

Energy Efficiency – the first fuel
for the EU Economy

How to drive new finance for energy
efficiency investments



Energy Efficiency
Financial Institutions Group

EXECUTIVE SUMMARY

of Final Report

covering Buildings, Industry and SMEs

February 2015

The Energy Efficiency Financial Institutions Group (“EEFIG”) was established as a specialist expert working group by the European Commission and United Nations Environment Programme Finance Initiative (“UNEP FI”), in late 2013, as a result of the dialogue between Directorate-General for Energy (“DG Energy”) and UNEP FI, as both institutions were engaging with financial institutions to determine how to overcome the well documented challenges inherent to obtaining long-term financing for energy efficiency. EEFIG resulted from the joining of these forces to engage with the sector’s stakeholders and financial institutions to create an open dialogue and work platform with the European Commission; and with UNEP FI helping to convene meetings and bring in a variety of active and interested players, among its members and beyond, as per its mission statement of “changing finance, financing change”. Founders believe that the creation of EEFIG represents the first time such a dialogue and work platform has been established between the Commission and the financial sector on the topic of energy efficiency finance.

EEFIG’s work is the consensus effort of over 120 active participants whose current professional experience is representative of one of the following stakeholder groups:

- Public and private financial institutions (banks, investors, insurers etc.);
- Industry representatives and industry associations;
- Banking associations and investor groups;
- Energy efficiency industry experts;
- Energy efficiency services representatives;
- SME associations and expert representatives;
- Civil society experts representing diverse energy efficiency stakeholder groups;
- International Energy Agency (IEA);
- European Commission; and
- UNEP FI.

EEFIG is supported by Climate Strategy and Partners (www.climatestrategy.com) which was contracted to support the coordination and drafting of this report on behalf of EEFIG and whose Chief Executive is the group moderator, rapporteur and an active participant in the group. EEFIG meetings are convened and chaired by DG Energy.

Legal Disclaimer

This document has been prepared for the European Commission by the members and participants of the Energy Efficiency Financial Institutions Group (“EEFIG”) as listed herein and represents a group consensus view. The views and opinions expressed herein are wholly those of EEFIG reached by consensus at the time of writing. The consensus view does not necessarily reflect, in its entirety, the individual view of the Commission nor any EEFIG member or participant nor should membership or participation in EEFIG bind any member or participant to the consensus views described here. EEFIG views and opinions are subject to change without notice. Neither EEFIG, the Commission, Climate Strategy or any individual member or participant of EEFIG may individually or collectively be held responsible for any use which may be made of the information contained herein. The examples and case studies described in this document have been provided by specific participants to EEFIG meetings and are based upon information gathered by these individuals; the references used to develop these illustrative examples (which are quoted) should always be considered as the most accurate and complete source of information. EEFIG members and participants note that many are specialists in either buildings or industrial energy efficiency and have therefore only provided input into the sections relevant to their specialist area.

ISBN: 978-84-606-6087-3

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Energy Efficiency Financial Institution Group Members

EEFIG participants have been drawn from the following firms, entities and organizations:

ABB	Energy Efficiency in Industrial Processes (EEIP)	NRW Bank
Agentschap NL	EFIEES	Orgalime
Allianz Global Investors Europe GmbH	Efinovia Europe	Parhelion
Allianz Climate Solutions	EIIF	Polish Bank Association
Allianz Real Estate	Emerson Electric Co.	Polish National Fund for Environmental Protection and Water Management
ASN Bank	European Association of Energy Service Companies (eu.esco)	RICS
Aurubis Belgium N.V./S.A.	European Builders Confederation (EBC)	Schneider Electric
Aviva Investors	EuroACE	Siemens
Bank Nederlandse Gemeenten (BNG)	Eurobank Ergasias SA	Siemens Financial Services GmbH
Bank of Valetta p.l.c.	Eurochambres	Societe Generale
Bpifrance	European Association of Public Banks (EAPB)	SPIRE
Belesco asbl	European Bank for Reconstruction and Development (EBRD)	Spire2030
Belfius	European Climate Foundation	Susi Partners
Bloomberg New Energy Finance	European Investment Bank (EIB)	Sustainable Development Capital Limited
BNG Bank	European Property Federation	Tera srl
BNP Paribas Asset Management	FIEC (European Construction Industry Federation)	The CO-Firm GmbH
BNP Paribas Investment Partners	Green Investment Bank	The Energy Managers Association
Buildings Performance Institute Europe (BPIE)	HBOR – Croatian Bank for Reconstruction and Development	Turboden
Caisse des Dépôts et Consignations	Hermes Investment Management	UNEP Finance Initiative (UNEP FI)
Cassa Depositi e Prestiti	Honeywell	Unicredit
CDC Climat	Huber Dixon	UNIDO - United Nations Industrial Development Organization
CECIMO	Hungarian Development Bank (MFB)	International Union of Property Owners (UIPI)
Cembureau	IFIEC (International Federation of Industrial Energy Consumers)	Union Européenne de l'Artisanat et des Petites et Moyennes Entreprises – UEAPME
Citi Handlowy	ING Commercial Banking	World Business Council for Sustainable Development
Bank Handlowy w Warszawie S.A.	International Energy Agency	
Climate Strategy & Partners	Institutional Investors Group on Climate Change (IIGCC)	
Cogen Europe	Investor Confidence Project	
Credit Suisse Securities (Europe) Limited	IPEEC	
Deneff	KfW Bankengruppe	
Deutsche Bank	Linköping University	
DNV GL	Munich Re	
E3G	Network of European Financial Institutions for SMEs (NEFI)	
EASME		
European Commission (EC)		
Econoler		
EDF FENICE		
EEP – Institute for Energy Efficiency in Production, University of Stuttgart		

Executive Summary

Energy Efficiency Investment is Strategically Important for the European Union

Energy efficiency investment is the most cost effective manner to reduce the EU's reliance, and expenditure, on energy imports costing over €400 billion a year. While energy efficiency investments have been gradually taking place for decades, the EU today finds itself in a place where these investments have become strategically important due to the high level of energy imports required by the EU bloc, energy price instability and the need to transition to a competitive low carbon and resilient economy. Energy efficiency investing has a fundamental and beneficial role to play in the transition towards a more competitive, secure and sustainable energy system with an internal energy market at its core.

The Energy Efficiency Financial Institutions Group (“EFFIG”) identifies the need to engage multiple stakeholder groups, scale-up the use of several financial instruments within a clear and enforced “carrot and stick” legislative framework. This report identifies a number of approaches and instruments that have proven to encourage investments and multiple market barriers that stand in the way of an energy efficient Europe. The scaling up of these successful approaches and removal of these barriers will require a range of identified actions from policy makers and market stakeholders to mobilize the millions of different actors in the EU that will build, finance and benefit from this market. This needs to be driven by an active structural reform agenda that can deliver economies of scale to drive down costs and improve supply capacity and ensure new opportunities for business and investment growth exist across all Member States.

A Historic level of Public-private Collaboration is Required

The European Fund for Strategic Investments (EFSI) can put energy efficiency first. In Europe investment levels are around 15% below their 2007 peak. Europe's new Investment Plan aims to address this¹. EFFIG findings support the Plan's position that there is no single or simple answer to how to boost growth and that addressing both the demand and supply sides of the economy is required. Member States have a clear role to play in pursuing the necessary structural reforms, exercising fiscal responsibility and providing regulatory certainty to boost investment in support of jobs and growth. In this context, **energy efficiency is the first fuel** because it is competitive, cost effective to produce and widely available. For these reasons, EFFIG considers that the Investment Plan should include a clear focus on improving the energy productivity of Europe as a key driver of growth with funds earmarked for energy efficiency investments. In doing so, Europe can unlock the multiple benefits of energy efficiency investments including energy security, competitiveness, social and territorial cohesion, job creation, well-being and greenhouse gas emissions reductions.

A historic level of public-private collaboration is required to deliver multiples of existing energy efficiency investment flows by 2030. EFFIG identifies various financial instruments that need to be scaled up and makes a strong case for using public funds to blend with private sector investment to address the risks and achieve the scale of financing needed. This report connects the financial instruments with enabling policies in specific sub-sectors in buildings and industry. Presently, there are insufficient public and private investments in energy efficiency in buildings, industry and in SMEs. If this trend continues then EU Member States are at risk of missing their 2020 and longer-term energy efficiency targets and their economies will be deprived from the boost energy efficiency investment can provide. EFFIG estimates that a five-fold increase in private energy efficiency investments in European buildings is required by 2030. The scale-up of smart financial instruments is required and that they are tailored, by sub-sector, to encourage a long-term and cost effective reduction of energy use in Europe's buildings, industry and SMEs.

Oil and Gas Price volatility offers an Opportunity to Build Resilience

The dramatic fall in the oil price, and its likely impact in lower European gas prices, well highlights the need for Europe to have buildings, industry and SMEs whose competitiveness and running costs are better insulated from the uncertainties and volatility created by commodity price shocks. This welcome respite will lower Europe's external fuel bill and provide much needed public and private investment capacity to increase the resilience of EU buildings, industry and SMEs to higher prices, and volatility, through long-term energy efficiency investments. Current carbon prices (€7/ton CO₂e in the EU Emissions Trading System) are having little direct impact on energy efficiency investment levels in industry or buildings. However, EFFIG sees lower oil and gas prices as providing a welcome window for policy makers

¹ COM(2014) 903 final



to enforce existing regulations, use fiscal tools to incentivise energy efficiency and reduce distorting “volume purchase” subsidies (where relevant) to large energy consumers and recycle those funds into greater support for energy efficiency, resilience and long-term competitiveness investments.

EEFIG's Uniquely Engaged Process Delivered Clear and Consensus Results

In late 2013, EEFIG (containing over 120 active expert participants) was jointly convened by the European Commission and the United Nations Environment Programme Finance Initiative (“UNEP FI”) to bring together their expertise to address the need to increase the scale of energy efficiency investments across the EU. This final report represents the consensus and shared views of its expert members from over sixteen months of collaborative work in a process containing several steps: a literature review; characterization of the market and rationale for energy efficiency investments in buildings, industry and SMEs; identification and definition of the key drivers of supply and demand for energy efficiency investments for each sector and prioritization of these by buildings or corporate segment; identification of the instruments and approaches required to stimulate energy efficiency investments each segment and concluding with a set of clear recommendations both to policy-makers and market participants.

The results of this process can be summarised as follows:

- EEFIG identifies a very strong economic, social and competitive rationale for the up-scaling of energy efficiency investments in buildings and industry in the EU;
- EEFIG sees a strong economic opportunity that is deliverable by boosting both the drivers of demand for and supply of energy efficiency investments in buildings and industry sub-segments;
- Whilst there is no single solution, EEFIG identifies a framework of cross-cutting measures as well as individual requirements to support investments for each market segment, while noting national differences especially in low income countries;
- In its analysis of the different tools and approaches, EEFIG identifies those which can be led by market stakeholders and those which must be policy-led. Both require work in parallel to deliver the targeted increase in energy efficiency investments;
- For buildings and industry EEFIG develops separate analysis and recommendations to policy makers and market participants to increase energy efficiency investment rates and flows;
- EEFIG concludes by highlighting seven key themes which emerge from both buildings and industry and SME analysis and provide the European Commission with final recommendations for its consideration.

EEFIG's Presents its Key Market and Policy Recommendations

EEFIG considers that its recommendations for market and policy-led actions should be considered in the context of broader structural reforms needed to improve the competitiveness of the EU economy and ensure the Investment Plan for Europe has a sustained impact on the EU 2030 climate and energy strategy. These actions include but are not limited to the following:

Market actions:

- Improvement of buildings certification methodologies and Energy Performance Certificate standards and the implementation of minimum performance standards upon building upgrade, sale or rental to help build a vibrant and comparable pan-European market for buildings energy efficiency investments;
- Improvement of information flows by developing an open-source energy and cost database for buildings and effective systems for sharing information and technical experience within industry sectors;
- Facilitate innovation such as on-bill repayment and on-tax finance mechanisms by creating pilots to help grow energy efficiency investments in commercial and residential buildings;
- Develop a project rating system to provide a transparent assessment of the technical and financial risks of buildings energy renovation projects and their contracting structure.

Economic actions:

- Streamlining, blending and optimizing the use of European Structural and Investment Funds, Horizon 2020 and EU ETS revenues for energy efficiency investments through ensuring their better linkage to National Building Renovation Strategies together with National Energy Efficiency Funds and energy market reforms;
- Increase the use of targeted fiscal instruments to motivate both building owners and companies to prioritize energy efficiency during their natural replacement cycle;
- Review of public and private accounting treatment of Energy Performance Contracts;
- Further expert examination of the discount rates used in energy modelling, policy-making and investment decision-making, to adequately balance the benefits and risks of energy efficiency.

Financial actions:

- Development of a common set of procedures and standards for energy efficiency and buildings renovation underwriting for both debt and equity investments;
- Adjustment to financial regulatory frameworks to better support capital market innovation, ensure that risk assessment and related capital requirements for long-term energy efficiency investments correctly reflect their risks and develop market potential for green bonds, citizen financing, factoring funds for Energy Performance Contracts and other more innovative sources of financing for energy efficiency;
- Address barriers to expanding the green mortgage market, including by examining how to include energy costs and energy efficiency potential in mortgage affordability calculations;
- Ensure that new regulatory frameworks for financial institutions (Solvency II and Basel III) do not prejudice energy efficiency investments²;
- Ensure that public technical assistance and project development assistance facilities are compatible and can be easily combined with market-based and concessional funding by qualified and experienced financial institutions;
- Ensure that public refinancing facilities, like those operated by the European Central Bank, confirm eligibility for financial instruments relating to energy efficiency.

Institutional actions:

- Increase the capacity to facilitate ongoing project development assistance to all relevant actors and technical assistance to relevant public sector bodies and entities for development and aggregation of energy efficiency investments in SMEs and households;
- Review of the public authority procurement rules to better value lower operational costs as a part of their tender assessment processes;
- Institutional capacity to implement National Buildings Renovation Roadmaps that enable long-term planning and supply chain scale-up to deliver and finance ambitious buildings renovation programmes;
- Increased focus on regulatory frameworks which support strong corporate energy efficiency investment choices at key points in their investment cycle (connecting with energy audits);
- Review to ensure that current State Aid rules do not unnecessarily burden accelerated energy efficiency investing and the up-scaling of public-private financial instruments.

The report develops and summarises the above actions and recommendations for policy makers and markets participants by sector in the following tables.

² Including the implementation of the Non-Financial Reporting Directive to improve availability of data for investors which includes energy use and efficiency and pass and implement the Shareholder Rights Directive to improve investor engagement with listed companies on sustainability and energy issues.

Summary of EFIG Recommendations (Buildings Sector)

<i>To Policy Makers</i>	<i>To Markets Participants</i>
Existing Buildings Regulations should be fully implemented, harmonised and consistently enforced across EU Member States	Engage key decision makers (owners and managers) with a clear business case that raises their awareness of the multiple benefits of buildings' energy efficiency renovations with evidence
Future Regulatory Pathways for EU Buildings should provide concerted and consistent regulatory pressure to improve the energy efficiency of buildings	Make it easy to get the right data to the right decision makers
High quality decisions and low transaction costs can only be delivered by easily accessible data and standard procedures	Improve the Processes and Standards for Buildings Labels, Energy Performance Certificates and Energy Codes
Reporting, accounting and procurement procedures must facilitate, and not hinder, appropriate energy efficiency investments in public buildings	Standards should be developed for each element in the energy efficiency investment process
The "at-scale" energy efficiency upgrade of residential buildings can only happen with a concerted address of the specific investment demand and supply drivers of this segment and the engagement and alignment of retail distribution channels	Leverage of private sector finance through optimal use of European Structural and Investment Funds and Member States funds
The targeted address of energy efficiency investment supply and technical assistance through the smart deployment of European Structural and Investment Funds 2014-2020 and Horizon 2020 into risk sharing mechanisms and project development assistance, working with partners with an successful track-record	

Summary of EFIG Recommendations (Industry & SMEs)

<i>To Policy Makers</i>	<i>To Markets Participants</i>
Policy framework should positively support strong corporate energy efficiency investment choices at key points in their investment cycle, using a "carrot and stick" approach	Raise energy efficiency opportunities at board-level and implement appropriate strategic resource investments to capture their multiple benefits within the natural company investment cycle
Public resources and facilitation should be engaged to establish dynamic and effective systems for sharing information and technical experience	Financial institutions should more widely adopt existing "best practice" models to stimulate their clients' energy efficiency investments
Ensure EU and national policies and resources are working effectively together to drive R&D and optimal energy efficiency outcomes	Encourage and support collaborative processes and consider R&D whose objective is to reduce the cost of and improve the up-take of energy efficiency investments
Support the clarification of the regulatory, fiscal and accounting treatment and standardisation of Energy Performance Contracts	Standards should be developed for the legal terms in and process to negotiate energy performance contracts
Energy efficiency opportunity identification and investible project pipelines should be supported with Project Development Assistance facilities for SMEs	