

Contribution to the Development of renewable energy sources in the European Union

The project will assist in reaching the renewable energy targets set in the EU White Paper and in assisting Italy to address its Kyoto Protocol commitments for Greenhouse Gas emission reductions. By transferring information about BIPV products and designs used in other European countries, duplication and the need for unnecessary R&D should be avoided. Instead, innovation should be stimulated, as well as increased competitiveness. The action will disseminate information and foster education on PV technology among the young generation and their school teachers. This will provide basis for the education and training of the future European PV specialists and decision makers who will live in an era where PV will be urgently needed as a component of free emission energy supply in Europe.

Unlike other countries as Germany, Switzerland and England, in Italy there are no political-economical procedures that on a national and local level could have given a decisive contribution to the photovoltaic market. There is a necessity of economical and technical instruments to guarantee a real opportunity for the utilisation of photovoltaic systems in public buildings and schools.

The ENEA (Ente per le Nuove tecnologie, l'Energia e l'Ambiente) has prepared in Italy a national program "10.000 PV roofs" on the same wavelength as analogous programs started already in other European countries. The aim of program is the diffusion of the PV systems applications, buildings integrated and connected to the electric net, in order to create favourable conditions to the knocking down costs and stimulate the national industry to adjust more reliable products and component. The new program, that should bring to an increase in Italy of 50 MWs installed power, has been already elaborate, generally speaking, from the Industry and the Environment Department, with the technical support of ENEA. The correct synergy with the operators of the PV sector has to be pursued, facilitating above all the gradual industrialisation of innovative developing technologies. The programme proponents - Ministry of Industry and Environment with ENEA assistance in the program management - rely on the contribution deriving from the local Corporate body involvement, from the industry, from ENEL and other electricity production and distribution Societies.

The relationship - between involved Electric Society and user - will be regulated by a special agreement, according with the regulation in force, including relative burdens for the net connection.

The diffusion of the PV systems (on the roof) depends above all on several reasons, as following:

1. a real wish of the public authorities to carry specific programs of incentive developing this solar energy sector. The contributions without security are the most common, among various available methods, or the facilitated financing and for a long - term, the green pricing, the opportunity to transfer into the electric net, with very advantageous conditions, the energy produced by PV systems (ex. net metering accords);
2. ability to organise and to manage effectively the development programs simplifying to the most the operations needed for fittings realisation. Besides it is essential to foresee a thick informative campaign useful to take advantage of facilities, spreading knowledge of PV systems technology;
3. goodwill and collaboration availability by the local and national electric societies assuring a valid support to the consumers interested to install a roof PV Systems;

Municipality will support the action assuring in brief the issue of possible construction permit. The landscape ties create often problems to install PV systems: the environment attention or sensitivity has to be followed by great consciousness and balance.

This project will contribute to coherence and larger impact of activities concerning PV application in schools and public buildings throughout the European Union. This activity will be oriented by the EC's White Paper for a Community Strategy and Action Plan for Renewable Energies and seek to optimise the results of this work such they will be most useful for the implementation of the proposals made by the EC' White Paper.

Strategies for dissemination

- **Provide detailed analysis of costs and environmental benefits of PV applications, in the form of Case Studies. As far as possible these should relate to existing PV projects;**
- **Identify potential product champions' (organisations and/or individuals) for building-integrated PV technology, and encourage them to take the lead in establishing and promoting the technology;**
- **Provide information on funding opportunities/financing mechanisms for PV power systems to key target groups;**
- **Advise and assist building owners and operators considering implementing building-integrated PV systems, particularly in relation to tariff implications and statutory requirements;**
- **Set up PV in buildings design competitions, which results in the selection and development of real demonstration projects;**
- **Prepare and promote articles on PV in targeted professional journals;**
- **Encourage product franchising', ie prepare a showcase of PV products which building professionals recognise and trust in terms of building performance;**
- **Provide detailed technical guidelines of PV building applications;**