

Smarter capital project execution for energy

Complete projects safely, on time, and on budget through smarter information management



"A mere 10% schedule overrun for an average-sized project results in a \$5 million loss in project profitability."

ProjectManagement.com - *Study on the Main Causes of Project Schedule Delays*, 2020

Business backdrop

The world is in a race for energy, striving to meet growing demand and overcome supply challenges. Prices of most forms of energy are already at record highs on an annual average basis—or are fast approaching such figures. Asset owner-operators, EPCs (engineering, procurement, and construction), and sub-contractors are under intense pressure to demonstrate progress along their project excellence journey. They must execute projects on time and on budget to safely, reliably, sustainably, and cost-effectively deliver more energy to the world.

To meet global energy demand, cumulative energy capital expenditures are projected to increase 18 percent over the five-year period from 2021 to 2025 when compared to 2016 to 2020.¹ Through another lens, capital project investments will need to climb from \$3.5 trillion today to \$9.2 trillion by 2050.²

This means that project excellence in the energy sector today will be considered average at best just one decade from now. In many instances, project execution is already failing. Despite advances in project management, construction management, and engineering software categories, nearly 50 percent of projects worldwide between 2010 and 2020 were delayed.³



¹ S&P, *Global energy sector capex poised for a strong rebound*, 2022

² McKinsey & Company, *Capital projects are critical for a green future*, August 2023

³ ProjectManagement.com – *Study on the Main Causes of Project Schedule Delays*, 2020

"Since switching to a single, integrated solution for engineering document management, we are in a far stronger position to deploy our global resources where they are needed most. Rather than manually routing requests to our suppliers via multiple different global teams, the OpenText solution allows us to create a single project center that's integrated with all our global suppliers."

Spokesperson
Energy Solutions Provider

The OpenText vision for energy companies

One major obstacle facing energy companies in the journey towards project excellence is inefficient management of unstructured information. In fact, 80 percent of employee time in the energy industry is spent looking through unstructured data to inform decisions and get work done.⁴

This statistic applies to the substantial amount of engineering drawings, P&IDs (process & instrumentation drawings), project reports, inspection videos, emails, contracts, permits, invoices, and additional unstructured information that is critical for successful project execution. A lack of modern governance of this information can lead to delayed projects that incur cost overruns into the tens of millions and even billions of dollars.

There are opportunities for improvements in capital project execution if companies are experiencing:

- Poor quality design packages.
- Misalignment between engineering drawings and site conditions.
- Lack of availability of engineering drawings for all projects.
- Procurement issues, such as late deliveries and lack of proper procurement tracking.
- Unstructured distribution, review, and approval of transmittals and contractual deliverables.
- Failure to use artificial intelligence and analytics across the project lifecycle to reduce non-value-added work.

Incorporating information management technologies and best practices across the lifecycle of all capital projects is necessary to achieve smarter capital project execution.

With improved information management, project teams, engineering, supply chain, and other lines of business supporting the project lifecycle can spend less time searching for information and more time on value-added work to safely execute projects on time and on budget.

Through a leading information management platform, energy companies, EPCs, and sub-contractors can organize unstructured information, integrate it with structured information, secure it, and automate the information flow across and outside the enterprise. Team members will be able to work smarter and inherently make project execution smarter, leading to higher project excellence levels and lower project risk.

“By moving to the cloud, we have scaled our document archive storage from 9TB to 15TB while reducing our operational costs. When we initially calculated our total cost of ownership, we determined that OpenText Core Archive for SAP Solutions would deliver savings of €23,000 a year and deliver payback within two years. Since then, wholesale energy prices in Germany have increased by 25% on average, which means the cloud solution will likely be even more cost-effective for ENERCON in the long term.”

Timo Feldner
Project Manager, ENERCON

Drive progress on the project execution journey

Eighty percent of the world's information is unstructured, and that holds true for the energy sector. A common mistake energy companies make is to use structured data applications to force fit and manage unstructured information. Adopting modern information management software technologies and best practices will position them to drive growth and efficiency across the energy value chain.

Improve information control for on-time, on-budget execution

One of the most common forms of unstructured information is asset documentation (content), including engineering drawings, process and instrumentation drawings, equipment manuals, operational procedures, inspection checklists, product datasheets, drone video, images, and more. These critical documents, along with contracts, purchase orders, invoices, and other project documentation, are often not easy to access, unavailable offline, disorganized, difficult to work with, inaccurate, and lack workflow automation. As a result, business processes suffer.

With an agile enterprise content management system, energy companies can connect people to content when and where they need it. From content capture and archiving to full lifecycle management, organizations can ensure content accurately reflects the engineered and constructed asset, and the project is handed over to operations on time and on budget.

Enable frictionless information exchange

Procure-to-pay information exchange with suppliers across the project lifecycle creates a massive amount of unstructured information. Phone calls, email exchanges, order confirmations and logistic tracking impact productivity, or worse, lead to project delays and cost overruns. Exchanges with strategic vendors, such as equipment manufacturers and field service providers, must be frictionless and provide end-to-end visibility so procurement issues do not contribute to project delays and asset downtime.

With a unified integration platform, energy companies can automate information flows and accelerate sustainable supply chain digitization by leveraging a pre-connected network of more than one million companies.

Predict and act on opportunities

The energy sector will never move this slowly again. Despite the productivity gains the industry has seen in the past decade, the tempo is only going to increase. AI, analytics, and the Internet of Things (IoT) are key technologies to accelerate project execution while decreasing project risk. By applying AI to information management, energy companies can gain the full strategic value of data faster and across diverse sources.

“Today, we process, on average, 30,000 forms each month, with peaks of around 37,000. The OpenText solution has truly become a core, mission-critical, enterprise-wide solution. With OpenText, we can pretty much meet the needs of anything the business requires.”

Claire Hazell

Corporate Applications Manager,
Mott MacDonald

As a result, organizations can:

- Automatically organize millions of project engineering and asset documents that lack governance.
- Leverage advanced video and image analytics to automate asset inspection.
- Use Industrial IoT for asset tracking, environmental monitoring, and safety monitoring.
- Use generative AI as a virtual subject matter expert for technicians, providing immediate information to avoid equipment failures and hazardous scenarios.

Why OpenText?

OpenText is the world's leader in information management and offers the most complete and integrated information management platform. We serve thousands of energy companies, including 24 of the top 25 by market cap and all 25 of the top 25 EPCs. OpenText helps these leaders organize, integrate, protect, and automate data as it flows through business processes inside and outside their organizations. No information management platform is more secure or scalable to manage high volumes of information at various stages of the project lifecycle.

The world is in a race for energy, and that race is just as much about information management as it is about energy itself. It is imperative that your projects are not just “smart,” but evolve to be smarter.

Project excellence across the energy sector is more important than ever, and that makes your team members and technology partners essential in continuously improving project execution so they are safely completed on time and on budget.

We would welcome the opportunity to be your strategic partner in your project excellence journey and support you in making your smart projects smarter.





Next steps

Together we can outline a vision and identify opportunities to quickly improve project excellence key performance indicators. Below are suggested next steps to ensure your project excellence and information management journeys are in lock step.

- **Introductory meeting**

Bring together your assigned OpenText Global Account Director or Senior Account Representative with your organization's Account Business Unit President, VP of Capital Projects, Chief Engineer, CTO, or decision maker on project excellence investments.

- **Joint roadmap exchange**

Hold a day-long information exchange with projects and critical supporting lines of business, such as engineering, supply chain and IT leaders (directors and above). OpenText will gather insight about your project excellence initiatives, current approaches, and obstacles. We'll then provide an overview of information management technologies and best practices that support those initiatives.

- **Business Value Consulting workshops**

Our Business Value Consulting team will engage with project teams and supporting lines of business to assess their current state and quantify the business impact of potential OpenText solutions along your project excellence journey.