

ENERGY EFFICIENCY POLICIES

MAKING THE ENERGY UNION WORK FOR CITIZENS



The Coalition for
ENERGY SAVINGS



WHAT IS AT STAKE?



2012

The Energy Efficiency Directive (EED) provides a framework for EU and national energy efficiency policies as well as a delivery mechanism to achieve the 20% energy efficiency target for 2020.

2016

In 2016, the European Commission presented a proposal to review the Energy Efficiency Directive and other energy legislation, notably to provide an outlook to 2030.

Today, there are visible signs that energy efficiency policies are encouraging the energy efficiency market to take off, bringing benefits for consumers and businesses across the European Union.

Legislators have the opportunity to accelerate the delivery of energy efficiency policies and give life to an Energy Union, which works for citizens.



2020

Current EED energy efficiency targets end in 2020. The target is on track to be achieved, but the energy savings trajectory needs to be extended.

2030

The 2030 energy efficiency target has to be set by legislators. The cost-effective potential has been evaluated at 40%. ¹

2050

The timeframe for planning energy infrastructure investments.

ENERGY EFFICIENCY POLICIES ARE SUPPORTED BY STAKEHOLDERS ACROSS TRADITIONAL INTEREST BOUNDARIES



**The Coalition for
ENERGY SAVINGS**

The emergence of the EED as a framework legislation coincides with a mobilisation across sectors to influence legislation and to improve the delivery of benefits.

The Coalition for Energy Savings was created in 2010 to gather all main sector and public interest representatives, including businesses, professionals, local authorities, trade unions, consumer and civil society organisations.



Climate Alliance



EUROPEAN ALLIANCE TO SAVE ENERGY
Creating an Energy-Efficient Europe



Advisory members :



MEMBER STATES HAVE DEVELOPED THEIR ENERGY EFFICIENCY STRATEGIES

Government departments regularly update the National Energy Efficiency Action Plans (NEEAPs) to progress towards their EED targets. They discuss lessons learnt and progress via the Concerted Action for the Energy Efficiency Directive, a network mobilising over 300 national officials and experts across the EU. ²





France: Energy efficiency as a job creator

Some Member States have modernised their energy legislation and brought energy efficiency to the centre of the public debate on energy and economic policy. France for example boosted its energy savings target with its 2015 Energy Transition Act, which is expected to lead to the creation of 200,000 jobs by 2030. ³

Germany: Energy efficiency as the compass for the Energiewende

The developments around energy efficiency at the EU level lead Member States to adjust their plans. In line with its long-term concept to cut primary energy consumption by 50 percent by 2050, Germany has conducted a public consultation on how to introduce the energy efficiency first principle in the energy system planning and make it the compass for its 'Energiewende' (German for energy transition). ⁴

MEMBER STATES CAN COUNT ON A RICH DIVERSITY OF INSTRUMENTS

Member States have developed energy efficiency strategies adapted to national circumstances. They have encouraged the creation of local jobs and growth across sectors (buildings, industry, transport and services).

The EU has the lead in setting targets and standards. It ensures the delivery of climate and energy targets, as well as internal market objectives.



THE ENERGY EFFICIENCY TOOLBOX



EU instruments

- Targets
- Minimum energy performance requirements, including for buildings and appliances
- CO₂ standards for vehicles
- Energy labelling
- Technical assistance
- EU funding

National instruments

- Targets
- Energy efficiency obligation schemes
- Taxes
- Financing schemes or incentives
- Public procurement and tendering
- Voluntary agreements
- Training and education
- Building renovation strategies
- Public works

National stakeholders are active advocates for stronger energy efficiency policies and improve the delivery of its benefits for citizens and business.

In Poland for example, the air quality issue is high on the political agenda. The Efficient Poland Initiative brings together expert organisations, business associations and NGOs to work on speeding up the renovation of the building stock in Poland. It is focused on single-family houses,

which generate the most low stack emissions (coal and wood heating). Efficient Poland provides analysis and suggestions to the Polish authorities to address these issues with effective policy, financial and regulatory measures.

Benefits of 2030 energy efficiency targets

For each additional 1% energy savings by 2030, pollution and health damage costs could be reduced Europe-wide by up to €6 billion per year. ⁵





ENERGY EFFICIENCY POLICIES ARE PROMOTED AT NATIONAL LEVEL



**Efficient
Poland**

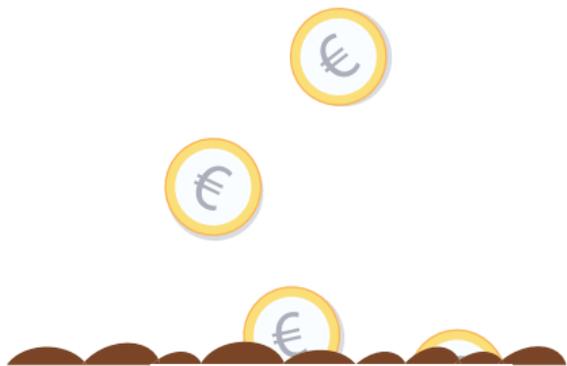
MEMBER STATES USE NATIONAL AND EU FUNDING TO ATTRACT PRIVATE INVESTMENT

Member States use public funding to leverage private investment in the energy efficiency market. Total public funding for energy efficiency has increased from about €6 billion in 2012, the year EED was adopted - to about €7.1 billion in 2014. ⁶

Financial support for energy efficiency from EU funds for energy efficiency has increased, including for innovation with Horizon 2020 energy efficiency calls. €194 million is available for 2016 and 2017 alone, supporting research and demonstration of more energy-efficient solutions for consumers, buildings, heating and cooling, industry, and innovative financing. ⁷

Funding for energy efficiency from the European Regional Development Fund and the Cohesion Fund has tripled since the last budgetary period, becoming the biggest contributor to climate action by these instruments. ⁸

€1 of public investment in energy efficiency measures can trigger a private investment of €13-20. ⁹



FINANCIAL INSTITUTIONS CALL FOR BREAKING DOWN BARRIERS TO ENERGY EFFICIENCY INVESTMENTS

The **Energy Efficiency Financial Institutions Group** (“EEFIG”) was set up by the European Commission and the United Nations Environment Programme Finance Initiative in 2013. It gathers public and private financial institutions, industry representatives and sector experts to recommend ways to overcome the challenges of obtaining long-term financing for

energy efficiency. The Energy Efficiency De-risking Project gathers data to support energy efficiency investment decisions through common standards.

The group identified several solutions and highlighted the importance of regulatory pathways.

Actors from the financial sector are mobilising:



We have the responsibility to design a sustainable environment for future generations by developing a pan-European mortgage financing mechanism, according to which energy efficiency investments are made more accessible and affordable for consumers and institutional investors, and the subsequent energy efficiency improvements reduce risk for banks, creating a win-win for all involved.” Luca Bertalot

Luca Bertalot is the Secretary General of the European Mortgage Federation - European Covered Bond Council (EMF-ECBC). ¹⁰



THE EU ENERGY EFFICIENCY LEGISLATION IS APPLIED BEYOND EU BORDERS

The EU's energy efficiency acquis is reaching out beyond its borders. The Energy Community, which groups the EU and its partners from South-East Europe and the Black Sea region, are implementing the Energy Performance of Buildings and the Energy Efficiency Directives.





Energy efficiency is going global. The IEA's latest energy efficiency market report shows that policies take a leading role in triggering energy efficiency improvements worldwide.



It's becoming increasingly clear that energy efficiency needs to be central in energy policies. All of the core imperatives of energy policy - reducing energy bills, decarbonisation, air pollution, energy security, and energy access - are made more attainable if led by strong energy efficiency policy." Fatih Birol

Dr Fatih Birol is the Executive Director of the **International Energy Agency** (IEA). 11

THE DIVERSITY OF INITIATIVES ACROSS EUROPE: CASE STUDIES

Supporting citizens' investments

In Lithuania, the Multi-apartment Building Modernisation Programme has been providing low interest bank loans to home owners to implement efficiency measures since 2005. So far 3,682 investment projects have been approved, 1,928 multi-apartment buildings are undergoing modernisation, and 1,251 are already renovated. In 2016, a new instrument was created with support from EU funds to increase bank's lending for energy efficiency measures (up to €500m). ¹²

Uniting co-owners around common projects

Energies POSIT'IF is a French Energy Service Company (ESCO) formed by local authorities and financial sector representatives that assists co-op houses and social housing projects in energy efficient building renovations. A part of the energy savings achieved during the contract phase is used to pay for the renovation, after which all the savings are for the benefit of the residents. ¹³

Improving access to information

In Croatia, an online tool, the 'REENOVA+ Technology Selector', allows interested residents to find out how to improve the energy efficiency of their homes. Manufacturers, retailers and installers of such technologies can take a REENOVA+ loan in order to improve the quality of their services to households. ¹⁴



Reducing energy bills for households

The UK recently launched a £320 million funding scheme (Heat Networks Investment Project) aiming to improve efficiency and supply low carbon heat to cities. The UK government estimates that heat networks have the potential to reduce heating costs by more than 30% in some cases. ¹⁵

Solving the issue of upfront costs

In the Netherlands, EnergieSprong significantly cuts renovation costs in social housing while tackling the issue of upfront costs through payments related to reduced energy bills. It also enables citizens to see their homes renovated in less than a week. In the Netherlands, the project plans to refurbish 100,000 houses and it is estimated that it will deliver savings of 430,000 tons of CO₂ per year. ¹⁶

Allowing participation of civil society

In France, CLER, the French NGO network for the Energy Transition, is coordinating a programme funded by the national white certificate scheme which advises local authorities on energy efficient building renovations for households with modest incomes. ¹⁷



Boosting competitiveness and maximising energy system synergies

In Denmark, energy efficiency in industrial companies has improved cost competitiveness by 9% in 10 years, according to an analysis by the Danish National Bank. ¹⁸

Benefitting from energy audits

In Romania, after analysing the results of energy audits (2015), more than 1,000 energy efficiency measures have been identified, leading to energy savings of approximately 247,611 tonnes of oil equivalent per year. ¹⁹ This amounts to the annual energy consumption of 220,000 Romanian households. ²⁰





Improving industrial processes

According to the European Industrial Insulation Foundation, reaping the annual cost-efficient potential for reducing heat-loss in industrial processes would lead to savings amounting to the energy consumption of 10 million households,²¹ reducing costs for the industry. A study of past energy audits has shown that industrial insulation measures have a payback time of one to two years.²² Heating and cooling networks enable the reuse of otherwise wasted energy in many industries.

FROM ENERGY TO ENERGY SERVICES SUPPLIERS: THE TRANSFORMATIVE ROLE OF ENERGY EFFICIENCY OBLIGATIONS SCHEMES

16 Member States have introduced or are planning to introduce energy efficiency obligations schemes (EEOs).

EEOs require national actors like energy suppliers or grid operators to deliver energy savings to their customers, recovering the costs through energy bills.

At the same time, energy bills are reduced through greater energy efficiency and reduced energy system costs. EEOs deliver consumer savings worth more than four times the costs. ²³



Ireland

In just two years, the Energy Efficiency Obligation Scheme in Ireland has resulted in energy savings equivalent to the total annual energy consumption of more than 50,000 homes. ²⁴

France

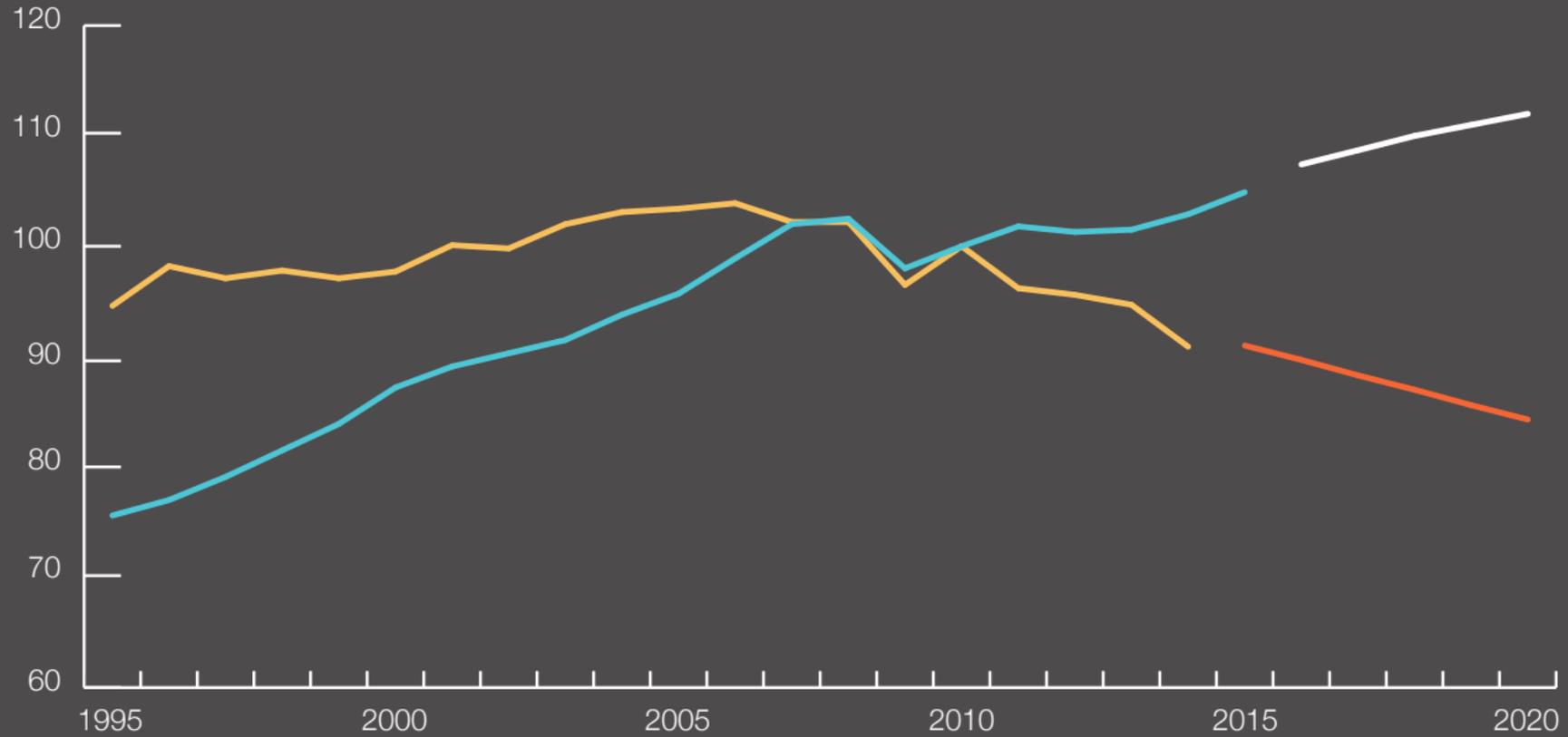
In France, the Energy Efficiency Obligation Scheme obliges energy suppliers to provide savings based on tradable energy efficiency certificates. The scheme has delivered around €24 billion of investments in energy efficiency and €2 billion of savings per year for consumers between 2011 and 2014. ²⁵

THE STRUCTURAL CHANGES ON THE ECONOMY

Around ten years ago the EU reached a turning point in its economic and energy development: energy consumption peaked and GDP growth became decoupled from energy consumption. Since then, economic growth is picking up in Europe, but energy consumption continues to fall. Energy efficiency policies have played a significant role in decoupling economic activity from energy consumption - it's the secret of sustainable growth. ²⁶

-  Annual GDP price corrected (2010 = 100, Eurostat 25/8/16)
-  Primary Energy Consumption (2010 = 100, Eurostat 28/8/16)
-  EU Reference Scenario 2016 (annual growth 1.2%)
-  Linear extrapolation of last ten years

Triggering positive changes



WHY SHOULD WE ACCELERATE THE DEPLOYMENT OF ENERGY EFFICIENCY IN THE EU?

Over the last decade, energy use has become increasingly efficient - cutting energy costs, creating jobs and growth, contributing to our security and reducing environmental harm. Energy efficiency policies have played a key role in enabling energy savings worldwide, but their potential is

still largely untapped.

Massive energy efficiency gains are needed to put our economies on the right path to remain within resource boundaries and to achieve the objectives of the Paris climate agreement.

Achieving these gains means investing in our infrastructure and therefore provides a much-needed opportunity to overcome the negative impacts of the recent economic crises by creating jobs, growth, and investments.

EU target ambition matters.
For every 1% extra energy savings by 2030: 27



EU gas imports
fall by 4%.



Households get
€29 of annual
energy bill savings.



Greenhouse
gas emissions
decrease by 0.7%.



Employment
increases by
336,000 jobs.

HOW TO ACCELERATE THE DEPLOYMENT OF ENERGY EFFICIENCY IN THE EU?

The review of the current energy efficiency legislation and the Energy Union legislation provides an opportunity to build on existing policies implemented by the EU and its Member States in the past years, and to bring further positive change for citizens, SMEs and larger companies in Europe.

Businesses across Europe, including SMEs, are

ready to thrive and deliver services and products to improve our lives. The technology is there. The financing is there. What is yet missing is a strong political and regulatory signal. This can be achieved by making sure that the Energy Union energy efficiency legislation fully unleashes the potentials of energy efficiency markets, notably by ensuring consistency, outlook, growth and certainty.



Consistency

Putting “Energy Efficiency First” in energy system planning to maximise benefits for consumers and to reduce the risk of stranded assets.



Outlook

Adopting a 2030 energy efficiency target based on the energy savings cost-effective potentials, evaluated at 40% by 2030, and putting in place an annual savings requirement until 2050.



Growth

Encouraging a regular and predictable growth of the energy efficiency market, notably through the extension and strengthening of Article 7 of the Energy Efficiency Directive.



Certainty

Setting up an accountable delivery mechanism for the energy efficiency target to reinforce investors' confidence and ensure a fairer comparison of supply and demand solutions.

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QUIZ

2050 is:

- a good time frame to plan for the energy transition, including for extending the horizon of EED Article 7; or
- the date when human kind will have certainly disappeared; or
- a new blockbuster movie with Daniel Craig and Angelina Jolie

Article 7 is:

- A White Stripes song; or
- A policy instrument used by EU Member States to encourage regular final energy savings as well as a predictable growth of the market of energy services and products; or
- A torture instrument from the Middle Age

Targets are:

- reminding you of good memories of playing darts back in high school, in a smoky café; or
- providing investors' certainty and a long-term outlook for the energy transition, especially if they are binding; or
- △ useful in a shooting range

40 is:

- the new 20; or
- △ the length of the deluge (in days); or
- the level of the energy efficiency target for 2030 which would ensure that all energy savings which are cost-effective are reaped

You have ticked

More ○ - You are far too cool to work on efficiency, but we would be delighted to work with you on this new project for Europe.

More □ - You are ready to join our movement of business, NGOs, consumers and local authorities calling for strong energy efficiency policies.

More △ - You should relax a bit, and give us a call! Life has a lot to offer. For example, energy efficiency products and services have an untapped potential for jobs.



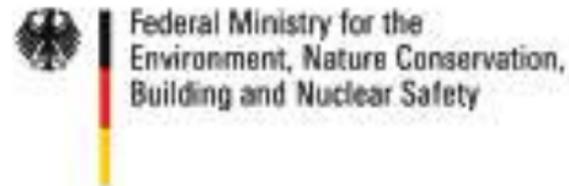
The Coalition for Energy Savings (AISBL) strives to make energy efficiency and savings the first consideration of energy policies and the driving force towards a secure, sustainable and competitive European Union. Its membership unites businesses, professionals, local authorities, trade unions, consumer and civil society organisations in pursuit of this goal.

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