Intelligent Spend in Oil and Gas
Meeting Global Energy Demand with Agile Procurement and Supply Chains
Building the Future of Energy with an Efficient Ecosystem

Resource scarcity, environmental impact, and enhanced expectations in customer and consumer experiences are challenging the oil and gas industry to innovate new products and services, business models, and platforms – all while running flexible, compliant, and sustainable operations.

But success doesn’t come from innovation alone. The back office must also optimize free cash flow; planned and unplanned inventory; and a range of maintenance, repair, and operations (MRO) assets, including materials, equipment, parts, services, repairs, and external workers.

Equally tested is the industry’s agility and adaptability. From changing environmental and safety regulations to extreme weather and global health crises, everyday disruptions keep organizational leaders hyper-aware that their supply chains, operational integrity, and innovation efforts could be impacted instantly. In the meantime, the pressure to demonstrate a commitment to a carbon-neutral and sustainable energy transition is driving the diversification of product portfolios and the augmentation of production operations with renewable energy, carbon capture, and other innovations.

Chief procurement officers (CPOs) are looking to address these challenges with fast, intelligent, and lean operations with high efficiency, lower costs, and better transparency. In fact, according to Oxford Economics, over three-quarters of industry leaders are investing in collaborative technologies (81%) and breaking down organizational silos (76%).

With end-to-end digital procurement solutions from SAP, oil and gas companies can address all spend categories, which are often driven by planning cycles, forecasts, projects, maintenance needs, and business users (see Figure 1). The solutions help to fully realize the advantages of flexible and agile procurement operations with a truly integrated source-to-pay process. And more importantly, they provide the insight and visibility to respond to unforeseen changes in the marketplace – with ease, less risk, and better customer value.

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Strengthening Resiliency with Procurement Digitalization

By digitalizing spend, oil and gas companies can bring valuable data together to unlock actionable business insights throughout the source-to-pay process.

This approach strengthens supplier collaboration, supply chain risk mitigation, vendor relationships, and compliance. Every purchase decision is guided to control spend and enhance profit margins, enabling the creation of business models that reinforce environmental sustainability and the health and safety within the workforce and nearby community.

In addition, unrealized discounts are recognized with greater ease, and supplier collaboration and productivity improve in the oilfield with just-in-time delivery and timely payments – all enabled with better procurement and supply chain visibility.

At the epicenter of this transformation is the procurement organization, bringing key stakeholders together to achieve all of these business outcomes and improve financial performance. Supply chain, manufacturing, engineering, and contingent workforce and services management functions can collaborate with CPOs to help ensure continuity across plan-driven supply chains, maintenance requests and capital projects, contingent labor performance, and field services management. (See Figure 2.)

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**Figure 2: The Unified Efforts to Drive Procurement Efficiency Company-Wide**

- Plan-driven supply chains
- Maintenance and projects
- Contingent labor
- Field services

**Supply Chain and Manufacturing**
- Asset and labor utilization
- Conversion
- On-time in full
- Inventory
- Speed to hire and engage

**Revenue and EBIT**
- Costs
- Internal and external inventory balancing
- Supply assurance

**ROCE and ROA**
- Return on capital employed (ROCE)
- Return on assets (ROA)

**Quality and Safety**
- Costs
- Internal and external inventory balancing

**Automation, Efficiency, and Agility**
- Background checks
- Rehire eligibility
- Consistent and compliant on- and off-boarding and certification tracking
- Approval workflows and policy enforcement
- Reporting and analytics
- Field services
- Cost containment
- Quality

**End-to-End Integration**
- Background checks
- Rehire eligibility
- Consistent and compliant on- and off-boarding and certification tracking

**External Workforce and Services**
- Asset and labor utilization
- Conversion
- On-time in full
- Inventory
- Speed to hire and engage

**Engineering Maintenance Reliability**
- Background checks
- Rehire eligibility
- Consistent and compliant on- and off-boarding and certification tracking

* Return on capital employed (ROCE) and return on assets (ROA)*
Many leading oil and gas companies that rely on procurement solutions from SAP are optimizing their supply chain networks and procurement functions by adopting four fundamental best practices:

**Extend Beyond the Barrel**

Break free from traditional energy demand and price volatility to capture new value, transform operations to reduce costs, engage in new business ventures, and fund growth. By delivering new sources of supply and skilled labor through an external workforce, procurement organizations can drive the move into new ventures, renewable energy businesses, and more competitive services.

**Digitalize Procurement and Supply Chain Processes**

Support forward-looking process automation to run touchless transactions without the need for manual intervention from IT. By increasing inventory visibility across the ecosystem, oil and gas companies can partner with MRO providers, match supply and demand, and dispatch owned or contracted resources across all transportation modes. They can collaborate better with their suppliers through the world’s largest business network, benefit from an integrated landscape of critical processes and documents, and help eliminate unnecessary and manual transactional work with external workforce management solutions.

**Compete as a Scalable Ecosystem**

Fast-track innovation to reduce costs, while improving operational agility, transparency, and safety. Organizations can seamlessly share data with ecosystem partners to help ensure that production, profitability, and safety targets are met. Plus, they can monitor their service providers’ performance based on specific compliance, safety, and certification metrics, as well as service-level agreements.

**Unlock Value with Technology**

Build more effective procurement strategies with real-time operational insights and transparency for enhanced operational effectiveness, safety, and profitability. Organizations can tap into predictive and prescriptive analytics, blockchain, and machine learning capabilities. On one platform, they can manage and optimize business systems and processes, suppliers and their networks, internal and external employees, and the customer experience.

**Sasol** standardized its processes across different business units and across 12,000 suppliers.

**An oil & gas company** improved its management of its $27 million external workforce to realize significant cost savings.

**ERG** handles €100 million in procurement volume through sourcing projects.

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**Success Across the Industry**

By digitalizing their supply chains, SAP customers can achieve significant outcomes, including:

- **50%** acceleration in source-to-contract time
- **50%** fewer workplace safety incidents
- **14%** reduction in maverick spend
- **13%** savings in sourcing costs
- **12%** lower craft labor costs
- **10%–15%** decrease in unplanned asset downtime

Source: SAP customer benchmarking data.
Fueling Stability and Control for a Changing Marketplace

With new competition emerging every day and consumer preferences changing dynamically, oil and gas companies must stay one step ahead to deliver on their promise of environmentally sustainable and safe operations for their workforce and the communities that surround them.

SAP customers that play within the traditional and alternative energy arena fulfill these expectations with agile procurement processes that support operational flexibility, visibility, and collaboration with internal and external partners.

| Source-to-Contract Efficiency | Negotiate best-value sourcing agreements through a global sourcing platform that provides built-in contract and supplier management and minimizes contract leakage. |
| Workforce Optimization | Get work done quickly, efficiently, and safely by sourcing and monitoring a reliable, certified, and skilled contingent workforce and outsourced services. |
| MRO Partner Collaboration | Align parts and services planning, order management, and inventory collaboration to reduce asset downtime caused by unavailable materials and services. |
| Financial Controls | Enforce budget commitments with touchless invoice processing, automated three-way matching, dynamic discounting, and cash and working capital management. |
| Complex Services Management | Create and approve proof of service online and offline through a business network and convert them into service sheets, invoices, and payments to reduce delays. |
| Risk Management | Use real-time visibility to actively monitor and manage risk and safety in your supply base to avoid costly disruptions and help ensure quality and business continuity. |
| Supplier Collaboration | Gain full visibility into demand, supply, and financial data in real time, while improving and simplifying global supplier collaboration company-wide. |
| Integrated Mobile Solutions | Achieve real-time, end-to-end visibility, whether in the office or at the well-head, to dramatically increase responsiveness and productivity. |
| Supplier Relationship Management | Introduce and operationalize experience management to survey, analyze, and act on supplier issues more purposefully. |
| Centralized Management of External Workers | Use digital checklists to verify that external workers have the qualifications and certifications for a given job. Then, deploy, manage, and pay resources across all facilities and project types. |
By digitalizing procurement and supply chain processes, oil and gas companies can reimagine supplier collaboration and commerce transactions to boost productivity and reduce operating costs across their oilfield and refinery operations.

SAP Ariba® and SAP Fieldglass® solutions and SAP Business Network provide the workforce efficiency, financial discipline, and risk mitigation necessary to achieve that vision. These solutions unlock value and transparency across all global spend through digital transformation, which helps:

**Create**
new value to fund business ventures through the digitalization of core processes

**Decrease**
service and maintenance costs, downtime, and customer delays

**Optimize**
resource utilization within the organization and across the service ecosystem

**Empower**
field resources to deliver excellent services safely, properly, and compliantly

Unlocking these capabilities enables energy companies to leverage forward-thinking procurement strategies across the business. Internal and external workers are increasingly skilled and productive. Customer value grows. And it’s all accomplished within environmentally and socially safe operations that are resilient and compliant.

**Learn more**
To find out more about intelligent spend management solutions from SAP, explore more information:

SAP Ariba  
SAP Fieldglass