succeed

in global manufacturing

from green to growth with enterprise sustainability

Atos

Sustainability is growth

Enterprise Sustainability is becoming increasingly important for long-term growth strategies.

The concept of Enterprise Sustainability is evolving fast. It was once seen as being almost exclusively focused on environmental performance and carbon reduction. Today manufacturing companies understand that sustainability also has a direct impact on the whole business and helps to ensure better profitability, faster growth and assured business continuity – now and into the future.

Enterprise Sustainability focuses on delivering essential business benefits, which include:

▶ Making **more efficient** use of key resources such as energy, water and raw materials, enabling manufacturers to cut running costs, freeing-up capital for investment, while also improving margins

▶ Improving **operational effectiveness** through greater transparency and access to accurate, integrated performance data in a timely fashion

▶ **Better management of risk** in all its forms, leading to improved management of complex value chains and assured compliance in different jurisdictions

▶ **Better safety management**, reducing the possibility of accidents, ensuring product integrity and safeguarding brand reputation.

For all these reasons, Atos sees Enterprise Sustainability as an integrated driver for competitive advantage and higher shareholder value: an integral part of business as usual, from 'top floor' to 'shop floor'.

Without a commitment to sustainability there can be no enduring success. A sustainable business strategy must incorporate enterprise sustainability solutions.

Sven Oudkerk, Global Director Sustainability for Manufacturing, Atos

Proven excellence in sustainability

For Atos sustainability has become a way of life, and our leadership position in Corporate Social Responsibility (CSR) and Sustainability Solutions is widely recognized.

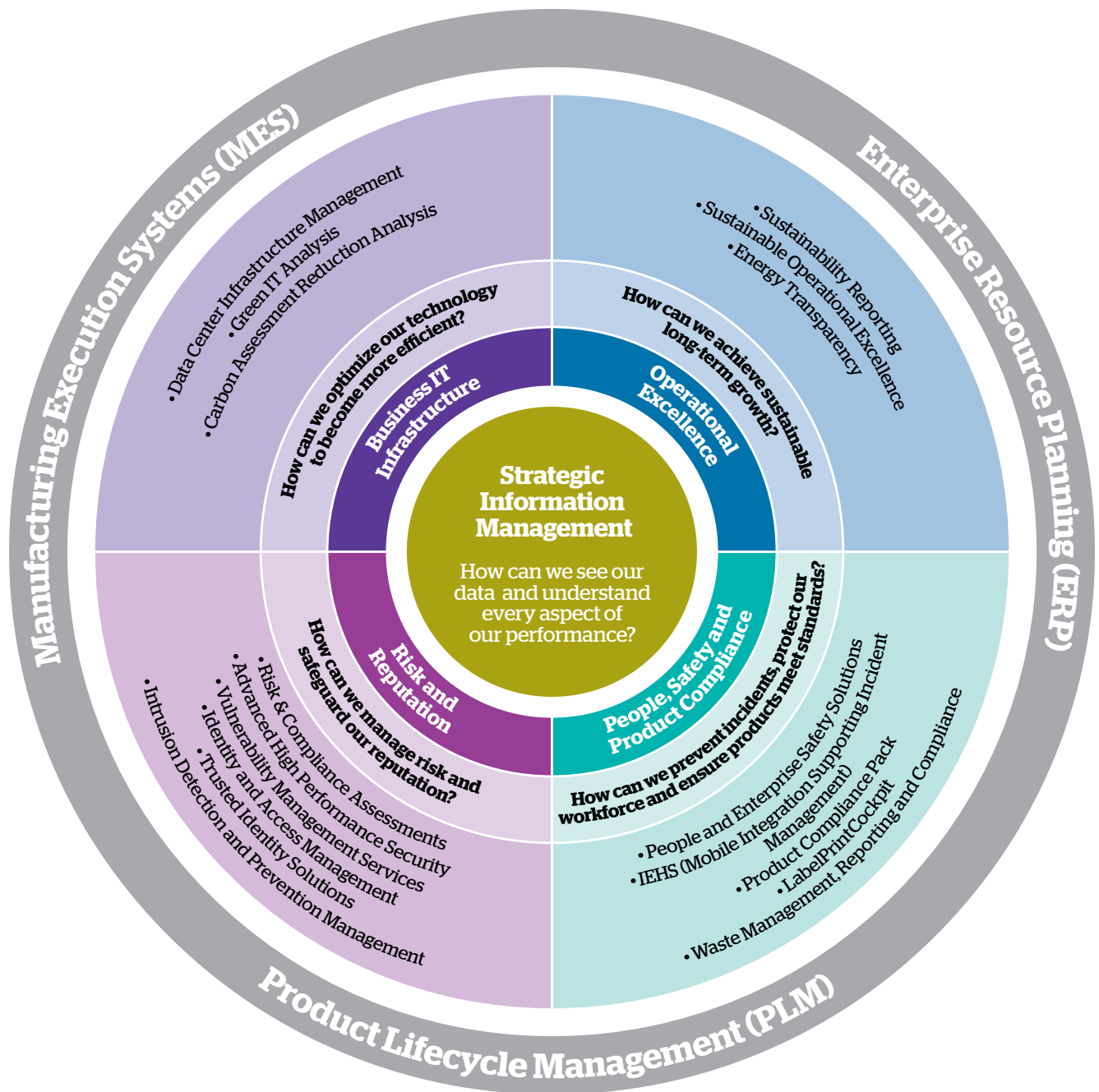**Atos is recognized for its achievements in becoming a sustainable company.**

Some highlights:

▶ We are a part of the Dow Jones Sustainability Index and the London FTSE4Goods index and are highly rated by Vigeo, which measures CSR performance

▶ We are consistently rated as a 'top performer' by the Global Reporting Initiative (GRI), which has recognized Atos as an exemplar for our industry. In 2013 Atos received the highest possible rating of A+ from GRI (for the third year in succession)

▶ As part of our Ambition Zero Carbon project we have already reduced our carbon emissions by 41% compared to the 2008 benchmark and are committed to a 50% reduction by 2015. We also aim to implement a carbon-neutral energy supply for our strategic data centers by end of 2015

▶ We are committed to helping our employees feel fulfilled and motivated, thanks to our wellbeing@work program. 24 geographies have taken part in our wellbeing survey, designed to help drive future policies, while three Atos workplaces, in Poland, Turkey and Austria, have been certified as the best places to work in their countries by the Great Place to Work Institute.

Our own successes are giving us best practice insights that we are leveraging for the benefit of our clients:

▶ Our own IT is rated among the cleanest and greenest anywhere. Our Green Data Centers are optimized for low energy use and reduced emissions, and we now offer these services to all our clients

▶ Our move towards Zero email™ is cutting travel-related emissions by use of social enterprise collaboration tools, including our own blueKiwi platform. We also offer these innovative strategic solutions to our clients

▶ We are rolling out our Smart Campus concept, which we developed at our new headquarters in Bezons, using the newest technology and ways of collaboration, while contributing to our employees' wellbeing at work

▶ Our enterprise sustainability solutions are best in class:

  − Verdantix, the leading independent analyst firm focused on energy, environment and sustainability, has placed Atos in its "Green Quadrant® Sustainable Technology Services (Global) 2013", the leaders quadrant, for high momentum and capability for sustainable technology

  − We are one of a selected group of companies that has earned high-level recognition from SAP as a leader in sustainability solutions, receiving the prestigious Pinnacle award from SAP in both 2012 and 2013.

Delivering multiple benefits now and in future

We base our strategy for enterprise sustainability on a clear vision. Strategic information management is at its heart.

The Atos Enterprise Sustainability portfolio connects our manufacturing solutions with data and information management to deliver sustainable business benefits.

Strategic Information Management — How can we see our data and understand every aspect of our performance?

Business IT Infrastructure — How can we optimize our technology to become more efficient?
- Data Center Infrastructure Management
- Green IT Analysis
- Carbon Assessment Reduction Analysis

Operational Excellence — How can we achieve sustainable long-term growth?
- Sustainability Reporting
- Sustainable Operational Excellence
- Energy Transparency

Risk and Reputation — How can we manage risk and safeguard our reputation?
- Risk & Compliance Assessments
- Advanced High Performance Security
- Vulnerability Management Services
- Identity and Access Management
- Trusted Identity Solutions
- Intrusion Detection and Prevention Management

People, Safety and Product Compliance — How can we prevent incidents, protect our workforce and ensure products meet standards?
- People and Enterprise Safety Solutions
- IEHS (Mobile Integration Supporting Incident Management)
- Product Compliance Pack
- LabelPrintCockpit
- Waste Management, Reporting and Compliance

Manufacturing Execution Systems (MES)

Enterprise Resource Planning (ERP)

Product Lifecycle Management (PLM)

Delivering real business benefits

We have created a manufacturing focused strategy for sustainability that is designed to deliver clear business benefits as well as sustainability excellence.

Energy reduction, risk reduction and prevention, image building, employee satisfaction, not only contribute to the sustainable well-being of the company, they also are essential elements for safeguarding the future.

Taking this business-focused view, we turn sustainability into a driver for competitive advantage and increased shareholder value for manufacturing organizations across the globe.

Atos Enterprise Sustainability

Is built from the following major components, and delivered along the whole value chain – we consult and design, we implement and operate the services and solutions:

▶ **Operational excellence**

▶ **People, safety and product compliance**

▶ **Risk and reputation**

▶ **Business IT infrastructure.**

All of which are connected to a growing range of Enterprise Sustainability portfolio elements.

Strategic Information Management

Information and information management are at the heart of Enterprise Sustainability, driving all of our sustainability-related solutions. Atos is an acknowledged leader in all aspects of information management, from Big Data solutions to real-time information flows for integrated manufacturing. Backed by world-class consulting skills, this means that information-based solutions are core business for us.

Our leadership in handling data enables us to collate, integrate and present insights concerning achievements against agreed sustainability criteria. This gives stakeholders and decision-makers accurate and timely insights about how key processes and business units are performing at any given moment, while revealing areas of concern and opportunities for improvement. Business performance is in this way linked to sustainability, resulting in competitive advantage for our customers.

Operational excellence

The effect of improved sustainability performance will be to push costs down and to enable improved efficiency in all parts of the business.

The Atos approach is designed to give clients the insights and tools they need to optimize both their individual processes and their entire process landscape. A set of reporting tools enables organizations to move fast in identifying and presenting the hard facts about current sustainability performance levels, while also delivering the insights that lead to purposeful intervention for performance improvement.

Key offers include:

Sustainability Reporting. Being a sustainable business makes sense, but being sustainable is not easy and proving sustainability is tougher still. It's not hard to see why. Your business is almost certainly generating all the data you need to identify where you stand today, to spot the obstacles to better performance and to draw up a roadmap to the future. Unfortunately, relevant data are normally generated within different systems and applications and in different formats, often with manual input, which makes data collection slow and costly. Reporting is therefore far from straightforward, while insights into potential performance and profit improvements are often missed. Not having a single, end to end view of your performance is the biggest obstacle to change for the better. Atos can clear the path and open up your route to better sustainability performance, with all of the benefits in cost-saving, full compliance and higher efficiency this brings.

Atos helps your organization to track and communicate sustainability performance, set goals and objectives, manage risks, and monitor activities while reducing the time and cost spent collecting data and compiling disclosures and reports.

Sustainable Operational Excellence provides integrated visibility on key indicators, using data flows from all core processes and systems. Not only does this enable better process management to ensure higher efficiency in operations, it also charts the levels of sustainability across a complex organization, enabling the strategic move from supply chain to value chain to value web. We use sustainability as a practical tool for achieving higher levels of efficiency in core processes, using our Sustainable Operational Excellence approach.

We also provide a strong focus on all aspects of energy usage. We make energy data transparent and available in real time through comprehensive monitoring and reporting. The ability to optimize energy usage is a key factor in improving cost performance, which in turn drives competitive advantage.

Energy Transparency is designed specifically for manufacturers that have high energy use as part of their business model. Energy Transparency uses a set of powerful operational, analytic and predictive tools that run on SAP HANA*, providing in-depth assessment of where energy is being used, where potential wastage might occur and how to intervene effectively.

*SAP HANA** is an in-memory data platform that is deployable as an on-premise appliance, or in the cloud. It is a revolutionary platform that's best suited for performing real-time analytics, and developing and deploying real-time applications. At the core of this real-time data platform is the SAP HANA database, which is fundamentally different than any other database engine in the market today. This database can process enormous data sets, in real time, with no data preparation, at high speed.

People, safety and product compliance

Sustainability policies play a key role in mitigating risk to people, processes, and products, while ensuring compliance with national and international regulations.

For manufacturers today compliance is a vitally important topic. Every company needs to prove that it maintains relevant data concerning the handling and movement of substances in order to meet global regulations. For industries that use substances, such as hazardous chemicals, with the potential to cause environmental damage or other health risks, this is a particularly important area. That makes it essential to align or embed appropriate controls within core processes, including those that are mission-critical.

It is equally important to keep the workplace safe, protecting employees, stakeholders and the corporate brand from the negative impact of major accidents, while making sure that hazardous materials are correctly handled across extended value chains. Atos is an established leader in many aspects of **Safety, Health and Environment (SHE)**, and we use the insights gained for our own activities to help clients improve their performance.

Our **People and Enterprise Safety Solutions** provide a structured approach to all aspects of incident and risk management, from initial reporting of safety observations, near-misses or accidents, through investigation, final close-out and reporting.

iEHS - the mobile integration supporting Incident Management – supports your safety culture and brings incident management to employee mobile devices via an intuitive interface. The app will enable you to record all incidents and rapidly mobilize the right employees. Incident recordings will go from the mobile devices – anytime, anywhere – right into your incident management solution.

Our **Product Compliance Pack** ensures that all manufacturing stages, from supply of basic materials to completed manufacture and delivery, have been managed to the highest standards. This enables companies in specific industries to use product compliance as a source of sustainable competitive advantage. The Product Compliance Pack combines SHE modules and Regulatory Content to offer added value content for a range of industries. Related business scenarios include:

- **Substance Volume Tracking**, which determines the volumes of substances in products available in warehouses, production lines and in the sales process. This enables development of a REACH compliant product life cycle
- **Supply Chain Collaboration**, supporting communication processes and cooperation within logistics chains, focused on both suppliers and customers
- **Product Safety**, which is at the heart of SHE, providing companies with a solid basis for meeting REACH/GHS/CLP obligations

- **Dangerous Goods Management**, empowering companies to manage automated dangerous goods management processes throughout the supply chain
- **Trading Goods**, a solution that enables companies to import Safety Data Sheets into their SHE system that are created outside their own SHE environment
- **Recycling Administration**, gives you control over your own recycling administrative processes, leading to a significant increase in efficiency, the highest level of accuracy and the assured regulatory compliance
- **Product and Regulatory Compliance**, designed for process and discrete manufacturers to prove the safety of substances, products and their usage according to legislation, like REACH, RoHS, JIG and GADSL.

LabelPrintCockpit offers a solution for the immediate, quick, flexible and error-free creation of labels for hazardous materials, dangerous goods, product and logistics, following the currently applicable regulations of the new GHS ordinance.

Waste Management, Reporting and Compliance tracks all aspects of waste, enabling better recycling, reduced environmental impact and enhanced compliance.

Risk and reputation

Manufacturing companies increasingly become aware that their businesses are threatened both by external forces (organized criminals, hackers, cyber-threats) and by internal risks, for example, employees stealing information, or simply by sheer carelessness. Companies have to deal with these threats in a world where safeguarding intellectual property is essential for long-term success. Proving that you can manage risks is also a fundamental requirement for regulatory compliance.

Corporate policies and compliance requirements should result in a single, integrated set of management tools and measures to mitigate enterprise risk and potential impact on business. Manufacturers today must not only exercise real, hands-on control: they must prove that they are doing so.

Atos Risk Management Services are highly proactive, designed to identify threats before damage can be caused, keeping the entire environment secure, no matter how fast security threats may evolve.

Advanced High Performance Security delivers comprehensive, all-round security management to large and complex organizations, and is the solution set that has assured the integrity of the Olympic Games since 2002.

Vulnerability Management Services help to proactively identify and safeguard key areas of concern. This enables rapid intervention to improve security performance before any vulnerabilities that exist can be exploited.

Atos is a leader in integrated **Identity and Access Management** solutions based on its own DirX product suite. Initially an **Identity and Maturity Assessment** can be provided to review current capability levels of an organization.

Based on the award winning CardOS smartcard solution, Atos delivers **Trusted Identity Solutions** that provide logical and physical access control to secure content, processes, systems and physical locations.

Intrusion Detection and Prevention Management carries out real-time scanning on networks and servers to identify and prevent malicious activities.

Atos also offers a range of additional **Risk & Compliance Assessments** to identify potential issues and put remedial solutions in place. These include Business Risk Analysis, Information Risk Assessment, and Governance, Risk & Compliance (GRC) assessment. A specific set of Maturity Assessments provide a rapid assessment of where any organization stands in terms of security systems, risk management and assured compliance.

Taken together, this offers manufacturers one of the most comprehensive risk and compliance portfolios available today.

Managing risk and ensuring full compliance are fundamental requirements for manufacturers of every kind, and especially for those with a presence or value chain in multiple countries. We understand how to mitigate risks and have built our solutions around this knowledge.

Business IT infrastructure

Green IT has become increasingly important to all large corporations. World-class corporations are now working to reduce the environmental impact of IT in terms of emissions, energy use and the lifecycle of materials used in IT products.

At the same time, IT is being actively used to reduce the environmental impact of business processes, reducing energy usage and associated costs, cutting transport costs through use of remote working, ensuring regulatory compliance and helping to make the entire enabling infrastructure more agile.

Atos is the European number 1 and world number 3 for managed infrastructure services. We are helping a growing range of clients to reduce their own energy consumption and carbon footprint, while cutting their operational costs, by moving their own server and storage needs into our own world-leading data centers. This enables consolidation and infrastructure optimization, leading to huge reductions in carbon emissions and overhead costs.

In Atos data centers we have reduced light usage by 70%, cut electricity requirements through variable fan speeds, reduced the number of servers, in some cases to one tenth of the previous number. These and other improvements can cut energy requirements by anything up to 85% of previous levels.

With our Data Center Services solution, we are taking the lessons learned from our own global network of data centers and can now apply them to the complete cycle of data center services for external clients whose data centers are not run by Atos.

In the data center space our strategic alliance with Siemens helps us to design and deliver all-round solutions, covering core IT, energy and facilities optimization.

Our **Data Center Infrastructure Management** (DCIM) solution, developed together with our partner Siemens, provides an integrated view of the 'total data center' and all its core systems. DCIM delivers real-time reporting, enhanced scenario planning, early intervention and rapid troubleshooting, enhanced asset management and better use of energy.

Our **Carbon Assessment Reduction Analysis** provides a methodical scan of existing datacenter facilities to identify areas of potential improvement for clients. Through our **Green IT Analysis** we define ways of using virtualization or other techniques to enhance energy and environmental IT performance.

At customer request we can assist in building green customer datacenters from scratch, either at customer premise or outsourced to Atos.

In all these ways we can help clients reduce their IT costs and emissions today, while optimizing performance into the future.

Canopy

Besides offering enterprise sustainability solutions on premise, Atos offers many solutions in a cloud environment, delivered through Canopy - the Atos company powered by EMC and VMware technology.

Many of Canopy's solutions can be offered as a pre-configured cloud configuration on an SaaS or PaaS basis. This way we provide a best in class cloud solution.

The anticipated benefits are substantial – IT cost reduction and capex avoidance through flexible pricing models combined with significantly increased levels of innovation and agility.

Canopy cloud solutions enable our customers to improve their business performance by realizing faster time to market for products and services.

Enabling the wider world of manufacturing

Sustainability solutions today can deliver immediate performance gains, while adding value to the results delivered by our wider portfolio of manufacturing solutions.

The Atos Enterprise Sustainability vision for Manufacturing is based on taking the debate forward, from green to growth. We believe that sustainability as a policy is best justified by its positive impact on business performance; enabling growth, reducing costs, managing risks and safeguarding brand reputation and trust. With an effective sustainability strategy in place, manufacturers will reduce energy costs; optimize their business IT; improve all aspects of operational effectiveness and improve risk management.

Atos Enterprise Sustainability connects naturally to the comprehensive range of manufacturing solutions that we offer, including leadership in SAP® solutions and other Enterprise Resource Planning (ERP) solutions, Manufacturing Execution Systems (MES) and Product Lifecycle Management (PLM), together with all aspects of integrated manufacturing.

All of these manufacturing concepts have sustainability at their core.

▶ Managing product lifecycles, from sourcing of raw materials to retirement and recycling, focuses on speeding process stages and making all aspects of the cycle more efficient

▶ Ensuring seamless production processes through MES, while enhancing collaboration and efficiency through Integrated Manufacturing

▶ ERP solutions aim to drive efficiency and productivity improvements, leading to competitive advantage and higher profitability.

Sustainability is not simply compatible with core manufacturing solutions: the concept is a key enabler and increasingly important to ensuring long-term success. To be profitable and competitive into the future, you have no choice but to become more sustainable in everything you do.

Atos is unique. Unlike almost any other IT services company we are a true manufacturing industry insider. We understand the priorities, pressures and ambitions of manufacturing businesses as only an insider can do.

We are the number 4 IT services player worldwide in the manufacturing market and the number 1 in Europe.

We have a unique strategic alliance with Siemens to cover production technology and and physical plant infrastructure, and are connected intimately to the world's largest PLM expert: Siemens PLM, and to MES which is connected to Siemens Simatic IT. We also have long-standing strategic alliances with other key players in manufacturing software.

We have manufacturing and engineering in our DNA, with a heritage that goes back to the middle of the 19th century. We have Siemens as an ancestor, and this has helped us gain a long-term inside knowledge of how manufacturers think, work and organize.

Atos has a long-term strategic partnership with SAP, in which we join forces to help clients achieve their sustainability goals, operational excellence, profitable growth, and business continuity. We work closely with SAP to provide cutting-edge expertise in the areas of sustainability and IT, relying on Atos recognized leadership in sustainability and SAP solutions for sustainability.

Atos in action

Business IT infrastructure

One of Atos' customers is a large international chemicals company, which has a strong and positive reputation for being a sustainability leader

Atos is making a vital contribution to this position through efficient datacenter management. As part of our work, we have played a major role in reducing carbon emissions from the client's IT infrastructure and data centers, actively seeking ways to improve performance and deliver higher levels of sustainability.

To give a specific example, Atos reviewed the efficiency of the existing ERP system and identified major opportunities for improvement.

By implementing a completely new, more modern technical infrastructure, including a reduction in the number of servers, Atos was able to reduce power consumption by 89%.

Operational excellence

Atos is supporting a global healthcare company in its mission to improve the health and well-being of people around the world by radically improving its data management systems

The client was finding it difficult and time-consuming to maintain accurate sustainability data while simultaneously ensuring full data integrity and timely reporting.

Atos proposed use of SAP SuPM and, after an initial pilot, moved rapidly to implement this new solution.

Today, the client has a flexible and user-friendly method for data uploading, enabling individual users to create sustainability reports efficiently, while also ensuring easy auditing of the reporting and collection processes.

Risk and reputation

Atos has implemented and supports the Corporate Directory of large a global engineering company

The integrated, standards-based directory is now used by all employees in 190 countries around the world. Based on the Atos DirX Identity & Access Management product suite the directory enables identity synchronization of more than 240 data sources and ensures that more than 350,000 entries are always correct and up to date. It also provides flexible definition of access rights and covers all key communication channels, including email, PKI, CTI, Communicator and others.

Our client's Corporate Directory is efficient, delivering results in less than a second, easy to use and universally accepted, with more than 190 million queries and month, and rising.

People, safety and product compliance

A German-based leader and pioneer in electrical connection technology required to ensure that its products were fully compliant with regulations such as REACH, RoHS, China RoHS, IMDS and GADSL

Atos was asked to implement SAP Product Compliance (based on EHSM 3.0) and to integrate this seamlessly with other key processes, including SAP Business Workflow and Adobe Document Service.

Atos was also asked to put in place interfaces and exchange formats for electronic data transfer (IMDS, Product Stewardship Network, BOMCheck, IPC1752), together with Business Warehouse SAP BI and customer-specific BOM BOS transfer. As result of successful implementation and integration by Atos, the client's products are compliant with all relevant regulations and the solution is fully integrated into the ERP landscape.

The future

Enterprise Sustainability is not an optional extra for successful manufacturing strategies. It needs to be built-into every aspect of business-as-usual, because it has a crucial part to play in delivering long-term success.

Sustainability is not solely about the green agenda and cannot be marginalized as something that counts only for CSR. It is a key factor in determining success or failure in the 21st century world of manufacturing.

Sustainability can and must be at the heart of corporate growth strategies for manufacturers. It delivers immediate benefits through cost reduction, improved energy and resource usage, assured compliance and enhanced operational efficiency. All of these factors help to achieve competitive advantage here and now.

Achieving world-class sustainability performance is a journey, and this journey will continue into the future, as new technologies and methods are developed to push sustainability excellence to new levels, year by year. Yet a commitment to a more sustainable approach will deliver measurable benefits in the first year: the sooner each manufacturer begins their journey in a truly integrated and systematic way, the more quickly they will unlock measurable business benefits and transfer to a firm of the future.

Working with Atos and its partners, your journey could start today. To find out more, contact us on: dialogue@atos.net

"We congratulate Atos as a leader in embracing sustainability in both its internal operations and solution offerings. Atos' efforts have led to its receipt of SAP Pinnacle awards for Sustainability in 2012 and 2013."

Scott Bolick, Vice President, Solution Management, Idea to Performance Solutions, SAP.

About Atos

Atos SE (Societas Europaea) is an international information technology services company with annual 2012 revenue of EUR 8.8 billion and 76,400 employees in 47 countries. Serving a global client base, it delivers Hi-Tech Transactional Services, Consulting & Technology Services, Systems Integration and Managed Services. With its deep technology expertise and industry knowledge, it works with clients across the following market sectors: Manufacturing, Retail & Services; Public sector, Healthcare & Transports; Financial Services; Telecoms, Media & Technology; Energy & Utilities.

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 and Paralympic Games and is quoted on the NYSE Euronext Paris market. Atos operates under the brands Atos, Atos Consulting & Technology Services, Atos Worldline and Atos Worldgrid.

For more information, visit: atos.net

For more information, contact: dialogue@atos.net

atos.net