

Putting energy efficiency first

Reframing the European Investment Bank's
action in times of transition and uncertainty

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Introduction

The aim of this report is to provide arguments why the European Investment Bank (EIB) should apply the Energy Efficiency first principle in its lending decision and explore the most promising mechanisms on how to do this.

- In the first chapter, a definition of ‘energy efficiency first’ is explored. The use of the principle by policy makers has been examined, and examples provided on how the principle could be put in motion.
- In the second chapter, the role of the EIB is specifically scrutinised. It shows that the Bank has valid reasons to embrace the principle and implement it in its lending decision.
- In the third chapter, recommendations are provided on how the Bank could implement the energy efficiency first principle. The actions stakeholders can take to monitor the implementation of the principle are also described.

1 Energy Efficiency First: a new imperative

The principle of considering energy efficiency first, for example in policy making and system planning, has evolved recently. Improving energy efficiency has long been recognised as the obvious route to improve the economic and climate performance at project level. It is only recently that the principle has gained attention at energy system level. By looking at this broader picture, energy efficiency considerations would no longer come as an “after thought”, but would be examined all along the life time of operations, even before they take place at all. This chapter explores the principle and its definition, as well as ways it can be applied within the energy system.

1.1 From prevention to precaution: a new paradigm

Energy efficiency first is related to existing environmental principles established by the EU Treaty and implemented in EU policies, in particular the principle of prevention of pollution at the source and the precautionary principle.

The principle of prevention of pollution at the source is enshrined in Article 192(2) of the Treaty of the Functioning of the EU (TFUE) and has been implemented through secondary legislation¹. Its development resulted in conceptualising the mitigation hierarchy (i.e. avoidance, minimisation, rehabilitation/restoration, and compensation) whose application can be found in the waste man-

¹ Industrial Emissions Directive, Environmental Impact Assessment Directive, etc.

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agement hierarchy (it is better to avoid producing waste than to deal with it). Energy efficiency first would be the application of these considerations in the energy field (it is more effective and cheaper to reduce energy waste than to increase energy supply or reduce the negative impacts of supply), and can therefore be viewed as resulting from a transfer of management principles.

The relationship with the precautionary principle is of a more general nature. This principle, set out in Article 191 of the TFUE, aims at ensuring a high level of environmental and health protection through promoting decision-taking in view of potential big hazards, despite the absence of certainty about the specific risks and probabilities. Precaution has been used to justify public intervention in complex areas where uncertainty might otherwise lead to paralysis. Precaution could be applied to the current evolutions of the energy system, where rapid changes bring in new actors, like consumers, whose behaviour is difficult to plan (high uncertainty). Because energy system planners tend to deal with these new uncertainties by simply not making decisions (paralysis), they apply business-as-usual approaches and tend to oversize the energy supply infrastructure as the safest bet. The first step to overcome paralysis is to improve the transparency and public participation in decision making. This would allow efficiency stakeholders to provide evidence on how to manage uncertainties in delivering energy savings, which are often related to an over-reliance in supply side solutions in the first place.

As the world is struggling to adopt solutions to mitigate climate change, it cannot afford to take any risk in the way it is managing the energy transition. As a consequence, narratives are evolving, from a “low-carbon” energy system to a “low energy” system. These developments are related to the move from the “green economy” (focused on minimising impacts) to the “circular economy” (focused on minimising resource inputs).

1.2 Applying the principle to manage the energy transition

Energy efficiency first implies:

- 1) Considering the potential for energy efficiency solutions in all decision-making related to energy.
- 2) Comparing the cost-effectiveness of energy efficiency and energy supply solutions (considering also jobs and economic growth, energy security and climate change mitigation objectives) and making an informed choice, prioritising energy efficiency improvements where they make sense. This ‘comparison’ can be applied to the future, meaning that any investment should be viable in the future under a low-energy consumption scenario, i.e. if all cost-effective energy savings are reaped.

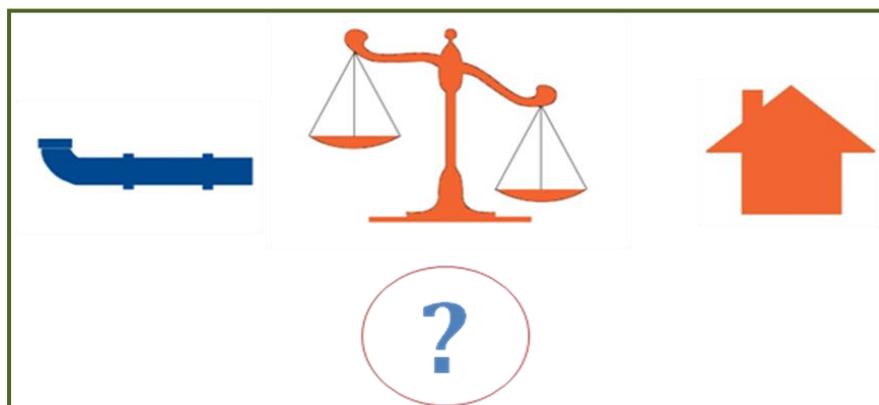


Figure 1 – Energy efficiency first

Considering energy efficiency first does not necessarily mean systematically choosing energy efficiency over supply solutions. It rather means making an informed choice.

Applying the principle requires identifying all decision points in the energy system where energy saving solutions might be overlooked or undervalued. The energy system can be considered as a public good which is affected by the action of different stakeholders (financial companies, non-financial companies, households, public banks, etc.) while none of them control it completely. A

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few examples on how the energy efficiency principle can be applied by energy system stakeholders are provided in the following table.

Table 1 – Examples of application of energy efficiency first

Stakeholder groups	Main leverage on energy consumption	State of play	What they need to be in the position to apply the principle
'Energy consumers' (households and companies)	Upgrade properties and assets	Some barriers remain to a complete market roll-out of efficiency solutions (e.g. lack of information, split incentive, short-term financial decisions, etc.).	-Market signals -Regulations
Financial companies	Influence investments (risk of infrastructure lock-in)	Risk of stranded assets not yet fully taken into account despite recent timidity towards coal from some actors. Difficulty to properly value energy savings projects despite recent developments ² .	-Appropriate energy projections -Appropriate impact assessments -Market signals -Regulations
Governments	Design the regulatory framework	Although the EU has a supportive legislative ³ and financial ⁴ frame-	-Political impetus

² [The Investor Confidence Project \(ICP\) Europe](#) aims at standardising how energy efficiency projects are developed and measured. By streamlining transactions and increasing the reliability of projected energy savings, ICP Europe intends to build a marketplace for standardized energy efficiency projects. The individual projects can then be aggregated and traded by institutional investors on secondary markets – just like mortgages or other asset-backed securities.

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	which constrains and influences the other actors	work for energy efficiency, few provisions aim at applying the energy efficiency first principle ⁵ .	
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In that context, public banks and financial companies have a similar behaviour when it comes to mitigating risks, but public banks do have the responsibility to achieve impacts and avoid locking societies into high risk infrastructure. The next chapter further explores their role, through the example of the European Investment Bank.

Conclusions

- Stakeholders can use the experiences from the prevention principle and the precautionary principle to enact energy efficiency first in practice. In its struggle to lead the fight against climate change, the EU needs to provide more clarity on energy transition and move beyond a supply side centric approach. As a consequence, narratives are evolving, from a “low-carbon” energy system to a “low energy” system.

³ Through obligations and targets to save energy (Article 7 of the Energy Efficiency Directive for example), rules related to public procurement, eco-design or environmental quality standards. This is based on the EU’s mandate to act on energy efficiency (Article 194 of the TFEU).

⁴ The EU is using its budget to support climate action, including energy efficiency: it has agreed that at least 20% of its budget for 2014–2020 – as much as €180 billion – should be spent on climate change-related action.

⁵ Articles 14 and 15 of the Energy Efficiency Directive, as well as provisions relating to the tasks of regulators in the electricity and gas market directives, are initiating a requirement for Member States authorities to consider energy savings solutions when planning the energy system, but the application of these rules and their enforcement is yet to be analysed. A publication on this topic is currently being prepared by the Coalition for Energy Savings.

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- Energy efficiency first implies considering the potential for energy efficiency solutions in all decision-making related to energy, to be able to make informed investment choices, by comparing energy efficiency and energy supply solutions and only approving projects which would make sense in an energy efficient world.
- Applying the principle requires identifying all decision points in the energy system where energy saving solutions might be overlooked or undervalued. Public banks have a particular position in this system: they should take care of the risk of their project portfolio but also anticipate societal demands.

2 Why should the European Investment Bank act on Energy Efficiency First?

The European Investment Bank (EIB) has valid reasons to embrace the energy efficiency first principle and implement it in its lending decision.

2.1 Energy efficiency: from a no regret option to a front role

Despite its leading position as an energy resource⁶, energy efficiency still has a large untapped development potential. An increasing number of voices⁷ argue that enabling an ‘energy efficiency boom’ could be a defining project for Europe. Political declarations in favour of the energy efficiency first principle have also emerged. Although the Energy Union communication from the Commission⁸ does not spell out the principle as such, the two commissioners in charge of delivering the Energy Union have embraced the definition to a certain extent.

⁶ The International Energy Agency describes it as the ‘first fuel. IEA 2014 [Energy efficiency: From "hidden fuel" to "first fuel"?](#)

⁷ See for example, Coalition for Energy Savings 2015 [Energy Efficiency First”: How to make it happen](#)

⁸ European Commission 2015 [A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy](#)

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“[...] the Energy Union puts energy efficiency first. We have to fundamentally rethink energy efficiency and treat it as an energy source in its own right”, said Vice-President for Energy Union Maroš Šefčovič, European Commission⁹.

“[...] It starts with taking "efficiency first" as our abiding motto. Before we import more gas or generate more power, we should ask ourselves: "can we first take cost-effective measures to reduce our energy?" said Commissioner Miguel Arias Cañete, European Commission¹⁰.

While energy efficiency stakeholders have been pushing for concrete changes in policies, the European Commission is yet to apply the principle in the revision of climate and energy legislation, expected in 2016.¹¹ In this context, all eyes are now turned to the European Investment Bank who has been announcing its willingness to act as a leader amongst financial institutions on climate change action.

The EIB supports energy efficiency via direct loans (for large projects¹² above €25 million) and intermediated loans via national and regional intermediary banks (for small and medium-scale projects). It has also been using a number of instruments. Some of them are directly targeting energy

⁹ Maroš Šefčovič 2015 [Driving the EU forward: the Energy Union](#)

¹⁰ Miguel Arias Cañete 2015 [Towards an Effective Energy Union](#)

¹¹ The European Commission Work Programme 2016 states that the Energy Union Strategy has “set out the key actions needed” to put energy efficiency first, but no details are provided on how the principle will be applied.

¹² See for example project [Spark](#) on smart meters in the UK, €479 million.

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efficiency, such as the Green Initiative¹³, PF4EE¹⁴, and DEEP Green¹⁵. Others target sustainable energy in general, such as EEEF¹⁶ and technical assistance from ELENA¹⁷. Other instruments have a broader scope, but can help energy efficiency projects, such as JEREMIE¹⁸ (SMEs) and JESSICA¹⁹

¹³ **Supporting** energy efficiency projects by small and medium sized enterprises (SMEs) in EU new Member States and pre-accession countries.

¹⁴ The Private Finance for Energy Efficiency (**PF4EE**) instrument is a joint agreement between the EIB and the European Commission which aims to address the limited access to adequate and affordable commercial financing for energy efficiency investments. Financial intermediaries are invited to participate in the PF4EE, which supports energy efficiency investments through credit risk protection, long-term financing and expert support services to financial intermediaries.

¹⁵ The Debt for Energy Efficiency Projects Green (DEEP Green) is an EIB initiative that aims at developing a suite of new financial products for four key groups of players in the EE market, namely, banks, public sector, ESCOs and utilities. DEEP Green targets aggregation and de-risking of energy efficiency projects, which are key barriers to the financing of EE investments.

¹⁶ The **EEEF** aims to provide market-based financing for commercially viable public energy efficiency and renewable energy projects within the European Union. The EEEF was launched by the European Commission, the European Investment Bank (EIB), the Cassa Depositi e Prestiti (CDP) and Deutsche Bank.

¹⁷ **ELENA** (“European Local ENergy Assistance”) is a European Facility aiming, through technical assistance, at supporting regional or local authorities in accelerating their investment programmes in the fields of energy efficiency and renewable energy sources. This grant support is provided within the framework of the Intelligent Energy Europe II programme.

¹⁸ The **JEREMIE** initiative (“Joint European Resources for Micro to Medium Enterprises”) offers EU Member States, through their national or regional Managing Authorities, the opportunity to use part of their European Union Structural Funds to finance small and medium-sized enterprises (SMEs) by means of equity, loans or guarantees, through a revolving Holding Fund acting as an umbrella fund.

¹⁹ **JESSICA** (Joint European Support for Sustainable Investment in City Areas), a policy initiative of the European Commission (EC) developed jointly with the EIB and in collaboration with the Council of Europe Development Bank (CEB), supports integrated, sustainable urban-renewal projects thanks to financial tools including equity investments, loans and guarantees, offering new opportunities for the use of EU Structural Funds.

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(urban projects), or technical assistance through JASPERS²⁰. The Bank also works on “mainstreaming” energy efficiency, i.e. ensuring that appropriate energy efficiency measures have been considered in all the projects it finances, although the methodology is not disclosed on the Bank’s website²¹.

EIB financing for energy efficiency has increased from €800 million in 2008 to peak at EUR 2.4 billion in 2010 before declining to just under EUR 1 billion in 2012²². Analysis²³ from CEE Bankwatch notes that as cross-sectoral issue, energy efficiency measures constituted only 2.8% of the EIB’s total lending in 2014. As a comparison, 15.5% of the Bank’s financing was provided over the period 2010 to 2014 to energy production transport and distribution²⁴. The Bank recognises that “[a]lthough Energy Efficiency (EE) has become more prominent in the EU28 mitigation portfolio over time, the evaluation suggests that EIB’s contribution was limited in this area”²⁵. But is it prepared to take up the energy efficiency challenge?

²⁰ [JASPERS](#) is a technical assistance partnership managed by the EIB and co-sponsored by the European Commission (DG Regional and Urban Policy) and the European Bank for Reconstruction and Development (EBRD). JASPERS provides technical expertise for any stage of the project cycle from the early stages of project conception through to the final application for EU funding.

²¹ EIB 2013 [Energy lending criteria](#)

²² EIB 2013 [Energy lending criteria](#), p.19

²³ Roggenbuck 2015 [9 reasons why the EU's bank is no climate leader](#)

²⁴ EIB 2015 [2014 Statistical Report](#)

²⁵ EIB 2015 [Operation Evaluation – valuation of EIB financing of Climate Action \(mitigation\) within the EU 2010–2014](#) pp.10–11

2.2 Challenge #1 for the EIB: What if we stop wasting energy?

In case Germany and France meet their respective 50% energy demand reductions targets for 2050 as set out in their respective energy transition laws and commitments, and if the EU continues a 1.5% savings path each year after 2020, as provided for in the Energy Efficiency Directive, energy demand in the EU will reduce dramatically, causing energy supply to shrink accordingly. These are not dream scenarios but the starting point for any 2°C pathway.

Indeed, the necessity to limit dangerous global warming and the state of existing technology is such that significant energy savings will be needed. Uncertainties about the social acceptability of nuclear energy production and about the roll out of carbon dioxide removal and carbon storage technologies are high, and society cannot rely on the fact that these solutions could change the picture. As noted by the Intergovernmental Panel on Climate Change itself, “[s]ubstantial reductions in emissions would require large changes in investment patterns [...] annual investments in low carbon electricity supply and energy efficiency in key sectors [...] are projected in the scenarios to rise by several hundred billion dollars per year before 2030”²⁶. The consequences will be dramatic after decades of energy supply growth. Mark Carney, the governor of the Bank of England, recently gave a speech²⁷ stressing the transition risk caused by the re-assessment of fossil fuel assets.

²⁶ IPCC 2014 [Climate Change 2014: Synthesis Report](#)

²⁷ Mark Carney 2015 [Breaking the tragedy of the horizon – climate change and financial stability](#)

Not only the EIB should avoid investing in the energy system of the past, but should also assume massive energy efficiency deployment: a doubling of the current investment in energy efficiency is needed to limit global temperature rise to 2°C²⁸.

The European Investment Bank runs high risks if it does not put energy efficiency first, because significant energy savings will be needed regardless of the climate mitigation route taken. Energy efficiency first is therefore a risk management principle which will help the EIB manage the risks in the transition to a 2°C world.

2.3 Challenge #2 for the EIB: Can it afford not to lead the energy transition?

Public banks are public entities acting for the common good, but they also operate as banks that are responsible for their portfolio. The type of risks they can take, and as a consequence the type of projects they support, depends on their mandate, and on how this mandate is interpreted by their shareholders. Despite the large size of the projects supported, these entities are often little known by the public, which makes it challenging to apply democratic control. Their role in accompanying societal change is important. Indeed, changing the project portfolio of public banks is considered as a zero-sum measure to trigger investment shifts: for the same amount of public money, it is possible to shift investments from one side of the economy to the other.

These high political stakes and the thirst for more energy efficiency explain the debates that occurred within the European Parliament during the set up of the European Fund for Strategic In-

²⁸ International Energy Agency 2015 [Energy Efficiency Market report 2015](#)

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vestments (EFSI). The EFSI is the key pillar of the European Commission's flagship Investment Plan for Europe, which aims to revive investment in strategic projects around Europe to ensure that money reaches the real economy, to unlock additional investment of at least EUR 315 billion over the next three years. A €16 billion guarantee from the EU budget, complemented by an allocation of €5 billion of EIB's own capital, was designed to increase the volume of higher risk projects supported by EIB Group financing operations and thus address the market failure in risk-taking which hinders investment in Europe. During the debate in the European Parliament, the Committee for Industry and Energy has requested that a certain amount would be earmarked for energy efficiency projects, showing the political demand for these projects. Although this request was not retained in the final legislation, energy savings from EFSI investments will be assessed thanks to a score-card system, and the implementing authorities have shown their political willingness to fast track efficiency projects²⁹.

On 22nd September 2015, the EIB adopted its Climate Strategy³⁰ describing the future direction and developments of its climate action. It states that the Bank has made climate action one of its top priorities and developed a leading position among international finance institutions in this area. However, this strategy lacks a clear vision as regards to the energy transition, as nothing in the strategy seems to prevent the Bank from investing in the energy system of the past, thus putting the transition at risk.

The EIB can only have a coherent climate change strategy if it puts energy efficiency first and lead on the energy transition. The Bank already recognised that “[i]nvesting to reduce energy consump-

²⁹ See for example ENERGIES POSIT'IF [project](#).

³⁰ EIB 2015 [EIB Climate Strategy: Mobilising finance for the transition to a low-carbon and climate-resilient economy](#)

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tion remains the most cost-effective way for the EU to meet its energy and climate objectives”³¹. Because citizens are requesting the energy transition, the EIB should redress its bias towards energy supply investments and allow stakeholders such as energy users and service providers to benefit from a growing energy efficiency market.

Conclusions

- The European Investment Bank runs high risks if it does not put energy efficiency first, because significant energy savings will be needed regardless of the climate mitigation route taken. **Energy efficiency first is a risk management principle.**
- The Bank should put the energy efficiency first principle at the core of its lending operations to enable the proper roll out of its climate strategy and lead the energy transition, as requested by citizens. **Energy efficiency first is matter of public interest.**

³¹ EIB 2013 [Energy lending criteria](#), p.17, and pp.18–19

3 Recommendations for the EIB

An analysis of the tools and procedures available for the EIB to make a difference and to apply the energy efficiency first principle is provided in this chapter. The EIB lends to individual projects for which total investment cost exceeds €25 million, which is why the project appraisal³² provides a unique chance to lead the way in applying the energy efficiency first principle. From a financial point of view, some projects would not make sense in an energy efficient scenario. From a societal point of view, the Bank has the obligation to lead in the energy transition and live up to its climate ambitions. This approach should be replicated and promoted in other aspects of lending, while at the same time the Bank should engage other stakeholders to embrace and implement the principle.

3.1 Stop investments into the energy system of the past

#1 – Develop future-proof energy scenarios

³² Project appraisal is carried out by the EIB's teams of engineers, economists and financial analysts, in close cooperation with the promoter. The evaluation of the project is multidimensional, and guidance is provided to help teams assess the relevance of the project. The technical appraisal is specific to each project. The financial appraisal looks at the expected profitability of the project. The economic appraisal helps assessing if the project is worth undertaking or not from the social welfare point of view. The social and environmental appraisal, which is closely linked to the economic appraisal, helps assessing the environmental and social impacts and risks. Societal aspects should be important for the Bank, whose role is different than the one of a private investor. Results are included in the project report to the Board of Directors for a financing decision.

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Energy projections are often overestimated. For example, the gas demand projections used by the European Commission to allocate funding for gas infrastructure projects under the Connecting Europe Facility are 30% higher than the Commission's reference scenario for gas demand by 2030³³. The EIB should develop an own energy reference scenario considering 80–95% greenhouse gas reduction by 2050³⁴. In practice this would ensure that EIB teams are better equipped to assess the relevance of some projects. If a gas infrastructure project is put forward for example, the comparison with the EIB's own projections will help better understand the outlook for gas, and EIB team should be able to perform a sensitivity analysis.

In order not to lock the European Union and its territories into high energy intensity pathways, the EIB should make sure its sectorial studies and country profiles take into account realistic energy demand projections and the development of a market³⁵ for efficient products. These profiles should give an understanding about the country's distance in achieving not only its energy efficiency target, but also the cost-effective potential to save energy. These profiles can be further developed at a more local level with development scenarios for cities for example.

Taking a step back, the Bank should use these elements to conduct a larger analysis about the risks of stranded assets to better understand the consequences of the transition to an energy efficient world compatible with a 2°C threshold.

³³ E3G 2014 [Energy Security and the Connecting Europe Facility](#)

³⁴ This scenario would be consistent with EU leaders' commitment to reducing emissions by 80–95% by 2050 if similar reductions to be taken by developed countries.

³⁵ According to a report by Fraunhofer ISI et al on behalf of DG ENER the EU could save at least 40% of its overall final energy demand by 2030 if it made of all the cost-effective efficiency improvements across all sectors of the economy.

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Transparency about these different scenarios is needed to allow stakeholders to assess and provide input to the Bank policies in these areas.

#2 – Stress-test individual projects against these scenarios

When evaluating the financial soundness of a project, the Bank should apply stress tests to all its projects to evaluate if they still make sense in an energy efficient world, based on the updated sectorial and country profiles.

As part of the cost-benefit analysis conducted to assess if a project makes sense for the broader economy, the Bank typically evaluates if the project is consistent with EU and other environmental and social policies and frameworks (using an ‘environmental and social screening checklist’³⁶). During that process, special attention should be put on ensuring that the project not only contributes to achieving the Member State’s energy efficiency target, but also puts it on the right pathway to move to a low-energy consumption pathway in the longer term. The ‘environmental and social screening checklist’ could be revised to include the following questions: 1) What are the underlying assumptions regarding energy demand? Will the project still make sense in a low energy demand scenario? 2) In case of an project in the energy sector, wouldn’t it make more sense to allocate the financial support to projects that save energy? 3) Is there a risk to create stranded assets? The EIB should request the project promoter to provide responses to these questions.

#3 – Rate individual energy projects against a standard energy efficiency project

³⁶ EIB 2013 [Environmental and Social Handbook](#) p.105

The EIB should systematically compare projects in the energy sector with a standard energy savings project and downgrade the project's rating in case of bad performance. Although the Bank considers that it is not its duty to act as a planning agency³⁷, the guidelines on the Economic Appraisal of Investment Projects already recommends comparing, where realistic, power generation projects³⁸, as well as gas grids, terminals and storage projects³⁹, with possible alternatives including the launching of actions and policies aimed at energy saving instead of increasing the energy demand and production. This comparison should be systematic and applied to all projects in the energy sector, and bad performance to this test should negatively affect the rating of the project.

3.2 Encourage energy efficiency market developments

Putting energy efficiency first implies to be in a position to consider the potential for energy efficiency solutions in all decision-making related to energy. When it comes to the role of a public bank, project origination is crucial to ensure that the pipeline of projects is nourished with good energy efficiency projects. The potential is demonstrated: according to research from the Coalition for Energy Savings⁴⁰, an additional investment of €386 billion until 2020 – €64 billion per year – should be realised in order to achieve the cost-effective energy efficiency potentials in the European Union, which is the economically justified level. How could the EIB multiply its efforts to go and search for energy efficiency projects?

³⁷ EIB 2013 [The Economic Appraisal of Investment Projects at the EIB](#) p.21

³⁸ EIB 2013 [The Economic Appraisal of Investment Projects at the EIB](#) p.107

³⁹ EIB 2013 [The Economic Appraisal of Investment Projects at the EIB](#) p.121

⁴⁰ Coalition for Energy Savings 2014 [Tapping the EU's huge energy efficiency potential](#)

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#4 – Consider the multiple benefits when rating energy efficiency projects

A large number of energy efficiency investments are small, and it can be difficult to undertake a cost-benefit analysis on a project by project basis. The Bank is already using simplified criteria to assess what can typically be expected in terms of energy savings for appropriate cost levels, and automatically approve small investments that are typically part of national (or regional) programmes. This is called the “white list” approach. The Bank could further act as a leader in the way it assesses the multiple benefits of energy efficiency projects by applying the most recent standards. Recent research⁴¹ from the International Energy Agency challenges the assumption that the broader benefits of energy efficiency cannot be quantified. Indirect impacts on the energy system of energy efficiency projects should also be taken into account⁴².

#5 – Replicate best practice in the design of financial instruments and intermediated loans

Energy efficiency projects are often intermediated in the form of a Framework Loan (FWL) or Multi-beneficiary Intermediated Loan (MBIL)⁴³. The EIB should promote best practice on energy efficiency first in all its financial instruments and intermediated loans, and engage financial intermediaries on this topic. This would increase the role of the European Investment Bank as a pioneer amongst other institutions.

⁴¹ IEA 2014 [Capturing the Multiple Benefits of Energy Efficiency](#)

⁴² A report from Ecofys, commissioned by Eurima, shows that energy efficiency in the building sector has the potential to reduce costs and increase efficiency on the energy supply side. Ecofys 2015 [The role of energy efficiency buildings in the EUs future power system](#)

⁴³ EIB 2015 [Operation Evaluation – valuation of EIB financing of Climate Action \(mitigation\) within the EU 2010 –2014](#) p.10-11

#6 – At project level, engage project promoters to mainstream energy efficiency in each project

The planning of each project should involve energy auditing professionals who would formulate feasible and cost-effective recommendations for energy efficiency improvement measures and packages of measures that would lead to measurable energy savings and better economic performance if implemented. The systematic involvement of energy auditing professionals during the project planning process will help improve the strategic environmental assessment and apply the mitigation hierarchy, as recommended in the EIB environmental and social standards⁴⁴. Given the long life-span of the projects, this will ensure the competitiveness of projects in a future where energy savings will be fully rolled out.

The EIB should promote this approach and provide transparency on how energy efficiency is mainstreamed in each project, by for example including it as a requirement for the financial assessment. This will help develop the market for energy efficiency services while also improving the measurement of the climate impacts of the Bank's portfolio.

3.3 Officially embrace and promote the principle

#7 – At EIB level, enshrine the principle in various strategies and documents

The European Investment Bank could enshrine energy efficiency first in future strategy documents such as a circular economy guidance or the operational plan covering the period starting 2016.

⁴⁴ EIB 2009 [Environmental and Social Principles and Standards](#)

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#8 – At national level, engage Member States on improving energy efficiency financing schemes

Based on an analysis of the cost-effective potential for energy efficiency, the EIB should actively engage Member States to encourage energy efficiency projects when designing the Country Operational Plans.

The EIB should become an active observer when energy efficiency programmes and support schemes are designed at national level, and position itself as a resource organisation. It should provide feedback when public consultations are organised on those schemes.

#9 – At EU level, use the political opportunity of the Investment Plan for Europe to sharpen energy efficiency financial tools

The European Fund for Strategic Investments can be used as a mechanism to overcome the market barriers to energy efficiency and encourage project aggregation, possibly through the promotion of Energy Performance Contracting. This will help the Bank diversify its portfolio of projects (example: ENERGIES POSIT'IF) and financial instruments.

3.4. Inform and engage stakeholders to implement the principle

#10 – Report on the implementation of the principle

The EIB should use its 3 pillar assessment (3PA) reports to review how the principle has been applied. Indeed, the principle is relevant to all three pillars. Putting energy efficiency first increases the technical, financial, economic, environmental and social viability of the project and its contribution to sustainable economic growth and employment (pillar 1). It increases consistency of pro-

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ject lending with EU policy objectives (pillar 2). Finally, it increases the added value of the Bank, given it is uniquely placed to accompany the energy transition (pillar 3).

#11 – At project level, encourage stakeholders to challenge projects which are not viable in an energy efficient world

Stakeholders should challenge projects at national level and at EU level if they are not viable in an energy efficient world.

#12 – At Member State level, invite stakeholders to participate in designing country profiles that are compatible with an energy efficient world

Stakeholders should request active participation in defining the country profile and other relevant documents which provides a vision of how the Member State will move into an energy efficient world.

#13 – At EU level, engage stakeholders and EU institutions to use the political momentum around the Investment Plan for Europe to promote energy efficiency

Because the EIB maintains a regular dialogue with the European Parliament on its activities in support of EU objectives, stakeholders can also require their representatives at the European Parliament to request information from the Bank on how it is putting energy efficiency first.

Although the projects supported by European Fund for Strategic Investments (EFSI) are subject to the normal EIB project cycle and governance, new dedicated bodies have been created, and the European institutions, including the European Parliament, will be following the delivery of the

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funding closely. Stakeholders should engage with these actors to understand how the principle is applied.

Summary of recommendations

The European Investment Bank should:

- #1 – Develop future-proof energy scenarios
- #2 – Stress-test individual projects against these scenarios
- #3 – Rate individual energy projects against a standard energy efficiency project
- #4 – Consider the multiple benefits when rating energy efficiency projects
- #5 – Replicate best practice in the design of financial instruments and intermediated loans
- #6 – At project level, engage project promoters to mainstream energy efficiency in each project
- #7 – At EIB level, enshrine the principle in various strategies and documents
- #8 – At national level, engage Member States on improving energy efficiency financing schemes
- #9 – At EU level, use the political opportunity of the Investment Plan for Europe to sharpen energy efficiency financial tools
- #10 – Report on the implementation of the principle
- #12 – At Member State level, invite stakeholders to participate in designing country profiles that are compatible with an energy efficient world
- #13 – At EU level, engage stakeholders and EU institutions to use the political momentum around the Investment Plan for Europe to promote energy efficiency