

Presentación de Entidades y Propuestas para su participación en el 7º Programa Marco

Madrid, 22 de junio de 2010

Debido a que la intención de esta jornada es que sea un foro informativo y de reunión de entidades **con una intención clara de participar en el VII Programa Marco**, y de cara a proporcionar los servicios de asesoría más completo y personalizados les rogaríamos que nos enviasen antes de la jornada una reseña de sus actividades que debería incluir los siguientes puntos:

1. Presentación de la empresa/grupo de investigación

BUSSINES LINES & TECHNOLOGICAL VALUES

The main actives of the company can be summarized as follows:

- Development of grid-connected PV Plants
 - Manufacturing of PV modules (mono and multi-crystalline Silicon) 50MW
 - Production of Si Solar cells 60 MW.
 - Manufacturing of solar thermal modules.
 - Fabrication of solar bi-axial tracker systems
 - Development of photovoltaic products for building-integration
 - Other photovoltaic products.
 - Combination of renewable energies
 - R&D in novel materials and PVs alternative designs.
 - Galvanization of metallic structures.
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- Pevafersa counts on its own R&D Centre focused on the development of new technologies and products.
 - Pevafersa is a member of two of the main European Technological Platforms of the Renewable Energy Sector: European Technological Platform of Sustainable Chemistry, European Platform of Hydrogen.
 - Pevafersa has established strong relations with main international technological companies in Europe (Schmid, Roth&Rau, Dupont, etc.).
 - Pevafersa collaborates with outstanding national and international research Centres in materials science and photovoltaic as CENER, University of Valladolid, CIEMAT, University of Valencia, University of Pavia (Italy)



2. Líneas de I+ D prioritarias relacionadas con fotovoltaica

- **Improvement of the mc-Si based technology (wafers, cells, modules).**
- **Building integration photovoltaics (BIPV).**
- **Silicon heterojunction technology.**
- **R&D on alternative materials as III-V semiconductors.**
- **Software tools for energy efficiency applications.**
- **Innovative measurement techniques for PV devices.**

3. Áreas de interés dentro del Programa de Trabajo de Energía 2011

- Improvement of the mc-Si based technology (wafers, cells, modules).
- Building integration photovoltaics (BIPV) and new applications of PV (green buildings, electric cars, etc.).
- Silicon heterojunction technology.
- New emitters and laser processes.

4. Resumen de la propuesta de proyecto

1.- Integration of laser methodologies in solar cell manufacturing:

- Physical texturing of wafers.
- Laser P-doping.
- Laser firing.
- Towards low temperature processes.

2.- Improving solar cell efficiency/cost-effectiveness from the wafer features (chemical and crystalline purity):

- Alternative sources of silicon.
- Crystal growing I: Wafers having bigger grains.
- Crystal growing II: Towards preferential crystalline orders of multi-crystals.
- Defects passivation prior to solar cell processing.

3.- Innovative PV products for new usages: green buildings, BIPV and other smart applications.

- New solutions and processes for BIPV.
- Parking lots for electrical cars.
- New energy services.

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