Present on the whole photovoltaic chain, Solairedirect is the first French independent producer of solar electricity, with solar parks and rooftop installations for a total capacity of 120 MW early in 2012.

At Draguignan in the Var department, Solairedirect continues its development with the construction of a new 12 MWp (peak megawatt) solar power plant. The park is composed of 48 246 x 250 Wp solar modules distributed over about 25 hectares. Electricity production of about 18 GWh/year is expected, equivalent to the annual energy consumption of 12,000 people.

Solairedirect is capitalizing on its experience to reach the best environmental requirements: the use of solar panels without heavy metals, perfect integration into the landscape, no concrete used and “green” sites.

Ecologically-friendly, 10,000 tonnes of CO2 will be avoided every year.

Solairedirect awarded Schneider Electric the turnkey electrical EPC (Engineering, Procurement & Construction) and a 20-year operation and maintenance contract.
Solution:
Turnkey electrical EPC contract including:
- Basic and detail studies
- Studies on DC current in cables and associated losses
- Installation grounding network studies
- Supply, installation and connection of electrical equipment from wiring the panels placed on the structures up to the grid connection station
- Supply & installation of MV, LV cables, optical fiber, the video surveillance and anti-intrusion system
- Entire management of the turnkey electrical package and coordination of partners and subcontractors
- Commissioning and tests on site of all electrical equipment in the power plant
- 20 years operation and maintenance contract, renewable. It includes preventive and curative maintenance operations associated with an availability commitment (98 %)

Electrical network:
- 1 X 1 000 KVA transformation station, equipped with:
  > 2 Xantrex GT500 inverters
  > 1 X 1 000 kVA low loss transformer
  > 1 MV compact switchboard RM6 type
  > 1 LV switchboard
  > 1 PLC cabinet to capture monitoring data
  > 1 UPS
- 1 X 500 kVA transformation station, equipped with:
  > 1 Xantrex GT500 inverter
  > 1 X 500 kVA low loss transformer
  > 1 MV compact switchboard RM6 type
  > 1 LV switchboard
  > 1 PLC cabinet to capture monitoring data
  > 1 UPS
- 1 grid connection of 20 kV
- 76 array boxes

Monitoring system:
- Supervision and control of equipment
- Support for maintenance and exploitation activities
- Evaluation of availability
- Weather monitoring
- Centralisation of information
- Creation of graphics and reports
- Data storage
- Management of remote and multiple access

The security system:
- An infrared intrusion system with cameras, connected to the remote-surveillance post (operated by a remote-surveillance company).

OTHER REFERENCES
- Ground-based arrays
  - Spain - Almería (7.76 MW)
  - Germany - Rote Jahne (6 MW)
  - France - Vinon Sur Verdon (4.2 MW)
  - France - Les Mées 1 - La Mouisse (12 MW)
  - France - Le Gabardan (20 MW)
  - France - St Clair (8.9 MW)
  - France - Les Mées 2 - Haute Montagne (12 MW)
- Italy - Cellino San Marco - AES (43 MW)
- Italy - Solare Roma - SunPower (15 MW)
- France - St Hilaire du Rosier - Solaire Direct (6 MW)
- France - Callian - Eneryo (7.4 MW)
- Buildings
  - Spain - Saragossa (10 MW)
  - Spain - Villacañas - Toledo (2.5 MW)
  - Spain - Molina De Segura - Murcia (300 KW)
  - Reunion & Mayotte Islands - 7 Casino stores (16 MW)