



Alcoa

Alcoa Extends Global Sustainability Leadership with EHS Solution

Alcoa is one of the world's leading producers of primary aluminum and fabricated aluminum. For several decades, Alcoa has also been widely recognized for its leadership in addressing a broad spectrum of sustainability issues. As its website says, "At Alcoa, sustainability is defined as using our values to build financial success, environmental excellence, and social responsibility in partnership with all stakeholders in order to deliver net long-term benefits to our shareholders, employees, customers, suppliers, and the communities in which we operate." Alcoa's ability to achieve commercial success while continuing to raise the bar on sustainability may be surprising to some, but not to Alcoa's environmental, health and safety (EHS) team.

"Sustainability is integrated into our core business strategy and impacts decisions and actions at every level of our organization" said John Rind, Senior EHS Consultant for Global EHS Services at Alcoa. "That's why Alcoa takes a comprehensive approach to sustainability management, addressing it through a variety of enterprise-wide programs and standards, all working together. Our team supports those efforts by collecting, analyzing and communicating EHS performance information from all across our company."

In 2009, Alcoa completed the first phase in its deployment of a global EHS and sustainability software platform, *Sphera Essential Suite®*. Since then, Alcoa has continued deploying the system at locations worldwide, serving a total of 170 facilities in 32 countries. The system now contains more than 40,000 contacts and at least 10,000 named users, including 4,500 active users, working in 13 languages.

By combining this global system with complementary technologies, the EHS information management team plays a critical role in the pursuit of Alcoa's strategic sustainability goals: financial success, environmental performance and social responsibility. The team uses EHS information to not only ensure compliance with regulations, standards and policies but also drive continuous improvement of core work processes and enable a culture of operational excellence.

"It's all about treating sustainability information with same rigor as we do financial information," said Travis Morse, Manager of EHS Systems for Global Business Systems at Alcoa. "It's got to be transparent and auditable so we can share it with our stakeholders. And it's got to be actionable so we can trace problems all the way back to their source at the equipment level - or, better yet, address issues proactively, before trouble occurs - in order to keep us moving forward on our journey to sustainable growth."

"Financial success" is the number one priority for any business. Alcoa has been a frontrunner in showing how improved information management can transform EHS from a burden to a financial advantage. The Sphera global software platform has helped Alcoa hold

CHALLENGE

- Integrate sustainability with business to enable financial success, environmental excellence and social responsibility
- Ensure full compliance with regulations, standards and company policies
- Continuously improve management processes to drive operational excellence

SOLUTION

Environmental Performance

- Compliance Assurance
- Task Management
- Regulatory content for EHS

RESULTS

- Deployed global information system at 170 facilities in 32 countries, serving 10,000+ named users in 13 languages
- Complied with 1,200+ active permits, including 2,500+ rules and 225,000+ requirement citations, across 250+ jurisdictions worldwide as well as 87 Alcoa corporate standards
- Tracked 20,000+ tasks in 2012 with >85% of case-related tasks completed on time
- Delivered EHS metrics for public use from Sustainability Scorecards, Quarterly Business Reports, Sustainability Report
- Supported company-wide safety standards and programs that emphasize the ability of all users to access and drill into real-time data

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down costs by eliminating the need to maintain hundreds of legacy systems, reducing the likelihood of regulatory fines, and minimizing disruption due to staff turnover.

“There have been savings from operational efficiencies,” Rind said, “but the bulk of what we gained was really increased productivity. By streamlining work processes and delegating tasks to operations staff, our team has been able to develop new capabilities and take on new responsibilities - such as higher level EHS data analysis, enhanced reporting, and further system integration.”

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Alcoa's global EHS system also contributes to the company's financial success by providing information for its Sustainability Scorecards, roadmaps, Quarterly Business Reports and Annual Sustainability Report. This commitment to public transparency and auditability has earned the trust of investors by making Alcoa a perennial favorite on sustainability stock indices.¹

Alcoa's second strategic sustainability goal focuses on “environmental excellence.” This global industry leader must currently ensure compliance with 1,200+ permits - including 2,500+ rules and 225,000+ requirement citations - across 250+ jurisdictions worldwide, as well as adhering to 87 Alcoa corporate standards and a host of international standards (e.g., ISO).

To stay up to date on many of these requirements, Alcoa relies on *Sphera CyberRegs*®, an online content service that tracks thousands of federal and state mandates. In addition, the EHS management team used the *CyberRegs* framework to post Alcoa's corporate standards online.

With near real-time visibility into regulatory requirements and internal corporate standards, Alcoa managers use *Sphera*

Essential Suite to assign EHS compliance tasks and make sure they are completed both properly and on time. In 2012, Alcoa tracked more than 20,000+ EHS tasks and achieved a completion rate of more than 85 percent on tasks related to cases.

Strong support from executive leaders for integration of sustainability into business operations and a global EHS system that tracks performance at both a micro and macro level enable Alcoa's EHS management team to drive continuous improvement of daily work processes and promote operational excellence enterprise-wide.

Alcoa's third strategic sustainability goal is to fulfill the company's social responsibility objectives. The EHS team uses *Sphera Essential Suite* to support many aspects of social responsibility, but none is more important than ensuring employee safety by managing operational risks.

“Safety is a core value at Alcoa. The goal of zero work-related injuries and illnesses is embedded in our daily culture,” Morse said. “It's a culture based on setting aggressive goals and tracking progress with real-time information - including us publishing our safety incident rates every hour on Alcoa.com. Our approach is data-based and includes both lagging and leading indicators so we can continue improving our traditional reactive incident management processes while focusing more and more on proactively identifying hazards that can potentially cause incidents, and eliminating or controlling them before an incident occurs.”

Alcoa is already working with Sphera to enhance risk management capabilities. For example, the EHS team now uses additional case management functionality built into *Sphera Essential Suite* to group multiple incidents of similar causes and attributes together. This enables Alcoa decision makers to manage those incidents as a combined case so they can apply similar root cause analyses, corrective actions and preventive measures across the family of incidents.

As a result of its company-wide safety standards and programs, supported by *Sphera Essential Suite*, Alcoa continues to build upon its long track record of proven, world-class achievements in safety management.

“Sustainability is more than just environmental or health and safety or any of its parts. It's all of those together, and we're continually trying to manage them more consistently and effectively with a global approach to EHS information management,” Morse concluded.

¹ e.g. Dow Jones Sustainability Index, NASDAQ OMX CRD Global Sustainability Index, Carbon Disclosure Project's Disclosure Index and Performance Index