

ITALY DAY

ABSTRACT TABLE OF PROJECT PROPOSAL

PROJECT Nr. 25

SECTOR:	Solar Energy – Thermal and Photovoltaic Concentration (CPVT)
PROJECT IDEA IN A HEADLINE:	Eos1 is the ultimate concentration system for high-efficiency cogeneration of photovoltaic and solar thermal energy (CPVT).
INNOVATIVE POINTS:	The receiver, the true innovative heart of the system, couples 0.11 sqm of triple-junction photovoltaic cells from the aerospace industry and is equipped with a “roll-bond” liquid cooling circuit.
POTENTIAL BUSINESSES AND APPLICATION FIELDS:	high efficiency production of electric and thermal energy for industrial users (eg agro-food, pharmaceutical, plastic and mechanical processing, etc..) and civil users (hotels, swimming pools, hospitals, housing complexes, etc..).
CHARACTERISTICS OF POTENTIAL PARTNERS:	business, commercial and/or investors
BRIEF PROJECT DESCRIPTION:	<p>Eos1's concentrated cogeneration allows the simultaneous, modular and dynamic production of electricity and thermal energy from a single system. This means electricity for homes and businesses and at the same time heating and hot water with temperatures ranging from 50 ° to 80 °C.</p> <p>Thermal energy can also be converted into energy cooling through the integration of common absorption systems, or similar.</p> <p><u>Eos1 consists of:</u></p> <ol style="list-style-type: none">1. A linear parabolic mirror2. A thermo-photovoltaic linear receiver.3. A 2-axis solar tracking & handling system <p>The movement system directs the concentrator in the direction of the sun during daylight hours, the dish focuses the rays, and the receiver converts them into energy. The parable has a 144x concentration factor and is made up of about 20 square meters of highly reflective mirrors. The receiver, couples 0.11 sqm of triple-junction photovoltaic cells with a “roll-bond” liquid cooling circuit.</p>