



Performance Risk Management for Energy
Efficiency Projects through Training



Measurement and verification in energy saving projects and PERMANENT

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Presentation Agenda

- ❑ Implementation of EE projects at present
- ❑ PERMANENT project introduction
- ❑ Basic tools of PERMANENT project
- ❑ Defined success criteria
- ❑ Project expected results and benefits



Energy saving projects – current practice

- ❑ In nearly all energy efficiency projects analyses are prepared before the project is implemented to specify the energy savings to be achieved (energy audits, feasibility studies)
- ❑ In most projects, though, little or no reporting of savings really achieved is required
- ❑ Sound financial and energy management, though, necessitates reliable information on results really achieved to follow effectiveness of the investment



Energy saving projects – sound practices

- ❑ Measurement and verification of energy savings demonstrates that energy savings are tangible and can significantly contribute to repayment of investments into energy efficiency
- ❑ This is mainly true in Energy Performance Contracting projects in which energy savings are guaranteed and must be followed, measured and verified – financial equivalents of achieved savings are used for repayment of the investment.
- ❑ To promote M&V, to promote investments in energy efficiency and to promote energy services,

- ❑ A project named “**PERMANENT**” was launched under EU’s Intelligent Energy Programme in 2009
- ❑ The Acronym stands for PErformance Risk MAnagement for ENergy efficiency projects through Training
- ❑ AIM: To educate high level people in Banks, financiers, project developers and energy users:
 - How EE projects can be demonstrated to have PERMANENT results; and
 - How that PERMANENCE can bring trust in both technical and financial results

- ❑ **International Performance Measurement & Verification Protocol (IPMVP)** - presents a framework and defines terms used in determining ‘savings’ after implementation of a project
- ❑ **An International Energy Efficiency Financing Protocol (“IEEFP”)** - an international standardised program for training financial institutions how to evaluate the risks and benefits of financing Energy Efficiency Projects - focuses on the “Savings Value” for loan repayment and credit capacity analysis
- ❑ **Efficiency Valuation Organization (EVO) experts** directly involved in the project

- ❑ Enviros Czech Republic : The Lead Consultant
- ❑ Maicon UK : Main Vehicle for imparting Know How
- ❑ Introduce EVO & IPMVP & IEEFP to local experts
- ❑ Train local instructors (EEE, EnEffect, EnergoECO, Enviros, FEWE and HEP-ESCO) - know how - recipient countries
- ❑ Identify local target institutions and customizations
- ❑ Promote and deliver local awareness and training activities to suit local markets.
- ❑ After PERMANENT, potentially continue training as a business opportunity.

WP1: General Management of the Action (PERMANENT)

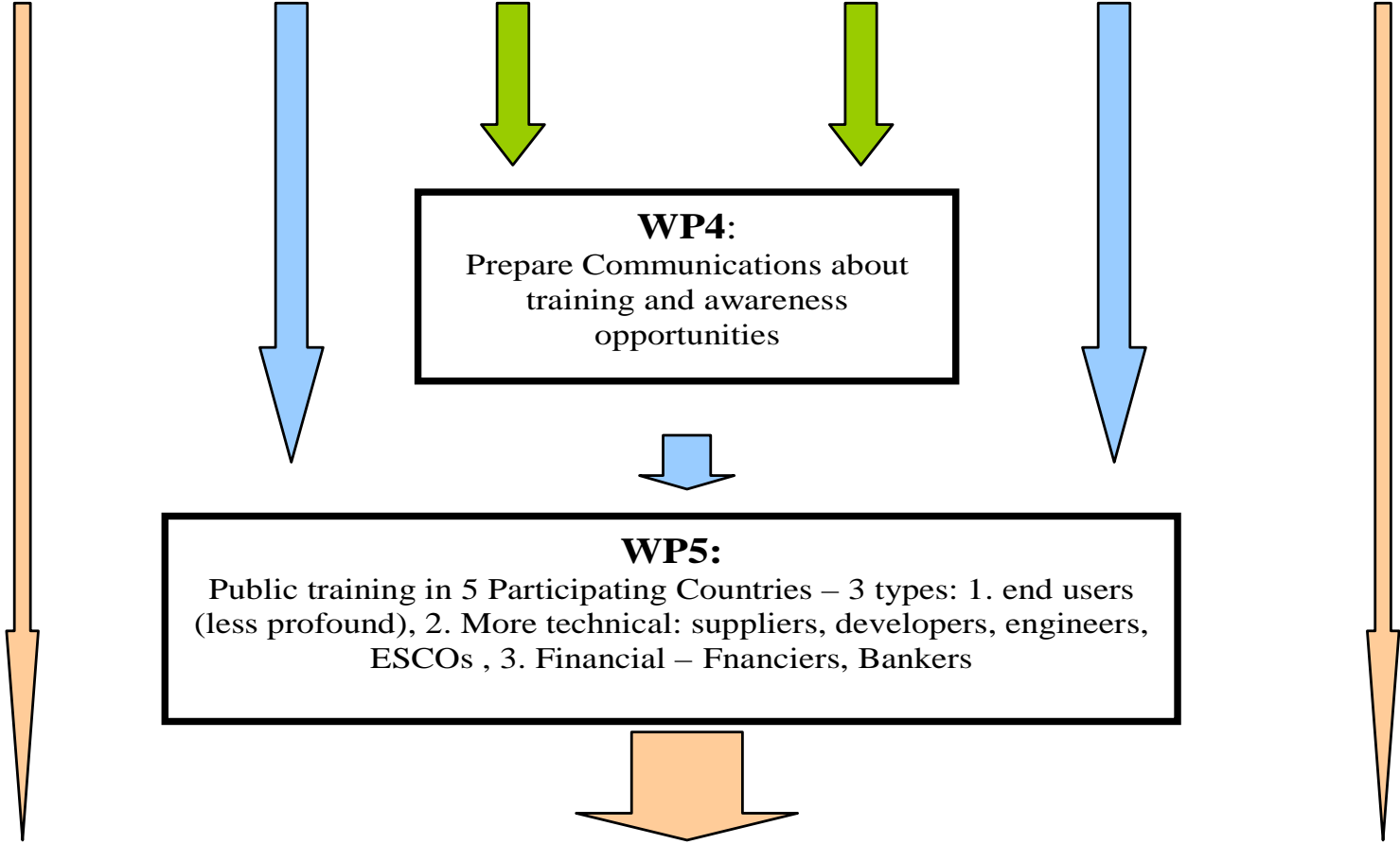
WP 2:
Adapting Protocols, preparation for
Training of Trainers

WP3:
Training of Trainers, further feedback to the
text of the adapted Protocols

WP4:
Prepare Communications about
training and awareness
opportunities

WP5:
Public training in 5 Participating Countries – 3 types: 1. end users
(less profound), 2. More technical: suppliers, developers, engineers,
ESCOs , 3. Financial – Franciers, Bankers

WP 6: Dissemination of project results, training materials, brochures with translated Protocols,
International Conference on Energy Efficiency Performance Measuring, Verification and Financing.



- ❑ 1,000 copies of the adapted IPMVP and IEEFP distributed in 5 languages
- ❑ 2,000 persons directly exposed to M&V educational sessions
- ❑ European and international institutions and professional bodies and authorities informed about the project through Newsletters.
- ❑ 2,000 institutions in total receiving Newsletters.
- ❑ 20 qualified trainers created.
- ❑ International conference organised for EE professionals here in Warsaw



- ❑ Czech Republic:
 - First contract for M&V Plan development
 - M&V Plan to become Annex to the Model Energy Performance Contract (agreed by the Czech Association of ESCOs)
- ❑ Romania: better recognition of Energy Performance Contracts, ESCOs role and principle of guaranteed savings
- ❑ Other countries?

see:

www.permanent-project.eu

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