



ENEL ADVANCED SOLAR LABORATORY

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ENEL RESEARCH TECHNICAL AREA

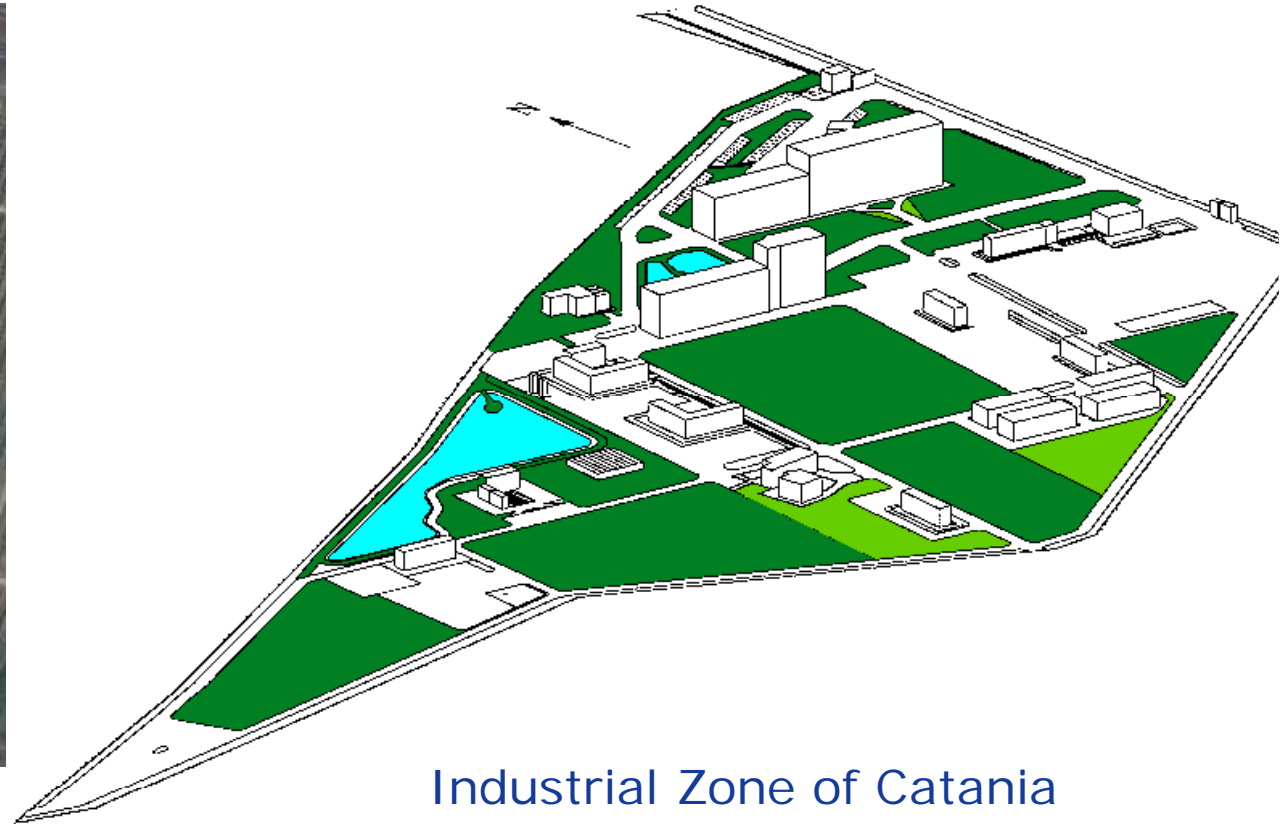


ENEL

- ❑ Enel is the largest Italian power company
- ❑ Enel is a world leader in green energy production (30,000 MW installed plants)
- ❑ In the period 2008-2012 Enel will invest 7.4 billion Euros for the development of renewable energy sources
- ❑ Construction of Solar laboratory on advanced PV in Catania (Sicily)
- ❑ Solar laboratory will be a useful tool for the European research on advanced PV

ADVANCED SOLAR LABORATORY

Location: Catania Sicily 35° N



Industrial Zone of Catania
100,000 sq.m. area

$DNI > 1600 \text{ kWh}/(\text{m}^2 \text{ y})$

$GHI \cong 1800 \text{ kWh}/(\text{m}^2 \text{ y})$



ADVANCED SOLAR LABORATORY

Main objectives

- ❑ Identify, characterize and optimize the most promising innovative PV technologies;
- ❑ Understand the key factors for the application of innovative technologies on large scale;
- ❑ Apply on large scale innovative PV systems already available at industrial level.

CPV Systems in Enel Advanced Solar laboratory



Power (2,9 kWp X 2)
Concentration ratio : 700 X
Aperture area : 18,24 m²

CPV Systems in Enel Advanced Solar laboratory



Power 3,9 kWp X 2
Concentration ratio : 380 X
Aperture area : 16,13 m²



Power \cong 4,940 kWp
Concentration ratio : 25 X
Aperture area : 44,6 m²