

Standardization for energy efficiency investments:

**The EFIG Underwriting Toolkit and the Investor
Confidence Project**

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SEIF Dublin

28th September 2017

Fifty Pounds

£50

AA30 969819

SPECIMEN

SPECIMEN

I sell here, Sir, what all the world desires to have

I can think of nothing else but this machine

Bank of England

MATTHEW BOULTON 1728-1809

JAMES WATT 1736-1819

AA30 969819

© THE GOVERNOR AND COMPANY OF THE BANK OF ENGLAND 2010

In 2016, global energy-efficiency investment rose 9% to

 **\$231 billion**

To achieve “66% 2°C” scenario
requires *average* investment into
energy efficiency > USD 1 trillion a
year between 2016 and 2050

i.e. circa 5 x current level



**Trillions of
€ of capital**

**Finance
people**

**What we need
to build**

What we have

**Billions of €
potential
projects**

**Energy
efficiency
people**

We need to build the jigsaw of energy efficiency finance



Just providing finance is not enough!



Standardization



Factories need standardization



Banks are factories

Lack of standardization is a problem

Lack of standardization (in project development and documentation) is one of the major barriers to increasing investment into energy efficiency



Energy efficiency projects do not yet meet the requirements of capital markets. No two projects or contracts are alike.

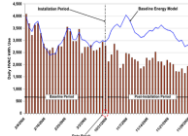


Michael Eckhart, MD & Global head of Sustainable Finance

Standards are like DNA. They are the basic building blocks for all technology and economic systems.

D.E. Purcell 2004

Lack of standardization results in:

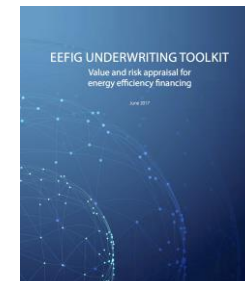


Greater performance risk
Uncertainty limiting demand
Higher transaction costs
Difficult to build capacity
Difficult to aggregate



Standardization of what?

- **Project development and documentation**
- **Understanding and appraisal of risks and value**
- **Performance data and reporting**



- **Contracts**

Various EU standard contracts available

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DEEP
DE-RISKING ENERGY
EFFICIENCY PLATFORM

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ICP and Investor Ready Energy Efficiency™

The Investor Confidence Project (ICP) is an international framework for reducing owner and investor risk, lowering due diligence costs, increasing certainty of savings achievement and enabling aggregation.

ICP ensures transparency, consistency and trust-worthiness through **best practice and independent verification.**



ICP certifies individual projects as **Investor Ready Energy Efficiency™ (IREE™)**

IREE™ is the quality mark like BREEAM or LEED but for an **energy efficiency retrofit project**

The IREE™ Certification is delivered prior to investment decision



What project types can be IREE™ certified?



Buildings

- Apartment blocks
- Tertiary

Available for US & all EU¹ countries, under development in Canada

Industry

District energy systems

Street lighting upgrades

Under development for all EU² countries

¹ Supported by Horizon 2020 grant Number: 649836

² Supported by Horizon 2020 grant Number: 754056

Benefits: Project owners

Investor Ready Energy Efficiency™ includes **independent review and certification** of proposed projects which:

- gives owners **confidence in project development and savings achievement.**
- enables the **comparison of projects** and access to more **project investment.**
- can function as a “**Tender in a box**” and provide **underwriting criteria** for buildings and portfolios.



Benefits: Investors

Investor Ready Energy Efficiency™:

- **reduces due diligence costs** and **speeds underwriting.**
- opens **access to quality projects** through Credentialed Project Developers.
- increases **confidence in project fundamentals and engineering.**
- provides standard projects and document packs with third party QA which allows for the **aggregation of projects** across borders and programmes.



Benefits: Project developers

Investor Ready Energy Efficiency™:

- offers a **repeatable project process**, aiding Quality Assurance.
- enables **more project approvals** due to industry standards and 3rd party review.
- **differentiates your company** and increases credibility with customers.
- Increases ability to **connect with finance**, insurance, utility programmes, without additional transaction costs.



Benefits: Government programmes

Investor Ready Energy Efficiency™:

- provides a **ready to deploy**, off-the-shelf system which is based on internationally recognized technical standards.
- provides a ready made **credentialing and training programme** that can be used to improve capacity across the supply chain and financial community.
- allows for the ability to distribute Quality Assurance **costs to the market.**





ICP Investor Network represents over €4 billion in energy efficiency project capital. They are looking for quality projects built to IREE™ standards and some provide incentives for IREE projects.



ICP Credentialed Project Developers (PDs) have been trained by ICP, their qualifications and experience have been vetted and are the only ones that can develop an IREE™ project.



ICP Credentialed Quality Assurance Providers offer independent and documented verification of project compliance with IREE™ designation.



First IREE™ certified project in Europe

National Health Service Liverpool Trusts



Project	NHS Trusts - Liverpool, England
Project Developer	Carbon and Energy Fund
Quality Assurance Provider	Verco
Investment	£ 13,000,000
Contract duration	15 years
Predicted annual savings	£ 1,850,000
Average annual energy savings	50%
Average annual carbon savings	33%



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All investments have VALUEand RISK



EEFIG UNDERWRITING TOOLKIT

Value and Risk Appraisal for Energy Efficiency Financing

A tool to assist financial institutions to scale up the deployment of capital into energy efficiency

valueandrisk.eefig.eu



Introduction



Financial Institutions
and Energy Efficiency



Financing Energy
Efficiency



The Project Life Cycle



Value and Risk
Appraisal



Resources



I strongly recommend this toolkit to project promoters, banks, financial institutions and anyone else interested in financing energy efficiency

Foreword by Maroš Šefčovič, European Commission VP



It will make it easier for financial institutions to carry out value and risk appraisals, for developers to attract capital, for businesses to fund projects

Foreword by Erik Solheim, UN Environment



SPREAD THE WORD
USE IT
FEEDBACK TO US

Purpose of the EFIG Underwriting Toolkit

To assist financial institutions in scaling up the deployment of capital into energy efficiency by:

- helping financial institutions better understand and evaluate **value and risks**.
- providing a **common framework** for evaluating energy efficiency investments and analysing the risks.
- helping developers and owners develop projects in a way that **better addresses the needs of financial institutions**.
- fostering a **common language** between project developers, project owners and financial institutions.

Efficiency brings multiple benefits

Increase in building asset value
Increase in productivity in industry
Increase in quality of production
Reduced staff turnover & sickness
etc. etc. etc.



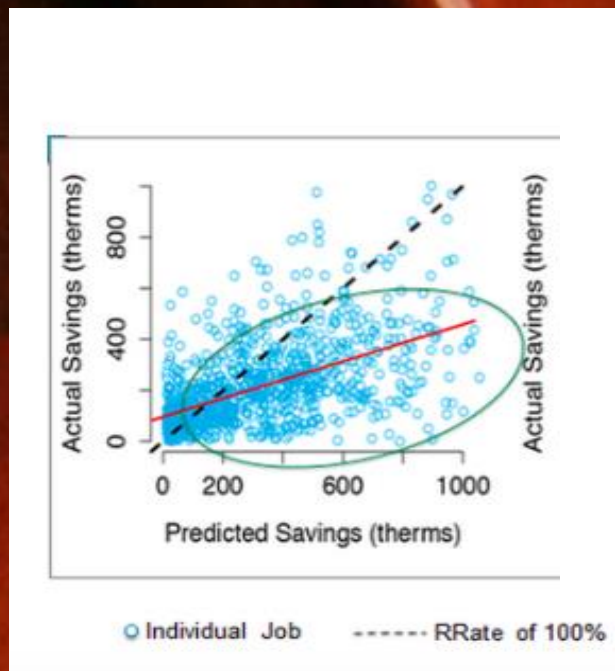
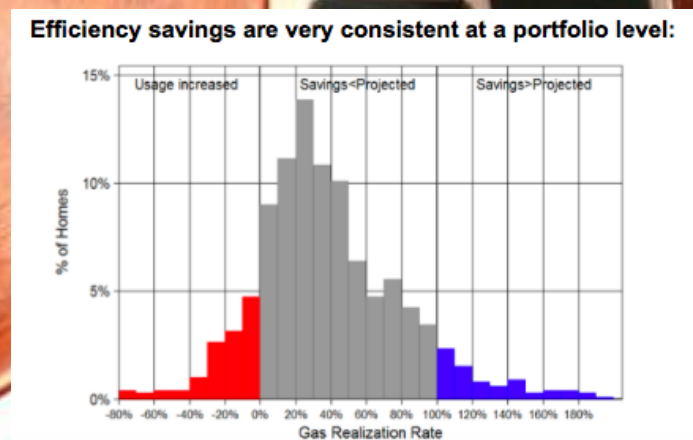
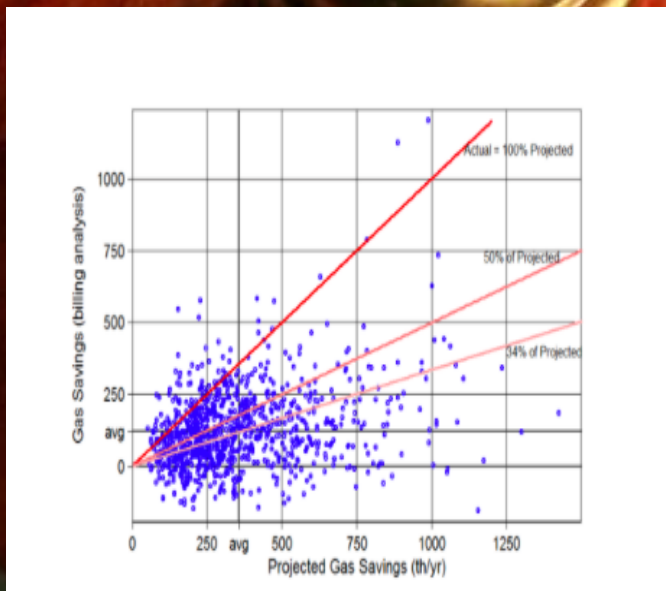
ALL benefits need to be identified, valued and included in financial appraisal where appropriate

Non-energy benefits may be more valuable & strategic than energy savings

Moving from uncertainty to understanding risks

~~Traditional view: "The returns are tremendous, and there's virtually no risk"~~

We are only just beginning to understand the risks



Data is key to understanding risks



Car loan data exists from 1919

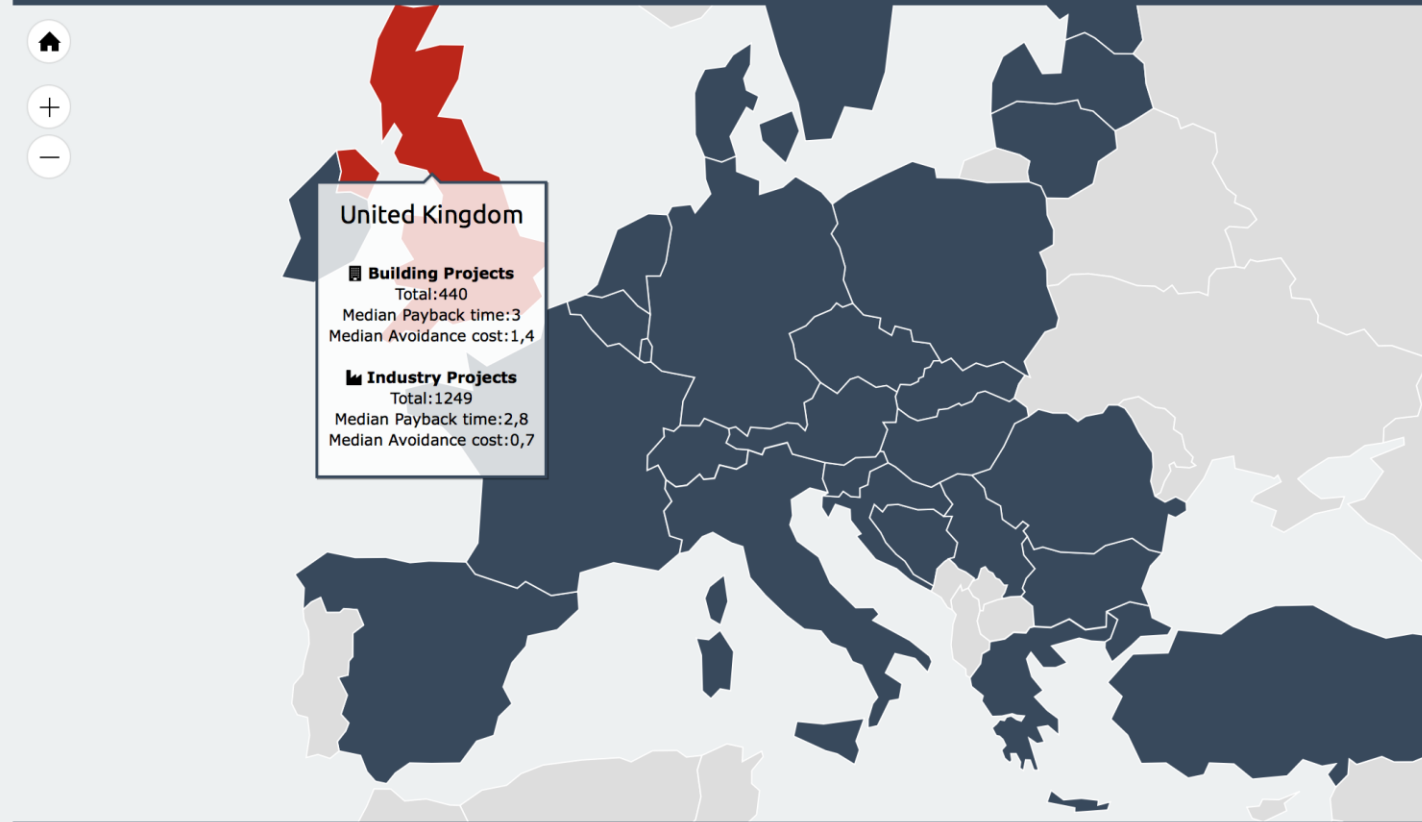
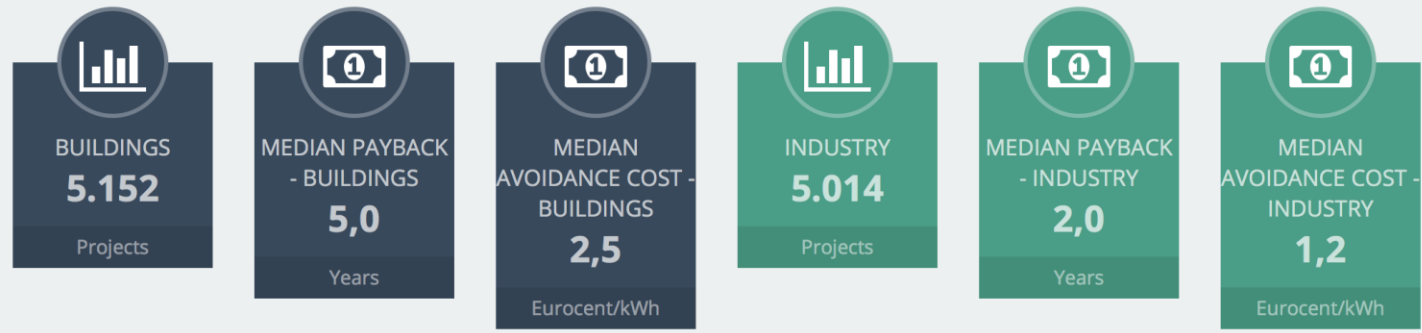


Mortgage data even longer



Very little data on energy efficiency performance & links to financial performance

Key figures Key figures for energy investments in the platform



> 10,000 projects across Industry & Buildings

deep.eefig.eu

BECOME A PROJECT PROVIDER AND A DATA PROVIDER

The Investor Confidence Project

[@europe.eepperformance.org](https://europe.eepperformance.org)
[@icpeurope](https://twitter.com/icpeurope)

**USE IT IN
PROJECTS &
PROGRAMMES**

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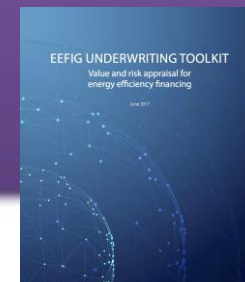
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