



ENERGY · SAFETY & COMPLIANCE

LLM-Powered Documentation & Compliance Control

A large-scale EPC contractor in renewable energy used Quantum One to keep capital-project documentation in order — 30% faster document processing.

IMPACT

30%

Faster document processing, shortening project timelines by 10–15%

40%

Fewer compliance errors, such as missing environmental permits or mismatched specs

20%

Lower legal and contractual risk from missed deadlines or ambiguous clauses

CLIENT PROFILE

CLIENT

A large-scale EPC contractor in the renewable energy sector

COMPANY TYPE

EPC contractor in renewable energy

INDUSTRY

Energy

SCENARIO

Safety & compliance

CHALLENGES

- Managing multi-gigabyte EPC documentation for capital projects presents challenges due to version conflicts, compliance gaps, and costly rework.
- Accurate, up-to-date documentation is critical for avoiding regulatory penalties, reducing project delays, and improving overall operational efficiency.

APPROACH

Domain-specific LLMs cross-check thousands of documents — PDFs, CAD files, e-mails — across versions, and flag discrepancies in technical specs, timelines, regulatory clauses and cost estimates.

The same models validate documentation against UAE regulations and the client's own internal policies, and auto-generate compliance reports for auditors.

BENEFITS

- Automated version comparison across thousands of documents
- Compliance guardrails against UAE regulations and internal policies
- Auto-generated compliance reports for auditors
- Smart clause extraction — obligations linked to project milestones, with overdue alerts
- EPC Knowledge Vault — all project documents indexed, tagged and searchable with instant Q&A
- AI-generated lessons learned and client-specific document templates

MVP FUNCTIONALITY

- The system compares uploaded project documents, identifies changes across versions, and explains each revision with page-level citations from both the original and the updated file.

TIME TO PRODUCTION

Stage	Quantum One	Typical process	
Problem definition	1 week	2–3 weeks	
Proof of concept	2–3 weeks	4–6 weeks	
MVP	4–6 weeks	8–12 weeks	
Scale-up	1–2 months	3–4 months	
Maintenance	Ongoing	—	

TAKE THE NEXT STEP

Speak with our experts to discuss tailored AI solutions for your industry

quantumone.ae