

# TRAINING AND CERTIFICATION IN ITALY

## INTRODUCTION

With a very attractive incentive scheme, today Italy is the world's second largest PV market. According to GSE the total installation at present amounts to about 259.000 units, and the cumulative installed and operating power has reached 9550 MW. Due to this impressive growth, for installers in PV sector is now required to comply with certification rules foreseen in the Italian legislation. The installers of PV plants will receive a certification after having followed a training programme and an examination of competences by the institutional bodies. The "certified installers" will be inserted in a national register under control of ENEA and of the regional authorities.

## Training courses available 2010 -2011

### Training Qualification Program Under ISO IEC 7024, qualified by Cepas\*

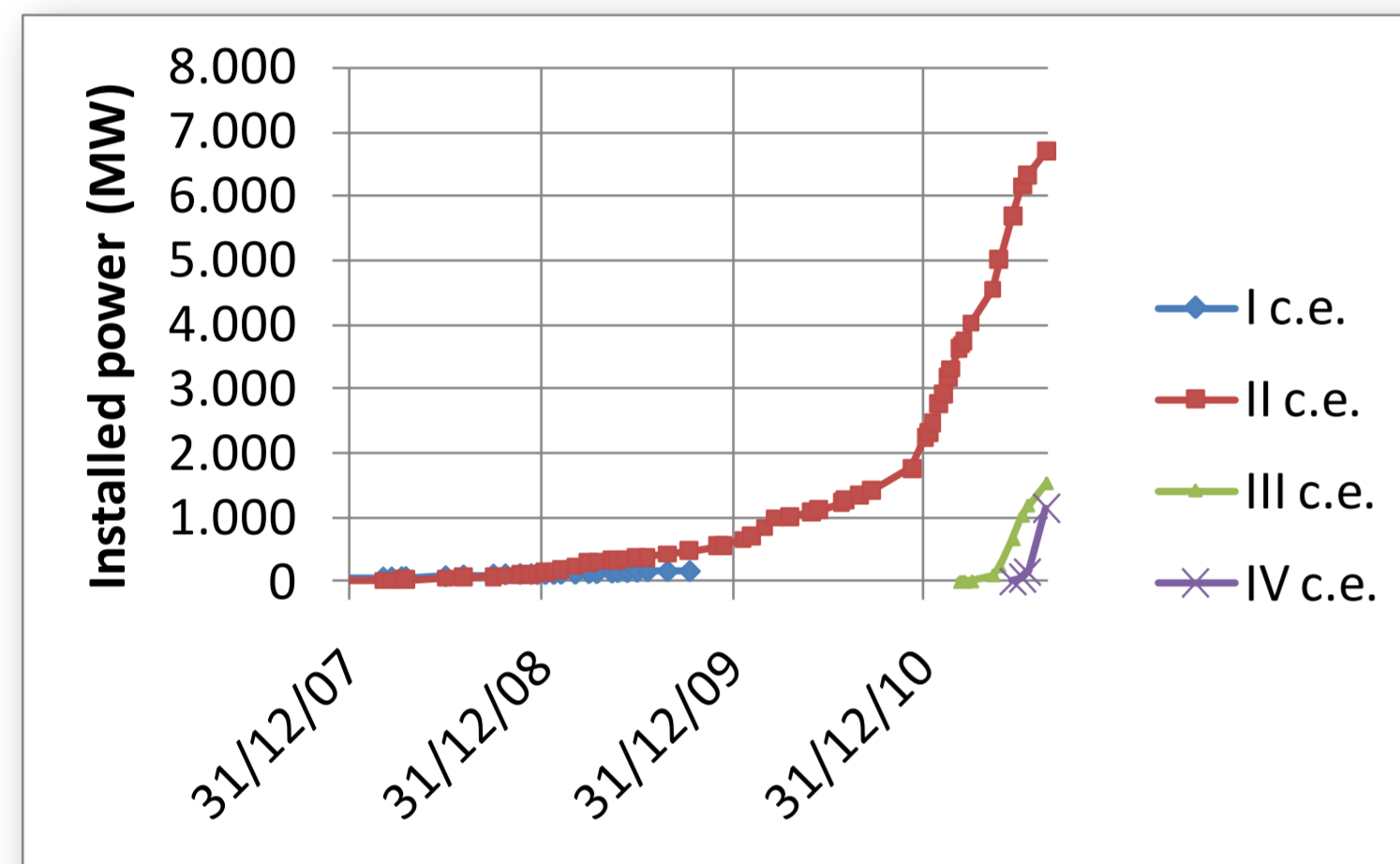
Company	Type Course	CEPAS Register Number	Date Of Qualification	Target	Duration Of The Training	Number Of Lectures	Final examination
MESOS - ENEA	Blended learning course	n. 94	01/02/2008	Designers, Installers, Maintainers	50e-learning 50 face to face	6/8	yes
ICIM	Face to face course	n. 111	01/12/2010	Installers	28 hours	2	yes
Centro Studi Galileo	Face to face course	n. 114	01/05/2011	Designers, Installers	32 hours	1/2	yes

\* Cepas is an Italian certification body for personnel and training courses

### Education and training provided from No-PV companies

	SHORT COURSES	AVERAGE TIME COURSES	LONG COURSES / MASTERS
% OF THE TOTAL	38%	36%	26%
DURATION	8-24 h	27- 80 h	500 - 1500 h
TYPE OF TRAINING	100% face learning	16% on line 21% blended	12% on line
PARTICIPANTS	20-40	Max 20	12-45
STAGE	no	10,5%	46%
AVERAGE COSTS	378 euro	1394 euro	3600 euro
FINAL EXAMINATION	Very few cases	Some cases	Yes
QUALIFICATION	Very few cases	31,6%	Only for Master's degree

## Market situation



Installed power in the framework of the four phases of the Conto Energia Programme (August 25, 2011)

The cumulative installed PV power sum to around 9550MW corresponding to about 259.000 installations.

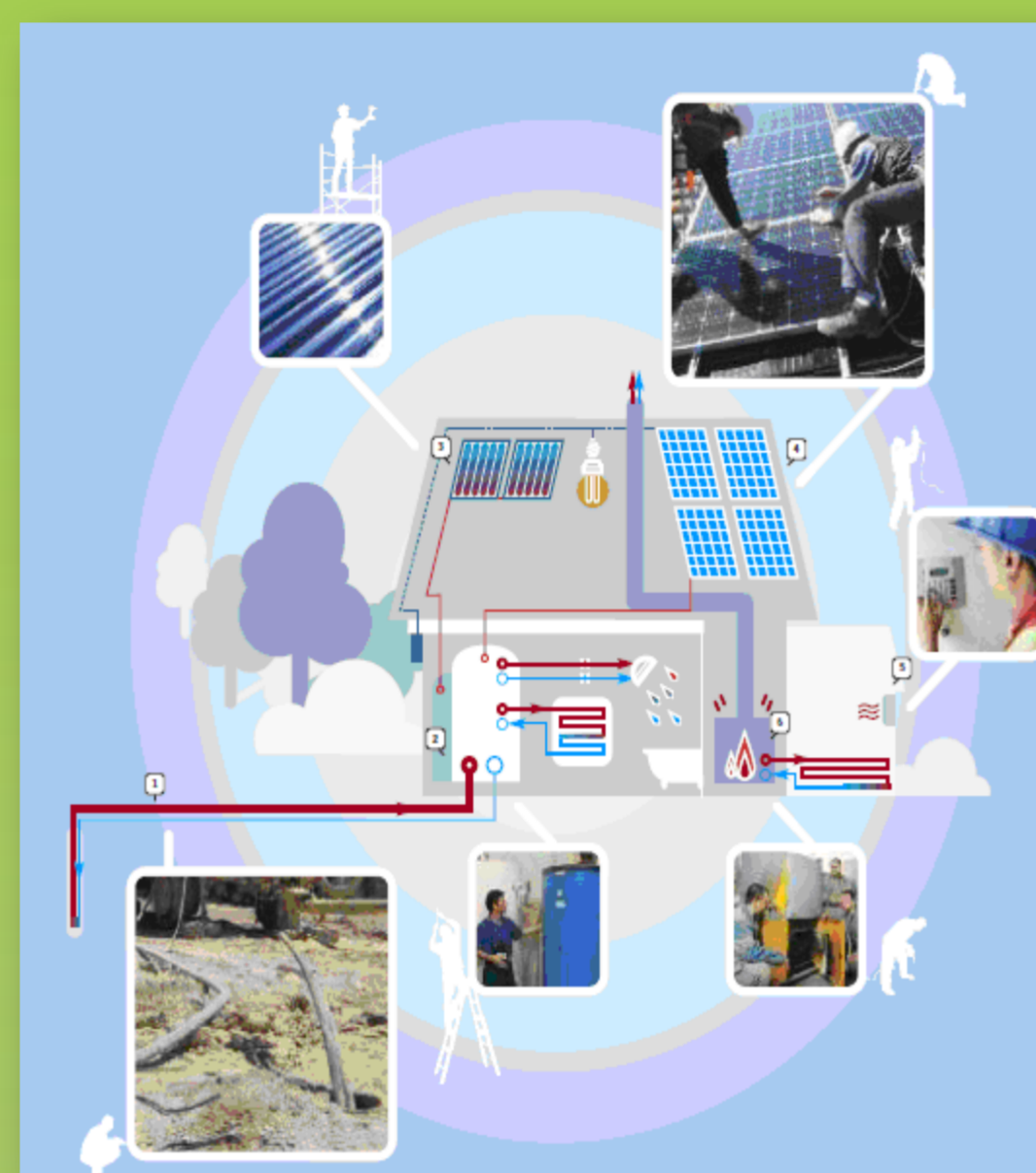
### The "Fourth Conto energia" (DM 5 May 2011)

- Total spending limit for the period 2011-2016: 23 GW with cap every six months;
- Reduction of the incentive tariffs starting in June this year;
- More generous tariffs to BIPV with innovative features
- Cost Limits, until the end of 2012, only for large plants.
- From 2013, will be introduced an all-inclusive tariff. At which will be added a tariff for self-consumption.
- Increase of tariffs, for plants owned by small municipalities, for installation on brownfield sites, landfills, etc, and for modules that replace asbestos.
- Tariff increase for plant using components manufactured within the European Union.

## The Italian Legislative Decree on Renewables

### The purpose of the DL 28/11

It defines instruments, mechanisms, incentives and the institutional, financial and legal frameworks necessary for achieving the 2020 goals as regards the total quota of renewable energy in final consumption and in transport.



European integrated approach for certification of installers  
www.qualicert-project.eu

### Training programs provided from PV companies

TYPE OF COMPANY	TARGET	HOURS	LECTURERS	QUALIFICATION - CERTIFICATION	GOALS/ BENEFITS
Module producer #1	installers, distributors, structured companies	32	technical staff of the company + external experts	yes	training on products, incentives, installation - become partner
Module producer #2	companies that aim at become partners	not found	technical staff of the company	yes	structured training program - training on products - become partner
Module producer #3	installers, designers, distributors	40	technical staff of the company	yes	training on products, installation and safety - become partner
Module producer #4	installers	16	technical staff of the company	yes	training on design and installation - become partner
Module producer #5	installers	8	technical staff of the company + external experts	yes	training on products, regulatory and market trends - become a partner
Distributor - Installer #1	installers	8	technical staff of the company + staff of the manufacture companies	yes	technical training - become a partner
Distributor - Installer #2	installers and professionals	8	technical staff of the company		training on installation - become a partner
Inverter producer #1	installers, clients	16	technical staff of the company		training on own products and safety requirements installation
Inverter producer #2	installers, technicians and distributors	16	technical staff of the company		training on own products

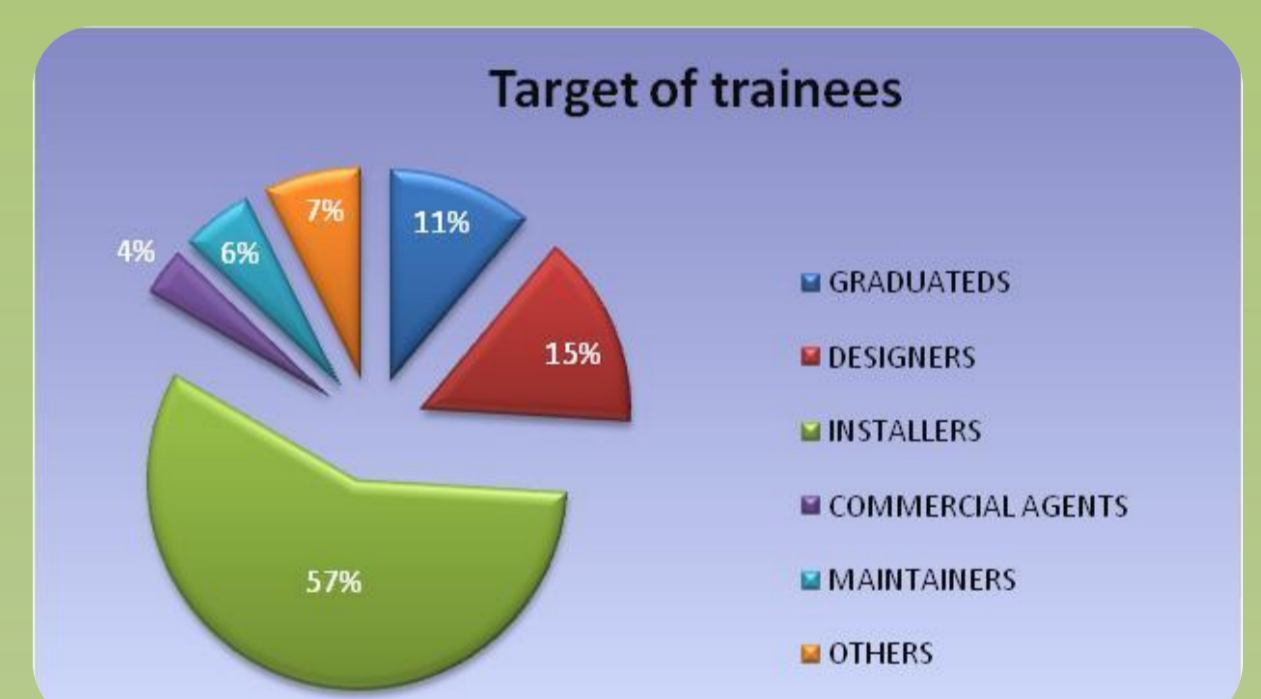
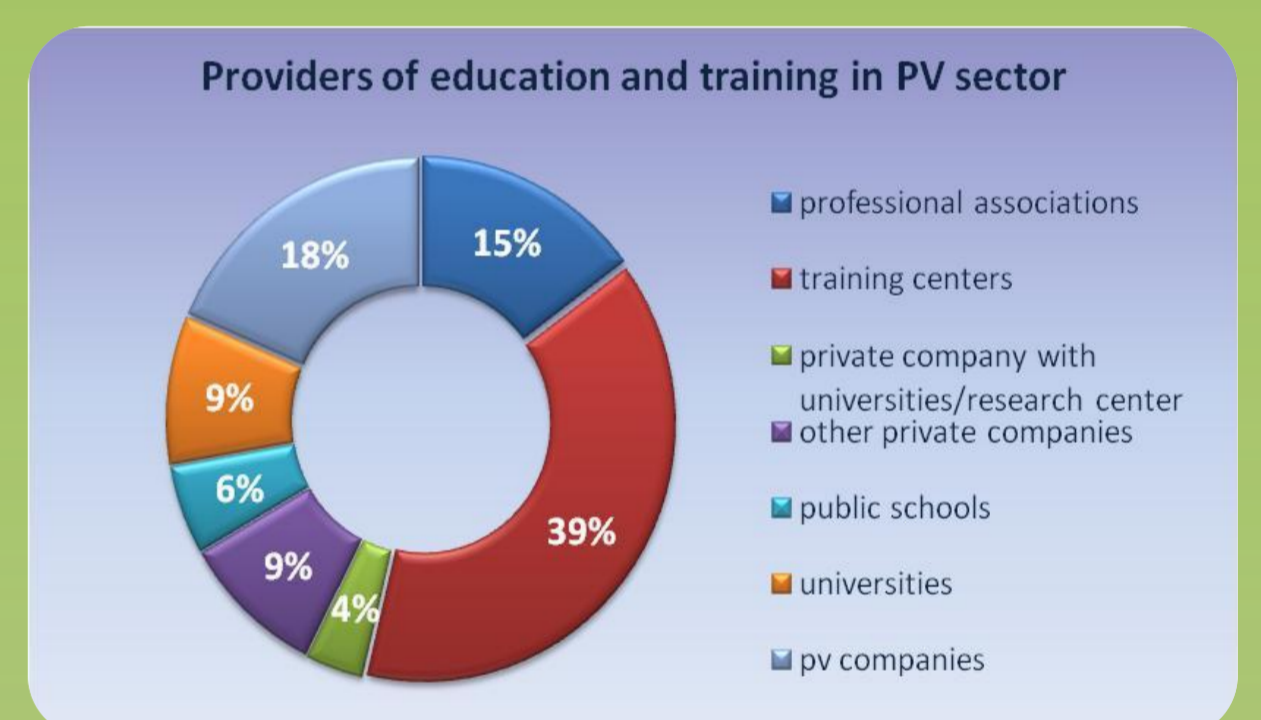
### Article 15 - Qualification system for installers

- Before **1st August 2013**, installers of photovoltaics plants must respect specific technical and professional requirements, such as:
  - university decree or technical degree with 2/4 years of experience in PV sector, according with the existing article 4 of the Ministerial Decree 37 of the 2008.
  - certificate of professional training course and final examination in order to demonstrate competences in accordance with Annex IV of the DL 28/2011.
- Within the 31st December 2012 the training courses for the RES installers should be provided directly by Italian Regions or by their accredited bodies - in agreement with the **Annex IV**.
- In order to promote the consistency with the Annex IV criteria and the homogeneity at national level, within the 31 December 2012, **Regions together with ENEA will design training courses to issue certification of installers of RES.**

### Annex IV - Installers Certification and training criteria

The certification schemes referred to in Article 15 are based on the following criteria:

- the qualification should be made by a transparent and clearly defined procedure and assure regional coverage of the training program offered by the supplier
- the training courses should include both theoretical and practical parts.
- the training provider should have adequate technical facilities to provide practical training.
- **the training provider can be the manufacturer of the equipment or system, institutes or associations;**
- the qualification of installers has a limited duration and every year qualified installers should attend refresh courses in the form of a seminar or event
- the training courses should end with an **examination** leading to a certificate or a qualification. The examination shall include practical assessment of installations



ITALIAN NATIONAL AGENCY FOR NEW TECHNOLOGIES, THE ENERGY AND SUSTAINABLE ECONOMIC DEVELOPMENT

Anna Moreno<sup>^</sup>, Salvatore Castello<sup>^</sup>, Patrizia Pistochini\*, Liliana Bonfiglio\*\*

<sup>^</sup>) ENEA C.R Casaccia, via Anguillarese 301 - 00060 Rome, Italy

\* ) ENEA C.R Ispra, via E. Fermi - 21020 Ispra VA, Italy

\*\* ) Mesos, via del Pigneto 303 h - 00176 Rome, Italy

anna.moreno@enea.it, salvatore.castello@enea.it, patrizia.pistochini@enea.it, mesos@enea.it



26th European Photovoltaic Solar Energy Conference and Exhibition

Reg. N. 6CV.1.49