

# **The EEFIG Underwriting Toolkit**

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# 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.

# Value and Risk Appraisal



# 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 & energy efficiency – the 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?

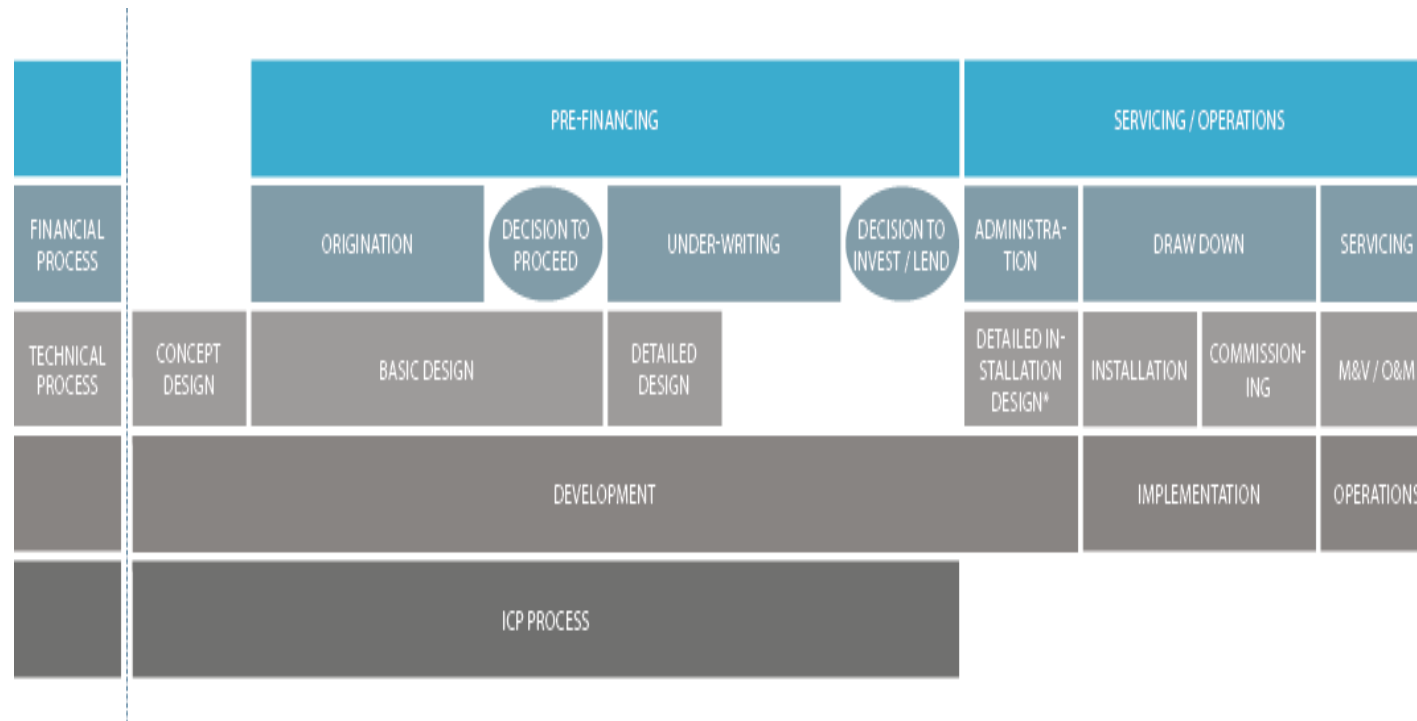
- Types of energy efficiency financing
  - Commercial/consumer loans
  - Leases
  - Green mortgages
  - Energy efficiency funds
  - Specialised energy services contracts e.g. EPCs and others
  - Property funds specializing in energy efficient/green properties
  - Green bonds
  - Forfeiting funds
  - Securitisation

**Ensuring normal, every day lending incorporates better than BAU energy efficiency**



# The project life cycle

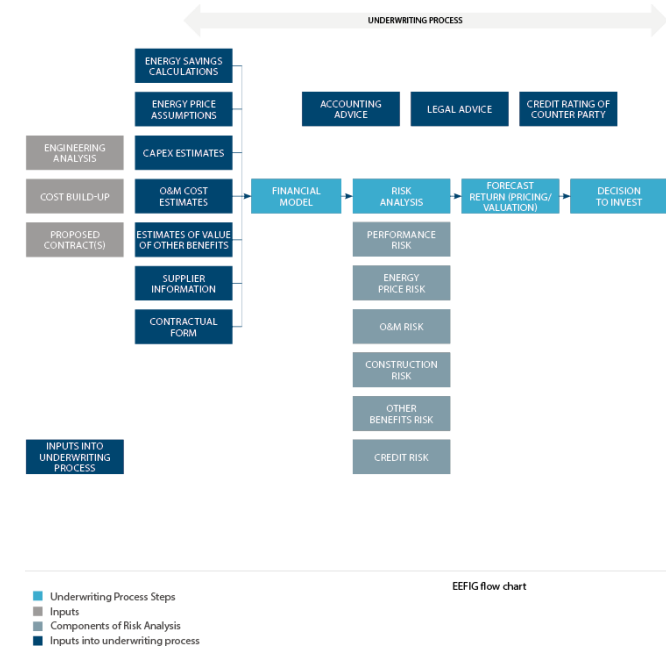
- Developers and financial institutions need to engage early in development process
- Need to create a common process and language
- Need to standardize





# The underwriting process

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



A common understanding of process helps financial institutions and project developers  
Building a common language

# 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

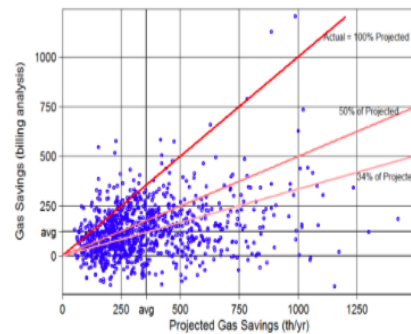
**Performance risk has been neglected but is critical - even if you don't think you are taking the risk you are taking some**

# Understanding of risks

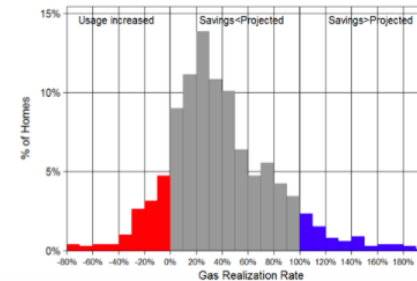
*“The returns are tremendous, and there’s virtually no risk”*

*1980s energy efficiency text book*

**WRONG**



Efficiency savings are very consistent at a portfolio level:



**Data is the key to understanding risk – DEEP etc**

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 top navigation bar includes 'Introduction', 'Financial Institutions & Energy Efficiency', 'Financing Energy Efficiency', 'The Project Life Cycle', 'Value & Risk Appraisal', and 'Resources'. A left-hand menu lists various resources, with 'INVESTOR CONFIDENCE PROJECT RESOURCES' highlighted. The main content area features a section titled 'INVESTOR CONFIDENCE PROJECT (ICP) RESOURCES' with a description of the ICP framework and a list of benefits. Below this, two diagrams illustrate the 'ORIGINATION' and 'PROJECT DEVELOPMENT' processes. The 'ORIGINATION' diagram shows energy efficiency projects coming from various channels like PACE programs, energy service companies, utility programs, and local government programs. The 'PROJECT DEVELOPMENT' diagram shows a developer developing projects according to ICP Protocols, involving a Credentialed Project Developer and an Investor Confidence Project.

Contents

- ENERGY EFFICIENCY BASICS
- THE PROCESS OF ESTABLISHING AN ENERGY EFFICIENCY PRODUCT
- THE PROCESS FOR ESTABLISHING AN ENERGY EFFICIENCY FUND
- THE PROCESS FOR ADDRESSING ENERGY EFFICIENCY IN A PROPERTY PORTFOLIO
- EXAMPLES OF ENERGY EFFICIENCY PRODUCTS AND FINANCIAL INSTRUMENTS
- DEEP PLATFORM
- BUILDING ENERGY DATA EXCHANGE SPECIFICATION(BEDES)
- INVESTOR CONFIDENCE PROJECT RESOURCES**
- PROJECT OUTLINE
- DATA CAPTURE SHEET
- SAMPLE INVESTMENT COMMITTEE APPROVAL DOCUMENTS SUMMARY
- BENEFITS CHECKLIST
- RISKS CHECKLIST

## INVESTOR CONFIDENCE PROJECT (ICP) RESOURCES

The Investor Confidence Project (ICP) provides a framework for energy efficiency project development, which standardises projects into verifiable project classes in order to reduce transaction costs associated with technical underwriting and increase reliability and consistency of energy savings. The ICP's certification system, Investor Ready Energy Efficiency™ (IREE™) assembles best practices and existing technical standards into a set of Protocols that define a clear roadmap for developing projects, determining savings estimates, and documenting and verifying results.

The benefits of IREE™ are as follows:

- Building owners get a standard that they can use to source energy efficiency projects they can believe in
- Investors achieve reduced due diligence costs thanks to third-party review of each project before certification
- Standardised approach to developing projects enables aggregation of projects into high performance portfolios.

The IREE™ process is shown below.

**ORIGINATION**  
Energy efficiency projects will come from a range of channels, programs, and businesses.

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

# Market Reaction

*"This is a very useful document"* **Ashok Sarkar, World Bank**

*"The Toolkit helps commercial banks and financial institutions see where the risks are and to build capacity"* **Toivo Miller, EBRD**

*"An invaluable reference document, which will help the cause"* **Stephen Barker, Siemens**

*"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."* **Cristian Sporis, Raiffeisen Bank**

*"We took the underwriting toolkit with its project cycle and used it to look at 64 projects. We really liked it. It was really easy to use. It works."* **Katarzyna Dziamara, Polish Institute for Regional Development Financing**

*"This is great"* **Ben Goldsmith, Menhaden Capital**

# A vision for the EFIG 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



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