

Success Stories: IREN – (TO) Italy

“Torino Nord” Project: The Customer



The 1st multiregional utility in Italy, listed on the FTSE, born July 1st 2010 by the merge between Iride and Enia.



IREN works on:

- ✓ Electricity (production, distribution, sales)
- ✓ Thermal energy for district heating (production, sales)
- ✓ Natural Gas (distribution, sales)
- ✓ Management of integrated water services
- ✓ Environmental services (waste collection, disposal waste)
- ✓ Services for public administrations

2010 revenues: 3,2 B€

2010 electricity production: 5460 GWh

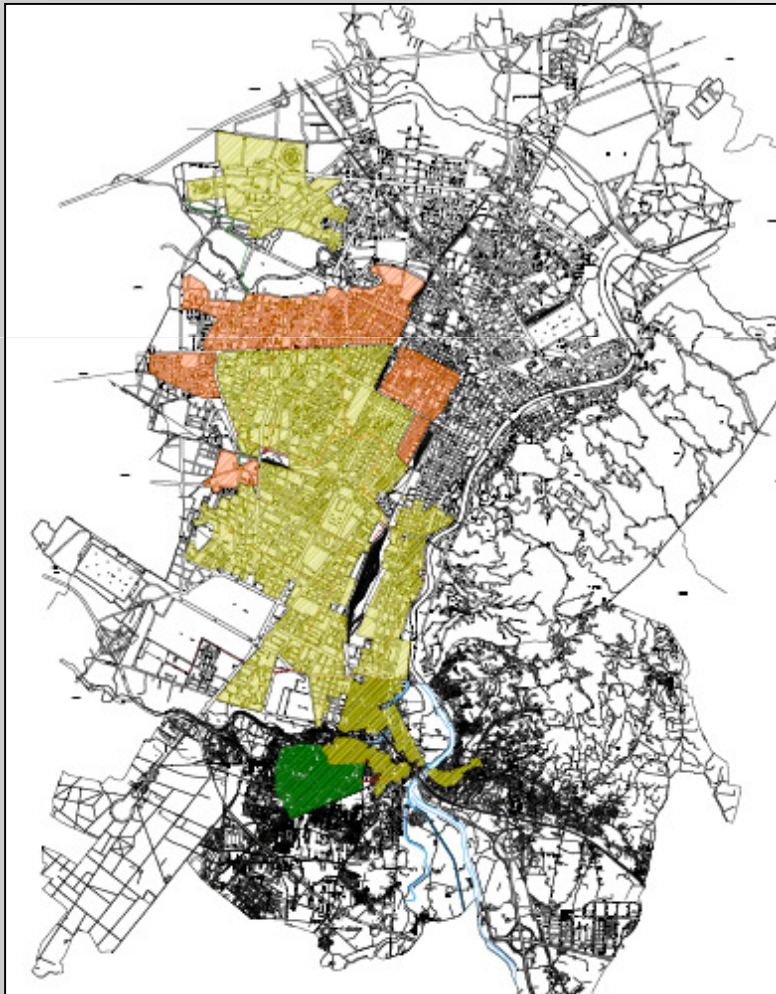
“Torino Nord” Project: Overview



Goals

- ✓ Replacing old power plant “Le Vallette” with combined-cycle cogeneration plant
- ✓ Increasing system efficiency
- ✓ Extending the users’ network
- ✓ Urban requalification

“Torino Nord” Project: Benefits / cont.



Network growth
120 km

Hot water distributed
18,000,000 cm/Y

People served
150,000

District heating enhancement
From 40% to 54%
of the city volume

“Torino Nord” Project: Benefits



Exclusively fed on

Natural gas

System efficiency is over

85% (cogeneration)

56% (pure electric)

Energy savings

95,000 Tep/year

Air quality

- **134 tons/year** of NOX

- **400 tons/year** of SOX

- **17 tons/year** of powders

“Torino Nord” Project: The Tender



✓ **24 inverters**
for water pumps from

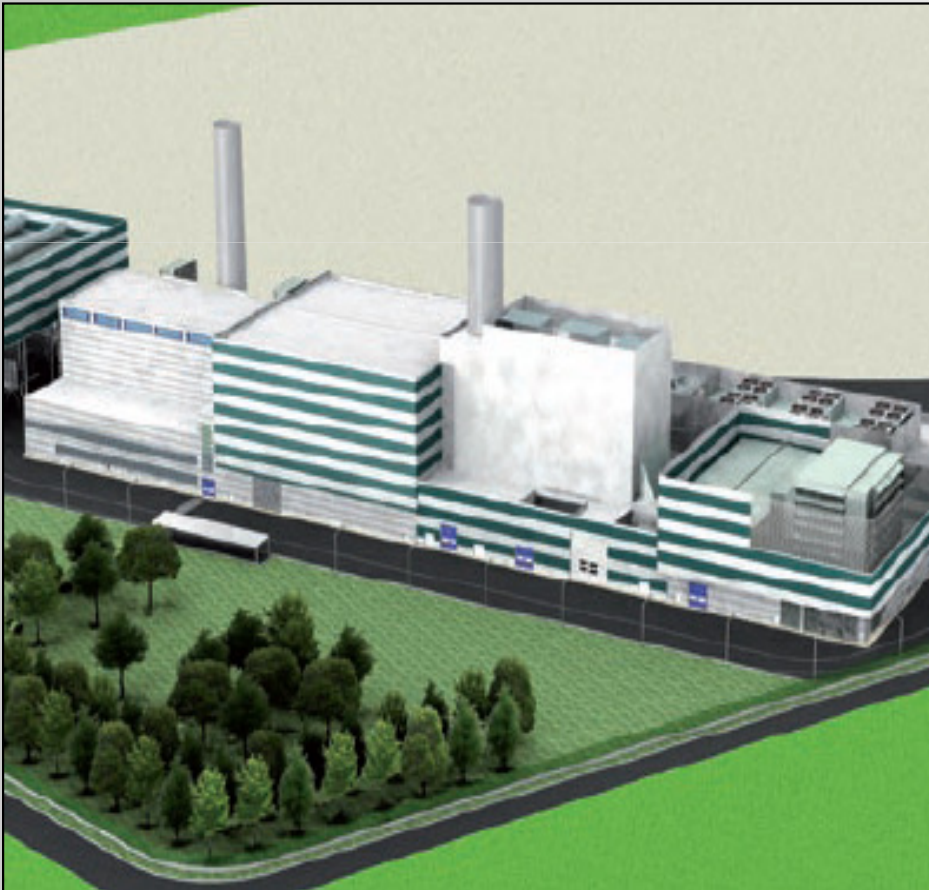
✓ **100kW to 800kW**

Reason why we had success ...



- ✓ **Very Good Reference**
we supplied the inverter for
“Politecnico Torino” power station
- ✓ **Best technical solutions**
IREN changed the requirements
for a performance-effective solution
- ✓ **Best pre-sales and after-sales
services**
- ✓ **Prices**

Reason why we had success ...



Torino Nord

✓ N. 8 - 800 kW Sinus Penta

The Pumping Station includes two series-connected units, one for delivery network and one for return network of district heating

✓ N. 3 - 90 kW + N. 1 - 35 kW Sinus Penta

Used for the district heating pressurization station

Santerno Products



RP4 Repumping Station

- ✓ N. 8 - 800 kW Sinus Penta for district heating in the Repumping station



“Le Vallette”

- ✓ N. 3 - 300 kW + N. 1 - 100 kW Sinus Penta for Thermal exchange station

Santerno Key Success Factors



- ✓ Excellent relationship with the customer
- ✓ Outstanding evaluation of project needs
- ✓ Co-engineering
- ✓ Tailor-made supply

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