

Standardization: supporting the appraisal of value and risk for energy efficiency investments

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SEIF Webinar

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**Finance
people**

**Trillions of
€ of capital**

**What we need
to build**

**Billions of €
potential
projects**

What we have

**Energy
efficiency
people**

The jigsaw of energy efficiency finance





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

Standardization of what?

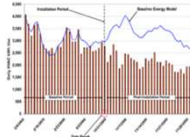
- Project development and documentation
- Understanding and appraisal of risks and value
- Contracts
- Performance data and reporting



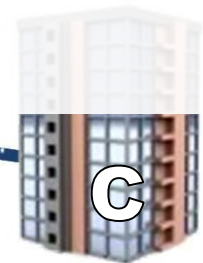
Various EU standard contracts available



Lack of standardization results in:



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



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



Ensures transparency, consistency and trustworthiness through **best practice and independent verification.**

Investor Ready Energy Efficiency™ Certification

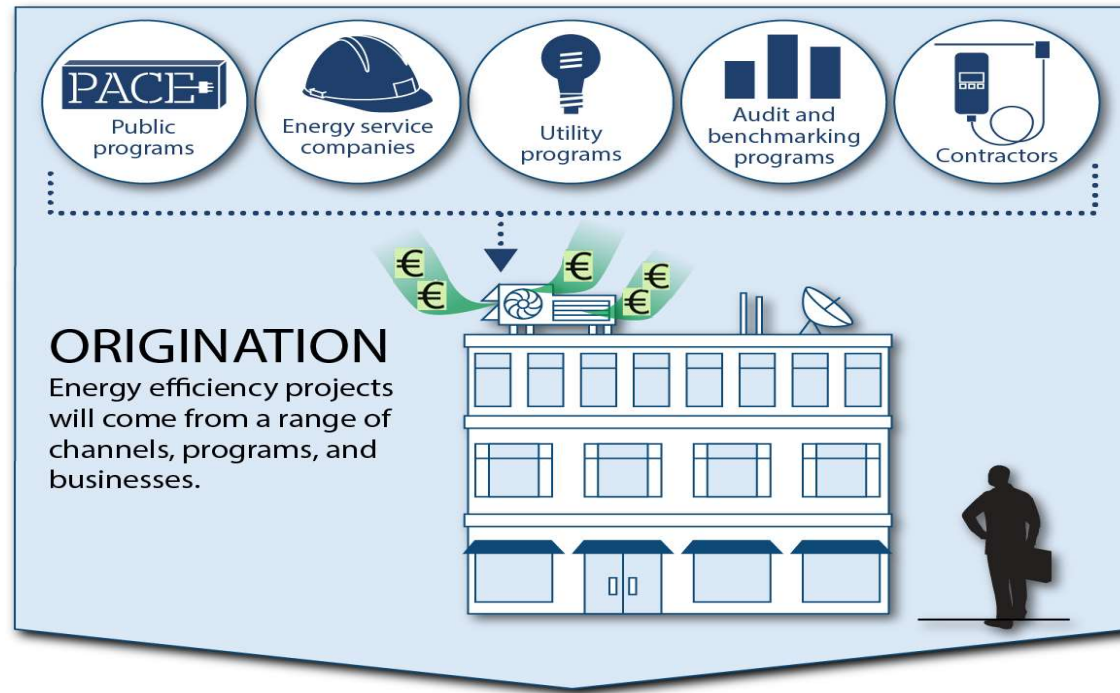


IREE™ is the quality mark like BREEAM or LEED but for **BUILDING, INDUSTRIAL, STREET LIGHTING** or **DISTRICT ENERGY EFFICIENCY PROJECTS**

IREE™ certifies individual energy efficiency projects
It can be used with any building rating system

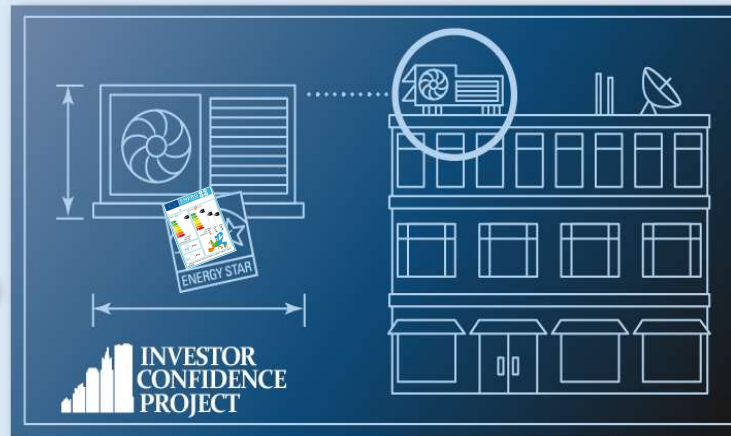


The process of IREE™ Certification



PROJECT DEVELOPMENT

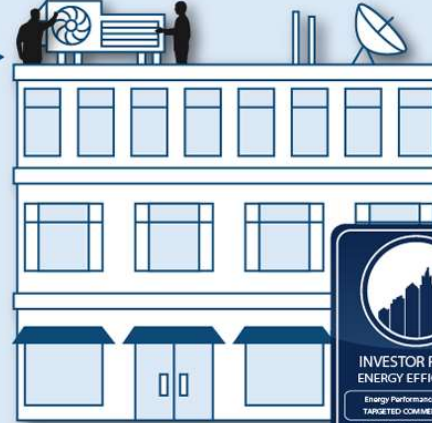
Credentialed Project Developer develops and documents projects according to ICP Protocols.



CERTIFICATION

Independent Credentialed
Quality Assurance Provider
reviews project for
ICP compliance and certifies
qualifying projects as
Investor Ready Energy Efficiency™.



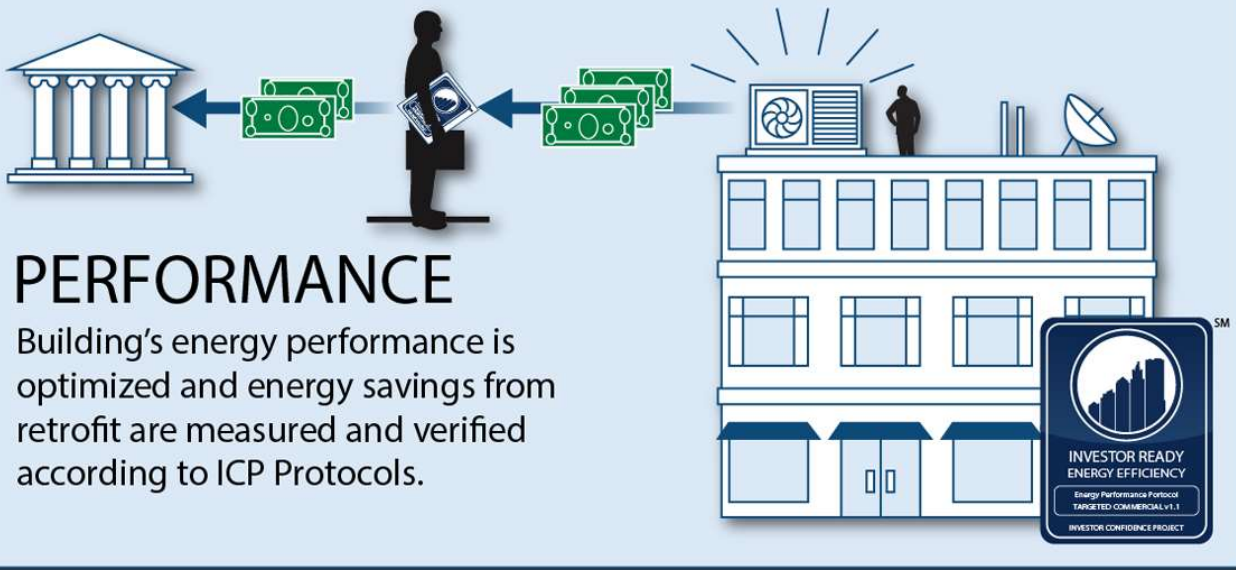


INVESTMENT

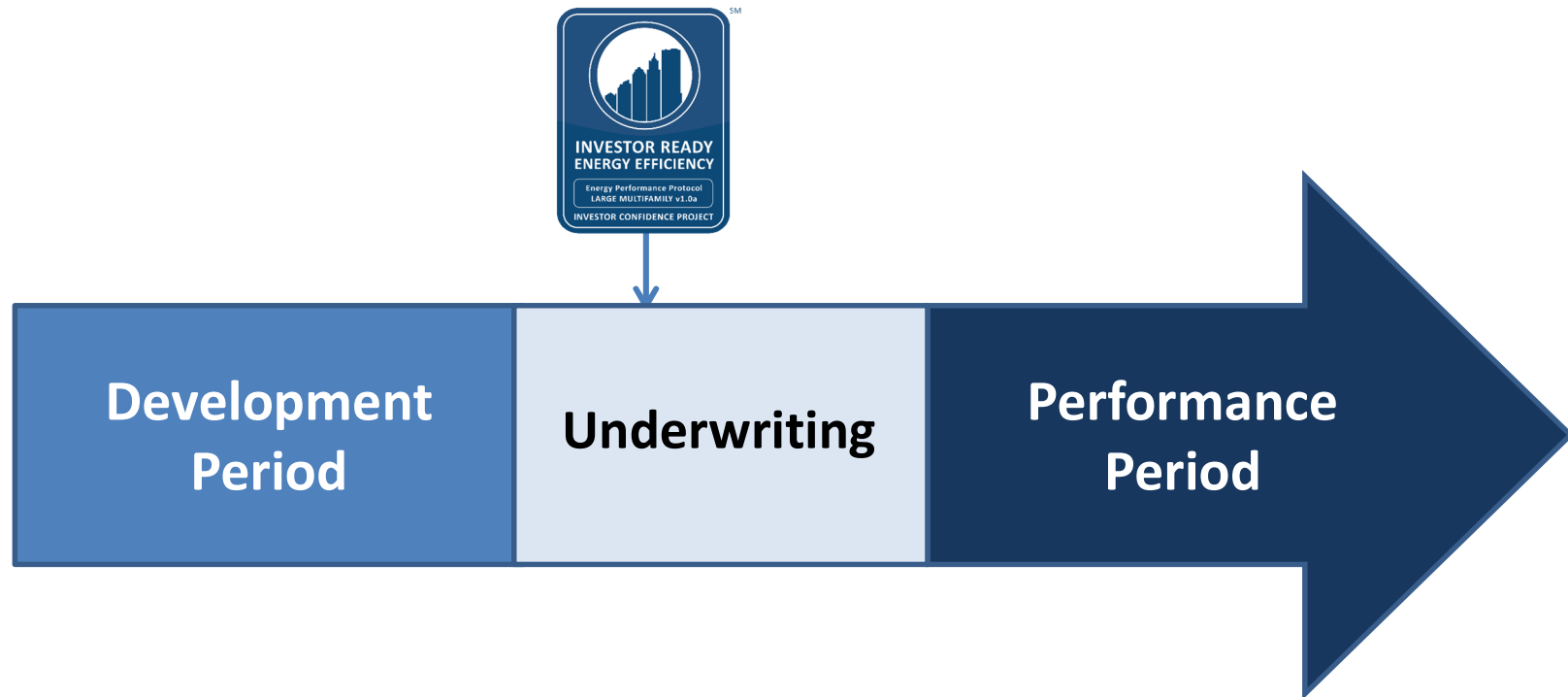
Building owners and investors can make investment decisions with increased confidence based on predicted savings.



SM



IREE™ Certification is an input into the investment decision



What project types can be IREE™ certified?



- Buildings**
- Tertiary
 - Apartment blocks

**Available for
all EU
countries**



Industry



District energy systems

**Under
development**

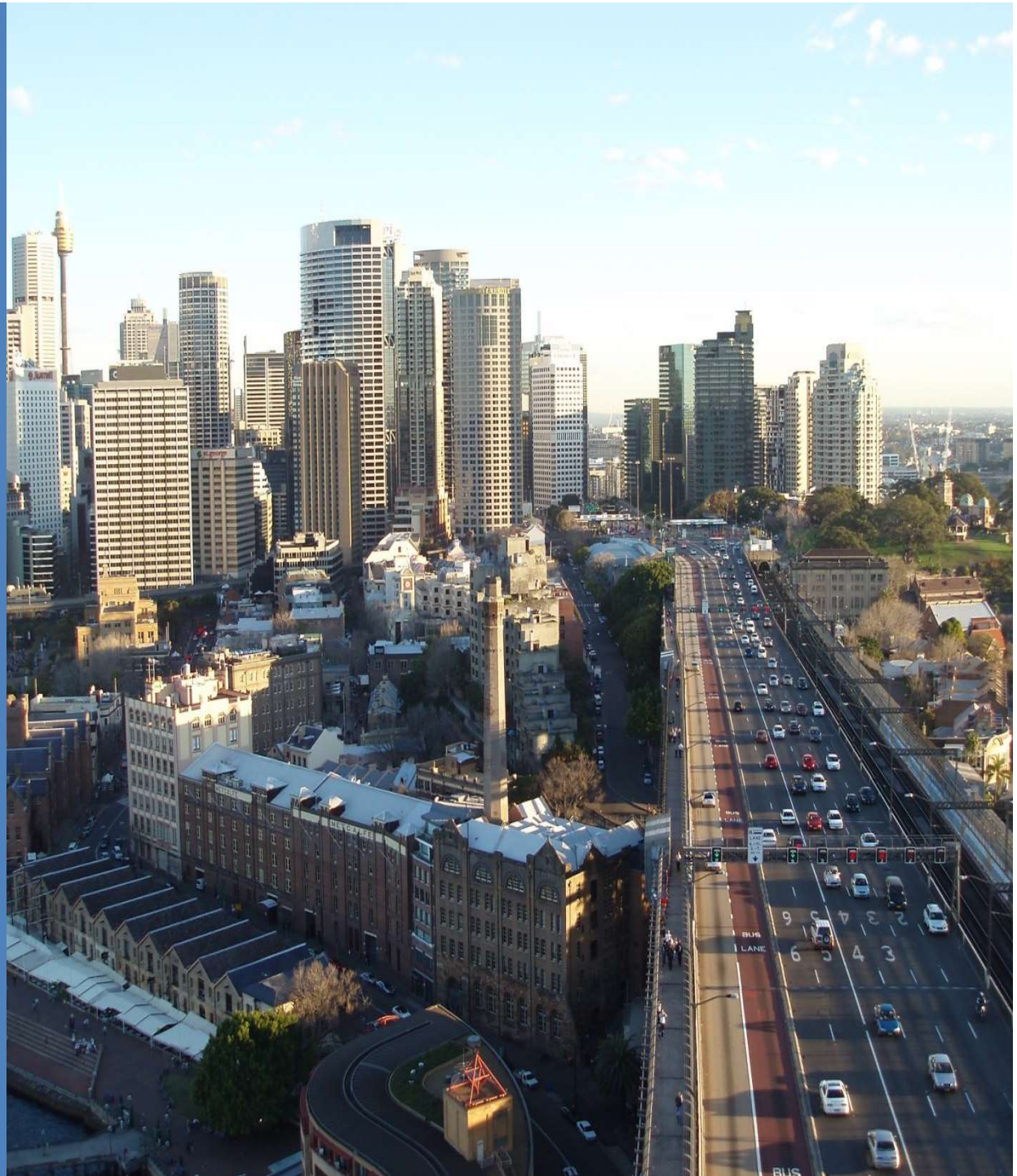


Street lighting upgrades

Benefits: Project owners

IREE's independent review and certification of proposed projects:

- 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 **underwriting criteria** for buildings and portfolios.



Benefits: Investors

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



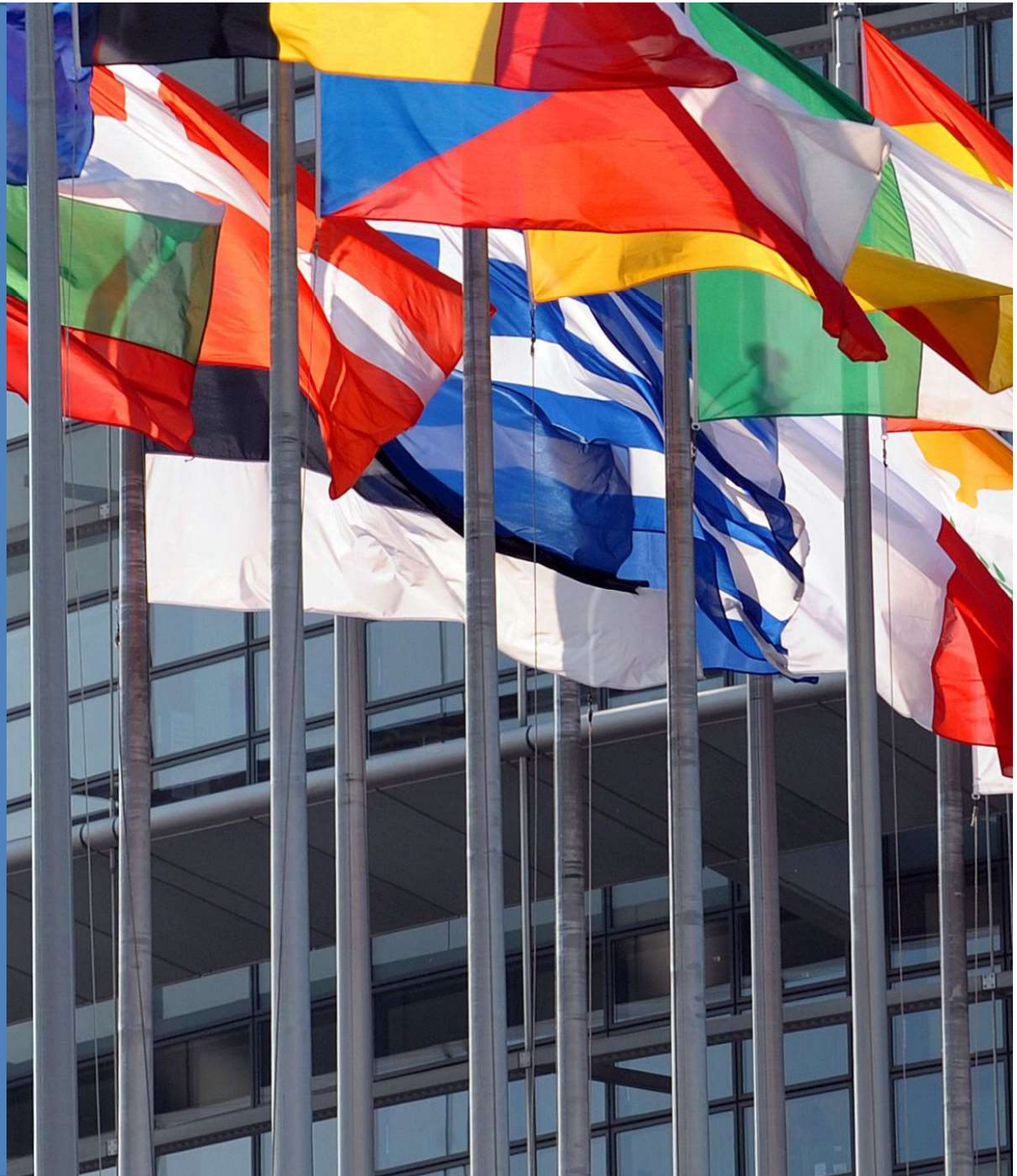
Benefits: Project developers

- 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

- based on internationally recognized and off-the-shelf technical standards.
- It is **ready to deploy**.
- ready made provider **credentialing and training programme**.
- allows for the ability to distribute Quality Assurance **costs to the market**.



ICP Europe Ally Members



ICP Europe Investor Network

ICP Investor Network represents **€1.5 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 providers: Project Developers



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**.

PDs can be ESCOs, Engineering firms, facility managers, building owners, or others that develop project proposals.

ICP Credentialed providers: Quality Assurance Providers



ICP Credentialed Quality Assurance Providers offer **independent and documented verification** of project compliance for IREE™ designation. They have been **trained** by ICP, their **qualifications and experience** have been vetted and can be an individual, independent firms or programmes.

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%



Now being applied across CEF portfolio in UK & Ireland – circa. €100m+

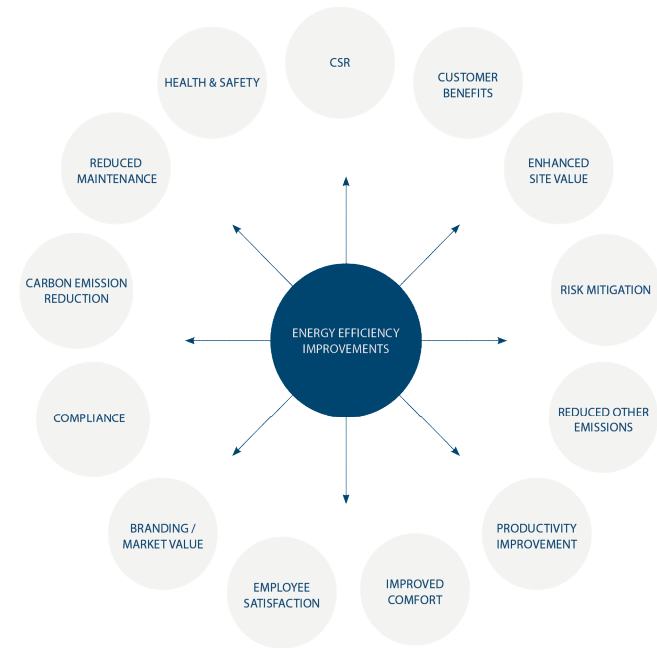


Value and Risk Appraisal



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.

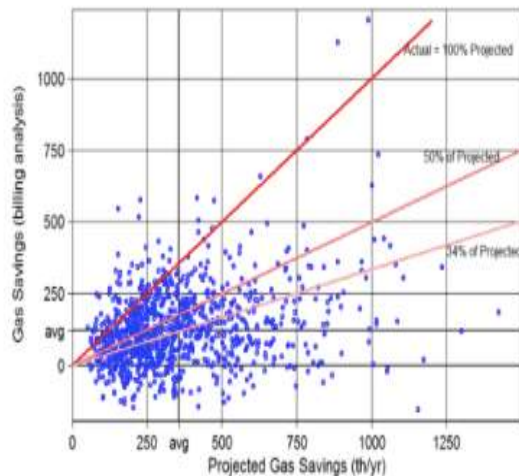


ALL benefits need to be identified, valued and included in financial appraisal where appropriate

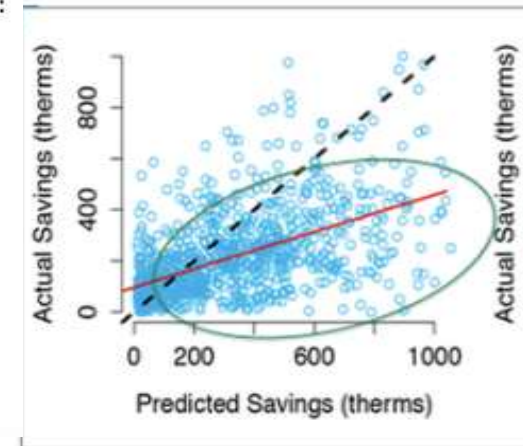
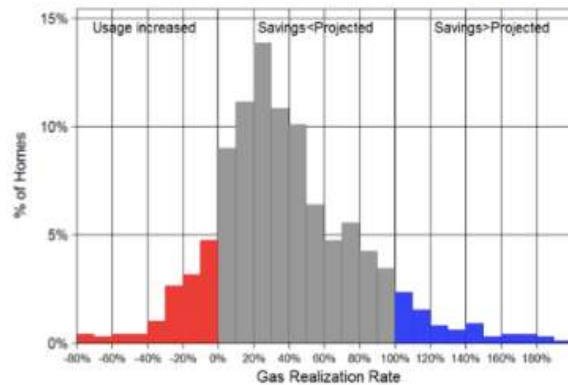
Understanding of risks

“The returns are tremendous, and there’s virtually no risk”

WRONG



Efficiency savings are very consistent at a portfolio level:



○ Individual Job - - - - - RRate of 100%

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

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



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



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.

Structure

- Financial Institutions and Energy Efficiency
- Financing Energy Efficiency
- The Project Life Cycle
- Value and Risk Appraisal

Hard copy and on-line

<http://valueandrisk.eefig.eu>

- Resources

On-line

<http://valueandrisk.eefig.eu/resources>

AUDIENCES

- Senior management
- Valuation and risk teams
- Originators & project developers

Financial institutions & EE – why?

Four reasons why financial institutions should be active in energy efficiency:

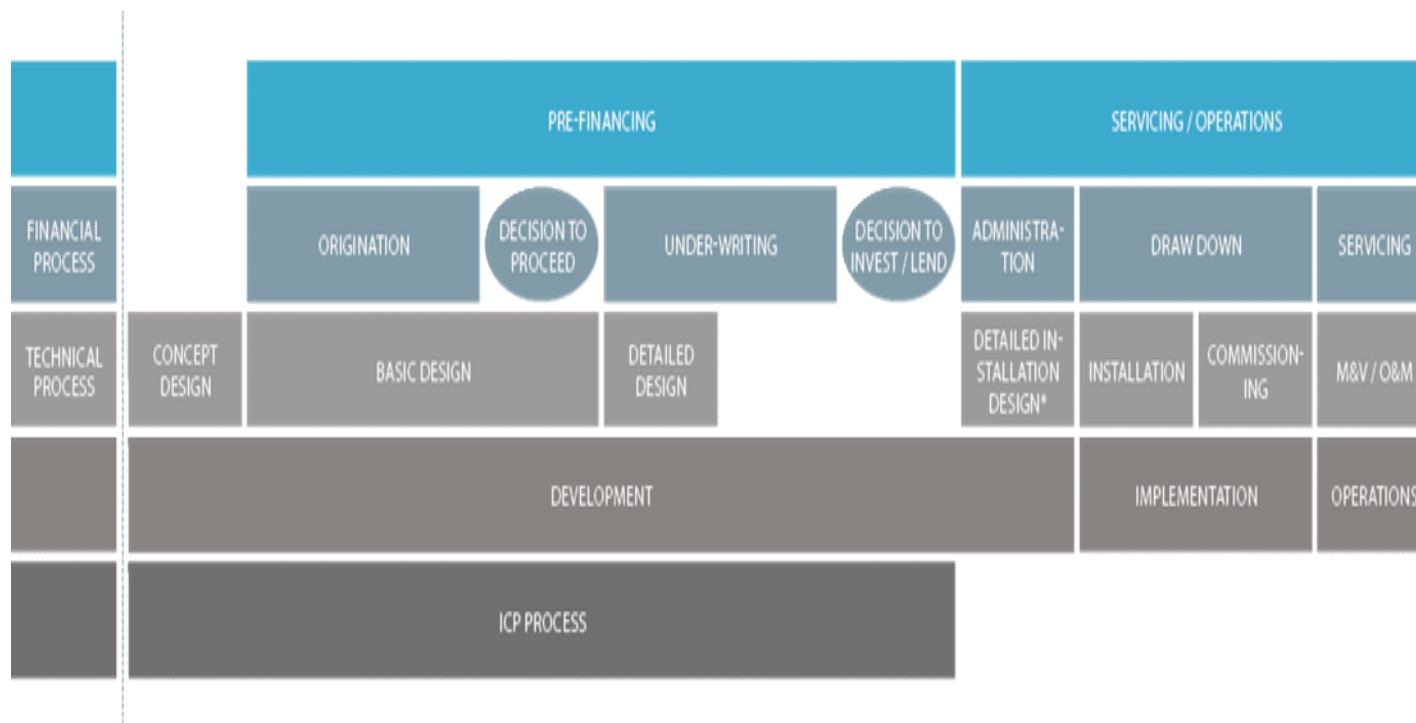
- Large market opportunity
- Risk reduction
 - Client risk through improved cash flow
 - Avoiding stranded assets as regulations tighten
- Achieving environmental objectives, CSR/ESG
- Growing interest from the regulators in climate risk

Financing energy efficiency – the how?

- Types of energy efficiency financing
 - Commercial/consumer loans
 - Leases
 - Green mortgages
 - Energy efficiency funds
 - Specialised energy services contracts e.g. EPCs and others
 - Property funds specializing in energy efficient/green properties
 - Green bonds
 - Forfaiting funds
 - Securitisation
 - **Ensuring normal, every day lending incorporates better than BAU energy efficiency**

The project life cycle

- Developers and financial institutions need to engage early in development process
- Need to create a common process and language
- Need to standardize



Value & risk appraisal - Value



- Sources of value
 - Energy
 - Savings
 - Reduced impact of energy price volatility
 - Reduced need to spend capex
 - Non-energy
 - Asset value
 - Productivity
 - Health & well-being
 - Etc etc



Non-energy benefits are often much more strategic and attractive to decision makers than energy cost savings

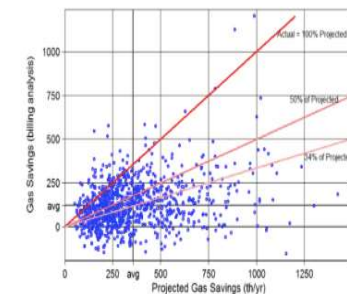
Financial appraisal needs to identify and value all benefits

Value & risk appraisal - Risk



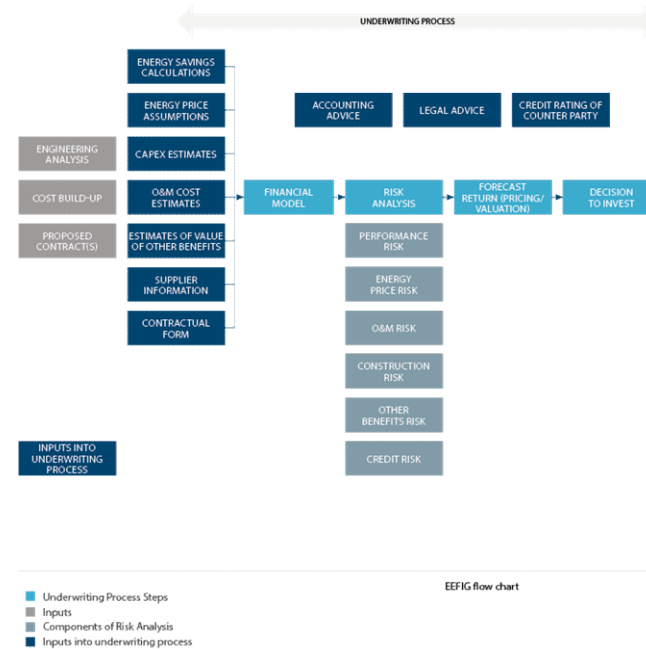
- Acknowledge and understand all the risks
- Very little data linking energy performance to financial performance
- Financial institutions should tag EE loans to enable risk analysis in future
- Better understanding of risk can bring more capital and product innovation

Performance risk has been neglected but is critical - even if you don't think you are taking the risk you are taking some



The underwriting process

- Technical and financial inputs from development process
- Build financial model
- Risk analysis
- Valuation
- Decision



Risk analysis should highlight factors with the biggest impact on financial return

May be worth spending more money to fully understand those factors i.e. get more data

Resources

- An on-line living document
 - Energy efficiency basics
 - Energy efficiency technologies
 - Examples of financial products
 - Glossary of terms
 - Processes for establishing products
 - DEEP
 - Investor Confidence Project resources
 - Project outline data capture sheet
 - Benefits and risks checklists

<http://valueandrisk.eefig.eu/resources>

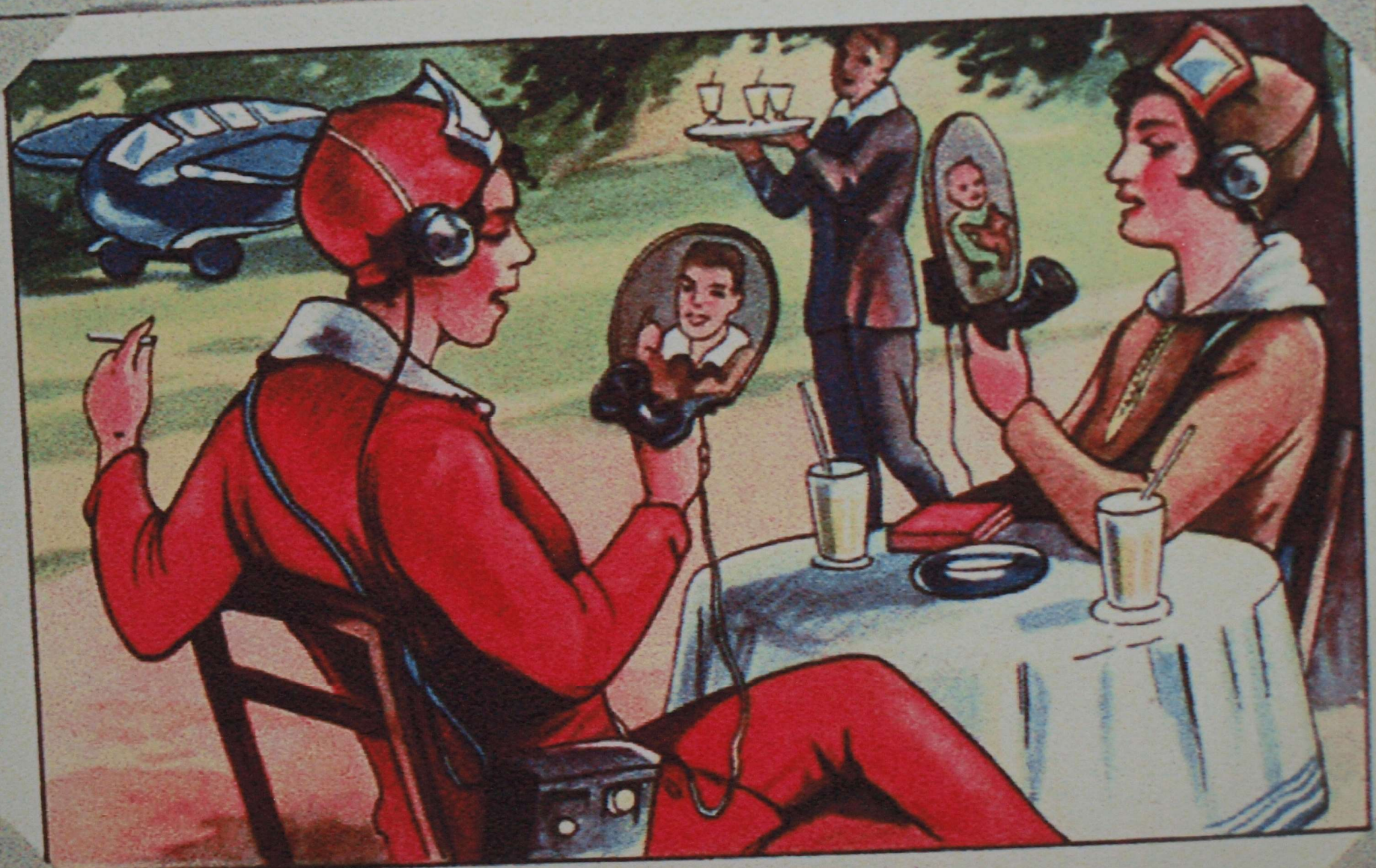
The screenshot shows the 'INVESTOR CONFIDENCE PROJECT (ICP) RESOURCES' page. The page header includes the Energy Efficiency Financing Group logo and navigation links: Introduction, Financial Institutions & Energy Efficiency, Financing Energy Efficiency, The Project Life Cycle, Value & Risk Appraisal, and Resources. A left-hand navigation menu lists various resources, with 'INVESTOR CONFIDENCE PROJECT RESOURCES' highlighted. The main content area features a title 'INVESTOR CONFIDENCE PROJECT (ICP) RESOURCES' and a brief description of the ICP framework. Below this, it lists the benefits of IREE™ and a diagram showing the ICP process flow. The diagram is divided into two main sections: 'ORIGINATION' and 'PROJECT DEVELOPMENT'. 'ORIGINATION' shows energy efficiency projects coming from various channels like public programs, energy service companies, and energy service providers. 'PROJECT DEVELOPMENT' shows a Credentialed Project Developer developing and documenting projects according to ICP Protocols. The diagram also includes icons for Public programs, Energy service companies, Energy service providers, and Value and Risk Appraisal.

Market Reaction

"The launch of this guidance for underwriting energy efficiency projects is greatly appreciated by the financial community. This is a useful tool which helps us better understand both the value and the risks of energy efficiency investments. This also provides a needed framework to improve our products and services and make them more competitive and attractive on the market."

Raiffesen Bank

The future



A vision for the EEFIG Toolkit

- A document that financial institutions can use to build capacity in energy efficiency financing
- A living document that grows with the market
- A growing library of case studies and examples of EE financing of all types
- Links to real data on energy & financial performance
- Tracking investment





The EEFIG Underwriting Toolkit

<http://valueandrisk.eefig.eu/>

<http://valueandrisk.eefig.eu/resources>

#EEFIG

#EEFIGToolkit

**SPREAD THE WORD
USE IT
FEEDBACK TO US**

The Investor Confidence Project

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

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USE IT

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