

The digital (and sustainable) transformation of energy

In our White Paper, we use data, trends and technological scenarios to describe the revolution that the energy sector is undergoing.

Between eco-sustainability and Digital Transformation

Renewable sources will supply 55% of the world's energy needs by 2035. According to Italy's Integrated National Plan for Energy and Climate, 30% of energy consumption must be covered by renewable sources by 2030 and the use of renewable sources must grow by over 20% in the transport sector.

Digital Transformation is expanding the Smart Grid concept: Blockchain, Cloud, Artificial Intelligence and 5G are generating a democratisation and decentralisation process that transforms those who consume energy into "prosumers".

What challenges do energy players have to address in order to innovate their business and increase their efficiency, reliability and eco-sustainability?

Today Digital Transformation is the main challenge for all businesses, including the Energy & Utilities sector, and represents a paradigm on which to measure approaches and methods. Ours are based on both traditional and frontier technologies, together with both business and process expertise, through which we implement the digital transformation of our customers.

We are witnessing an important technological drive: the use of new enabling technologies, such as Artificial Intelligence, the Cloud and Robotic Process Automation, is reinventing the business processes of Energy players, not only by making the use of their assets more efficient, but also by creating an economic system that originates from a smarter use of the assets.

Technology is the lifeblood of a company like Enegan, a free-market energy and gas trader that chose to use 100% green energy to help save the planet. In order to take on this challenge, we chose Engineering because it embodies certainty, reliability and innovation.

Ettore Froio
Energy & Utility Italian Market Executive Director, Engineering

Vincenzo Tartuferi
General Manager, Utilities & Telco Division, Engineering

Maurizio Castagna
Research & Development Manager ENEGAN



Watch video

300+
Customers

900+
Professionals

15+
Countries where we deliver projects

10+
Competence Centers

What we do



Oil

Decarbonisation is changing the hydrocarbons market: renewables are projected to make up over 50% of energy generation by 2035.

We support customers in their Digital Transformation journey, with our 10+ years of expertise in refining processes, using the latest technologies and methodological approaches.



Power

Global electricity consumption is expected to double by 2050.

We contribute to energy efficiency and to the development of renewable sources by creating solutions both in traditional processes and in new digital businesses.



Gas

Gas remains an important resource in the energy sector and is expected to evolve in production and distribution processes through the "Gas-to-Power" and "Power-to-Gas" concepts.

We oversee our customers' "core" processes throughout the entire supply chain, from production to distribution, up to trading and sale to the end-user.



Extra Commodity

5G, IoT or Big Data favour the transition to a people-based ecosystem, improving customer knowledge.

Thanks to our proprietary and innovative solutions, we support customers in the development of new digital business lines that offer services and products.



Water

Water demand is projected to grow by 55% in the next 30 years.

We optimise work management in the water sector with AI, IoT and all the various technologies related to Workforce Management.



Waste

We produce 2 billion tons of municipal solid waste every day, which is expected to increase to 3.4 billion by 2050.

We create Augmented Cities where we manage waste, following the principles of the Circular Economy, Blockchain and IoT.



Heating

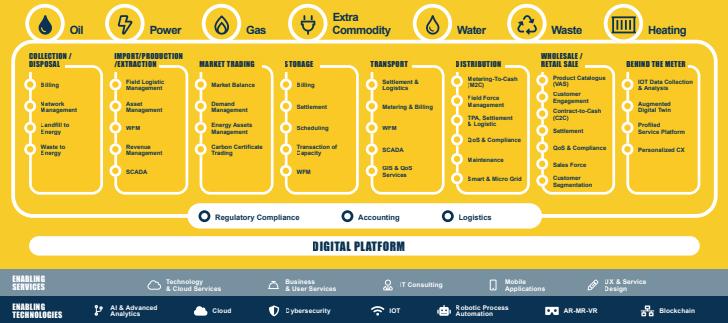
District heating could cover nearly 40% of Europe's thermal energy needs.

We provide IT solutions and process support for the management of energy technological systems.

Our Portfolio for Smart Energy & Utilities



Discover our Portfolio Map and our Case Studies



The World WE LIVE IN

- Augmented City
- Smart Transportation
- Smart Energy & Utilities
- Digital Media & Communication

The World that LOOKS AFTER US

- Smart Government
- E-Health
- Digital Defense, Aerospace & Homeland Security

The World WE WORK IN

- Digital Industry
- Digital Finance
- Digital Retail & Fashion
- Smart Agriculture

