ETA services for Solar Energy

Technical support in the identification of the most suitable pathways for the implementation of photovoltaic technologies in projects.

Guideline provision for the design phase, aimed at ensuring the highest performance and integration level of PV systems.

Feasibility evaluation of the proposed solution (including technical pros and cons, long term reliability, O&M requirements, financial viability.

Activities

| Identification of the exploitable areas for PV integration and sizing of PV systems in buildings and infrastructures |
| Investigation of PV technologies suitable for project implementation |
| Specific issues to be addressed for the building integrated PV (BIPV) SYSTEM |
| Energy yield |
| Grid integration of PV power |
| Heating and Cooling |
| Engineering |
ETA services for Biomass & Bioenergy

Technical support in the identification of the most suitable pathways for the implementation of biomass technologies in projects

- Biomass resource assessment
- Techno-economic feasibility studies
- Market studies
- Environmental assessments
- Biomass supply chain risk and economic assessment

Areas of activity

<table>
<thead>
<tr>
<th>Agricultural aspects and logistics</th>
<th>Anaerobic digestion</th>
<th>Biomass thermochemical conversion (torrefaction, pyrolysis, gasification, HTL)</th>
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<tr>
<td>Biomass power generation</td>
<td>Advanced biofuel</td>
<td>Algae</td>
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Strategic consultancy
Resource assessments and logistics, feasibility studies, market and policy analysis, sustainability assessment.

Business development
We help you identify the best partners for your projects, from technology providers and research organisations to industrial partners or financial institutions.

Engineering
Design and technical support for Renewable energy and Energy saving technologies. Industrial collaborations, Investigations of technologies for project implementation.

Communication
Knowledge transfer among research, industry and policy-makers through event organisation, training and capacity building activities, publications.

Representative projects

NOUVEAU YACHT CLUB - MONTECARLO
The project, developed by the architecture firm Foster and Partners, includes some aspects of environmental sustainability, such as the integration of photovoltaic panels on the canopy of the upper terrace, whose design and realization was carried out by ETA Florence.

ABU DHABI MASDAR DEVELOPMENT PLAN
ETA-Florence was responsible for the energy planning of Masdar City, which required a detailed analysis of the renewable energies available, estimated production, simulation of energy supply, expected demand and strategic integration of various types of technologies in this difficult environmental context.

BIOMASS AVAILABILITY FOR ENERGY USE - SLOVAKIA
ETA Florence has carried out a resource assessment study for an international energy company about the potential, theoretical and effective availability of solid biomass from forest residues and ligno-cellulosic energy crops in Slovakia for use in large-scale power plants.

BIOGAS FROM BIOMASS RESIDUES
Techno-economic assessment and promotion of biogas plants to process urban and agriculture organic residues.

FROM ORGANIC WASTE TO HIGH VALUE PRODUCTS
Identification and techno-economic assessment of advanced technologies for biowaste upgrading into high value biofuels, biochemicals and biofertilizers.

BIOMETHANE FOR TRANSPORT
Technological and economic solutions for the use of biomethane in natural gas vehicle fleets.

BIOFUELS
Feasibility study for the national biofuel strategy in the Democratic Republic of Benin.

USED COOKING OIL AS BIOFUEL
Innovative solutions for the collection of used cooking oil and its use as a biofuel in energy production.

LIGNOCELLULOSIC ENERGY CROPS
Promoting the production and utilisation of energy crops at a European level.

PELLET MARKET
Global Wood Pellet Industry Market and Trade Study.

ALGAE
Increasing the competitiveness of the European non-energy algal sector by a novel solution for biomass production.
ETA-Florence Renewable Energies is a registered engineering firm
Founding Member of EUBIA (European Biomass Industry Association)
Founding Partner of the Regional Energy Agency of Tuscany (REA - Regional Energy Agency)

Awards and Acknowledgment

etaflorence has received the Tuscany Region “Eco Efficiente Award” in 2005 and again in 2008

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