



Nefos Consulting

AI is like Excel -Start today!

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<https://nefosconsulting.com>



AI & ENERGY TRANSITION

TUESDAY 20 MAY, 2025 16:00-18:00





Technological Advancements Timeline



Industrial Revolution



Age of Electricity



Rise of Semiconductors



Personal Computer Era





Internet Revolution



Age of Artificial Intelligence

IEA: AI is a “general-purpose technology, much like electricity” shaping a new industrial revolution

Global Impact: The AI Data Center Explosion

- Global data center electricity use projected to 2x > **1,000 TWh** by 2026
- **Now:** Top clusters (xAI) require 150-250 MW
- **2026+:** AI megafactories:
 - 5 GW 
 - 1.4 GW 





The Energy Transition Opportunity to support AI

- **Renewables** energy growth driven by hyperscalers
- **Nuclear** is key in the mix
- Long-term **PPAs** (Power Purchase Agreements) are financing clean energy deployment



AI has tangible Business Impact



- AI system increased wind farm output by 5% and reduced unplanned downtime by 20%



National Grid

- AI improved load forecasting accuracy by 15%, saving \$300M annually



- AI reduced data center cooling energy by 40%, cutting facility power by ~15%



- Energy price forecasting in 12 markets one month ahead



Nefos Consulting

Our business value design thinking method identifies AI use cases that are tailored to your goals

	Lower Complexity	Higher Complexity
Higher Business Impact	<ul style="list-style-type: none"> • Predictive maintenance for critical assets • Customer usage analytics and segmentation • ESG analytics and carbon footprint reporting 	
Lower Impact		

AI Use Cases you can start now!



Our proprietary framework helps organizations prioritize AI investments for maximum business impact

Making AI as simple as Excel

AI Masterclass

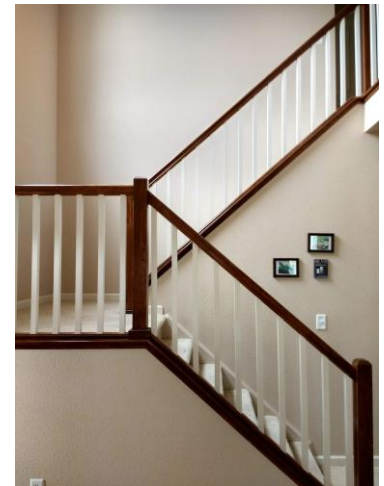
- Interactive session to provide strategic relevance to your organization
- Half-day

AI as your Personal Assistant

- Hands-on enablement & coaching on the job:
- 12 weeks

Identifying & Prioritizing AI Use Cases

- Business Value Design Thinking Workshop & AI Use Case Roadmap
- 4 weeks





Thank you

Contact us to:

- Schedule your AI Capability Maturity Assessment
- Request our AI in Energy whitepaper

<https://nefosconsulting.com>

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Appendix



AI Strategy Experts

- Specialized AI advisory firm helping organizations turn AI potential into business reality, fast
 - Proven methodology for aligning AI initiatives with business goals
 - Driving building impact in weeks, not years
 - Working with organizations across Europe and the Middle East
 - Human-centric and ethical approach to AI implementation
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- <https://nefosconsulting.com>



Use Case: Predictive Maintenance for Energy Assets

Business Challenge:

- Unplanned outages cost utilities €150,000+ per hour
- Traditional maintenance: either too late (reactive) or too early (calendar-based)

AI Solution:

- AI monitors equipment via sensors, detects anomalies before failures occur
- Digital twins simulate asset behavior under various conditions

Real Results:

- E.ON: 25% fewer failures, 89% prediction accuracy
- 15-20% maintenance cost reduction
- 3-5x ROI within 18 months

Implementation Keys:

- Start with high-value assets with existing sensor data
- Blend AI recommendations with human expertise