



**WEBINAR**



Wednesday 6 December 2017  
UK: 2pm – NL: 3pm

## **How the Investor Confidence Project is breaking down the barriers to energy efficiency investment in Europe**

Presenter:

**Dr. Steven Fawkes**

ICP Europe, Senior Advisor

Moderator:

**Claudia Gonella**

GRESB, Marketing & Communications Director

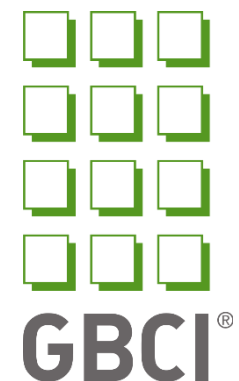
# Who Are We?

- Initiated in the United States in 2011 with funding from the Environmental Defense Fund
- Dr. Steven Fawkes put Consortium of companies together and received € 1.9 million Grant from the European Commission's Horizon 2020 programme to create ICP in Europe in 2015
  - New protocols
  - New team
- Europe Consortium composed of:
  - EnergyPro Ltd (UK)
  - Verco (UK)
  - Serimus (Luxembourg and Germany)
  - Denkstatt (Austria and Bulgaria)
  - RdA Climate Solutions (Portugal)



# Investor Confidence Project Milestones

- **2015:** ICP Consortium receives € 1.9m Grant from E.C.
- **2016:** ICP launches IREE Certification and Investor Network in Europe. Now more than 30 projects and programmes adopting the scheme.
- **2017:** ICP receives new 1.5m Grant from European Commission to expand into Industry, Street Lighting and Infrastructure.
- **2017:** ICP acquired by GBCI and starts integration into its activities, Arc platform and transition to a fee-based model.



# 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 – the first fuel for Europe*



**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*

# Lack of standardization results in:



**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 trust-worthiness through **best practice and independent verification.**



SM IREE™ is the quality mark like BREEAM or LEED but for a **BUILDING, DISTRICT ENERGY, INDUSTRY OR STREET LIGHTING EFFICIENCY PROJECT**



IREE™ can be used with any building rating system – it is certifying individual energy efficiency projects

# What Energy Efficiency Projects Typically Lack

- Consistent approaches to baseline development, savings calculations, implementation cost estimates, financial analysis
- Commissioning plans
- Persistence plans
- Proper training of facility personnel
- Documentation
- Updated systems and operator's manuals
- IPMVP-adherent M&V plans

## ICP Targeted Protocol Elements for IREE™ Certification

### Baseline

- Energy use data for the building
- Performance data / building data specific to ECMs
- Weather data
- Occupancy for baseline period
- Baseline model
- Estimates of end-use energy use (CBECS)

### Savings Calculation

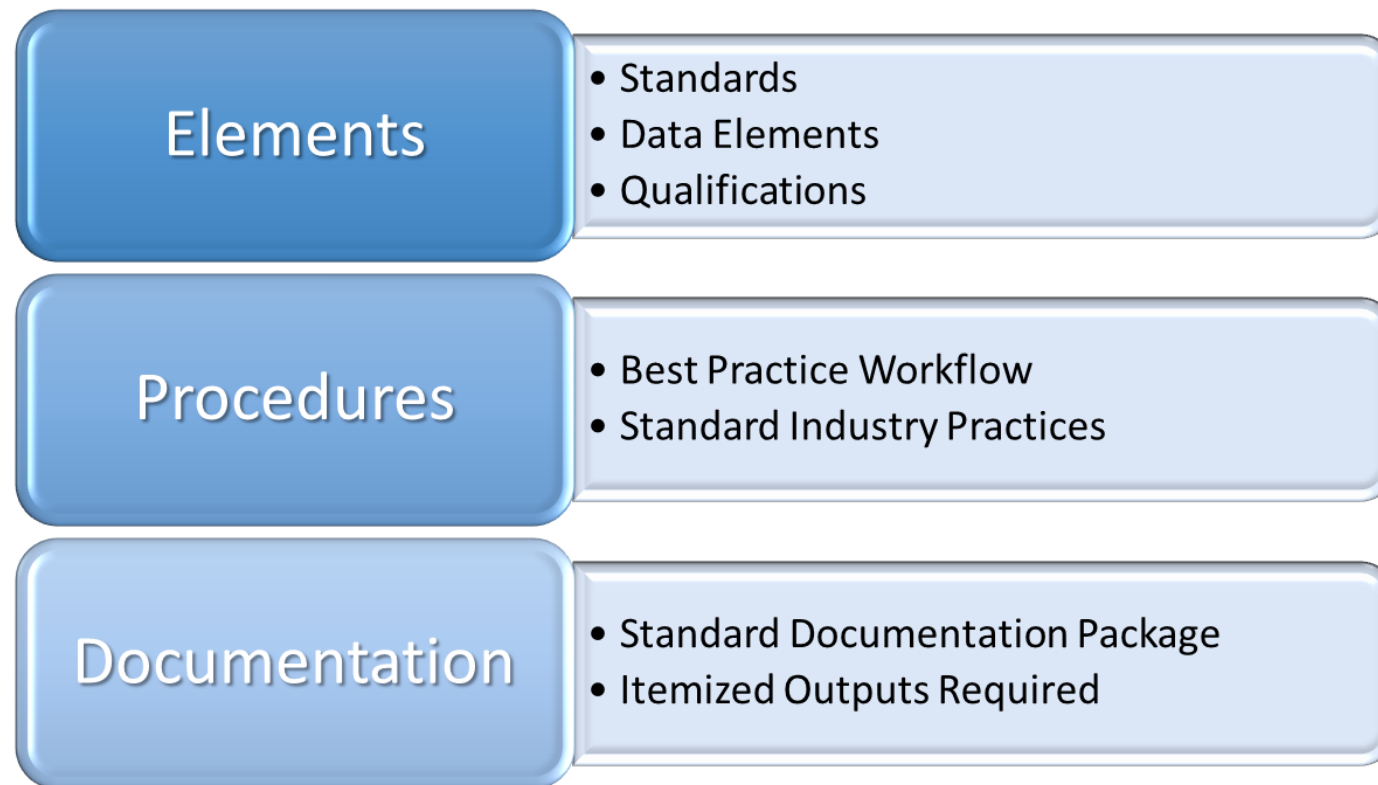
- Description of the existing conditions
- Transparent calculations
- Calibrate savings using pre-energy use data
- Preliminary cost estimates
- Savings and cost effectiveness projections
- Final report including proposed ECM descriptions, economic performance, and supporting data

### Measurement and Verification Plan

- M&V plan following IPMVP Option A  
(Measurement of key parameters, but stipulation for others)



# The ICP approach



# The IREE™ Certification is delivered prior to investment decision



# ICP represents Minimum Viable Quality

We believe ICP represent not the maximum, but in fact the *minimum* set of requirements to ensure performance.

Cost reductions come from **consistency across programmes and business models**, specificity that can be **automated, standard data and documents** and having it all happen one time (every party accepting the IREE™ Certification).

# What project types is IREE™ designed for?



**Tertiary  
Buildings**



**Apartment  
Block**

Supported by Horizon 2020 grant Number: 649836



**Industry**



**Street  
Lighting**



**District  
Energy**

Supported by Horizon 2020 grant Number: 754056



# 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

- IREE **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 with third party 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 3<sup>rd</sup> 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™ is based on internationally recognized and off-the-shelf technical standards **ready to deploy**.
- Ready made provider **credentialing and training programme**.
- Allows for the ability to distribute Quality Assurance **costs to the market**.





# ICP Europe Allies



# ICP 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.



**INGENIOUS INFRASTRUCTURE**



**Menhaden**



# 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.

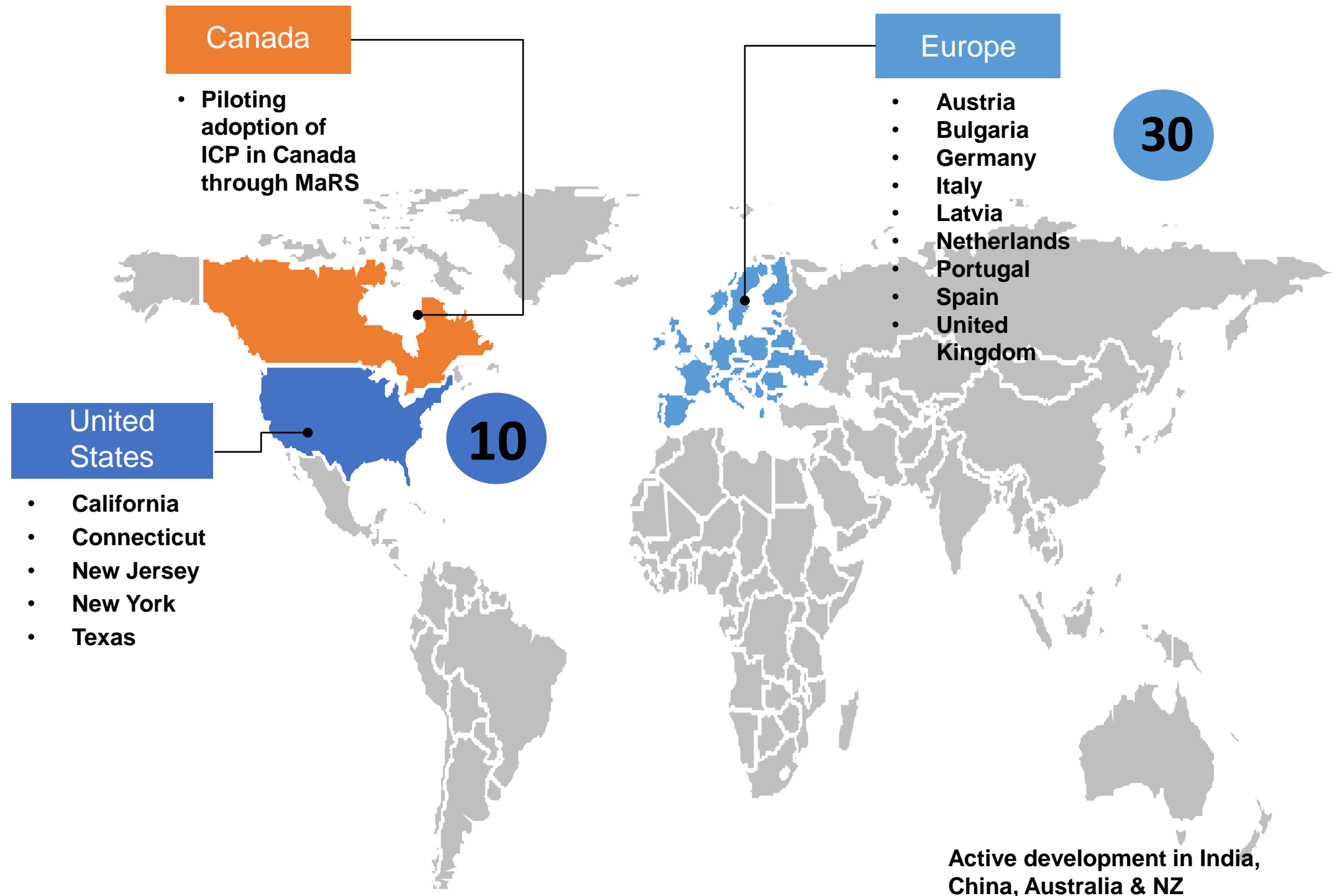


# ICP Credentialed providers: Quality Assurance Providers



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 programs.

# Projects & Programmes Adopting ICP



# Projects adopting ICP in Europe

Status	Project type	Location	Project developer	Protocol
Certified	Three-building hospital	Liverpool, United Kingdom	Engie	Large Tertiary
Certified	Commercial office building	London, United Kingdom	CES Energy	Targeted Tertiary
Certified	Leisure Centre	Exe Valley, United Kingdom	Anesco	Standard Tertiary
Certified	School	Shaftesbury, United Kingdom	Anesco	Standard Tertiary
Certified	Office building	Alentejo, Portugal	Soningeo	Targeted Tertiary
Underway	Student housing complex	Mammheim, Germany	KEA	Standard Apartment Block
Underway	Hotel	Eastern Germany	Dena	Standard or Large Tertiary
Underway	Parking space	Berlin, Germany	E.ON	Targeted Tertiary
Underway	Vienna Choir Boys – Summer Residence Sekirm	Province of Carinthia, Austria	Inprogress Architekturconsulting, ARCH+MORE, JP	Large Apartment Block
Underway	Commercial building	Madrid, Spain	Sunflower Energias	Targeted Tertiary
Underway	Hospital	United Kingdom	Cynergin	Standard Tertiary
Underway	Social housing buildings	Liguria region, Italy	TBD	TBD
Underway	Hotel	Algarve, Portugal	Amago	Large Tertiary
Underway	Hotel	Ireland	Connected Energy	Standard Tertiary
Underway	Public commercial building	Gijon, Spain	Soningeo	Targeted Tertiary

# Programmes adopting ICP in Europe

Status	Programme name and details	Location	Programme Administrator	ICP process parts considered
Final agreement	Eefin2	Germany	DENEFF	ICP Protocols
Final agreement	Carbon and Energy Fund (CEF)	Liverpool, England	Carbon and Energy Fund	Full IREE adoption
Final Agreement	F3 Latvia	Latvia	F3 Latvia	IREE rules written into Investment Procedures
Final Agreement	SUM EE Funds	Spain & Portugal	SUMA	Full IREE adoption
Final Agreement	PARITY	Portugal	Boa Energia	Full IREE adoption
Final Agreement	RE:FIT	United Kingdom	Greater London Authority, Local Partnerships	Full IREE adoption
Final Agreement	London Mayor's Energy Efficiency Fund	United Kingdom	Greater London Authority	ICP Protocols

# IREE™ Certification in Europe - examples

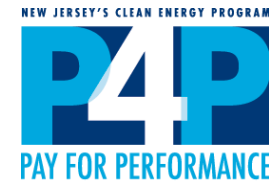
- The **£100 million Carbon and Energy Fund** has committed to promote the use of the ICP Europe protocols and other tools on its projects, including the inclusion of a reference to the recommended use of ICP tools in any new frameworks.
- The **F<sup>3</sup> Latvia EUR 100 million Fund** has written ICP into its rules. Backed by EBRD.
- The **£500 million London Mayor's Energy Efficiency Fund's preferred bidder Amber Infrastructure** has committed to incorporate ICP into its rules.
- **SUMA Capital** has committed to promote ICP through its funds.





# IREE™ Certification in the United States – examples

- ICP has been approved as an alternative standard in the **Connecticut Green Bank's CPACE programme**.
- ICP has been integrated in **New Jersey Clean Energy programme Pay-for-Performance (P4P)**.
- California Utility **Pacific Gas & Electric** is offering interest-free loans to projects that follow the ICP Protocols in its **On-Bill Financing programme**.
- ICP has been integrated into **Texas PACE programme's** statutes.



# IREE™ Certification in the United States - examples

## Tigard Bowl, Oregon



- Bowling complex located in Tigard, a suburb southwest of Portland Oregon.
- **NorthWrite Inc., an ICP Credentialed Project Developer, proposed a turnkey energy efficiency package for the project** focused on addressing;
  - ✓ the outdated HVAC control system which operated continuously 24x7 at full capacity
  - ✓ the lighting system which was inefficient and provided poor quality illumination.

**NorthWrite partners with Joule Assets, a member of the ICP Investor Network, to offer unique turn-key energy efficiency solutions to its clients.** Joule Assets provides complete financing solutions for energy efficiency and demand response projects that can provide off-balance sheet treatment, guaranteed savings, fixed payments, and other features that help building owners mitigate risk and maximize operating profits. For this project, NorthWrite leveraged incentives through the Energy Trust of Oregon, performance insurance from ICP partner Hartford Steam Boiler, and Joule Asset's performance-based financing to provide an **enticing zero initial cost solution with guaranteed savings** that the owners of Tigard Bowl approved and implemented.

Project	Tigard Bowl
Project Partner(s)	NorthWrite / Joule Assets
Investment	\$28,000
Incentives	\$14,000
Annual Cost Savings	\$3,905
Percent Savings	13%
Simple Payback	3.6 years

**NorthWrite**



# Investor Ready Performance Insurance: lower premiums for IREE projects

ICP is partnering with [HSB Munich RE](#) to provide a performance risk insurance policy which will insure energy efficiency savings realization for building owners.

- HSB has pre-underwritten the ICP IREE Certification, and will accept certified projects as being pre-approved for performance risk insurance subject to financial underwriting.
- All certified projects have a direct path to providing performance risk insurance, which will enable performance guarantees to customers and will demonstrate the value of IREE certification.
- Investor Ready Performance Insurance will be offered to certified IREE Projects.



Hartford Steam Boiler

*“HSB does provide improved terms for energy efficiency projects that are ICP credentialed. The Asset Performance Insurance element of our cover (covering a shortfall in achieved savings) incorporates a “confidence factor” within the rating model. The highest confidence level is applicable to ICP credentialed projects. This contracts the performance parameters and **reduces the premium**. The exact reduction in premium depends on the nature of the project to start with.”*

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**Paul Cullum** - Alternative Distribution Manager, HSB Engineering Insurance Limited

“CEF are proud to be closely associated with the Investor Confidence Project (ICP). As leaders in the energy efficiency industry, CEF fully support the project’s objective of enabling a marketplace for building owners, project developers, utilities, public programmes and investors to trade in standardized energy efficiency projects. ICP defines a clear road-map from retrofit opportunity to reliable Investor Ready Energy Efficiency™.”

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**Carbon and Energy Fund**

“The Energy Efficiency sector appears to be a business sector with a huge potential, and it will surely be boosted through the standardization of process and procedures that help reducing the project risk.”

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**Tiago Simões de Almeida -**  
Project Finance Director, BPI

“The ICP approach has become a standard for our bidding new mandates.”

"The Investor Confidence Project is a great example of the many initiatives launched to address the recommendations of the first EFIG report. ICP's progress in providing structure to the process of energy efficiency project preparation and training has been very helpful."

"We have supported ICP's work to standardise project development in the building sector and are pleased to see the project being extended into industry, street lighting and district energy."

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**Leo Bedford** –  
Investment Manager,  
Amber Infrastructure

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**Peter Sweatman** –  
CEO, Climate  
Strategy & Partners

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**Stephen Hibbert** - Global  
Head of Energy & Carbon  
Efficiency Finance, ING  
Wholesale Banking

# What Value Can We Bring?

- A **standardized** approach to projects across portfolios
- **Reduced performance risk** of energy efficiency projects
- A **standardized procurement process** that can be applied across portfolios and countries
- **Ensuring best practice** project development across portfolios and countries
- A standardized method for **measurement & verification** of results

# Call for Action

- **Join** as an [Ally](#)
- **Join** as an [Investor Network](#) member
- **Bring forward projects** that could benefit from ICP (buildings, industry, street lighting or district energy projects)
- **Join** our [Technical Forums](#) on Street Lighting and/or District Energy



# Contacts

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# Q & A