Welcome to the ICP Technical Forum Webinar

Using the control panel provided, please select your audio preference – either ‘mic and speakers’ if you want to follow the webinar on your computer, or ‘by phone’, if you would like to call in. Please follow the directions given.

The control panel can also be used for the following during the webinar:

• If you would like to ask a question, please click on the hand icon or ‘call out’ at the bottom of the tool bar. This will go red and alert the presenter that you want to speak.
• Alternatively, if you would like to write a question or comment, there is a text box that you can expand or shrink using the arrow at the top of the tool bar.

The presentation will start today at 15:05 (CET)
This presentation will be recorded.
Agenda:

- Investor Ready Energy Efficiency (IREE) roll-out plan
- Final release of Project Development Specification
- Final release of Annex A
- First draft of Protocol Summaries
- Timeline, next steps and your participation
Outcomes

Understanding of:

• How a project may be given an IREE label
• What is the role of PDS in ICP, and how to use it
• Main conclusions, challenges and future around Annex A

• Objectives of Protocol Summaries
• Next steps and how you can participate
If You Do Have Questions During the Webinar.....

• Q&A session will be held at the end of the presentation
• If you would like to ask a question verbally, please raise your hand
• Please don’t forget to briefly introduce yourself by stating your name and organisation!

This presentation is being recorded and will be posted at europe.eeperformance.org and emailed to registrants
If You Do Have Questions During the Webinar…..

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Investor Ready Energy Efficiency (IREE) Roll-out Plan
IREE™ Workflow - Origination

**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.
CERTIFICATION

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

INVESTMENT
Building owners and investors can make investment decisions with increased confidence based on predicted savings.
PERFORMANCE
Building’s energy performance is optimized and energy savings from retrofit are measured and verified according to ICP Protocols.
IREE roll-out plan phases

- Project Developer (PD) training
- Third party Quality Assurance (QA) training
- Software development
- Pilot projects roll-out
- FAQ development for supporting structures
PD Training

• The PD is the professional/company which is responsible for assisting the owner of the building with the adequate implementation of the ICP protocols.

• PD training will comprise a 3-hours training activity (webinar based, two sessions), with polls during the training. It will then begin to be offered in person in certain locations based upon demand.
PD Training – Accreditation Requirements

• Project Developers must retain, either on staff or under contract, a licensed Professional Engineer or (specific MS certification).

• Project Developers must provide evidence of minimum 5 years of relevant industry experience.

• Project Developers must provide a minimum of 3 references from past projects.
PD Training – Accreditation Requirements

• Project Developers must carry insurance for error and omissions, with a minimum of (to be determined) coverage per claim.

• At least one member of the engineering staff involved on the project must undergo the ICP PD Training.
PD Training - Warm up

Preparation material is provided before the training, in order to facilitate, as much as possible, the establishment of a common level of understanding about the ICP Europe system, as well as the objectives of the training/credentialing.
QA primary responsibilities

- Ensuring that the project was developed according to the ICP Energy Performance Protocols leveraging the ICP Project Development Specification and QA Checklist

- Checking that methodologies, assumptions and results follow best practices and are reasonable, based on the reviewer’s professional experience and available guidelines
QA activity

• The third party QA provider is responsible for issuing the IREE label for a Project, and consequently critical for the robustness of the ICP Europe system.

• QA training comprises a 2 hour training activity (one session, webinar based), with polls during the training and an automated testing and certification facility after it.
QA activity

- QA activity itself will eventually be regularly audited, at Member State level, by Third Party Providers, to which an invitation process is to be established.

- Qualification revalidation will be based on minimum experience (minimum number of IREE labels issued in a certain period) and/or credits gained on partnerships to be defined.
QA Training – Certification Requirements

• May be an individual, an independent firm, or a program

• Must be a Professional Engineer (if an individual) or have a Professional Engineer on staff to oversee and approve all review efforts (if a firm)

• Minimum of five years of relevant energy efficiency project development experience, and three years quality assurance review experience
QA Training – Certification Requirements

• Must provide three references demonstrating relevant project development and/or quality assurance review experience

• Must attend the ICP Accredited Project Developer training

• Must complete the ICP Certified Quality Assurance Provider training
QA Training – Warm up

• Preparation material is provided before the training, in order to facilitate, as much as possible, the establishment of a common level of understanding about the ICP Europe system, as well as the objectives of the training and certification.
Auditing QA activity

• The QA provider is a critical element of the ICP certification system, as the final responsibility for IREE label issuing resides with them.

• For this reason, to ensure Europe wide consistency on the adopted procedures as well as to benchmark and build a database on results, a Third Party Organization QA auditing activity is foreseen to be performed in each of the MS.
Software development

The Software Provider Certification program intends to ensure that standardization can be achieved at scale through automation.

Certified providers applications allow developers and others to bring ICP compliant projects to market quicker and with fewer resources.
Software development

The ICP Virtual Documentation Package will enable the standardization of documentation assembly, access, and verification and is a key enabler to reduce transaction costs, speed underwriting, and increase investor and building owner confidence.

Certified software will be able to facilitate the workflow required to develop IREE approved projects through an automated and secure process.
Software development

The Software Provider Credential is designed to assure that a provider's product (software/application either installed or web-based) can support the requirements of the ICP Performance Protocols and ICP System.

Specifically, qualifying products must enable managed and easy access to all of the required documentation as well as support the ICP workflow for creating ICP IREE™ Projects.
Software development

It should be noted that ICP is seeking to create facilitated workflow that is streamlined and consistent with ICP methodology in a general sense.

ICP will be developing materials and launching an open call to the software development market in June, as well as setting the structures for developer support and the final launch of the first certified tools.
Pilot projects roll-out

Pilot projects provide ICP with the opportunity to stress-test our tools, better adapt them to the EU practices context, as well as giving visibility and credibility to the system.

For this reason ICP will give proper technical support to these projects in this phase where QA is not yet available, and at the same time build adequately formatted case studies that can be communicated to the market.
FAQ development for stakeholders

Providing all relevant ICP stakeholders with a repository of relevant and typical questions is of utmost importance.

For this reason, this plan foresees the development of an initial database of FAQ, and the creation of a dedicated section of ICP website for this purpose, which is to be permanently updated as the knowledge base arising from implementation grows.
ICP Credentialed Project Developers
ICP Credentialed Quality Assurance Provider
ICP Credentialed Software Provider
Final release of Project Development Specification
What?

• Roadmap for Project Developers to correctly implement each requirement specified in the protocols – released TODAY!

• Covers all protocols

• Comprehensive description of minimum requirements - use of referenced documents not essential

• References additional resources which may be useful for a best practice approach
How?

• Living document
• To be used together with other ICP Europe products – protocols, index of national resources and software packages
• Guidance on protocol application – what protocol is best for my project?
• Critical path methodologies and resources
• Templates for plans and other supporting elements
• Glossary
The ICP Project Development Specification (PDS) brings the many complex details of an energy efficiency project into focus, providing a clear direction to the entire team with regards to requirements, tools, expectations, and quality management. Its unified approach to project development ensures that projects compliant with the ICP Protocols can be trusted to be consistent in their approach, methodology, and financial returns.
Final release of Annex A
Knowledge MIND THE GAP
What are potential drivers of future changes?

• Market uptake of the protocols, and in particular pilot projects, some of them already ongoing;
• Project Developers and Third Party Quality Assurance certification processes;
• Software development;
• New standards and supporting resources.
COMMUNITY

Be the Change, Lead the Change
First draft of protocol summaries
What?

• Single page protocol add-on to the beginning of each protocol
• Provides overview of tasks and procedures needed to be implemented on a specific protocol, across all its stages
<table>
<thead>
<tr>
<th>Phase</th>
<th>Objective</th>
<th>Task</th>
<th>Description</th>
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<tbody>
<tr>
<td>Baseline</td>
<td>Establish current energy consumption, which will form the basis for savings calculations</td>
<td>Collect energy source information</td>
<td>Collect <strong>energy source data and rates</strong> for all utilities to inform baseline and savings calculations. Develop <strong>load shapes</strong> if demand charges or time-of-use pricing are in effect to establish the impact on potential monetary savings.</td>
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<td>Estimate energy end-use consumption</td>
<td>Develop an <strong>energy end-use consumption breakdown</strong> to create boundaries and reality checks, using sub-metering, calculations or nationally recognised benchmarks.</td>
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<td>Develop energy consumption equation</td>
<td>Identify <strong>independent variables</strong> that affect energy consumption (e.g. weather, occupancy) and calendarise data to match baseline period. Establish any <strong>interactive effects</strong> that may affect the energy savings. Develop <strong>baseline regression model</strong> using independent variable data, and establish accuracy in order to validate the robustness of the data.</td>
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<td>Carry out energy audit to identify ECMs</td>
<td>Collect <strong>building asset, operational and performance data</strong>, to be used to inform the energy model. Create a list of <strong>routine adjustments</strong> (expected changes in energy use) and <strong>non-routine adjustments</strong> (unexpected changes e.g. change in type of space use) which will be used to adjust the baseline during the Measurement &amp; Verification (M&amp;V) process. Develop <strong>Energy Conservation Measures (ECM) descriptions</strong>.</td>
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<td>Savings calculations</td>
<td>Produce valuation of proposed projects</td>
<td>Carry out dynamic energy modelling on whole building retrofit</td>
<td>Prepare <strong>model inputs</strong> based on on-site observations and measured data. Develop <strong>energy model</strong> using accredited software, carried out by suitably qualified individual. Calibrate energy model to match actual monthly data, and adjust model if necessary using actual building data. <strong>Document</strong> inputs, assumptions and results.</td>
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<td>Develop investment package</td>
<td>Establish the investor’s required <strong>investment criteria</strong>, and prepare an initial set of ECMs. Prepare comprehensive <strong>preliminary cost estimate</strong> to rank ECMs (the final investment package should be based on contracted bids), and establish the financial performance of each measure individually and then as a <strong>package</strong>. Prepare <strong>final report</strong> summarising ECMs, constructability, projected savings and all supporting data.</td>
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Timeline, next steps and you
ICP Europe Backbone – 2015-16

- Large Tertiary protocol
- Standard Tertiary protocol

- Targeted Tertiary Protocol
- Targeted Apartment Block Protocol

- Large Apartment Block Protocol
- Standard Apartment Block Protocol

Available TODAY

- Project Development Specification

August 2015
October 2015
December 2015
March 2016

‘Final’ versions available on website

Available TODAY

‘Final’ versions available on website

Available TODAY

‘Final’ versions available on website
ICP Europe Roll-out Timeline – 2016

- Project Developer (PD) and Quality Assurance (QA) Curriculum Developed: January 2016
- Software Developer Credential: March 2016
- PD and QA Training and Accreditation: June 2016
- IREE Certification: August 2016
How can you help:

• Tell us if our tools fully respond to the needs and specificities of your markets – please comment

• Deploying application on your projects – we are here to support you

• Get in touch with us on a one to one basis, through myself if you would like to address any particular issue or just to discuss

luis.castanheira@eeperformance.org
The future of the Tech Forum…

• Protocols and PDS released!

• Training/certification programs and software development on the way;

• Tech Forum will have periodical meetings on the basis of feedback needed.
Technical Forum Call - 30 June, 2015

PLAY RECORDING
Questions?
Do You Have Questions?

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Investor Confidence Project Europe

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