

Smarter trading across the energy value chain

Power Trading and Retail System



Trusted partner for your Digital Journey

Atos

In today's turbulent and increasingly complex energy markets, Atos PTRS (Power Trading and Retail System) can give your business a clear competitive advantage. Your customers are already taking full advantage of liberalization, so what about you?



Trading to business advantage

Change is a given in today's liberalized energy business, which is characterized by intense competition, new business models and unprecedented levels of variability and price volatility. There are less and less certainties but one thing is for sure, tomorrow's industry will face even greater levels of diversity and an ever more complex value chain.

The unbundling of the traditional vertically integrated power utility has created big benefits for energy users and new business opportunities for energy companies but it has brought in its wake significant challenges.

As well as facing growing competition from nontraditional players and more complex commercial and regulatory environments, energy producers face increasing variability of both production and loads, and reduced levels of availability.

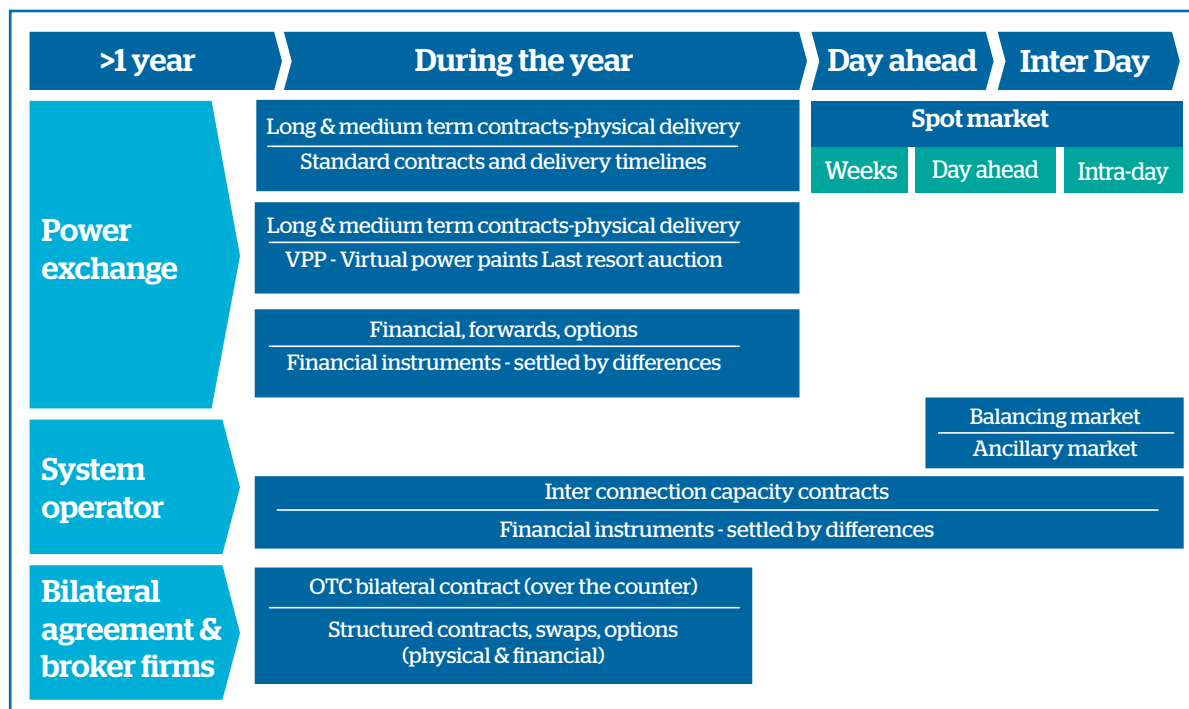
The past decade has seen the development of mechanisms such as TSO-backed markets and power exchanges, which have proved to be effective tools for countering the growing volatility and optimizing grid resources.

However, the amount of additional RES capacity, particularly wind and solar, scheduled to come online in the current decade will undoubtedly add more price volatility as renewable intermittent sources grow to become significant factors in short term markets and in energy trading portfolios.

As the structure and product offerings in short-term power markets becomes more complex, market participants will need to ensure information systems are up to the task of competing in a much more dynamic energy trading environment.

Share of RES-generated electricity in the EU to reach 35% by 2020.

Wholesale markets and transactions



Information is power

Energy companies are going through a period of unprecedented change but many are hampered by information systems which date back to an era when markets were much more predictable and the business environment stable. This prevents them from taking full advantage of the trading opportunities that today's dynamic market conditions create.

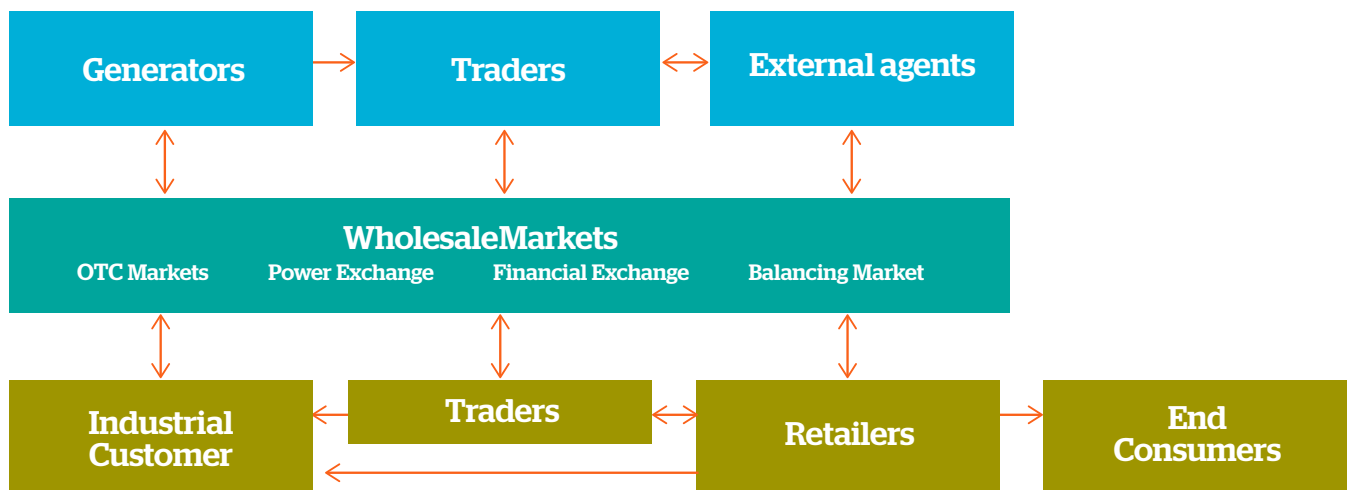
Deregulation and liberalization have transformed the energy sector into a dynamic information-driven business in which IT is used not just to help with operations management and decision support, but to drive competitive advantage through smarter trading strategies.

For example, when gas prices are high it may be more profitable for CCGT producers to sell gas rather than use it to generate electricity, and purchase power in the market to meet their load requirements or contract commitments.

These arbitrage opportunities can also exist across the generation portfolio -- through dualfuel generation, for example -- but generators that wish to take advantage of them need to adopt a smarter approach to energy trading.

It is not even necessary to own physical assets to participate in today's energy markets, as shown by the advent of energy trading companies and the development of new ideas such as "virtual power plants" which may only exist as software code.

In this new scenario of constant change and fragmented value chains, the ability to optimize the process flows and business intelligence between wholesale trading, generation and retail activity will become a key differentiator and a source of competitive advantage.



↑ =PTRS Trading Management

Complete ETRM solution —

Atos Power Trading and Retail System(PTRS) is a comprehensive energy trading and risk management platform that spans the needs of three groups of market participant: traders and retailers, generators, RES/self producers.

Whatever your role, PTRS has been designed to help you achieve a sustainable business advantage in today's turbulent and increasingly complex wholesale and retail markets.

Using PTRS, producers can optimize the energy supply to fluctuating demand, and ensure that all the energy generated is sold at the optimum price.

As well as handling spot deals on the day-ahead and intra-day markets, you can use PTRS for long and medium-term contracts on power exchanges or financial transactions such as options and forwards or OTC transactions via broker firms.

As well as offering a comprehensive set of tools for traders, PTRS integrates front , middle and back-office functions to handle not just trading, but deal capture, settlement and billing, as well as portfolio evaluation and management.

The PTRS solution is being continually enhanced and broadened to meet the evolving demands of today's integrated energy businesses. The most recent additions to the PTRS suite include modules covering areas such as gas trading and logistics, emissions rights trading and risk management.

Multiple players, diverse business benefits

Role	PTRS Business Benifits
Traders and Suppliers	<ul style="list-style-type: none">• Ensures continuity of supply at fair prices• Delivers superior service to end users• Builds a complete picture of market developments through comprehensive business intelligence• Manages trades to ensure maximum ROI• Handles interfaces with other players through efficient, automated systems
Generation Companies	<ul style="list-style-type: none">• Manages production for maximum efficiency and profitability• Plans generation levels based on real-time information• Trades output for highest available margins• Manages downtime and maintenance in ways that protect business outcomes
Self Producers and RES	<ul style="list-style-type: none">• Reduces risks and mazimize profits as the market evolves• Manages your operations to ensure market alignment• Aggregates capacity from small generators to be negotiated in the market• Allocates committed schedules to each production unit

Technology tailored to your business

PTRS has been developed by Atos to cover the increasingly complex requirements of liberalized and liberalizing energy markets. It allows you to trade the full range of contracts across all time horizons and offers extensive connection possibilities both internally to your existing business systems and externally to markets, exchanges and third parties.

PTRS provides a flexible and integrated solution for energy trading and risk management. Its modular design means your ETRM solution can be tailored to your specific business model and customized to your existing IT capabilities and trading maturity, so reducing implementation times and risk.

The wholesale market is the key arena for energy trading and it is characterized by agreements of widely different scale and duration.

Reflecting the complexity of wholesale markets, the PTRS Wholesale Contracts module can deal with a large number of contract types. It allows you to manage physical and financial deals with ease, and has been designed to register, settle and bill complex contracts from the OTC market.

In addition, its interface with the standardized instruments listed in organized markets supports both auction and continuous trading in futures, forwards, options and swaps

Redefining retail

The retail energy business today is a lot more complex than it used to be. The Retail Contracts module in PTRS has been designed to accommodate the complex types of supply contract included those tied to formulas based on external indices such as forward curves or Brent oil.

APIs allow the exchange of information with customer-facing CRM systems and back-office ERP systems using web services or files.

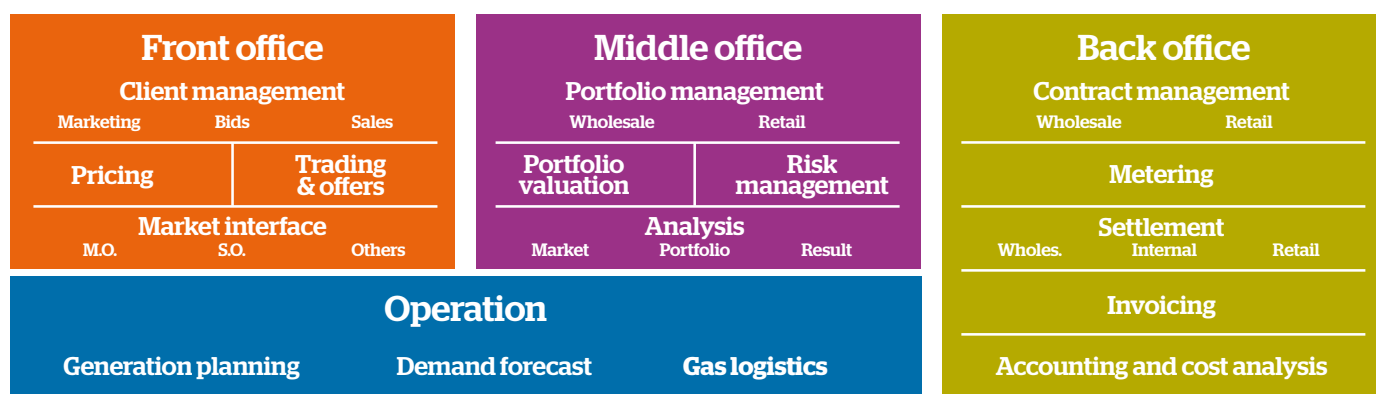
For businesses that want a turnkey solution, PTRS can also be implemented with an

integrated CRM system, thus providing a complete end-to-end solution for retail-focused energy businesses.

Traders interact with organized markets via the PTRS Power Exchange Front Office module. This allows market participants to prepare and submit bids to day-ahead, intraday and ancillary services markets using simple templates coded in HTML or Excel.

Rounding out the PTRS solution are specialist modules for Portfolio Management, Physical Dispatch, Risk Management and Gas Trading.

Irrespective of the scope and scale of the implementation, customers can rest assured that PTRS is a flexible solution that can easily be adapted to the customer's business model and local market specifications, languages and characteristics.



Proven experience —

PTRS is a proven solution that has been in existence for more than a decade and today has more than 15 reference customers. As markets have evolved to embrace deregulation and liberalization, so too has PTRS.

Reflecting the diversity of the modern energy business, our PTRS customers have distinct profiles in the energy industry- generators, traders, retailers – and all are active participants in the wholesale energy markets.

Energy generators who wish to implement the PTRS solution will benefit from the synergies and enhancements made possible by the recent strategic alliance between Atos and Siemens.

This brings together the experience of Siemens as provider of generation technology

equipment and the complementary experience of Atos as provider of IT solutions for energy wholesale markets.

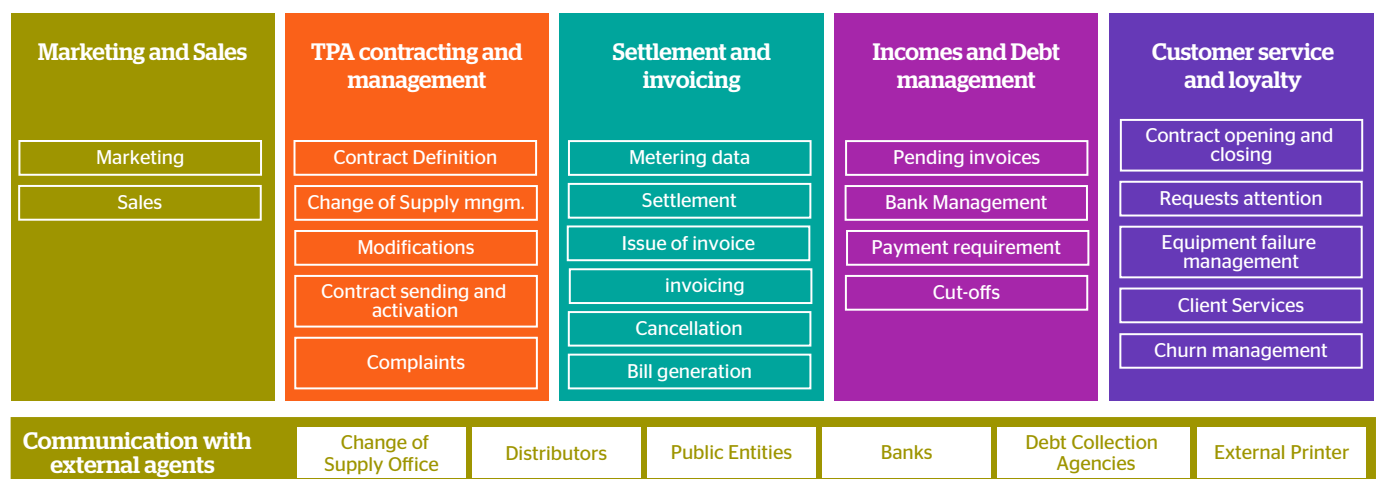
This alliance takes PTRS to a next level of integration by enabling generators to complement the ETRM strengths of Atos PTRS with the specialist functionalities offered by Siemens jROS offering for energy generation planning.

This integrated approach lets generators access an extensive range of modules for all aspects of optimizing their power plant

and contract portfolio. At the same time, it minimizes integration risk because jROS and PTRS communicate via joint standard interfaces tested in-house, so they do not need to be implemented in a project first.

Easier technical integration translates into a real competitive edge to generators. By offering a seamless data flow between generation planning and energy trading, the combined PTRS-jROS solution allows faster decisions to be made in the bidding process on energy exchanges and for bilateral trading.

PTRS Commercial System



Integrated in the global suite, PTRS offers a Commercial System to manage the global contract lifecycle for retail contracts. The module covers the Front-Middle-Back office activities with the implementation of a CRM platform based on a commercial product, a Forecast Calculation Module, MDM for managing actual consumptions, flexible settlement calculation allowing tailored contracts and ERP capabilities for payments and debt management.

About Atos

Atos SE (Societas Europaea) is a leader in digital services with pro forma annual revenue of circa € 12 billion and circa 100,000 employees in 72 countries. Serving a global client base, the Group provides Consulting & Systems Integration services, Managed Services & BPO, Cloud operations, Big Data & Cyber-security solutions, as well as transactional services through Worldline, the European leader in the payments and transactional services industry. With its deep technology expertise and industry knowledge, the Group works with clients across different business sectors: Defense, Financial Services, Health, Manufacturing, Media, Utilities, Public sector, Retail, Telecommunications, and Transportation.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and is listed on the Euronext Paris market. Atos operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline.

Find out more about us

atos.net

ascent.atos.net

Let's start a discussion together



For more information: dialogue@atos.net

All trademarks are the property of their respective owners. Atos, the Atos logo, Atos Codex, Atos Consulting, Atos Worldgrid, Worldline, BlueKiwi, Bull, Canopy the Open Cloud Company, Unify, Yunano, Zero Email, Zero Email Certified and The Zero Email Company are registered trademarks of the Atos group. Atos reserves the right to modify this document at any time without notice. Some offerings or parts of offerings described in this document may not be available locally. Please contact your local Atos office for information regarding the offerings available in your country. This document does not represent a contractual commitment. November 2016. © 2016 Atos