



# **PVTRIN Training and Certification** of PV installers in Europe

The European Initiative for raising standards and promoting confidence

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## Stages



#### 1. Analysis of the PV field in Romania on:

- Legal framework
- Applicable technical regulations
- Regulating authorities
- Available training courses in the field of PV
- Available trainers and training structures in the field of PV
- Identify the current status of the training framework in Romania





#### **Stages**



## 2. Set-up of the National Consultation Committee (NCC) according to the PVTRIN methodology:

- Ministry of Regional Development and Tourism MDRT
- National Regulatory Authority for Energy ANRE
- · National Qualification Authority ANC
- Romanian Standards Association ASRO
- "Transilvania" University Braşov
- "Ion Mincu" University of Architecture and Urbanism Bucharest
- "Valahia" University Târgovişte
- "URBAN-INCERC" Institute Bucharest
- Employers Association for New Energy Sources- SUNe

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#### The PV situation at the beginning of PVTRIN



- Only the qualification title "Solar photovoltaic systems installer"

   no. 741103 in the COR Romanian Occupations Code existed,
   but with no clear definition of the knowledge and skills set
   required to perform this profession / no Professional Standard defined for PV installers
- · Lack of PV related training for vocational training of adults
- Lack of training providers/trainers for PV courses
- Lack of legal regulations and financial instruments to support the promotion of the PV technology
- Lack of confidence in the growth potential of this technology
- Widespread belief that a new qualification is not necessary





### Solution – case study



#### The steps identified after the initial situation analysis:

- ABMEE to become a training provider in accordance with the Romanian law
- Have an authorized training course, based on the PVTRIN methodology
- Identify a laboratory that met the PVTRIN requirements for the practical part of the training

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## The PVTRIN Project – case study



#### Step 1

ABMEE applied for authorization of the PVTRIN training course and of ABMEE as a training provider at ANC - National Qualification Authority (NCC member) on the documentation defined through PVTRIN.

During the next 4 years ABMEE is authorized to provide training for PV installers following the PVTRIN training scheme.





## The PVTRIN Project – case study



## Authorization compliant with the national legal frame:

Law no. 57 of 22/03/2012 for adults training

#### Authorized by:

- · Ministry of Labor, Family and Social Protection
- Ministry of Education, Research and Innovation









## The PVTRIN Project – case study



#### Step 2. Technical Committee that verified the PVTRIN materials

- Dr. Fiz. Dan Ilie TEODOREANU SUNe
- Prof. Univ. Dr. Nicolae OLARIU Valahia University
- Dr. Ing. Lucian CÎRSTOLOVEAN Transilvania University
- Prof. Univ. Dr. Alexandru POPA Trainer Kronstadt Energy Regenerabile (KER)
- Ing. Vlad Mihai MAZILU Trainer KER







## The PVTRIN Project – case study



#### Step 3. Selection criteria for trainees

- Minim 3 years of experience as electricians
- ANRE licensed to practice, for electrical installations up to 1kV, IIB license

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## The PVTRIN Project – case study



## Step 4. Implementation of training courses









### The PVTRIN Project – case study



#### Step 4. Implementation of training courses





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## The PVTRIN Project – case study



#### Step 5. Finalizing the training

- Examination of trainees, following the PVTRIN methodology validated through the authorization process of ABMEE
- Graduates will be issued 2 certificates:
  - A standard certificate
  - The PVTRIN certificate that will only be valid if accompanied by the standard Romanian certificate





#### **PVTRIN** achievements



- A provider for vocational training authorized following the PVTRIN methodology and in accordance with the Romanian legal frame
- Direct involvement of the private sector laboratory and training by KER
- 45 trainees currently in the training process
- High interest for this PV specialization 61 trainees for future courses
- Contribution to the development of the Professional Standard in Romania for PV installers based on the PVTRIN methodology and using the experience gained in the project
- Several training providers that are willing to include the PV training in their training offer



