

drilling

down deep into energy
for sustainable information value



Your business technologists. Powering progress

Atos



No easy oil

There is no easy oil. There is no easy gas. World demand for energy may fluctuate with the rhythms of the economy, but the overall trend will remain up. Energy companies must continue to meet demand in the most challenging of scenarios. Operational excellence is the bedrock of your profitability, and information excellence is its foundation.

Oil and Gas companies have some of the most complex and most widely distributed operations of any human endeavor. Not only do you operate in some of the world's harshest environments, but you do so under constant scrutiny. More than in any other industry, you must meet and be seen to meet your environmental responsibilities while delivering energy at an affordable price and with a return that will satisfy your shareholders.

To minimize risk and maximize performance in scenarios as demanding as these, the information on which you rely to make good decisions must be timely, accurate and relevant. When Atos looks across the Energy and Utility sectors, we follow the mantra **“control, innovate, sustain.”** Here's why...

Control

If you can look right across your operations and gain a clear understanding of resource use and production status, you establish the most favorable position for good decision-making. The closer you can get to real-time information, the better it is.

Innovate

High-quality real-time information becomes, in turn, the foundation for new ideas. With the ability to visualize agile combinations of both machine and business data, creative and credible innovation will flow.

Sustain

As an energy company, you are in it for the long term. Innovative ideas need to contribute sustainable business value and that sustainability spans financial, social and environmental durability.



There are thousands of examples of how this thinking can be turned to practical advantage, powering progress every day from the rig to the refinery and beyond.

Predictive maintenance and asset management provide a great illustration. The ability to minimize non-productive time is high on everybody's agenda, and this brings the ability to execute on service according to need rather than time-schedule right into focus. With a real-time data feed from a drill-head sensor, for example, we can optimize service intervention, extend the useful life of the asset, and minimize the risk of accident or injury.

The OT and IT fit

Think about a basic data audit for any energy company. Data breadth and volume are beyond the imagination of anybody outside the industry. There are two constant streams of machine and business traffic flowing through your company: that generated by Operational Technology (OT) and that driven by Information Technology (IT).

Mastery of this constant flow is the key to your ability to control, innovate and sustain. Most importantly, you need to be able to create a new dimension of intelligence by combining information from OT and IT. These two have traditionally remained largely separate, but from now on, that must change. Sure, different people are going to need different views, but the principle is clear: energy is a practical science, and science is built on evidence.

Atos takes the initiative in powering progress. Once we have established the importance of the principle of combined OT and IT real-time data, we put it to good business use. We present a simple proposition built around four clear areas of competence.

1 We use our industry-specific expertise in energy to help you improve operational processes, increasing efficiency and profitability and reducing risk. Mastery of real-time SCADA data is critically important here.

2 We take care of the business IT systems on which every organization relies to manage functions including HR, procurement and finance. Although generic, industry knowledge still counts: an oil company is not a bank.

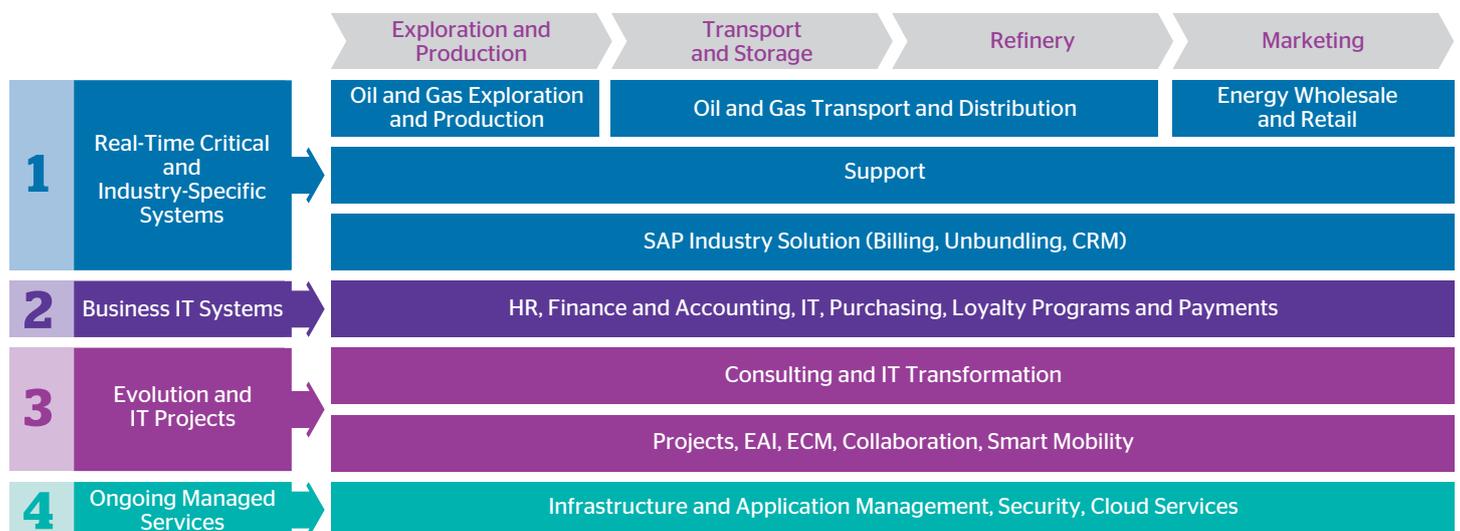
3 Change is continuous, and the actions which result from the decisions you take must be managed effectively. Our consultancy and system integration services ensure that every project we undertake is delivered on time and on budget.

4 Energy companies cannot miss a beat: operations continue all day every day. The systems on which you rely must be continually managed and when support or intervention is required, it must be calm, efficient and cost-effective.

Intelligence and reporting

Before taking a closer look at Atos in energy, let's just consider intelligence and reporting. Real-time data mastery is important because it is the foundation of responsible decision-making. The scope is as wide as the range of professional roles within your enterprise: everybody from the Oil Refinery Manager to the CFO needs a reliable vantage point.

Wherever your people are working around the world, and whatever they are working on, they need clear and relevant dashboards at their fingertips. They need to be able to share information securely with both colleagues and contractors, and they need to be able to aggregate information with the minimum of manual intervention. And this is not just about people: actionable rule-based machine-to-machine communication is an increasingly important part of the mix. From now on, if you engage with any IT partner, make sure that they can make this happen: because if they can't get the big picture - neither can you.



Inform to achieve

Atos delivers focused expertise right across the energy landscape. We draw on exceptional experience in turning real-time data to actionable intelligence. Different scenarios need different solutions (no two sets of heritage applications are the same). Remaining mindful of the differences, we always drive hard to share best practice.

This is not an encyclopedia. The examples below give a flavor of how Atos can help you improve utilization, streamline process and reduce risk. All these activities build on deep industry knowledge. But let's not forget core IT and business process management skills. These are equally important and we can also take full responsibility for every ruggedized PC, every network component, every application upgrade, and every billing transaction.

Oilfield monitoring and optimization

Atos creates a continuously refreshed digital portrait of your oil and gas upstream operations. You get to exploit previously siloed information in real-time. This not only contributes to optimized drilling, development and production operations; it also reduces risk and supports effective predictive maintenance.

Pipeline integrated management

You need to manage your transport and distribution networks to exceptionally high levels of consistency and safety. An immediate and reliable view of the entire network is a pre-requisite. Atos will bring together real-time data streams from right across the network with agility and precision, allowing you to compare current and historical data, and to act on the result.

Commercial gas dispatch

Gas dispatch today must allow increased collaboration and secure third-party access to shared systems. Atos has worked side by side with major gas operators since the start of energy market deregulation. Our gas commercial dispatch solutions are robust and comprehensive, handling everything from forecasting to contract management.

Refinery I/O logistics

Refinery logistics demand instant response to changing physical and financial conditions. Operators need to handle minute-by-minute fluctuations in price and demand, without ever losing sight of the fact that in potentially hazardous environments, safety always comes first. Atos designs, builds and operates exceptionally robust solutions.

Enterprise asset management

Energy company asset registers are complex. Heavy reliance on third party specialists means that the extended register must also encompass partner resources from across the globe. Atos can handle the most complex asset mix - feeding real-time data directly into its predictive maintenance solutions to extend asset life-cycles and keep your operations running productively.

Workforce mobility

Mobility is the watchword in energy. People have to work safely and productively wherever they are, and today, even the toughest roughnecks are digitally literate. Combining GIS data with extended process and workflow systems, we can support every member of your workforce while providing the precise resource data needed for planning and allocation.

Atos and energy

The energy sector is intensely physical. It always has been. Today, however, the continual flow of oil and gas must be mirrored by a continuous flow of actionable information. Dramatic increases in the opportunities for gathering reliable digital information let you construct up-to-the-minute pictures which work.

Energy professionals need actionable intelligence in all aspects of their work:

- ▶ To coordinate resource and monitor production on a global scale
- ▶ To minimize environmental impact and to maximize asset utilization
- ▶ To respond instantly to changes in demand and corresponding fluctuations in market value.

Atos knows how to deliver this actionable intelligence. We have around 3,000 energy and utility industry IT experts, of which 1,500 are dedicated to Atos WorldGrid expertise. They have strong and complementary track records in both industrial control and business process systems, and it is this dual focus which is particularly relevant to our energy clients today.

In July 2011, Atos combined forces with Siemens IT Solutions and Services, almost doubling our total workforce to around 78,000. The combination is not just about size however, it's about skills and experience too.

This combination brings us closer to Siemens, and this is going to be of clear benefit to our energy and utilities clients. A combined research and development initiative worth over €100 million will, for example, feed transformational ideas and practices directly into the engagements we undertake together.

With over 30 years' sector experience, we already serve some of the best known names in the business. Our client portfolio includes BP, GDF Suez, PTT Group, HPCL, Repsol, Shell and Total.

Next steps

These are exciting times for us all. The world is thinking differently about energy - about how to source it, manage it and use it.

We are always keen to hear about your immediate requirements. If, for example there are specific IT issues or objectives you wish to discuss, we are ready to talk. We are also eager to share ideas about new commercial engagement models - with the emergence of the cloud, for example, there are opportunities for you to extend service without capital investment and at minimum risk.

But perhaps most of all, we would welcome the chance to sit down together and talk energy. We have dedicated energy and utility centers of expertise in France, Germany, Spain and China. At each of these, we can offer hands-on sessions for any of the specialist areas discussed here.

Information excellence underpins your operations.

And this is what we deliver.

Your business technologists.

Powering progress. Atos.

Jos Vanhommerig
Atos Business Technologist,
Energy

“Yes, we are an IT company - but we are an IT company that can support our energy clients from the rig right up to the dashboard of the CEO.”



About Atos

Atos is an international information technology services company with annual revenues of EUR 8.7 billion and 78,500 employees in 42 countries. Serving a global client base, it delivers hi-tech transactional services, consulting, systems integration and managed services. Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. It is the Worldwide Information Technology Partner for the Olympic Games and is quoted on the Paris Eurolist Market. Atos operates under the brands Atos, Atos Consulting, Atos Worldline and Atos WorldGrid.

For more information, contact: dialogue@atos.net

atos.net

Atos, the Atos logo, Atos Consulting, Atos Worldline, Atos Sphere, Atos Cloud, Atos Healthcare (in the UK) and Atos WorldGrid are registered trademarks of Atos SA. All trademarks are the property of their respective owners. June 2011© 2011 Atos.

