumption at least once a year, and billing information should be made available at least quarterly, on request or where the consumers have opted to receive electronic billing or else twice yearly. Gas used only for cooking purposes may be exempted from this requirement.

Promotion of efficiency in heating and cooling: by 31 December 2015, Member States shall carry out and notify to the Commission a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling. For the purpose of this assessment, Member States shall carry out a cost-benefit analysis covering their territory based on climatic conditions, economic feasibility and technical suitability.

## Energy efficiency

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The Council adopted the energy efficiency directive with the Finnish delegation abstaining and the Spanish and Portuguese delegations voting against. This follows a first-reading agreement with the European Parliament.

## Energy efficiency

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PURPOSE: to update the Union's legal framework with respect to energy efficiency.

LEGISLATIVE ACT: Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC.

CONTENT: The Directive establishes a common framework for measures to promote energy efficiency in the Union with a view to pursuing the overall objective of the energy efficiency target of saving 20% of the Union's primary energy consumption by 2020 and of making further energy efficiency improvements after that date. The requirements laid down in the Directive are minimum requirements and shall not prevent any Member State from maintaining or introducing more stringent measures.

Energy efficiency targets: each Member State shall set an indicative national energy efficiency target, based on either primary or final energy consumption. By 30 June 2014, the Commission shall assess progress achieved and whether the Union is likely to achieve energy consumption of no more than 1 474 Mtoe of primary energy and/or no more than 1 078 Mtoe of final energy in 2020.

Exemplary role of public bodies' buildings: each Member State shall ensure that, as from 1 January 2014, 3 % of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year. The European Parliament, the Council and the Commission agreed to make a comparable commitment bearing in mind budgetary and public procurement rules.

Member States:

- shall establish a long-term strategy for mobilising investment in the renovation of residential and commercial buildings with a view to improving the energy performance of the building stock. They may opt for an alternative approach, whereby they take other cost-effective measures, including deep renovations and measures for behavioural change of occupants, to achieve, by 2020, an amount of energy savings in eligible buildings owned and occupied by their central government that is at least equivalent, reported on an annual basis;
- shall ensure that central governments purchase only products, services and buildings with high energy-efficiency performance, insofar as that is consistent with cost-effectiveness, economical feasibility, wider sustainability, technical suitability, as well as sufficient competition.

Energy efficiency obligation schemes: each Member State shall set up an energy efficiency obligation scheme. That scheme shall ensure that energy distributors and/or retail energy sales companies achieve a cumulative end-use energy savings target of 1.5% of the annual energy sales to final customers by 31 December 2020.

However, to achieve this target, Member States will have the option of using a bundle of flexibility measures as well as equivalent alternative measures such as: (i) the possibility of achieving 1.5% target in three stages, reaching the 1.5% in 2018; (ii) excluding energy sales from ETS-covered industries; and (iii) the counting of energy savings in the energy transformation, distribution sectors and counting early actions as from 31 December 2008.

The use of these flexibility measures should not lead to a reduction of more than 25% of the amount of the energy savings target.

As an alternative to the establishment of energy efficiency obligation schemes, Member States will be able to adopt other public policy measures to achieve energy savings among final customers, provided those policy measures meet the criteria laid down in the Directive. The policy measures may include, among other things: (i) energy or CO<sub>2</sub> taxes that have the effect of reducing end-use energy consumption; (ii) financing schemes and instruments or fiscal incentives; (iii) regulations or voluntary agreements that lead to the application of energy-efficient technology or techniques and reduce end-use energy consumption; (iv) standards and norms that aim at improving the energy efficiency of products and services; (v) energy labelling schemes; (v) training and education programmes.

Energy audits and energy management systems: Member States shall promote the availability to all final customers of high quality energy audits which are cost-effective and: (i) carried out in an independent manner by qualified and/or accredited experts according to qualification criteria; or (ii) implemented and supervised by independent authorities under national legislation.

Metering and billing information: Member States shall ensure that, in so far as it is technically possible, financially reasonable and proportionate in relation to the potential energy savings, final customers for electricity, natural gas, district heating, district cooling and domestic hot water are provided with competitively priced individual meters that accurately reflect the final customer's actual energy consumption and that provide information on actual time of use.

Where final customers do not have smart meters, Member States shall ensure, by 31 December 2014, that billing information is accurate and based on actual consumption. Final customers shall have the possibility of easy access to complementary information on historical consumption allowing detailed self-checks.

Promotion of efficiency in heating and cooling: by 31 December 2015, Member States shall carry out and notify to the Commission a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling. Member States shall carry out a cost-benefit analysis covering their territory based on climate conditions, economic feasibility and technical suitability.

Promotion of energy efficiency: Member States shall evaluate and if necessary take appropriate measures to remove regulatory and non-regulatory barriers to energy efficiency.

Review and monitoring of implementation: by 30 April each year as from 2013, Member States shall report on the progress achieved towards national energy efficiency targets.

ENTRY INTO FORCE: 04/12/2012.

TRANSPOSITION: 05/06/2014.

DELEGATED ACTS: the Commission shall be empowered to adopt delegated acts to review the harmonised efficiency reference values referred to in the Directive. The power to adopt delegated acts shall be conferred on the Commission for a period of five years from 4 December 2012 (a period that may be tacitly renewed for periods of an identical duration, unless Parliament or the Council object). A delegated act shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months (this deadline may be extended by a further two months) of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object.



# Energy efficiency

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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.

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## Energy efficiency

This 2016 report assesses the progress achieved by 2014 in achieving the target of improving energy efficiency by 20% by 2020 and implementing the Energy Efficiency Directive.

On the basis of the Member States' annual reports for 2016 and the latest available data from Eurostat (2014), the Commission is optimistic that the objective of reducing primary energy consumption by 20% will be achieved if Member States comply with their commitments.

Progress towards the EU's energy efficiency target for 2020: the report notes that the EU has made considerable progress in recent years. By 2014, its primary energy consumption was only 1.6% higher than its target by 2020. Its final energy consumption was even 2.2% below the target set for 2020.

By 2014, the final energy consumption of 17 Member States was already below their indicative target for 2020. Transportation accounted for the largest share (33%) of total final energy consumption, followed by industry (26%), the residential sector (25%), the tertiary sector (13%) and the other sectors (3%).

National sectoral trends: most Member States have decreased their final and primary energy consumption between 2005 and 2014. If this pace is maintained, they should meet the 2020 targets, with the exception of Estonia, Malta and Sweden in the case of primary energy consumption, and with the exception of Austria, Belgium, Lithuania, Malta and Slovakia in terms of final energy consumption.

An analysis carried out for the EU-28 shows that the decline in primary energy consumption between 2005 and 2014 is mainly due to an improvement in energy intensity. The slowdown in the economy, changes in the combination of fuels and structural changes played a relatively minor role. The energy savings achieved have reduced the energy bills of consumers and reduced greenhouse gas emissions by about 800 million tonnes of CO<sub>2</sub> in 2014. The Commission considers that public policies have played a key role in improving energy efficiency.

The report shows that the majority of Member States have improved their final energy intensity in industry and in the services sector and have reduced the average energy consumption per m<sup>2</sup> in the residential sector over the period 2005-2014. The transport sector was the only sector to have recorded an increase in final energy consumption in 2014 compared to 2013.

Recommendations: the report calls on the Member States to:

- improve energy efficiency in the transport sector: increased use of public passenger transport, use of low-emission alternative energy, low-consumption vehicles and the deployment of related infrastructure such as charging systems for electric vehicles;
- continue efforts to renovate existing buildings, in particular by improving financing conditions for investments in energy efficiency. Information and communications technologies (ICTs) can play an important role in this regard by providing consumers with the tools to be better informed and to manage their energy consumption intelligently. In order to further mobilise public and private investment, the Commission presented an initiative entitled [Accelerating clean energy in buildings](#) in 2016. It also adopted a communication entitled [Accelerating Clean Energy Innovation](#) which proposes to concentrate the funds available under Horizon 2020 on the decarbonisation of the Union's housing stock.

The Commission will continue to closely monitor the implementation of the Energy Efficiency Directive. In 2017, it will initiate a dialogue with all Member States to verify the conformity of national legislation with the Directive.

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## Energy efficiency

This Commission report assesses progress made by Member States in achieving national energy efficiency targets by 2020 and in the implementation of the Energy Efficiency Directive.

This 2017 report provides the latest insights into progress made up to 2015 towards the 20% target set by Directive 2012/27/EU. It builds on the 2016 Energy Efficiency Progress Report as well as the Member States' 2017 Annual Reports and National Energy Efficiency Action Plans (NEEAPs).

The main findings are as follows:

- after energy consumption gradually decreased between 2007-2014, it increased in 2015 in part due to a less warm winter and lower

- fuel prices. Although primary energy consumption rose by 1.5% compared to 2014, it was still on track to meet the 2020 target;
- primary energy consumption largely decreased in the post-recession years (2009-2015) in nearly all Member States, showing that economic recovery and growth could be achieved without increasing national demand for energy;
- increases in economic activity have tended to push up energy consumption. Energy savings have helped offset this. However, their level was not high enough in 2015 and 2016 to offset the impact of the growth in economic activity;
- final energy intensity in industry decreased in almost all Member States in 2015;
- Member States are making good progress in achieving energy savings under the EED. Their collective efforts in 2015 were above the linear trajectory for achieving the required savings by 2020;
- in their 2017 NEEAPs, several Member States revised their indicative national targets for 2020. While the national targets announced are still consistent with the EU level of ambition for final energy consumption in 2020 when taken together, the gap is now greater for primary energy consumption.

Conclusion: the report concludes that if the increases observed in recent years reverse the trend observed since 2005, achieving the 2020 targets will require additional efforts.

In order to step up efforts, it is essential that the policies and measures proposed in the 2017 NEAPs are implemented effectively. While some countries have ambitious energy efficiency measures in place, others need to increase their efforts:

- EU and national policies should tap into the large cost-effective potential for energy savings represented by the building stock and speed up digitalisation in the energy sector. The building renovation market is estimated to be worth EUR 80-120 billion in 2030;
- energy efficiency measures for buildings could also play an important role in reducing energy poverty. It has been estimated that potentially 1.5-8 million households could be removed from energy poverty depending on the specific measures adopted by Member States;
- additional improvements in the transport sector are needed in most Member States. Against this background the revision of the light duty vehicles CO<sub>2</sub> legislation beyond 2020, together with an improved monitoring system, are of key importance, as reducing CO<sub>2</sub> emissions and energy consumption in transport is closely linked to fuel efficiency. Additional measures to promote more efficient use of transport, such as the revision of the Combined Transport Directive, a switch to collective transport modes, and a transition to zero- and low-emission vehicles, driven in particular by electro-mobility, will also be needed;
- the [proposed Regulation](#) for the Governance of the Energy Union should improve the coordination of efforts on energy efficiency.

The two different decomposition methodologies analysed in this report confirm that energy efficiency was a key driver of the improvements in energy intensities across sectors.

In November 2016, the European Commission proposed a [revision of the Energy Efficiency Directive](#) (EED) as part of the Clean Energy Package. The review aims to adapt the EED to the 2030 perspective, by setting a binding 30% energy efficiency target, which effectively maintains the current level of ambition.

The binding 30% energy efficiency target proposed by the Commission will improve energy security by reducing fossil fuel imports by 12% in 2030 which corresponds to import savings of EUR 70 billion.

The Commission will continue to closely monitor the progress of Member States towards their indicative national energy efficiency targets for 2020 and EED implementation.

## Energy efficiency

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The Commission presents its 2018 assessment of the progress made by Member States towards the national energy efficiency targets for 2020 and towards the implementation of Directive 2012/27/EU (the Energy Efficiency Directive) as revised by Directive 2018/2002/EU (the revised Directive).

Energy efficiency is strong driver to achieve the 2020 and 2030 climate targets and also a key building block for the [Commissions proposal](#) in 2018 for A European strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy. This report provides the latest insights into progress made up until 2017 to meet the 2020 target before 2020.

### Main Findings

- Following a gradual decrease between 2007 and 2014, energy consumption increased between 2014 and 2017.
- Primary energy consumption rose by 0.9% in 2017 compared to 2016. Final energy consumption increased by 1.1% in 2017. At present, both are slightly above the fixed trajectory towards the 2020 target.
- Weather variations are one of the main reasons for the fluctuations observed in energy consumption in recent years. Weather-corrected figures for energy consumption are less volatile, but also show a rebound trend since 2014.
- Increases in economic activity continue to push energy consumption up. Energy savings have helped offset the impact of these increases, leading to gradual improvements in energy intensity. However, in recent years, energy savings were not high enough to offset the impact of the growth in economic activity, possibly also due to the delays in implementing energy efficiency policies in some Member States.
- The growth in transport activity and the low-oil prices during 2014-2017 were the main reasons for the increasing energy consumption.

Based on an assessment of the latest national energy efficiency action plans (NEEAPs) and 2018 annual reports, it is clear that, collectively, Member States are making good progress in achieving energy savings under Article 7 (energy saving obligation) of the Energy Efficiency Directive. However, the analysis shows that several Member States are lagging behind in terms of savings for 2016, with Bulgaria, Croatia, Cyprus, the Czech Republic, Greece, Latvia, Luxemburg and Portugal having achieved less than 60% of required savings for 2016.

The report confirms that that energy efficiency was a key driver of the improvements in energy intensity across sectors. Until recently, these were sufficient to neutralise the surge in energy demand driven by economic activity, higher heating and cooling comfort standards, and

changes in behaviour and lifestyle. However, more recently the amount of savings achieved seems to have diminished while the positive effects of activity increased.

#### Trends in Member States

In order to better assess the growing energy consumption trend and identify a possible way forward, in July 2018 the Commission set up a Task Force on mobilising efforts to reach the EU energy efficiency targets for 2020. The report on the work carried out by the Task Force identified some additional causes of the growth in energy consumption related to national contexts. These included: (i) delayed implementation of energy efficiency policies; (ii) a difference between estimated energy savings and actual energy savings achieved; (iii) insufficient consideration of the impact of behavioural aspects such as the rebound effect; (iv) lack of funding for energy efficiency policies; and (v) restrictions related to EU state aid rules.

The Task Force agreed that there is a need to address the delivery gap in achieving the EU 2020 targets. A set of solutions was identified, including:

- ensuring full implementation of the existing legislation, as there have been delays in transposing and implementing both the Energy Efficiency and

[Energy Performance of Buildings](#) (EPBD) Directives. This includes full achievement of the energy savings obligation under Article 7 and meeting the requirement to carry out regular inspections under the EPBD;

- making full use of the remaining funding opportunities under the European Structural and Investment Funds and implementing additional measures at national level.

#### Further action

The Commission recalls that the revised EED set the 2030 energy efficiency target to be at least 32.5%. The latter also included a possible upward revision clause, which increases the level of ambition compared to efforts required to meet the 2020 targets.

Several measures recently adopted or in the pipeline should bring additional energy savings in a slightly longer time perspective after 2020. These include: (i) the legally binding national climate targets 2021-2030 for sectors like transports and buildings not covered by the EU Emission Trading System; (ii) recently agreed stricter CO<sub>2</sub> standards for light duty vehicles beyond 2020, together with an improved monitoring system; (iii) CO<sub>2</sub> emission standards for new trucks; (iv) the legislative package of new energy performance standards and labelling for products, and (v) the strengthened Article 7 in the revised EED. The fact that the revised EPBD better incorporates the digital dimension will facilitate deployment of ICT and smart technologies which are expected to play an important role in increasing the energy performance of buildings and reducing energy consumption in buildings in the coming years.

The Commission states that it has intensified the exchange of information and best practice, and has initiated the process of strengthening Member States market surveillance of product efficiency requirements. It also aims to help Member States to build capacity for promoting building renovation in the public sector, including through the use of energy service contracting.

The Commission will continue to monitor the Member States progress towards their indicative national energy efficiency targets for 2020, as well as their implementation of the EED. It will report on progress to the Task Force in the summer of 2019 when the preliminary data for 2018 will be available for assessment.