

## Training and Certification of PV Installers in Europe



### PV market and employment

- The large up-take of RES installations requires significant number of highly qualified installers to ensure a reliable functioning of systems
- Markets are growing faster than the qualified PV installers force
- PV qualification profiles and evidence of skills are required; generally installers are lacking training for complex systems and new technologies/products
- Developers/Designers/Investors/PV owners seek for skills' certification and quality assurance throughout the development of a PV/BIPV application (design, installation, and maintenance)
- Lack of accredited training and certification schemes for PV installers in most EU countries
- EU policy forcing for acknowledged certification schemes

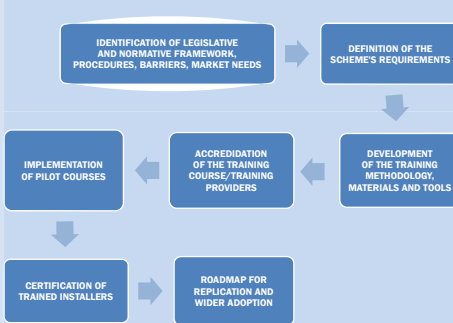
### The European Initiative PVTRIN

The PVTRIN's scope is the development of an EU acknowledged training and certification scheme for technicians active in the installation and maintenance of small scale PV systems.

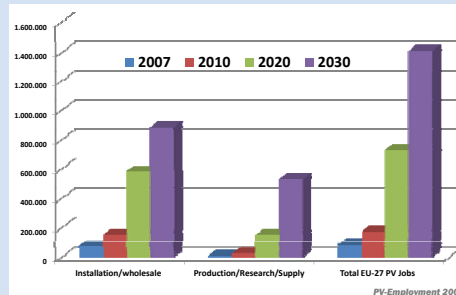
The PVTRIN Certification scheme will be, initially, implemented in six (6) countries: Greece, Bulgaria, Croatia, Cyprus, Romania and Spain, incorporating the criteria set by the 2009/28/EC Directive for acknowledged qualification schemes in each Member State, as well as the national legislation.

In order to incorporate the genuine market needs and to assure the broadest possible support, the key stakeholder groups and PV market actors have been involved in the project's activities.

### PVTRIN Action Plan



### EU-27 PV Jobs estimations



### The challenge

- to provide the key components for a common qualification framework, an appropriate training methodology and a clearly defined accreditation route
- to configure a competent PV installers' workforce according multinational accepted criteria and standards
- to encourage a greater number of technicians to advance their professional skills and knowledge
- to set the base for the adoption of a common accepted - within EU - certification scheme
- to ensure the quality of PV/BIPV installations and to defend PV's credibility from poor demonstrations.

### Benefits for the installers, the PV industry and the society:

- Creating a qualified workforce, the PVTRIN supports the **EU PV Industry** to address the need for skilled technicians. The PV investors' increased confidence will lead to market growth.
- **The certified installers** gain professional competitive advantage, improving their technical skills and knowledge; the certification provides the "passport" to the EU job market.
- **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.
- **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.

### Expected Results

- Accredited training courses and an operational certification scheme for PV installers
- Practical training material/tools for installers and their trainers; Web portal with access to technical information
- 8 pilot training courses implemented, a pool of skilled/certified PV installers in participating countries
- A roadmap for the adoption of the scheme across Europe.

### Long term, PVTRIN will

- contribute to the PV/BIPV market growth in the participating countries
- provide a supporting instrument for EU MS to meet their obligations for acknowledged certifications for RES installers till 31/12/2012
- enforce the MS efforts to achieve the mandatory target of a 20% share of energy from RES in overall Community energy consumption by 2020.

PROJECT PARTNERS	COUNTRY
Technical University of Crete Environmental Engineering Dpt. Project coordinator	Greece
European Photovoltaic Industry Association	EU/ Belgium
Fundación Robotiker	Spain
Building Research Establishment Ltd	UK
Scientific and Technical Chamber of Cyprus	Cyprus
Technical Chamber of Greece Branch of Western Crete	Greece
Agency of Brasov for the Management of Energy and Environment	Romania
Energy Institute Hrvoje Požar	Croatia
Sofia Energy Centre	Bulgaria

