Training and certification of PV installers in Europe

*The IEE project PVTRIN*

IEE/09/928/SI2.558379, 1/05/2010 - 30/4/2013
The PVTRIN Scope

Development of a training and certification scheme for technicians who are active in the installation and maintenance of small scale PV systems.

Aim:
To set the base for the adoption of a mutually acknowledged certification scheme in EU

Duration: May 2010 – April 2013

Countries: Greece, Belgium/EU, Bulgaria, Croatia, Cyprus, Romania, Spain, UK
# PVTRIN Consortium

## Project Partners

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<td>TECHNICAL UNIVERSITY OF CRETE ENVIRONMENTAL ENGINEERING dpt</td>
<td>GREECE</td>
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<td>RENEWABLE AND SUSTAINABLE ENERGY SYSTEMS LAB</td>
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<td>AGENCY OF BRASOV FOR THE MANAGEMENT OF ENERGY AND ENVIRONMENT</td>
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Background

- RES applications require **highly-qualified installers** to ensure a good functioning of systems
- In general, **markets are growing faster than the qualified PV installers force**
- Developers/ Designers/ Potential investors seek for **skills’ certification and quality assurance** throughout the development of a PV project (design, installation, and maintenance) to ensure higher performance of their system
- **Lack of accredited training and certification schemes** for PV installers in most EU countries
- **EU policy** forcing for acknowledged qualifications and certification schemes
PVTRIN supports EU policy and targets

PVTRIN mainly addresses to the 2009/28/EC Directive on the promotion of the use of energy from RES*, incorporating the criteria set for qualification schemes, certified training courses and accredited training providers in each MS

*“Member States shall ensure that certification schemes or equivalent qualification schemes become or are available by 31 December 2012 for installers of small-scale biomass boilers and stoves, solar photovoltaic and solar thermal systems, shallow geothermal systems and heat pumps. Each Member State shall recognise certification awarded by other Member States in accordance with those criteria”.
The Challenge

- establish a pool of local technicians who are competent at installing PV systems according multinational quality standards
- provide the key components for a common qualification framework, an appropriate training methodology and a transparent and clearly defined accreditation route
- guarantee the best performance of PV installations, lowering risks or technical failures during the system’s installation and life cycle
- reinforce PV technology’s credibility and to boost the competitiveness of the PV industry
The PVTRIN activities result in:

- 8 pilot training courses implemented in 6 countries (Greece, Bulgaria, Croatia, Cyprus, Romania and Spain); a pool of 185 skilled/certified PV installers, 145 already certified
- operational certification/qualification scheme for PV installers
- training “package” for installers and their trainers (handbooks, e-learning platform, assessment forms; other training materials/tools); also for training providers, assessors and certification bodies
- all key stakeholder groups actively involved and supported the initiative
- more than 40.000 technicians aware of the scheme in EU level
- more than 1.000.000 EU citizens informed.
Long Term Results

Long term, PVTRIN will:

- contribute to the PV/BIPV market growth in the participating countries
- encourage a greater number of technicians to advance their professional skills
- provide a supporting instrument, for EU Member States, to meet their obligations for acknowledged certifications for RES installers
- enforce the EU countries to achieve the mandatory target of a 20% share of energy from RES in overall Community energy consumption, by 2020.
Why have a Certification Scheme?

• To increase uptake of PV
  – Confidence to purchase
  – Good publicity
• To protect customers
  – Safety, quality and performance
  – Complaints investigation
• To protect the industry
  – Underpin reputation
  – Deter and isolate ‘Cowboys’
• To help installers
  – Independent confirmation of competence
  – Continuous improvement
  – Employability, mobility
PVTRIN certification scheme

aims to:
• fulfil the requirements of 2009/28/EC Directive i.e.:
  – to be transparent
  – to include an accredited training course including theory and practical examinations leading to the certification of PV installers
  – to include requirements for regular training updates as part of the certification maintenance requirement
• meet the legal requirements and be compatible with the institutional framework for each member state
• maintain and enhance the reputation of the PV industry by underpinning the safety, quality and performance of PV installations and minimising technical failures and complaints.
The PVTRIN Certification Process

Phase 1

Application Received → Review → Accept → Training and Assessment → Certification Decision → Issue PVTRIN Certificate

Application Received → Review → Decline → Inform Applicant

Certification Required → Reassessment Required

Certification Awarded → Issue PVTRIN Certificate

Phase 2

Apply Certificate Maintenance Requirements
Benefits for the installers, the PV industry and the society – 1/2

- Creating a qualified installers workforce, PVTRIN supports the EU PV Industry to address the need for skilled technicians. The increased confidence of PV investors will lead to market growth.

- The trained installers gain professional competitive advantage, improving their technical skills and knowledge; the certification provides the “passport” to the EU job market. The training material, tools and web platform will provide them a “24/7” technical assistance.
Benefits for the installers, the PV industry and the society – 2/2

- **Developers and engineers** will profit by the existence of skilled installers. Involving them in their PV projects means efficient installations, less technical failures and satisfied customers.

- **PV investors** win confidence that the appropriate level of quality and performance is met and maintained for their PV system.

- **National authorities** will find a supporting instrument to meet their obligations for acknowledged certifications for RES installers.

- **The entire society** is to benefit; the higher PV penetration to the energy mix will reduce the greenhouse gas emissions improving citizens’ quality of life.
For more information contact the project coordinator:

TECHNICAL UNIVERSITY OF CRETE (TUC)
ENVIRONMENTAL ENGINEERING DEPARTMENT
RENEWABLE AND SUSTAINABLE ENERGY SYSTEMS LAB

Associate Professor Theocharis Tsoutsos
University Campus, Kounoupidiana, 73100 Chania
Tel +30 28210 3 7825
Theocharis.tsoutsos@enveng.tuc.gr,
info@pvtrin.eu, www.enveng.tuc.gr