

# Energy Efficiency – the first fuel for the EU Economy

**“Mobilizing Investments for the Energy Transition:”**  
*How to drive new finance for energy efficiency investments*

Slides from EEFIG Report - Covering Buildings and Industry – and  
EEFTG presentations

*Presentation for BP Forum on Energy & Sustainability*  
*30<sup>th</sup> September 2015, Madrid.*



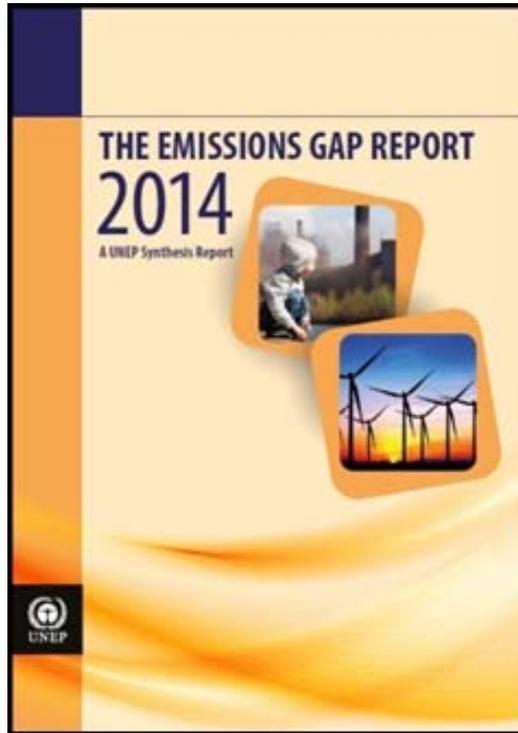
CLIMATE & STRATEGY  
P A R T N E R S

Presented by

Peter Sweatman, CEO Climate Strategy & EEFIG Rapporteur



# What does the UN say about EE potential?



*Report is based on contributions from 38 lead scientists from 22 research groups in 14 countries.*

“Global energy intensity improved by 1.6% annually between 2002 and 2012” – ie. cumulative 17.2% improvement in 10 years.

Between 2015 and 2030, energy efficiency improvements worldwide could help avoid 22–24 Gt CO<sub>2</sub>e (or 2.5–3.3 Gt CO<sub>2</sub>e annually in 2030) of emissions relative to a baseline scenario and assuming a carbon price of US\$ 70 / tonne. This corresponds to a reduction in primary energy demand of about 5–7 per cent”

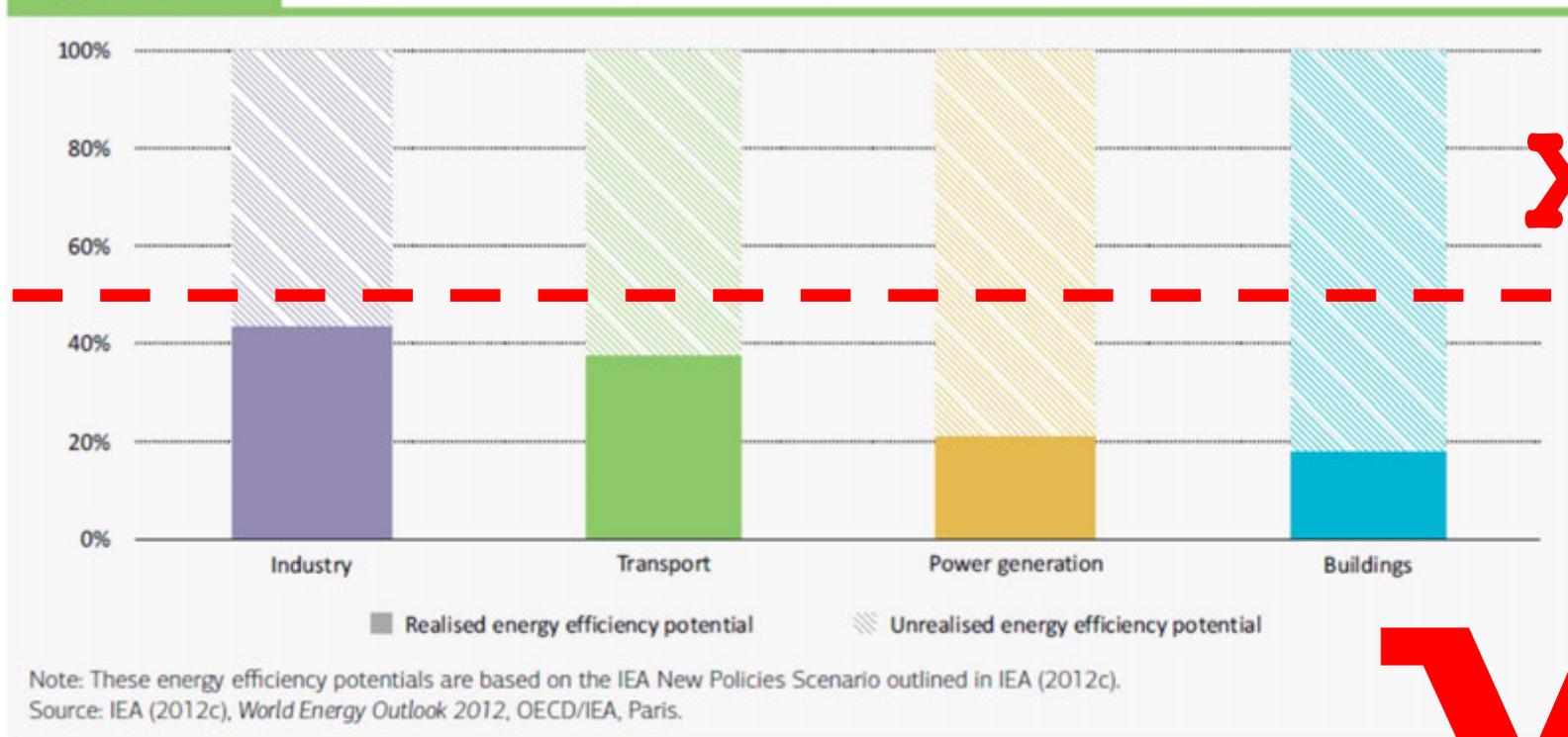
Improving energy efficiency comes with substantial multiple benefits. Not only does it reduce or avoid greenhouse emissions, but it has long been considered a main way to increase productivity and sustainability, primarily through the delivery of energy savings. Moreover, energy efficiency measures can contribute to economic growth and social development by increasing economic output, employment and energy security.”

*Source: The Emissions Gap Report. UNEP  
2014.*



# What does the IEA say about EE potential?

Figure 1.3 Long-term energy efficiency economic potential by sector



**Key point** IEA projections to 2035 show that as much as two-thirds of energy efficiency potential will remain untapped unless policies change.

Source: *Capturing the Multiple Benefits of Energy Efficiency*. IEA 2014.

# So, how much investment do we need ?

## Global Annual Investment Need (2014-2035, IEA)

### 2014 Ceres Global:

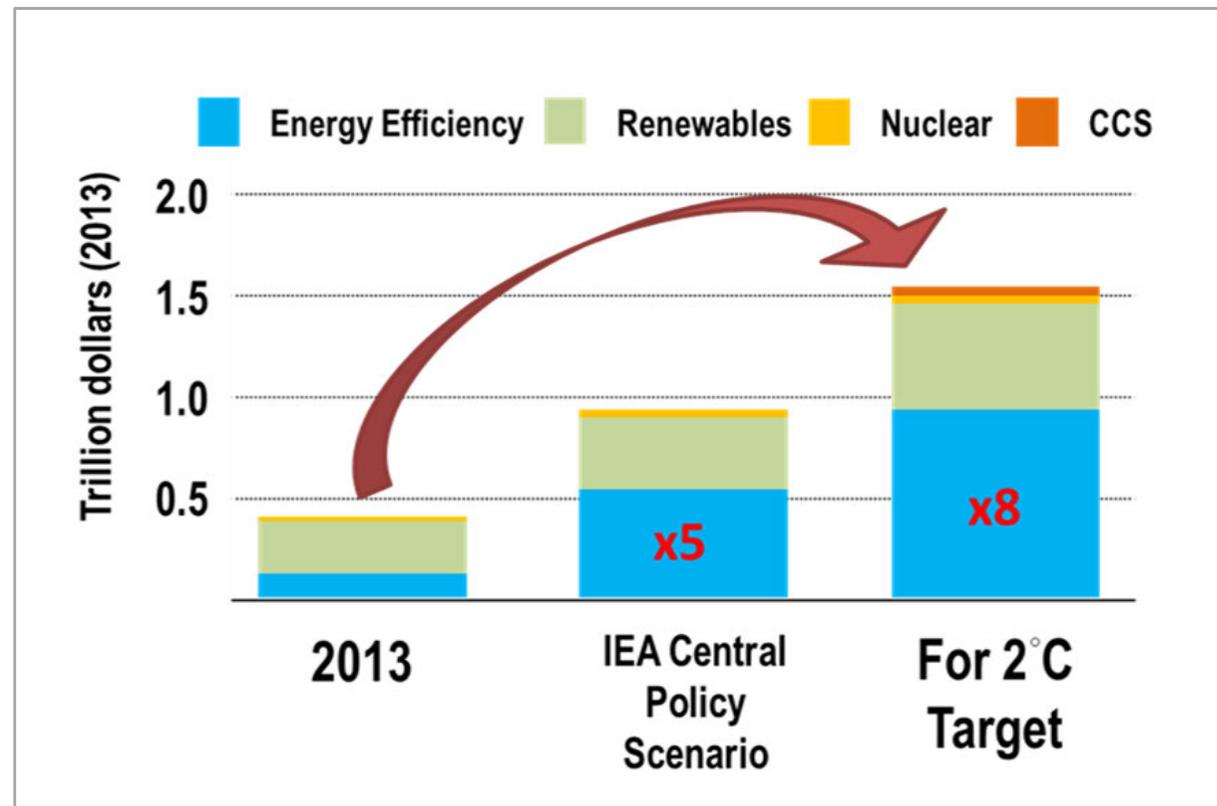
Projects global annual investment need (2010-2020) to limit global temperature rises to a 2°C scenario:

- \$300 billion in buildings' energy systems
- \$30 billion in industry

### EU needs to invest:

(for 2°C scenario, IEA)

- \$1.3 trillion in energy efficiency in buildings from 2014-2035
- \$154 billion in energy efficiency in industry



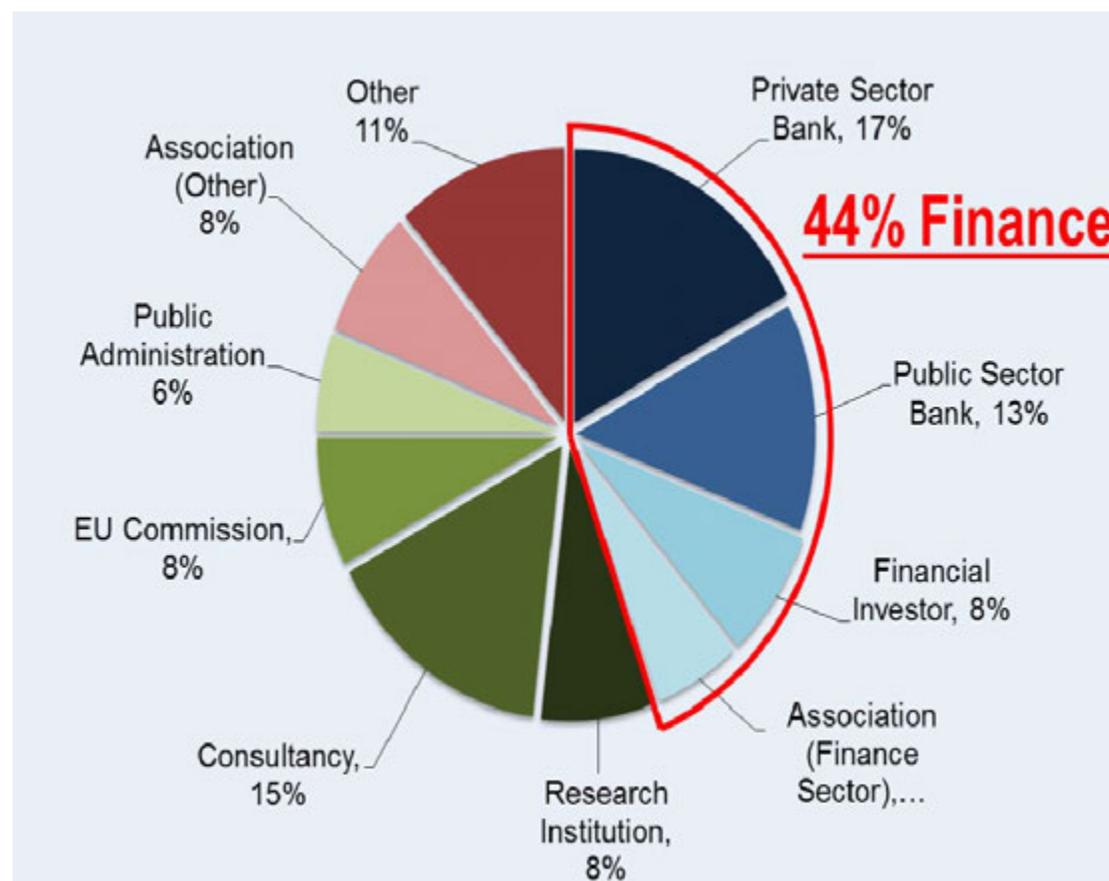


## Who and What is EEFIG ?

- Convened by EU Commission and UNEP FI
- Voluntary participation of 120 people representing 100 organizations
- Specific mandate
- 12x 1-day meetings over 18 months, 3x surveys and 2x reports



Active input of some 120 expert participants (8,000 hours)



# EEFIG MANDATE: How to Increase the Flow of Energy Efficiency Investments in EU

The Energy Efficiency Financial Institution Group (“EEFIG”) was established to determine how to overcome the well documented challenges to obtaining long-term financing for **energy efficiency**

## EEFIG’s Mandate

- 1 What are the most imminent challenges that must be overcome?
- 2 Who would be the right party to address them?
- 3 What should the European Commission/ EU do?

# Three Keys: Policies to Drive Demand/ Reduce Uncertainty, Simple FIs and Removing Blocks

Buildings and Corporate sectors are very different Yet...

EEFIG participants identified cross-cutting themes

which provide a framework to describe challenges facing energy efficiency investing in both EU Buildings and Industry

## Imminent Challenges

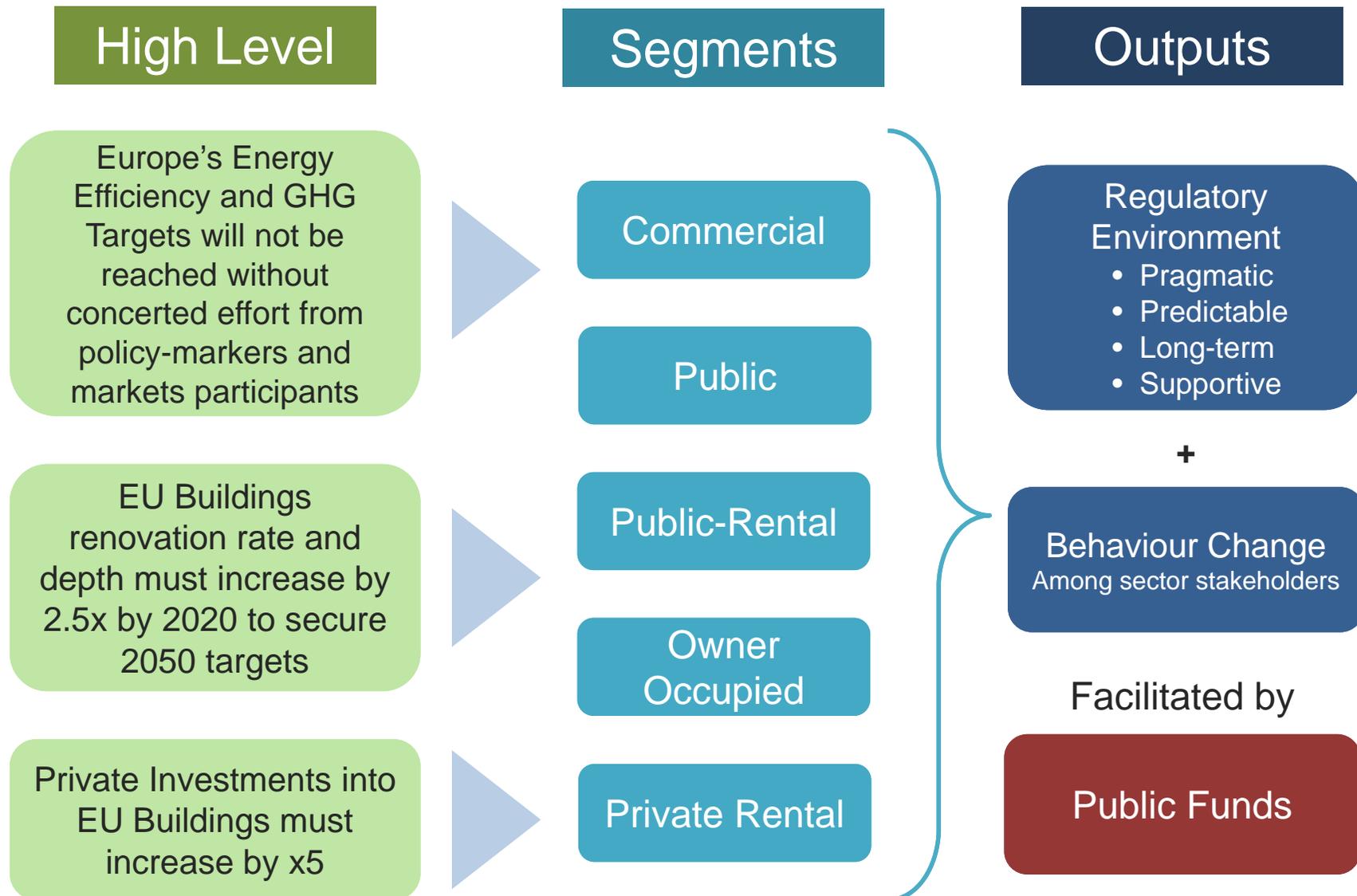
- 1 Driving Demand
- 2 Managing Uncertainty
- 3 Distribution and Aggregation
- 4 Blending Grants and Loans
- 5 Accounting Treatment
- 6 Horizon Period / Optimal Scope
- 7 Financial Regulatory Issues

# Key Messages:

Mobilizing Energy Efficiency  
Investments in EU Buildings,  
Industry & SMEs



# Buildings: Different Strategies for Different Segments



# Buildings: Policy-led and Markets-led Approaches to Deliver “*Smart Finance for Smart Buildings*”

## Policy-led Approaches

- Development of Standards and a Common Investment Language
- Improvement of Buildings Certification and Energy Performance Certificates
- Open Source EU Buildings Energy Database
- Industry and Finance supported National Buildings Renovation Roadmaps
- Optimize Use of EU Structural and Investment Funds for Energy Efficiency Investments in Buildings

## Market-led Approaches

- Common and Standard Underwriting and Investment Procedures
- Linking impact of building energy performance with investment performance
- More Proactive Engagement and Continuous Improvement and Usage of Energy Performance Certificates (EPCs) from Financial Institutions
- “Operational” Energy Performance Database
- Project Ratings
- Life cycle portfolio-wide sustainability programmes

# Buildings: “Smart Finance” or Simple Finance ? Or to UP-SCALE both....

EEFIG Participants Identified  
16x EE Financial Instruments

7x “Mature”  
Instruments

- Widely used to fund energy efficiency investments directly or indirectly

9x “Emerging”  
Instruments

- Are newer but have a varying potential to increase energy efficiency investing in EU buildings

## Highlights from EEFIG’s Survey, Working Group & Discussions

1. Dedicated credit lines have the widest applicability in all buildings segments
2. Energy Performance Contracting is growing in commercial and public buildings
3. Risk-sharing facilities are proving very useful
4. EE investing through direct and equity investments in real estate and infrastructure is important
5. Subordinated loans and leasing are presently “niche” instruments for buildings EE
6. Good potential for on-bill repayment and on-tax finance (PACE)
7. EE funds and Energy Service Agreements show good potential only in commercial and public buildings

# Industry: Extending the Horizon and Increasing the Improvement Rate for EU Companies...

## EU Industry:

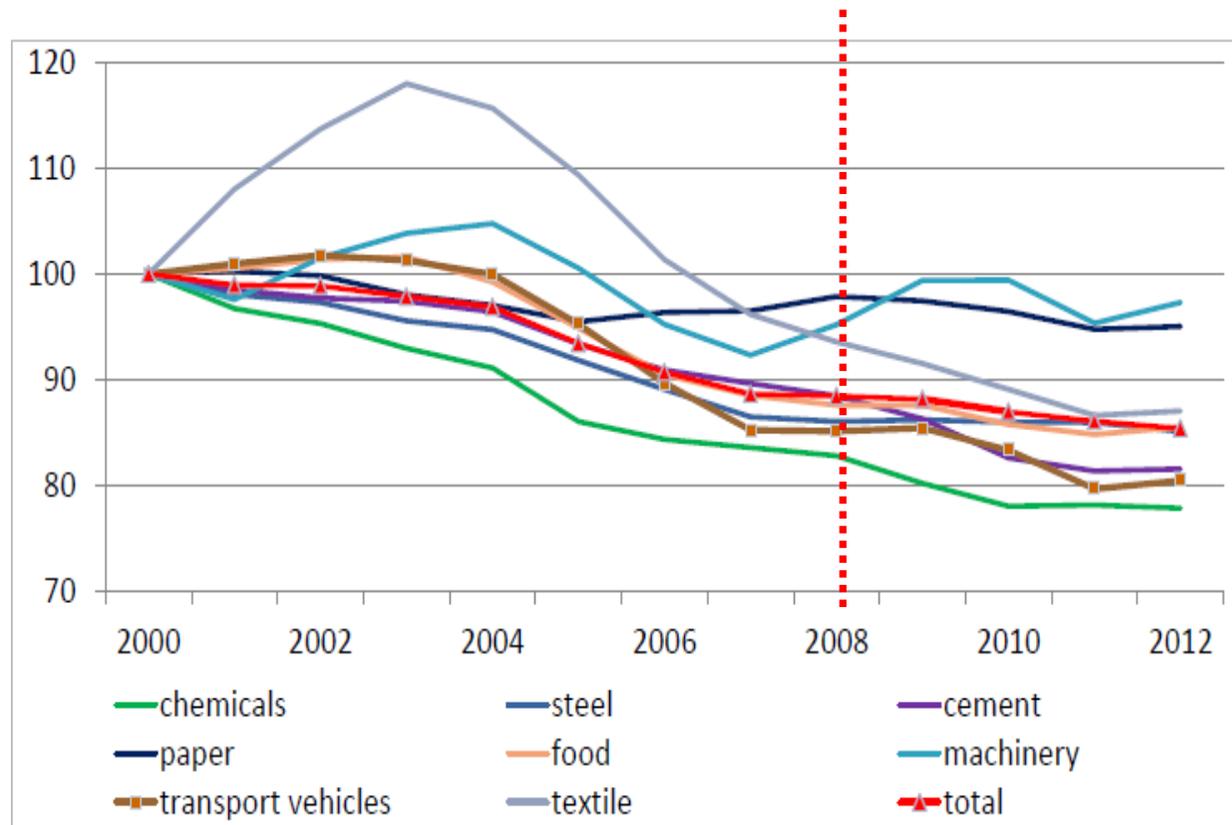
- Responsible for (26%) of European final energy consumption
- World leader in EE

## EU Industrial Energy Efficiency:

- Improved on average by 1.3% per annum over the last 15 years
- Speed of progress has been reduced since the financial crisis

Yet Potential additional savings with a 2030-2050 horizon are substantial

Energy Efficiency Index (ODEX) in EU Manufacturing Industries calculated by ODYSSEE-MURE project and published November 2014, using industry data rebased from year 2000.



# Industry & SMEs: Policies-led and Markets-led Approaches should work together

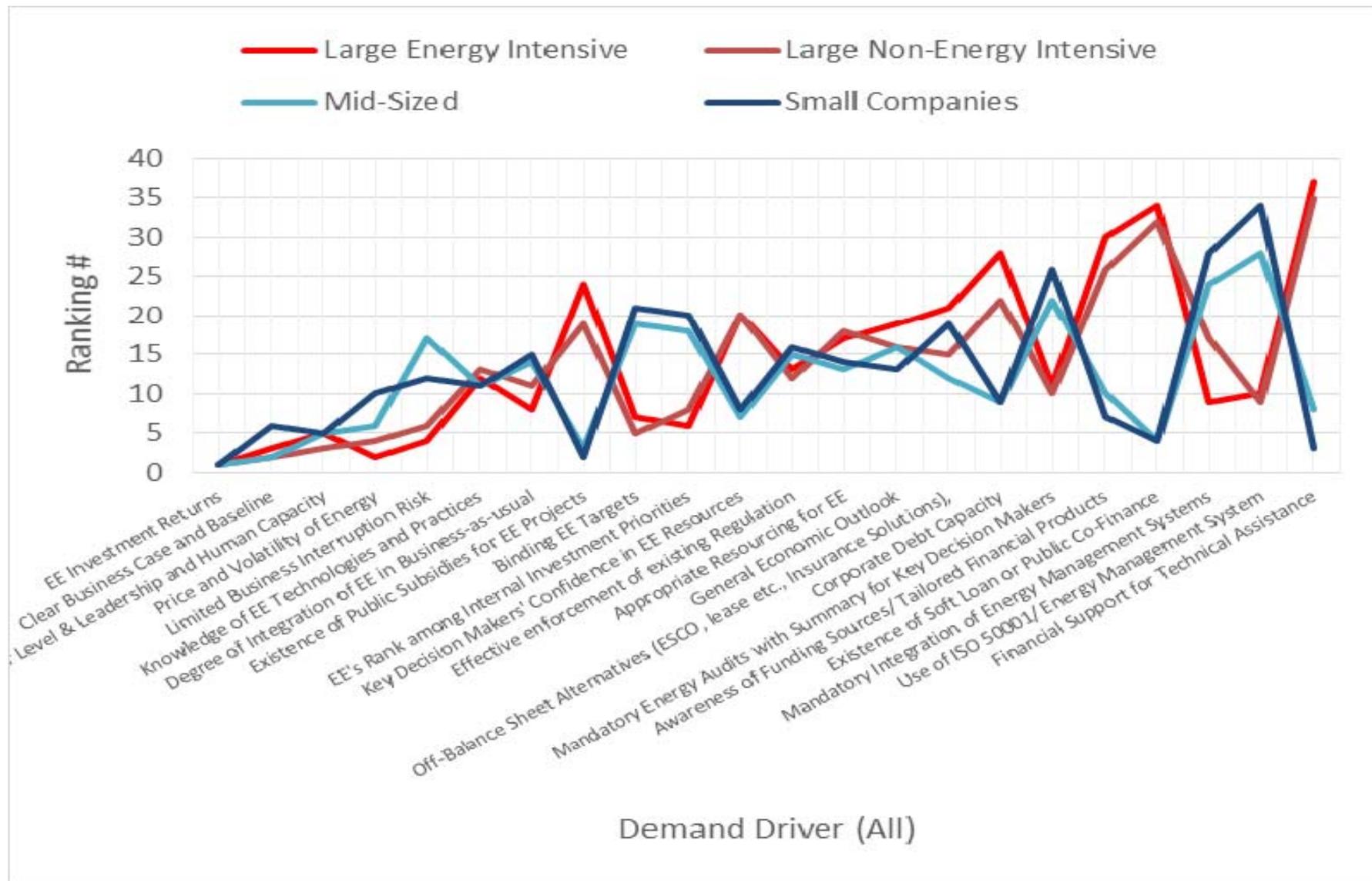
## Policy-led Approaches

1. Hybrid “Carrot and Stick” policies to Encourage Energy Efficiency focus at key points in the Corporate Investment Cycle
2. Policy-led initiatives to incentivise the integration of Energy Management Systems and creation of senior Energy Manager roles
3. Open Source EU Corporate Energy Efficiency Benchmarking Databases
4. Industry and Finance supported Energy Efficiency Sector Pathways
5. Policy support for Longer-term Energy Efficiency Investment Horizons and Consideration of Multiple Benefits
6. Project Development Assistance Facilities for SMEs

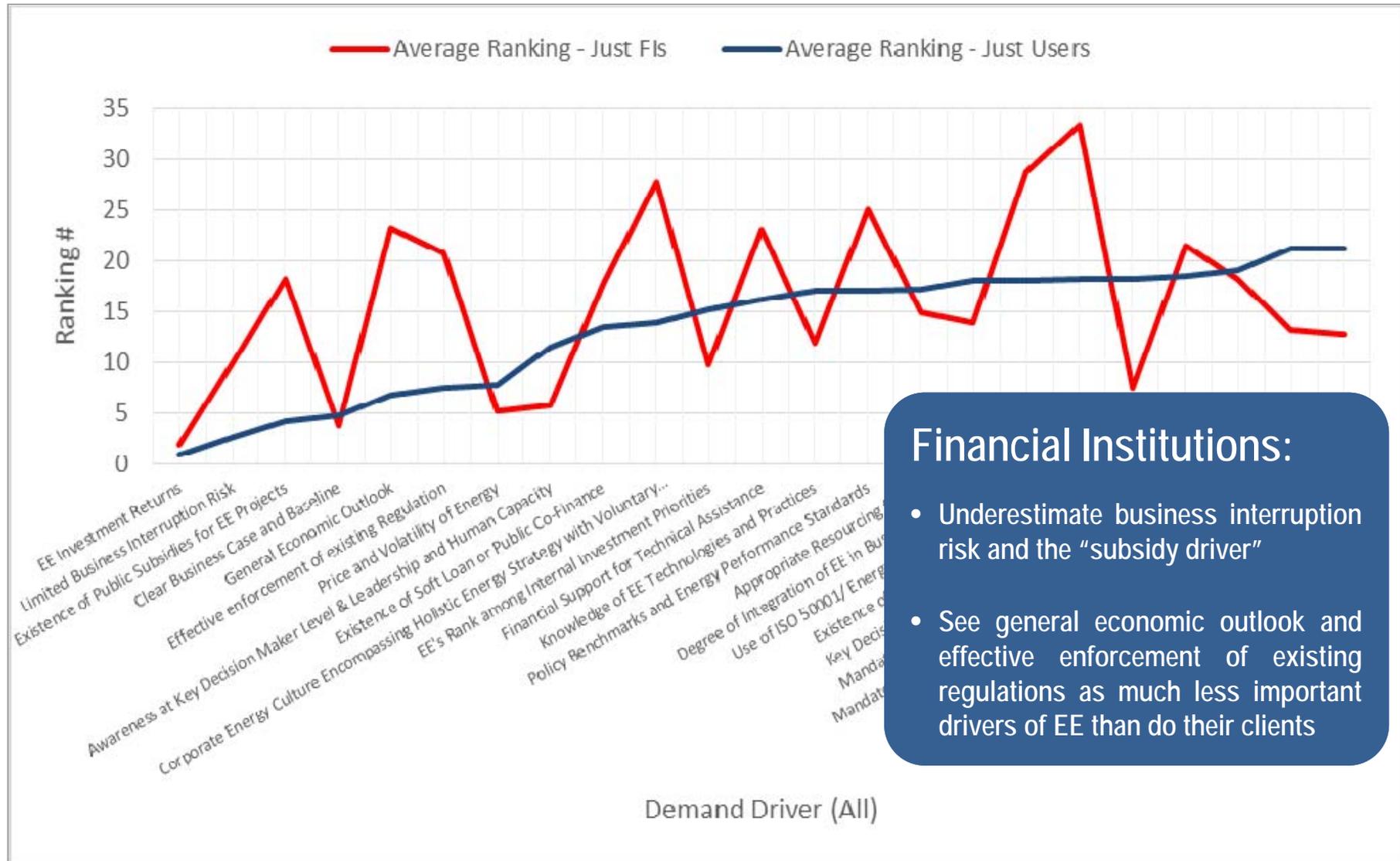
## Market-led Approaches

1. Energy Efficiency Investment Approach and Procedures imbedded within “Standard” Corporate Finance
2. Promotion of Use of ISO 50001 and Energy Management Systems within large energy consumers supported by Financial Institutions
3. Contribute to Energy Efficiency Performance Benchmarking Database
4. Raise Energy Efficiency as a Strategic Priority at Executive Board level and Link to Key Points in the Corporate Investment Cycle

# Using Participant Surveys to Understand Corporate Drivers by Segment



# Noticing Divergent Opinions from Financial Institutions



**Financial Institutions:**

- Underestimate business interruption risk and the “subsidy driver”
- See general economic outlook and effective enforcement of existing regulations as much less important drivers of EE than do their clients

# What Member States can do to Mobilize more Energy Efficiency Investments... (*5x Elements*)

## Buildings

- **PUSH:** Ensure effective transposition and local enforcement of EU Directives and increase policy focus on reducing wasted energy
- **PULL:** Address need for high quality buildings performance and energy data plus standard investment procedures
- **BUSINESS MODEL:** Scale-up replicable energy efficiency investment programmes and reduce their transaction costs for customers
- **TECHNICAL:** Initiate review of accounting, reporting and procurement hurdles for public buildings and improve standard procurement procedures
- **FINANCE:** Link optimal funding sources to National Buildings Renovation Strategies (EED Art. 4).

## Companies

- **PUSH:** Ensure effective transposition of existing EU Directives ensuring increased visibility and financial rigor of energy audits
- **PULL:** Support regulatory stability and visibility for long-term EE, eg. negotiated voluntary industry agreements with cost effective fiscal and accounting incentives
- **BUSINESS MODEL:** Address need for information and experience sharing, substantiate corporate energy efficiency metrics and procedures and consider role in process energy intensity and EE investment performance databases
- **TECHNICAL:** Develop energy performance contracting market and resolve accounting issues
- **FINANCE:** Support Project Development Assistance facilities to build SME capacity and in the networks which serve them.

# EEFIG's 2015 report was successfully launched on February 26<sup>th</sup>

Report has been seen over 5,000 times

## Key Headlines:

*High level support for the EEFIG's work is in evidence in Europe and internationally.*

### The Energy Collective, February 27<sup>th</sup> 2015

*The report is a milestone, representing one of the most potent collaborations to date between the European Commission and institutional investors on how regulation can feed directly into long-term, green financing: in this case, energy efficiency in property and SMEs.*

### Responsible Investor, March 10<sup>th</sup> 2015

*The report is worth taking seriously – because if the EU is to reap the potential dividends from improvements in energy efficiency, it will need a lot more investment than a (small) fraction of €315bn.*

### European Voice, March 11<sup>th</sup> 2015

*The EEFIG called for energy efficiency projects to be given priority in the deployment of Juncker plan money.*

### Euroactive, March 13<sup>th</sup> 2015

## Media / Press outlets where It has been mentioned:





## Key Supporting Quotes



*"Energy efficiency is already the biggest source of "new" energy supply, but large untapped potential remains in Europe. Implementing the report's recommendations can support economic growth and help tackle climate change at the same time."*

**Felipe Calderón, Former President of Mexico and Chair of the Global Commission on the Economy and Climate**



*"Investing into energy efficiency measures in buildings, industry and in SMEs is fundamentally important for Europe. I will strive to ensure that energy efficiency investment financing is looked at in our forthcoming policies and that this Report will be used as inspiration for our further work."*

**European Commission Vice President, Maroš Šefcovic**



*"Energy efficiency has played and continues to play a sizeable role in the development of the global economy. This is nowhere more evident than in financial markets where energy efficiency is establishing itself as an important segment. Policy makers and private markets need to work further to support this essential driver of energy efficiency investment."*

**Maria van der Hoeven, Executive Director of IEA**



*"Only half of the estimated 60 -100 billion Euros annual investment required to achieve Europe's 2020 energy efficiency targets in buildings is being met. The joint efforts by the EU and UNEP's FI to build a healthy dialogue among stakeholders and disseminate know-how has the potential to unleash private investment to the scale required to meet future ambitions and obligations."*

**Under Secretary-General of the United Nations and Executive Director of UNEP, Achim Steiner**



# CLIMATE & STRATEGY PARTNERS

*“ 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 ”*

Peter Sweatman CEO of Climate Strategy - EFIG Launch Feb 26<sup>th</sup> 2015

**Climate Strategy leads in Energy Efficiency Finance with 8 white papers written in the past 6 years and supporting international policy initiatives**



**Climate Strategy** understands the interdependent relationships between:

- Environment
- Society
- Business
- and Government

and their roles in guiding the **global transition to a low carbon economy**

**190 key note speeches and public conferences on the Transition to a Low Carbon Economy and 90+ press articles, Climate Strategy is working for a Climate Deal at COP21**



100 Billion Euro



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