



## ENEL GROUP

Number one producer of electricity in Italy, with a market share of 44%.

**Industry:** Energy  
**Geography:** Italy

### Deployment Summary

- Enel uses TIBCO's software to integrate internal systems and processes at all levels of their company. During the first phase, integration focused on Electricity Exchange (Borsa Elettrica) support systems, CRM and billing support systems in the gas area; CRM and billing support systems in the electricity area; and plant support systems.
- Enel uses TIBCO BusinessWorks™ software to provide an enterprise service bus (ESB) that connects several integration environments through a federated architecture.

### Benefits

- Supports rapid integration of various company activities based on different applications – from production and distribution of energy to customer support systems.
- Provides an integration infrastructure, accelerating deployment of new applications and new services.
- Provides the communications layer for Enel Group's service-oriented architecture (SOA).



"TIBCO is the technology platform that allowed us to focus our attention on design as well as implementation and on processes and their integration in order to achieve business integration, a key element to facilitate business improvement."

**Roberto Maddaloni, head of the Application Architecture Department, Enel.it**

## Enel Uses TIBCO to Integrate Processes from Power Plants to Customers

Enel Group is one of the major energy suppliers in Europe. It is the number one electricity producer and distributor in Italy with a market share of just under 44% and almost 30 million customers. Enel Group recently entered the gas sector and is already ranked second in the Italian market, with almost 2 million customers and a growth target of 50% more customers over the next four years. In the electricity sector, Enel Group is the world leader in geothermal energy production and one of the major players in the world of renewable energy, producing approximately 16.7 GW every year. Enel Group's international presence is set to grow in the very near future through an aggressive acquisitions campaign.

### The "Extended Business Integration" Project

Any company with business and geographic coverage like Enel Group has a highly complex and fragmented IT system. The need for an integration strategy was recognized some time ago, and intensified with projects like Energy Exchange, which completely changed the IT system for the generation of electricity, tying it to a series of synchronous and asynchronous business events. "Enel's outlook, in terms of business integration, was completely inappropriate," explains Roberto Maddaloni, head of the

Application Architecture Department at Enel.it. "We had to design and create the integration components with the same level of attention already adopted for the functional components. TIBCO helped us in this process, through an approach that included cultural aspects of enterprise integration."

The subject of integration, which Enel Group had addressed in 2000, was addressed on a wider scale with the implementation of the TIBCO platform – thus the project name, "Extended Business Integration."

### Why TIBCO

"Our decision to opt for TIBCO was based on quantitative aspects as well as other quality-related factors," said Maddaloni. "The requirements of an integration platform can be achieved through a combination of many elements which are not strictly related to one another. The TIBCO platform stands out for its high internal integration, with the same interfaces and the same 'look-and-feel' in all the areas it covers."

Enel Group saw the Extended Business Integration project as a means to achieve a true common infrastructure of services. "For us, TIBCO has become a corporate standard for integration, and integral to establishing a true service-oriented architecture," said Maddaloni.

"We decided to give the project an all-enterprise focus, as widespread as possible, to standardize the approach to integration, including the skills, the know-how and the methodologies involved."

### Integration from Production through to the Customer

Enel Group used the TIBCO-based integration project as the basis for a range of other initiatives affecting several areas of the company. One such area was the traditional electricity production and distribution area, where the introduction of the new Electricity Exchange system had revolutionized the company's standard processes. "This area requires significant integration: bids from the day before, bids from the day after, new players, such as Grtn (National Transmission Grid Operator), the sole buyer, and so on," Maddaloni said.

Enel Group also saw the need to integrate the new Giove- (Jupiter-) based billing procedures, which depend on SAP IS-U and the CRM Clarify system. The company initially created in-house integration application prototypes and then decided to rewrite everything using the TIBCO platform.

Another area that desperately needed an integration platform was gas supplies, a new sector for Enel Group, but one that is rapidly growing. "In the gas sector, where market trends are very similar to those already witnessed in the telecommunications sector, the problem was exacerbated by the fact that Enel Group grew through the acquisition of companies with non-standard IT systems," Maddaloni said. For example, the Camuzzi Group, which was acquired by Enel Group, had proprietary systems and a Siebel

CRM platform, as well as a SeeBeyond integration platform already in use, which was quickly replaced by the TIBCO integration platform.

### Measuring Success

Enel Group decided to measure success based on two parameters: assimilation of the TIBCO technology within the corporate culture and implementation on internal IT systems. "Training was one of the first activities Enel Group opted for after choosing TIBCO," Maddaloni said. "To date, we have already held over one thousand training days for Enel Group staff and the TIBCO platform is implemented on over 30 systems throughout the company." Furthermore, a series of methodology guidelines were defined to support all the stages of the integration process, from analysis through to testing and monitoring. This documented framework is available on the corporate portal. "We have created a true community of experts through which experiences can be shared and the culture of TIBCO business integration is spread throughout the company," Maddaloni said.

### Developments

Having achieved the initial objectives for the first implementation of the TIBCO platform, Enel Group is getting ready for new challenges. First, the progressive deployment of the platform to cover all of the corporate application fields. "Not just towards the more traditional business processes, but also to support the technical generation and plant running processes," Maddaloni said.

In parallel, an assessment of existing systems is being carried out with the aim of identifying areas for realignment and improvement of current integration

## TECHNOLOGY

### Solutions Summary

The Enel Group chose and implemented TIBCO BusinessWorks as a standardized integration platform to be implemented in the company's various areas of activity – from electricity to gas and from production to distribution of energy. Designed as an enterprise infrastructure project, the implementation of TIBCO's enterprise service bus software offered Enel a complete and uniform integration infrastructure, which was rapidly diffused throughout Enel Group to connect several integration environments. Thanks to TIBCO, the most widespread CRM platforms are being integrated alongside a number of managerial platforms, including SAP as well as Clarify and Siebel.

mechanisms and to improve operating efficiency through the evolution of the monitoring systems.

Another area of focus for future Enel Group projects is business activity monitoring (BAM). "Although we have already created some prototypes, we haven't used BAM to its full potential as it is one of the most advanced environments. It is almost always built on top of previously integrated environments and represents the high-level vision of integration," Maddaloni said.

"Beginning with the reference framework and the enabling technology, the corporate integration service infrastructure has been achieved," Maddaloni said. "The full operation of our business integration community completes the evolution process of business integration at Enel Group."



**TIBCO Software Inc.** (NASDAQ: TIBX) is a provider of infrastructure software for companies to use on-premise or as part of cloud computing environments. Whether it's optimizing claims, processing trades, cross-selling products based on real-time customer behavior, or averting a crisis before it happens, TIBCO provides companies the two-second advantage™ – the ability to capture the right information at the right time and act on it preemptively for a competitive advantage. More than 4,000 customers worldwide rely on TIBCO to manage information, decisions, processes and applications in real time. Learn more at [www.tibco.com](http://www.tibco.com)

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