

Tapping the EU's huge energy efficiency potential

The premier investment focus for sustainable jobs and growth

Briefing - November 2014

Summary

The job, growth and investment package to mobilise €300 billion over the next three years can and should be a major part of the transition to a prosperous, low-carbon and sustainable future. It has an ambitious goal and must deliver investments that ensure high economic, social and environmental returns.

Energy efficiency investments have proven to deliver the highest economic and social returnsⁱ and, in principle, can be activated quicker than many other investments, using a combination of financial and regulatory incentives to remove barriers. However, much more needs to happen to tap the cost-effective potentials. EU Member States are struggling to reach the savings required by the Energy Efficiency Directive and achieve the EU's 2020 goal of 20% energy efficiency, although these savings are only one part of the overall cost-effective potential.

Tapping this potential requires new policies, regulations and financial incentives, aligned with EU goals, to overcome barriers and enable private investors to enter into the highly profitable energy efficiency market. Completing the internal energy market requires completing the internal market for energy efficiency, which will unleash market forces that can mobilise the investments needed.

Many examples exist where public financial support schemes leverage private investment in energy efficiency improvements. These improvements create and maintain new and local jobs, increase state revenues, strengthen growth and enhance energy security, while improving the living environment and global climate.

The Coalition believes that in order to deliver on these benefits the proven cost-effective energy efficiency potentials mustⁱⁱ be fully realised. It is estimated that **this requires an additional investment of €386 billion until 2020 or €64 billion per year.** This includes stepping up implementation of the Energy Efficiency Directive, additional measures to close the remaining gap to the 2020 energy efficiency target and further removal of non-market barriers to realise the full potential by 2020 and beyond.

Energy efficiency delivers:

13 to 17 jobs (new or maintained) per €0.1 million public investment in energy efficiency measuresⁱⁱⁱ.

€1 of public investment in energy efficiency measures can trigger private investment of €13-20 per capita^{iv}.

Reduction of gas imports by 2.6% for 1% of energy saved^v.

Why invest in energy efficiency

Already today public support schemes and regulatory action deliver 20 Mtoe savings each year, indicating an annual investment level of around €40 billion^{vi}. This is a strong basis to build on and expand.

1. **Existing demand:** Direct public support schemes for private energy efficiency investment projects, which are in place in most countries at different levels (national, regional and local), are frequently over-subscribed showing that the demand for this funding exists.
2. **Quick:** Investment in energy efficiency can be rolled out very quickly, rather than taking many years to access, develop and obtain permits for new investments, as is the case with traditional infrastructure such as new distributions grids.
3. **Effective:** Public finance support for energy efficiency has been shown to leverage significant private investment.

How to invest in energy efficiency

Innovative channels for funding have been developed in the EU and at national level. These can be replicated and strengthened. For example:

- **Capacity-building funds**, which provide technical assistance to Member States to develop innovative investment programmes and are already being used by the European Investment Bank to increase uptake of energy efficiency investments. For example, ELENA (European Local ENergy Assistance) which helps EU towns and regions with technical expertise and organisational capacity to implement large energy efficiency projects.
- The **Covenant of Mayors** has existed for many years and with the right tools, such as an EU energy transition fund, Covenant signatories would be able to fast-track energy efficiency investments with the involvement of the private sector and civil society. Experience shows that revolving funds work well at local level for using public money.
- **Risk sharing facilities**, such as guarantee funds reducing the risks for financial institutions, are key to increase bank lending to energy efficiency investments. For example, the Bulgarian Energy Efficiency Fund, which offers a special portfolio providing Energy Efficiency Service Companies (ESCOs) with guarantees against delayed payments from clients or defaulting clients, and individual owners with guarantees for loans made by financial institutions.
- Supporting **aggregators**, which bundle smaller loans together, reducing transaction costs, making them more palatable for big lenders like the EIB and more digestible those running projects. For example the Housing Finance Corporation in the UK aggregates private financing requirements of housing associations so that they can gain access to the best competitive rates in the financial market.
- **Carbon trading revenues**, which can be ring-fenced to fund energy efficiency measures.

Barriers to investments in energy efficiency remain. However, specific regulatory changes and financial support schemes driven by the growth, jobs and investment package can rapidly overcome these barriers and enable investments to be made more easily.

Examples of regulatory changes needed include:

- Temporary exemption from **State Aid** rules for energy efficiency investments undertaken over the next three years. This should be combined with a longer term plan to review the State Aid General Block Exemption Regulation and permanently increase energy efficiency exemptions to 100% of eligible energy efficiency costs (matching exemptions to those for infrastructure and renewable). Energy efficiency funds should be redefined under State Aid rules as economically-sound entities pursuing a goal of economic viability and cost recovery rather than profit making.
- Regulation at EU level that promotes **Private-Public Partnerships** (PPPs) (such as Energy Performance Contracting) and also allows PPPs to benefit from EU funding. Often involving a private partner does not allow a project to benefit from EU funding (due to regulatory and non-regulatory obstacles that persist at Member State level). In general, there is a need for PPPs to be embedded to a greater extent in the financial sector.
- **Review public debt and deficit restrictions** for public spending on energy efficiency to support the delivery of National Energy Efficiency Plans where it can be proven they would start to reduce trade imbalances and boost growth within three years. Linked to this, modifying the interpretations of EUROSTAT rules on public debt and deficit relating to investments to create future savings, which considers investments in energy efficiency under energy service contracts as public debt in the National Accounts even if organised through ESCOs with performance guarantees.
- Remove **split incentives between the owner and the tenant of buildings** and incentives in **tariffs that are detrimental to efficiency investments** or which might hamper the participation of demand response in balancing markets and ancillary services procurement.
- Encourage additional criteria referring to further addressing energy efficiency in **public procurement** and facilitation on Joint Public Procurement to facilitate the bundling of small projects by local and regional authorities.
- Promote wider use of **energy audits that** meet the financial and economic criteria and demands set out by the Energy Efficiency Directive, as well as investment-grade audits. The latter, also based on life-cycle cost analysis, provide additional guidance for future investments and maintenance, whenever this is appropriate and proportionate.
- Further develop the road map for **long-term financing** to improve access for capital to low-return long-term necessary investment.

The Energy Efficiency Financial Institutions Group (EEFIG) has produced, with the buy-in from the financial sector, a series of detailed recommendations on tools and approaches, required to stimulate energy efficiency investments; this should be explored further. Possibilities for energy efficiency, including financing and overcoming non-economic barriers regarding energy efficiency, identified in the European Commission's draft Strategic Energy Technology Plan (SET-Plan) Integrated Roadmap should also be investigated.

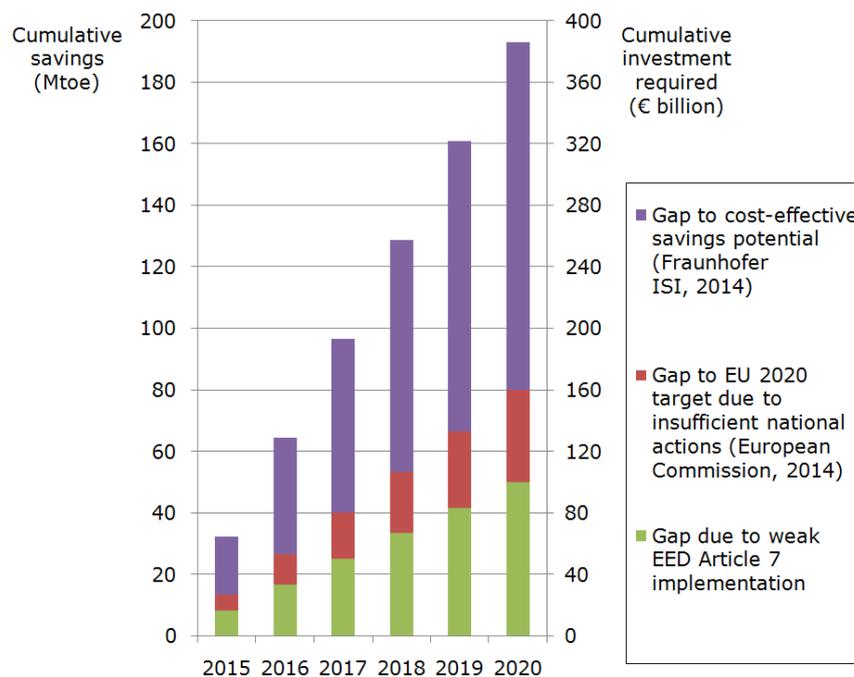
The Coalition for Energy Savings can provide many more examples and specific advice on the regulatory changes necessary to ensure the mobilisation of the investments.

Annex: How much additional investment is needed?

Due to weak implementation of the Energy Efficiency Directive^{vii} and insufficient national energy efficiency targets, a gap remains to the 20% energy efficiency target for 2020. In addition, the cost-effective energy savings potential is even higher^{viii}, leaving many investment opportunities untapped. Based on estimates from the European Commission and Fraunhofer ISI, the Coalition for Energy Savings estimates that savings of 32 Mtoe are needed every year until 2020 to close this gap.

Ecofys and Fraunhofer ISI assessed the investment required to reach the cost-effective energy savings potential by 2020 resulting in €3.6 billion investment to deliver 1 Mtoe savings on average^{ix}. The Commission data suggests lower investment of €1-2 billion of investment is needed per 1 Mtoe based on an assessment of the investment required to reach the 2020 target^x.

Based on an average of €2 billion of investment needed per 1Mtoe savings, €64 billion per year to 2020 is needed to deliver the full cost-effective energy savings potential in 2020. This would be an estimated additional investment of €386 billion until 2020. The graph below shows the cumulative savings and cumulative investment needed to 2020.



ⁱ Cambridge Econometrics, Verco, Building the Future: The economic and fiscal impacts of making homes energy efficient, 2014.

ⁱⁱ See Annex: How much additional investment is needed?

ⁱⁱⁱ Based on IEEP, Review of costs and benefits of energy savings, 2013, assuming that on average €1 of public finance leverages €10 of private investment.

^{iv} Jülich Institute (2011), Impact on public budgets of KfW promotional programmes in the field of energy-efficient building and rehabilitation.

^v European Commission, Impact assessment accompanying energy efficiency communication, 2014.

^{vi} Based on an average of €2 million investment needed for every 1 Mtoe saved. See Annex: How much additional investment is needed?

^{vii} Coalition for Energy Savings, Analysis of Article 7 Member States reports, 2014.

^{viii} Fraunhofer ISI, et al., Study evaluating the current energy efficiency policy framework in the EU and providing orientation on policy options for realising the cost-effective energy efficiency/saving potential until 2020 and beyond, 2014.

^{ix} ECOFYS, Fraunhofer ISI, The upfront investments required to double energy savings in the EU27 in 2020, 2011.

^x European Commission, Impact assessment accompanying the Energy Efficiency Directive, 2011.