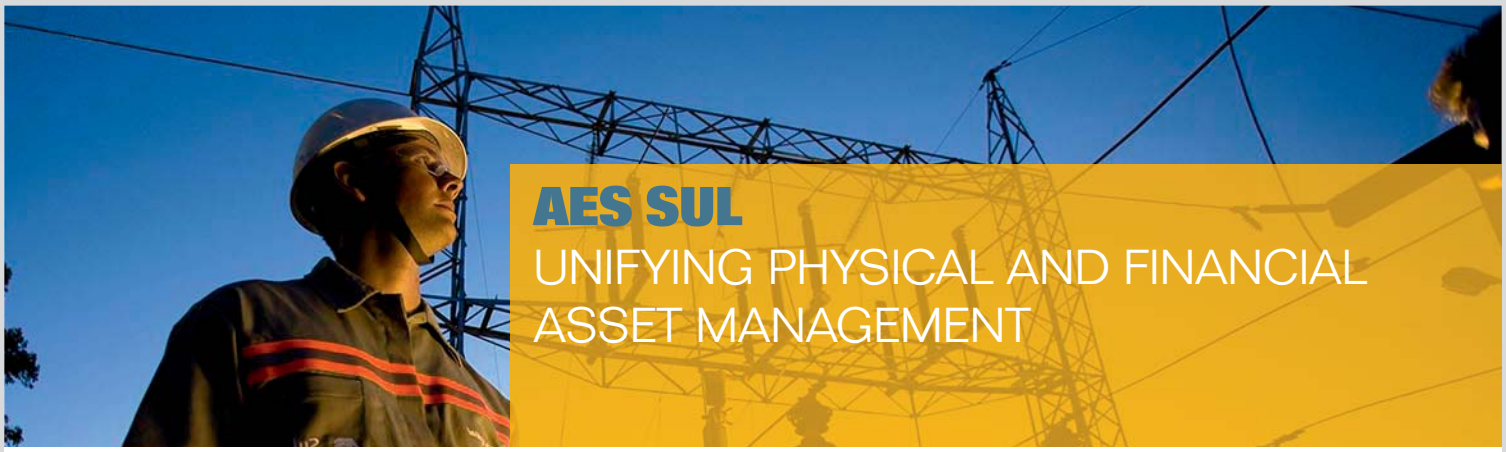

AES SUL
UNIFYING PHYSICAL AND FINANCIAL ASSET MANAGEMENT

QUICK FACTS

Industry
Utilities

Revenue
US$1.2 billion

Employees
1,200 plus 1,300 third-party personnel

Headquarters
Porto Alegre, Brazil

Web Site
www.aessul.com.br

SAP® Solutions and Services
Integrating enterprise resource planning and a geographic information system with the SAP NetWeaver® Process Integration offering

Implementation Partners
Softtek, IMAGEM

Brazilian electrical utility AES Sul Distribuidora Gaúcha de Energia S/A needed to automate the exchange of data between its geographic information system and its SAP® software. AES Sul integrated the suites using the SAP NetWeaver® Process Integration offering, making data available wherever needed. The firm boosted productivity and customer satisfaction, achieved regulatory compliance, and enabled rates to accurately reflect costs.

AES Sul
Uma Empresa AES Brasil

Key Challenges
- Integrate enterprise resource planning software from SAP with an ESRI geographic information system (GIS) for automated bidirectional exchange of data
- Comply with government regulations for accurate reporting of assets
- Increase visibility into costs of assets to justify appropriate rates for services
- Provide the right materials for projects
- Boost productivity and customer service
- Improve traceability and uniformity of information from beginning to end
- Heighten safety and reliability in the electric system operation

Why SAP Was Selected
- Compatibility with the SAP® software in place
- Ability to integrate very different applications using state-of-the-art technology
- Scalability and sustainability
- Openness and adherence to standards

Implementation Best Practices
- Strong executive-level project leadership and sponsorship
- Teaming between business and IT personnel to design the solution
- Use of ASAP methodology and project tools that delivered quality and managed risks
- Use of Microsoft Word and Visio for redesigning the asset management process and testing
- Widespread communication throughout company

Low Total Cost of Ownership
- Completion on schedule and within budget
- Replacement of manual processes for performing data exchange
- Development of scalable, sustainable platform for future growth and integration with other systems
- Improved cost estimation accuracy due to error rate reduction
- More control over profit margin due to real-time inventory visibility

Financial and Strategic Benefits
- Enabled compliance with regulations, avoiding penalties and fines
- Gained ability to provide complete cost data for future rate revision processes, reducing losses (US$3.77 million per year)
- Eliminated disparities between GIS and SAP software inventories, avoiding need for third-party reconciliation services (US$5.4 million in 2008)
- Automated information flow, improving productivity while reducing human error
- Improved project traceability and resource allocation, for greater customer satisfaction

Operational Benefits

Key Performance Indicator	Impact
Time to update network database between SAP and GIS software	-67%
Time to develop physical design of projects and corresponding budget	-50%
Errors in project budgets due to incorrect list of materials	From 60% to less than 5%

"A fair recognition of our assets in the Regulatory Asset Base (RAB) depends on accurate asset management processes. Therefore success with SAP NetWeaver PI was essential to the health of our business."

Sandra Marlene Heck, GAFIX IT Manager, AES Sul Distribuidora Gaúcha de Energia S/A

www.sap.com/contactsap

AES Sul Distribuidora Gaúcha de Energia S/A, part of global giant AES Corporation, distributes electricity to more than a million customers in a 100-square-kilometer area in the Brazilian state of Rio Grande do Sul.

Automating Data Exchange

Between 2002 and 2009, AES Sul invested more than US$271.3 million in infrastructure development. To sustain its business, the firm must charge rates for its services that recoup these investments and deliver a reasonable profit. However, utilities in Brazil are tightly regulated and must have government approval for any rate increases. The national energy agency, ANEEL, requires accurate records of the cost of all AES Sul's assets and uses these records in making rate change approval decisions every five years. In the most recent evaluation, in 2008, AES Sul calculated that it lost nearly US$3.77 million per year due to disparities between physical assets and financial records. Bad data was costly in another way as well: far too often resources were unavailable when needed for projects, causing delays, cost overruns, and customer dissatisfaction.

The root of these problems, AES Sul determined, lay in the manual methods used to exchange data between the two major software suites the company uses to run its business. SAP® software manages financials, inventory, product lifecycle management, and other back-office functions, while a major geographic information system (GIS) provided by ESRI manages spatial information for the physical infrastructure. For many operations the two suites must communicate closely and frequently. But because this communication was manual, too many errors, delays, and costs ensued. The error rate in project cost estimates was 60%. Inventory data maintained in SAP software was so inconsistent with physical inventories that AES Sul had to hire third parties to reconcile them – at a cost of US$5.4 million in 2008.

The solution clearly required making the interapplication communication electronic, but this meant using just the right software. It had to interface well with both suites and handle today's massive data exchange volumes and the even larger needs of the future. In the SAP NetWeaver® Process Integration (SAP NetWeaver PI) offering, AES Sul found these qualities and more.

For implementation help AES Sul summoned the expertise of two partners. Softtek brought SAP software know-how, while IMAGEM delivered GIS experience. With exceptional teaming, the project finished on schedule and within budget.

Reaping Big Return on Investment

With all-electronic data communication AES Sul has greatly increased productivity while reducing the incidence of human error. Designers develop projects twice as fast, using the GIS's graphical visualization and interaction, and can count on the SAP software for dependable budgeting and inventory data. With accurate lists of needed materials, projects are deployed faster. The error rate in project cost estimates is down to 5%, and no expensive reconciliations will be needed. When ANEEL reviews rates in 2013, AES Sul will be able to defend its requests with a complete, accurate picture of its infrastructure and the costs of developing and maintaining it.

AES Sul has even more plans to benefit from SAP technology. Next it plans to deploy service-oriented architecture (SOA) concepts to develop a layer of the software for mobile use, enabling the monitoring of projects in the field.

Implementation Partners
With operations in more than 20 countries, Softtek is a global supplier of business processes and IT solutions, including SAP software. IMAGEM provides GIS solutions for geographical asset management for utilities and other industries.

Softtek®

imagem
Soluções de Inteligência Geográfica

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Picture Credit
AES Sul, Porto Alegre, Brazil

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