Sdi S.p.A.

Company Profile

Aug-2022

Summary

- Sdi S.p.A.
- Quality, Safety and Environment
- Products and turn-key systems
- Solutions
- Services
- Research & Development
- Our customers

Sdi S.p.A.

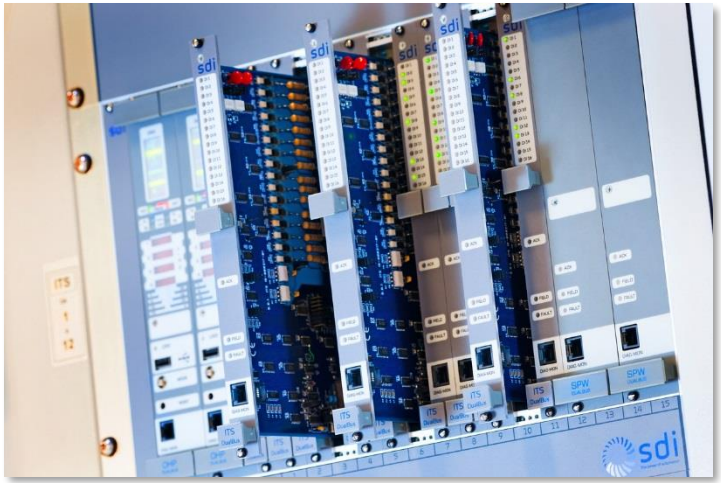
- Sdi in brief
- Highlights
- Mission
- Offices and laboratories
- Economic data
- Organization
- Our resources
- Never ending growth
- Sdi worldwide
- Why Sdi?

- A short presentation about who we are and what we can do

- Since 1973 is the main Italian company in the field of automation, supervision, control and remote control of highly critical industrial plants

- Sdi develops, builds and supplies complete DCS, SCADA systems and special application equipments to main Italian players like Eni, SNAM and ENEL Green Power

- More than 40 years of experience grant the know-how for continue innovation and evolution of Sdi's offer



- We aim to provide a reliable and technologically advanced answer to every **automation** need, coming first on **innovation** path thanks to our **eXPert™** platform.

Offices and laboratories

Headquarters - Trezzano s/N (Milano)

(3500 m2 area – Offices and laboratories for both Hw and Sw development)

- Management, commercial, marketing and accounting offices
- Hardware and Software laboratories, R&D
- Systems pre-building and testing

Production Unit - Trezzano s/N (Milano)

(600 m2 area)

- Warehouse, after sales and maintenance services

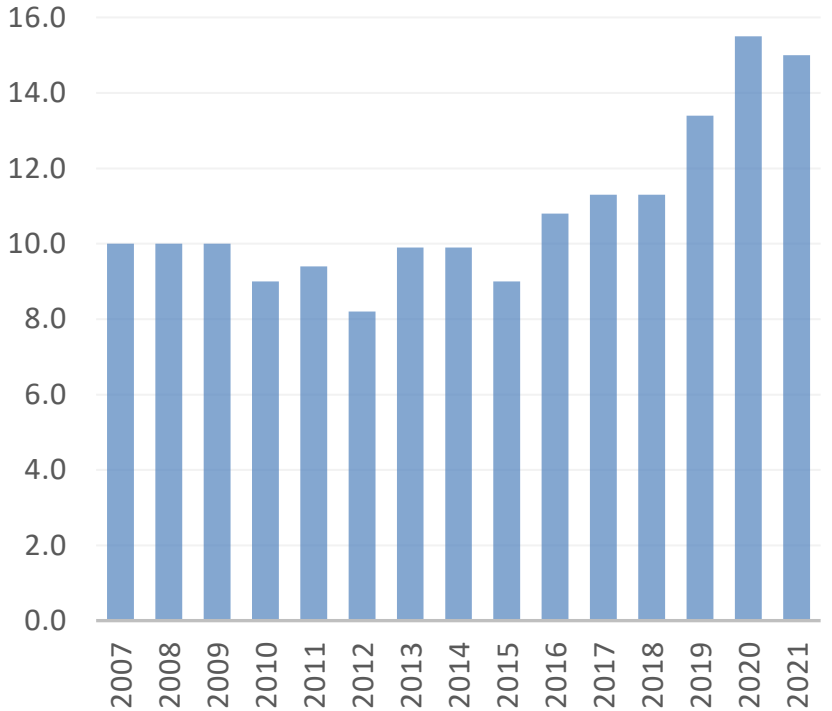
Branch Office - Pisa

- R&D office
- Software development, after sales services

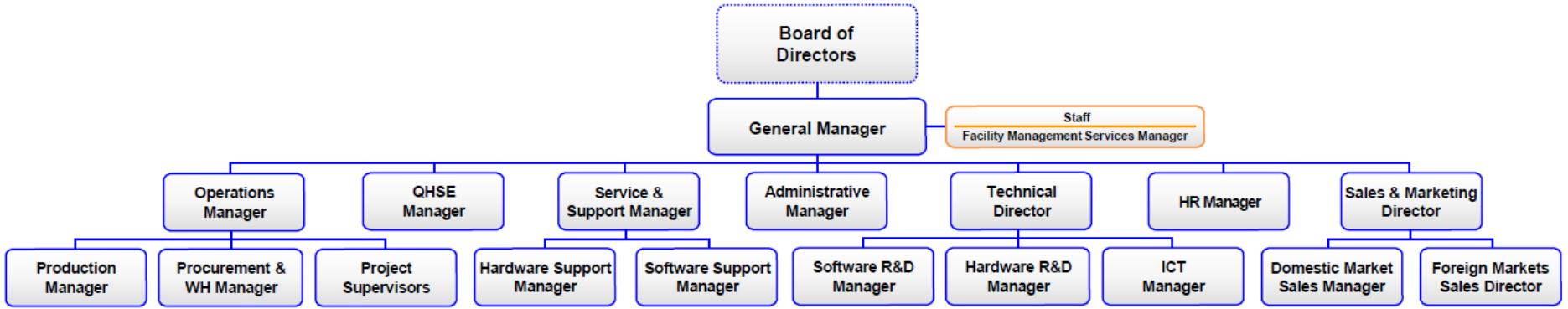
Economic data

- Sdi is an independent entity. The paid up capital of € 400.000,00 is completely held by company management

- Average turnover of 14,6 Mln€, increasing in the last 3 years.



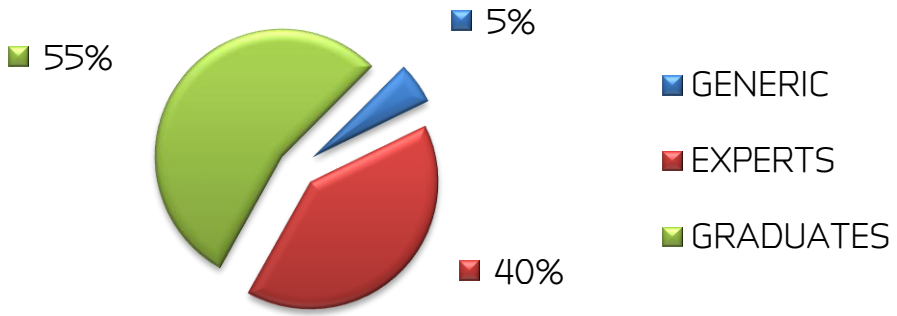
Organization chart



Rev. 10 of 12.06.2019

Our resources

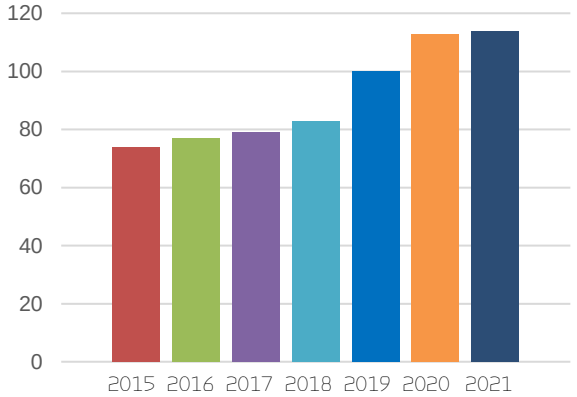
- 114 employees and partners (17 % women)
- Average employees age: 41
- Average working seniority: 17
- All staff employed with permanent contract
- Staff turnover tending to zero



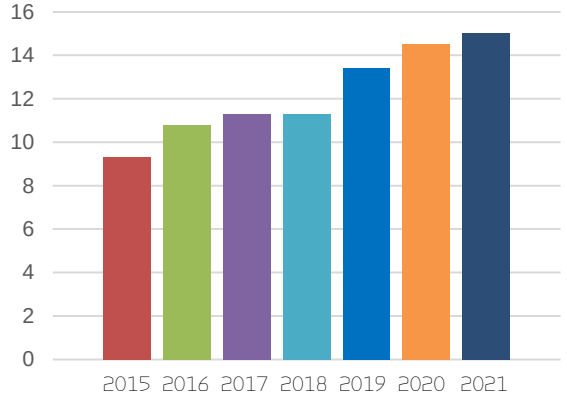
Never ending growth

- Increase of staff numbers
- Growth and consolidation of turnover in the last yers
- Growth and consolidation in sales volume of eXPert products licenses directly supplied to end customers and/or integrators

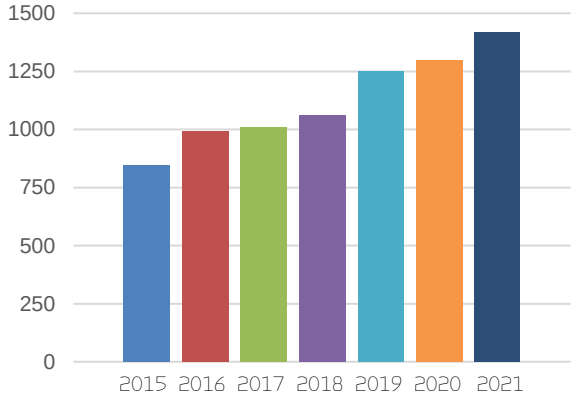
Staff growth (Unit)



Turnover increase (Mln€)

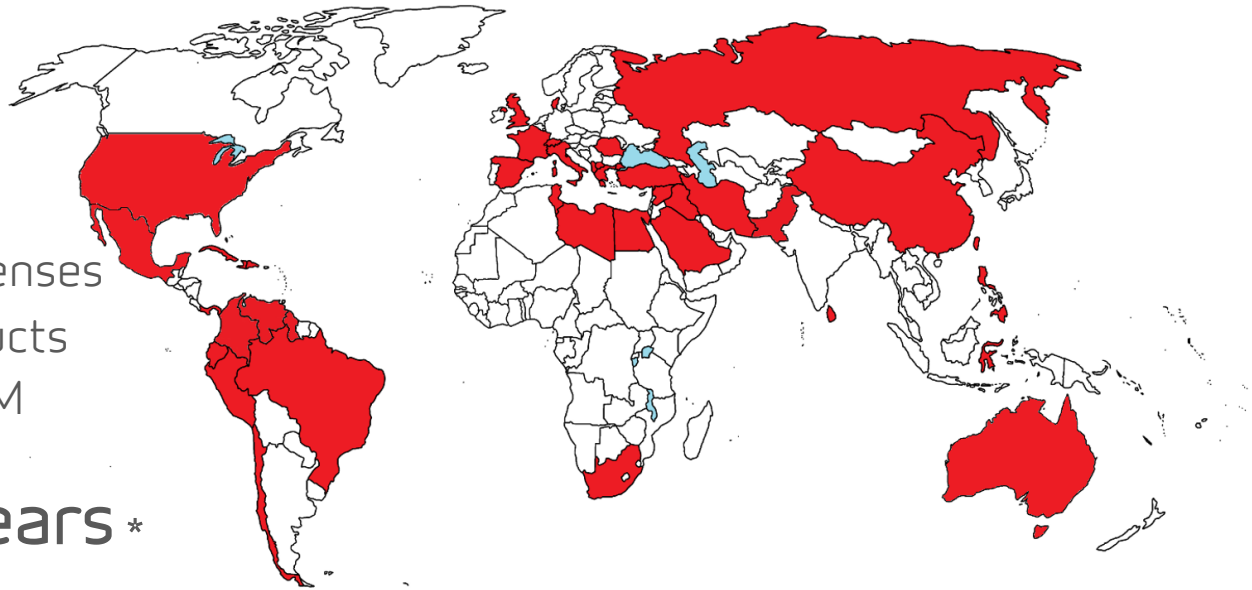


Licenses sales (Unit)



Sdi worldwide

More than **14.000** licenses of the *eXPert* range products sold directly of via our OEM partners and VARs in the **last 16 years** *



* = sales data for years 2006-2021

Our value – ahead on Automation path

- Flexibility & Integration at first place: we can provide a completely custom solution that meets every control, monitoring and remote control needs
- Field-proven reliability: hundreds of applications in the field of oil & gas, power production and distribution, public utilities, water, renewables, transport…
- Our commitment in development: we invest everyday in improving our solutions, thus creating a strong relationship with the customer
- Valuable data, everywhere: we can provide the information you need on every device, anytime

Quality, Safety and Environment

- Certifications
- Research Laboratory
- Metrological Qualifications

Quality, Environment, Information Security, Health and Safety in the Workplace

Certifications

- The management systems of Sdi S.p.A. certified by *DNV GL Business*

Quality – UNI EN ISO 9001

Environment – UNI EN ISO 14001

Information Security– ISO/IEC 27001

Health and Safety in the Workplace – ISO 45001

Research Laboratory

- Sdi's Research Laboratory is qualified to complete subsidized research projects aimed to technologic innovation of third parties systems and solutions

- REGISTER OF APPROVED RESEARCH LABORATORIES of the Italian Ministry of Education, University and Research, art.14 Law 297/99

Ministero dell'Istruzione, dell'Università e della Ricerca

- Certified in accordance to Italian regulations in force
- Certification Body: PREFETTO PROVINCIA DI MILANO

"Legal Metrology Competent Body accredited by C.C.I.A.A. (Chamber of Commerce) and by the Prefecture of Milan "

Il Prefetto della Provincia di Milano

Sect. 599/11

VISTA la dichiarazione in data 16 novembre 2011, con la quale la ditta "**S.D.I. AUTOMAZIONE INDUSTRIALE srl**" con sede in Trezzano sul Naviglio, Via Tommaso Edison n. 10, fa conoscere che intende intraprendere la fabbricazione di strumenti metrici in provincia di Milano;

VISTA l'impronta della marca di fabbrica con la quale saranno contrassegnati gli strumenti metrici da presentarsi alla prima verificazione, riprodotta qui di seguito:

s.d.i.
LI

VISTO il certificato dal quale risulta che uguale impronta è stata depositata presso l'Ufficio Metrico Provinciale;

VISTO l'art. 1 del regolamento per la fabbricazione di strumenti metrici, approvato con R.D. 12/05/1902, 226;

PRENDE ATTO

della dichiarazione citata nella premessa.

Milano, 13 gennaio 2011

p. IL PREFETTO
Il Vice Prefetto Vicario
(Russo)

Products and turn-key systems

- Overview
- Distributed control systems (DCS)
- Remote control systems (SCADA, RTU)
- Simulation and Leak Detection Systems
- Metering skids
- Sdi and Industry 4.0

Products and turn-key systems

eXPert™ SCADA
Remote control

eXPert™ DCS
Distributed control

eXPert™ STAR
RTU and controllers

eXPert™ LDS
Simulation and
Lead Detection

eXPert™ EMMS
Metering and
Custody Transfer

Remote control systems (1-2)

- Highly integrated SCADA platform composed by:
  - Software modules of the central system – **eXPert™ SCADA**
  - Field devices (RTU) – **eXPert™ STAR range**
- Disaster Recovery systems
- Hot-backup redundancy natively integrated in each module of the SCADA platform

Remote control systems (2-2)

- Over 1.000.000 tags database, featuring multi-level hierarchical structure suitable for geographically distributed systems
- Redundant or single field device communications (GSM, LAN, WAN, wired and wireless)
- Standard communication protocols, certified in accordance with IEC 870.5.101/104, MODBUS, DNP3, etc
- Proprietary protocols management to ensure the complete integration with third parties RTU

Remote control systems - Elements (1-2)

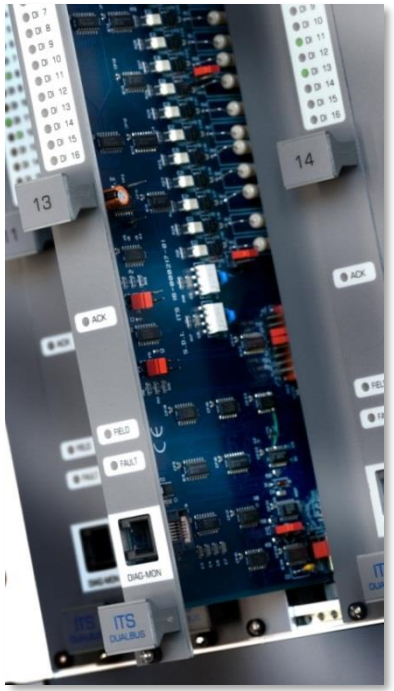
- SCADA server in redundant or single configuration
- Flexible operator stations (HMI) and videowall support
- Engineering workstations
- Historical data storage stations
- Field devices interface modules
- External systems interface modules
- Hardwired and wireless communication manager
- Disaster Recovery architecture manager
- Cyber Security management in accordance to IEC 62351 regulation

Remote control systems - Elements (2-2)

- Modular or single-board (RTU) remote control peripherals
- SIL 3 Safety SCADA software (developed in accordance with the "V-model" contained in **IEC 61508 standard**)
- Safety remote control peripherals (**SIL 3** certified RTUs)
- Smart I/O interfaces
- Field bus interfaces
- Sequence of Events RCE/SOE recorders
- Asset Management module
- Optimization modules

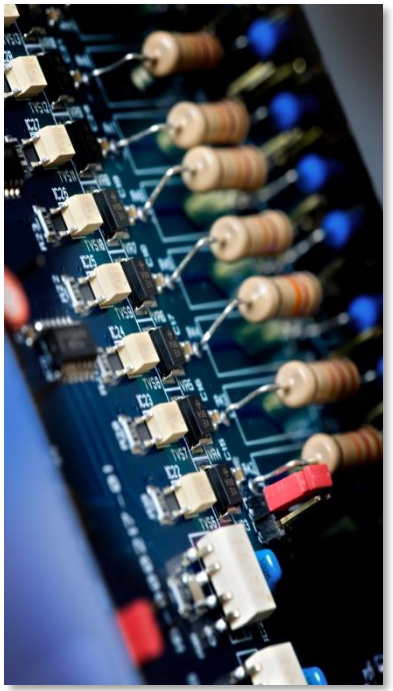
DCS systems (1-2)

- Modular architecture
- Highest reliability and safety levels
  - Hot-Backup redundancy management
  - Hot Insertion Boards (HIB)
  - Diagnostics
  - Safety Integrated Systems (SIL 3) according to IEC 61508 e IEC 61511 standards
  - Cyber Security management in accordance to IEC 62351 regulation



DCS systems (2-2)

- Alarm Management and Operator Audit Trails from HMI stations and control room videowalls
- LAN / WAN connectivity for field acquisition and remote control centers
- Data interchange with ERP systems granted by relational database management
- Scalability and flexibility of system architecture
  - Over 2048 control nodes
  - Over 1 Million of physical I/O tags

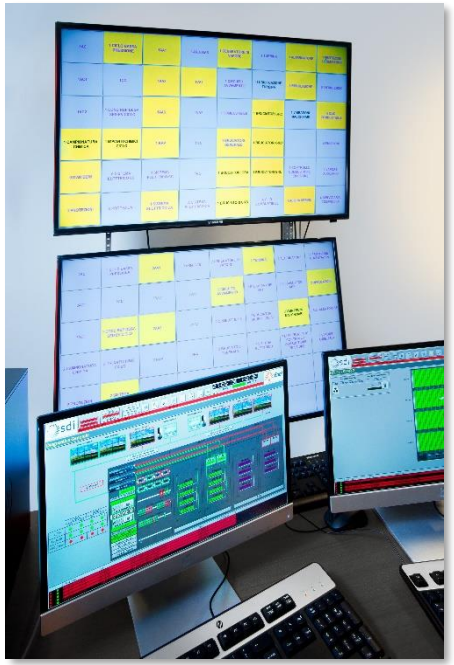


DCS systems – Elements(1-2)

- Modular control nodes
- **eXPert™ STAR range** programmable controllers
- Smart I/O interfaces
- Fieldbus interfaces
- Smart communication interfaces
- Loop controllers
- F&G - ESD – PSD modules (SIL 3)

DCS systems – Elements (2-2)

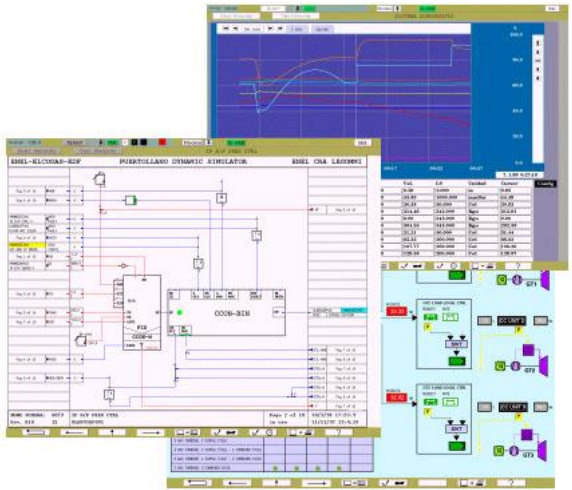
- Sequence of Events recorders RCE/SOE
- Flexible operator interfaces (HMI) and videowall support
- Engineering workstation
- Historical data storage stations
- Asset Management
- Plant optimization and advanced control modules



Simulation and Leak Detection systems

- **eXPert LDS** real-time Leak Detection System based on accurate simulation models derived by SCADA provided data– **eXPert™ LDS**

- Complete integration between real-time SCADA functions and simulation functions
- Specific packages for interactive simulators:
  - Plant design
  - Predictive and corrective maintenance
  - Operator training
  - Process performance optimization



Metering skids

- Complete technical and fiscal metering systems – **eXPert™ EMMS**
- Support for volumetric, venturimetric and ultrasonic measurement principles
- Metrological certified body
- Interface with EMS (Energy Management System)
  - Data acquisition
  - Enterprise systems data interchange
  - Analysis and accounting

Sdi and Industry 4.0

Connecting physical and digital wolrd

- Sdi's eXPert technology is ready for Industry 4.0 thanks to its advanced enabling features

High performance HMI

Remote devices wireless connection

Mobile device interface

Cyber Security management

Real-Time data analytics

Big Data management

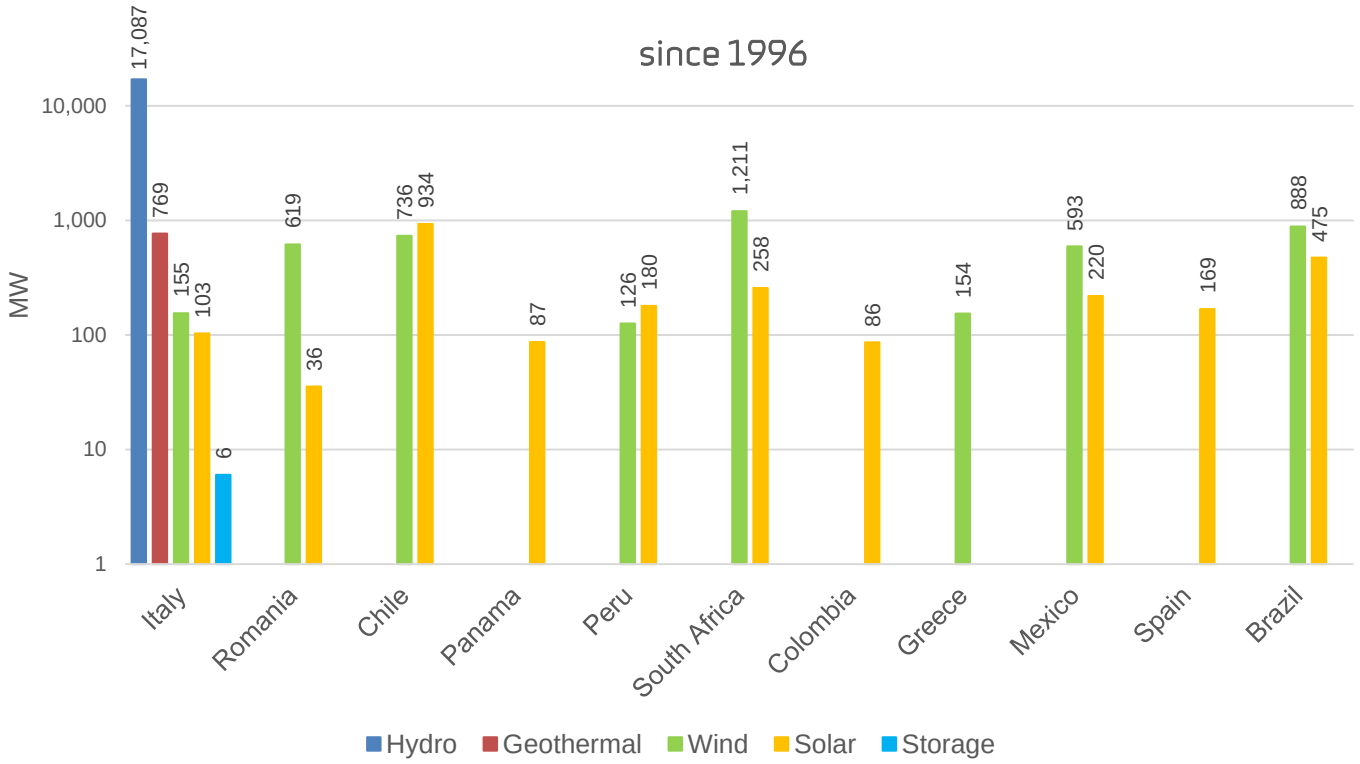
eXPert™ is Industry 4.0 ready

Solutions

- Green Energy
- Gas
- Power
- Public Utilities
- TSO
- DSOs

Geothermal Plant
Hydro Power Plant
Photovoltaic Plant
Wind Farm

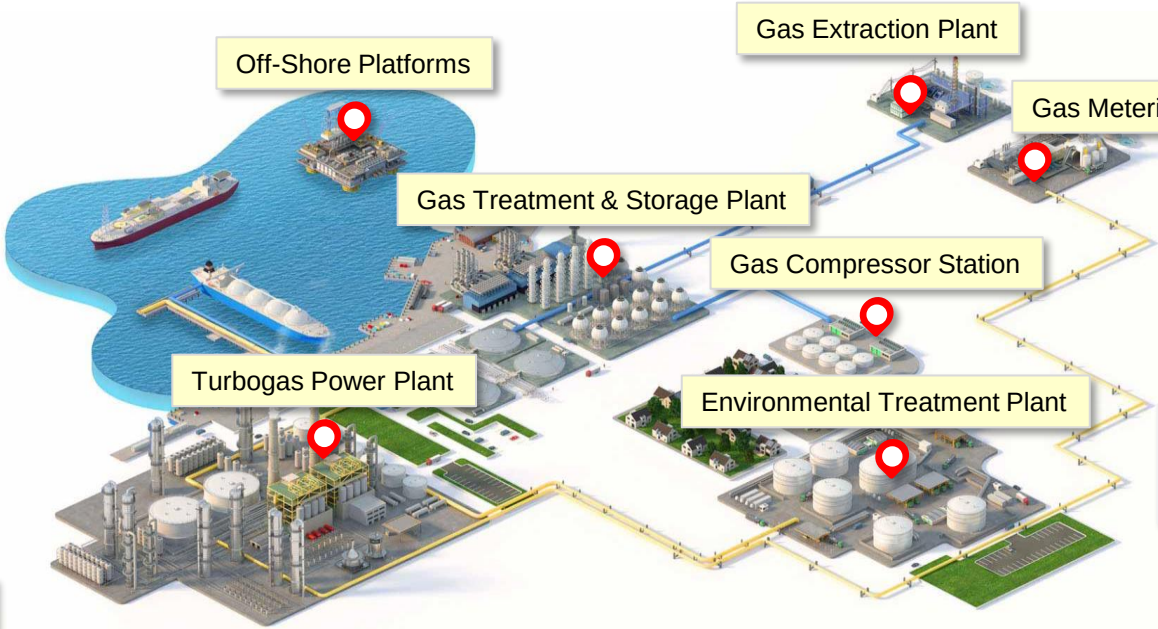
Green Energy - Portfolio



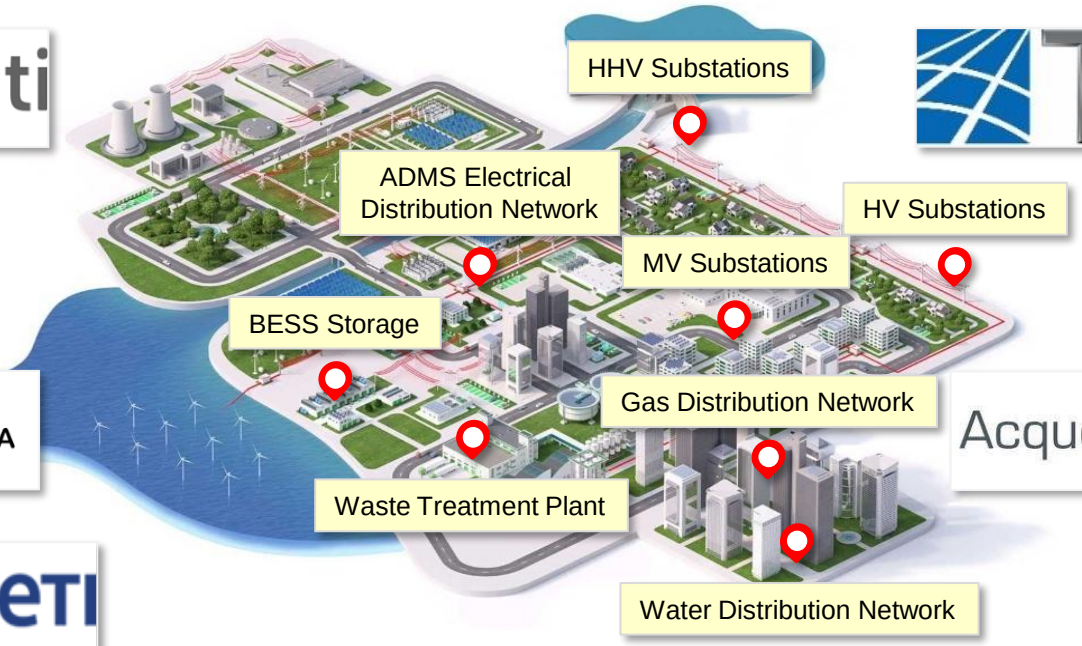
Managed power per type:

- Hydro: 17 GW
- Wind: 4,5 GW
- Solar: 2,5 GW
- Geothermal: 1 GW
- Storage: 6 MW

Total: 25 GW


Off-Shore Platforms
Gas Extraction Plant
Gas Metering System
Gas Treatment & Storage Plant
Gas Compressor Station
Turbogas Power Plant
Environmental Treatment Plant

Public Utilities, TSO, DSOs



unareti

Terna

DEA DISTRIBUZIONE ELETTRICA ADRIATICA

edyna

AMAIE ENERGIA E SERVIZI S.r.l.

Acque Veronesi

megareti ENERGIA E GAS

a2a ambiente

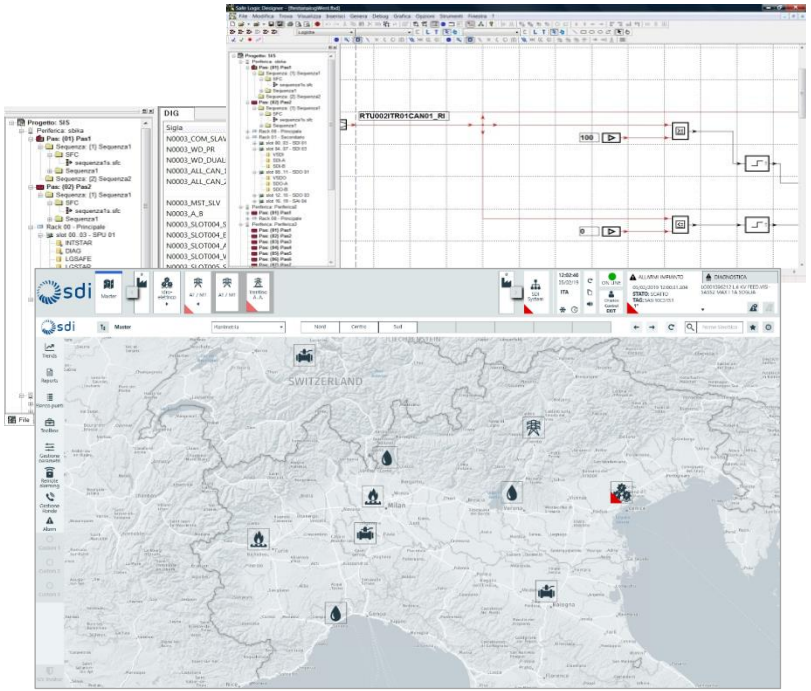
Services

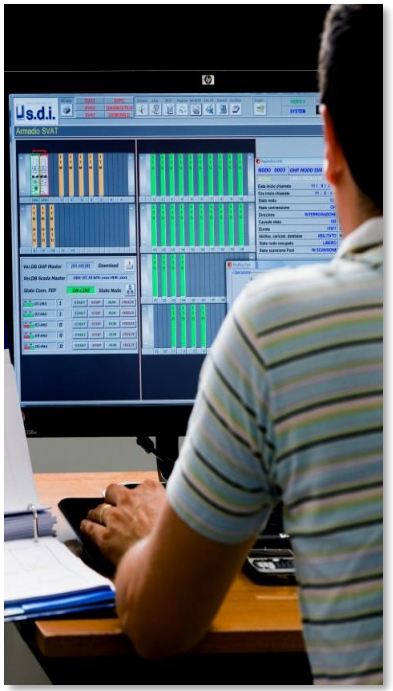
- Complete systems design and supply
- Engineering
- Functional integration of third parties devices
- Commissioning
- On-site maintenance
- Remote assistance and h24/365dd stand-by
- Courses for maintenance and system operators

Services

Complete systems design and supply

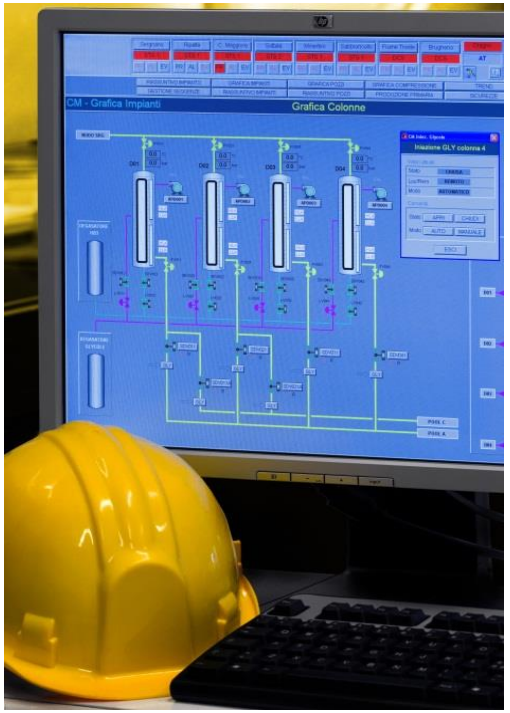
- Engineering
- Integration
- Building
- Configuration
- Installation
- Testing
- Commissioning
- Maintenance





Maintenance and support

- Software maintenance
- Hardware maintenance
- Remote assistance
- All-inclusive maintenance contracts
- Stand-by H24 service / 365 dd
- Factory technical support
- On site technical support
- Application-specific training courses
- System operators courses



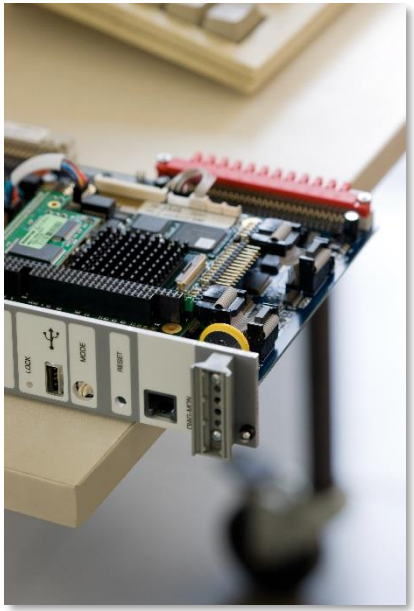
Research and Development

- Product management
- Custom applications design and development
- Software development
- Hardware development
- Public and private founded research projects

Research and development

Product management

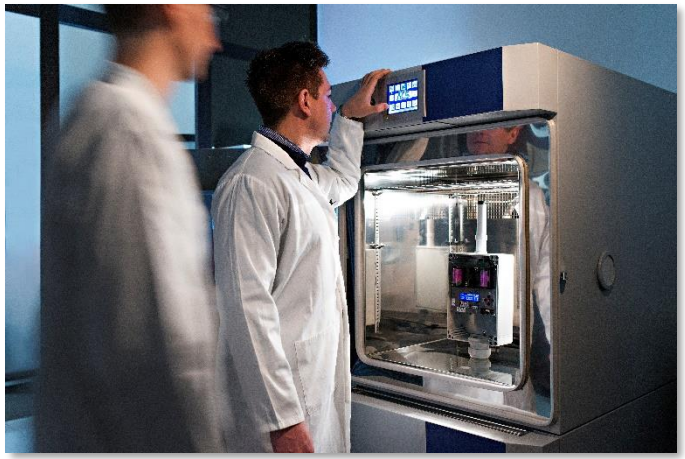
- Analysis of technological progresses and enhancements introduced in new hardware and software platforms applied to industrial applications
- Constant interaction with customers and experience learning in over 40 years of systems implementation
- Identification of new possible features in order to make the systems more and more performing while adhering to operational needs
- Participation in innovative projects, carried out in collaboration with leading universities and research institutes



Research and development

Custom development

- Design and development of engineering software applications
- Design and development of custom hardware devices for automation field
- Custom development based on functional or detail customer specifications
- Support for development of solutions that require certification from third party body



Our customers

- Direct customers
- VAR partners and integrators

Our customers

Some of our customers

Gruppo ENI

Gruppo SNAM
Rete Gas

Thank you for your attention

Company Profile