## TEST ENERGIA "All-Inclusive" OFFER

### DESIGN

TEST ENERGIA offers high quality and professionalism in all stages of design of the systems for renewable energy:

- mechanical and electrical building design;
- management of all practices for obtaining any necessary permits for installation and report to the Comuni and/or Province and/or Regioni Sovrintendenza, Genio Civile;
- Elaboration and application of coordination security plan for installation;
- Very accurate Direction of the works for an excellent realization of the project.



#### INSTALLATION

TEST ENERGIA realize the installation through own workers and equipments. The supply is managed directly by the internal supply department which maintains direct relationships with worldwide producers. The structures are often customized on the specific needs of each installation. The installed parts are: Photovoltaic Modules, Inverters, photovoltaic field Panels DC/AC, network interface Panels, protective devices against fulmination, electric Cables, Pipe for the cables, solar cables, support structures for flat roofs, inclined plate roofs, on Shelters, on Solar Tracker. Installation in partial or total architectural integration.

TEST ENERGIA installs modules in polycrystalline, monocrystalline, amorphous and triple junction silicon.

#### TESTING AND MAINTENANCE

ENERGY TEST make tests on structural and production plants using its own staff and equipment to check properly all functions, ensure right productivity and certify the quality of the implementation. The continuous production of the systems is ensured by a maintenance offered by the same company through economic assistance multi-annual contracts.



### INSURANCE AND BUSINESS PLAN

TEST ENERGIA offers to its customers insurance solutions through companies partners:

- insurance for direct damage (theft, fire, vandalism acts, weather events);
- insurance against non-production of photovoltaic system;
- insurance for liability ;
- insurance for damage caused by the electricity local network

TEST ENERGIA offers to its customers an accurate economic analysis to evaluate the gain of investment of photovoltaic installation taking into account the various concomitant economic incentives, savings energy, maintenance cost insurance, bank fees and other items.

#### FINANCING

TEST ENERGIA, under agreements with major banks, may assist each customer in selection of financial means necessary for the realization of photovoltaic system. The photovoltaic system in "Conto Energia" with the incentives granted for 20 years can be financed in two ways:

- 1 with advanced capital from the customer as an investment with a low risk and an incomparable profit using immediately free electricity for more than 30 years.
- 2 There is no cost to the customer, through "Chirografo" bank loan, whose rates are entirely financed by incentives of the "Conto Energia". The client in this case does not pay anything and immediately receives free electricity for more than 30 years. The extinction of the loan takes place in 15 years therefore the last years are an additional incentive.

### **TEST** energia

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# SYSTEM FOR RENEWABLE ENERGY

Capture the Sun with Us







www.test.it



#### THE COMPANY

TEST ENERGIA designs and realizes technological systems inrenewable energy with particular attention to PHOTOVOL-TAIC ones. The installations are fully designed by the company where an highly qualified professional staff constantly works in order to offer high technical standards and a comprehensive management to every customer.

TEST ENERGIA offers technical expertise, projects and installations appropriate to the various energetic needs.

TEST ENERGIA offers a complete "All-Inclusive" service: obtaining authorizations, designs, handling practices, realization of the PV systems and all you need achieve an early production, connection and the incentives in the Energy





#### CLEAN ENERGY AT NO COST

The renewable energy are a good alternative to the traditional fossil fuels. With the new italian decree "Conto Energia" of February 2007 have been approved interesting incentives for those who install a photovoltaic system.

The purpose of these grants is to promote choice of the photovoltaic source for production of electric energy.

The new "Conto Energia" of February 2007 finally streamlined the bureaucracy, facilitating the procedures for requesting Italian State incentives. Eligible people for this law are: individual, legal persons, public and condominiums; everyone can produce electric energy, clean energy at no cost. In fact, the "Conto Energia", through twenty years incentives, allows an almost free installation and realization of a photovoltaic system ensuring a highly advantageous investment return.

The producer is further facilitated because the "surplus" of energy can be accounted and sold to a Electrical Manager. The "Conto Energia" also provides more incentives if the installation follows criteria of total or partial architectural integration on buildings and structures for every function and purpose.



Our Business Partner:

ING.GAETA.

Trading partner for the supply of Solar Tracker

#### PHOTOVOLTAIC SYSTEMS

The basic device of a photovoltaic system is the photovoltaic cell made with semiconductor material (monocrystalline, polycrystalline or amorphous silicon). When the cells are affected by solar radiation they generate free electrons and electric energy. The photovoltaic panel is composed by multiple cells and its classification depends on its performance under optimal conditions (Wp - peak of Watt).

A photovoltaic system can be installed on roofs of houses, roofs of buildings, prefabricated buildings, parking shelters, wooden sheds or on the ground, either on fixed structures or tracking devices. Each photovoltaic system requires a particular study and careful analysis of the installation location in order to choose the appropriate support structure, integrant part of the system itself.



## SOLAR THERMAL SYSTEMS

The Sun can give us up to 90% of hot water we need everyday. The solar thermal systems transform the energy radiated by the sun into thermal energy and heat, therefore heat under form of hot water for the environments' services or heating.

#### Solar Thermal Systems with Natural Circulation

It's a system made by collectors and a single module tank, it's a natural circulation system that does not require mechanical or electrical parts to work.

#### Solar Thermal Systems with Forced Circulation

It's a system made by collectors where the fluid circulates thanks to an electric pump, which involves fewer constraints on the location of the "accumulation boiler" that can be located also far from the collector for functional or aesthetic



### WIND SYSTEM

Wind energy is the product of the conversion of the kinetic energy from wind into other forms of energy. It's the cheapest source among all renewable energies. The installation's time and costs are relatively low but it is very important an accurate measurement of wind speed and revealing its presence in the site where you would like to install your wind system in order to justify its application. The wind turbines are relatively simple machines with a turbine driven by the moving air flow. They may have rotors with horizontal axis or vertical axis. The evolution of Italian energy regulation has allowed the exchange in place of electric energy from wind sources. Besides recently a law was enacted encouraging the production of electricity from wind sources through a measure similar to "Conto Energia" of photovoltaic solar systems reserved to production systems called "Mini-wind System", that are small and therefore with a very limited environmental impact. A Mini-wind turbine to generate the energy required for a house can be installed on a thin stilt, the rotor's diameter does not exceed 8 meters for power of about 20 Kw but with rotor's diameters of 3 meters is possible to obtain a Kilowatt of power from the wind.

