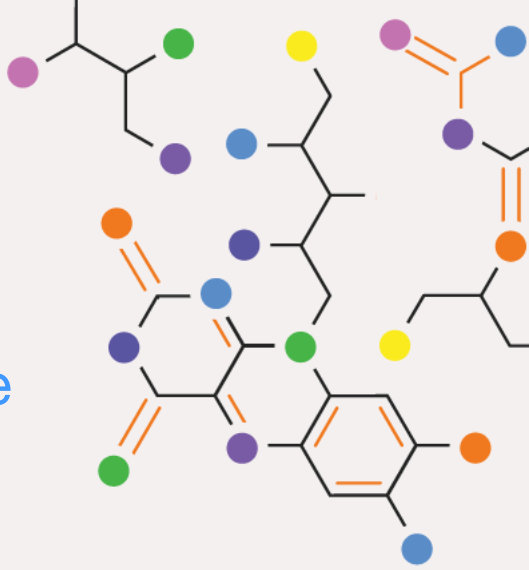
NOBLEAI



Accelerate Asset-Critical Outcomes Across the Energy Value Chain From Months to Minutes

From Upstream to Downstream to Renewables: Solving Difficult Energy Challenges with Rigorous, Practical AI

Our first-principles Science-Based AI (SBAI) models, delivered through the Visualizations, Insights, and Predictions (VIP) Platform, turn limited and fragmented data into clear, defensible answers—built for real operations at enterprise scale.

Industry Challenges

Energy companies today face rising uncertainty, higher costs, and slower progress toward sustainability due to volatile markets, shifting policies, and the need to balance energy security, affordability, and climate goals.

- **Complex Reservoir Decisions & Asset Optimization:** Operators face rising uncertainty and costly delays in subsurface modeling and completion design.
- **Accelerating R&D and Product Innovation:** Traditional lab validation cycles stretch 12–18 months, delaying new formulations and product launches.
- **Sustainable Product and Feedstock Transition:** Decarbonization targets and shifting feedstocks demand rapid reformulation under new performance and regulatory constraints.
- **Digital and Data Acceleration Across Operations:** Energy companies struggle to bridge legacy workflows with modern AI/ML tools.
- **Energy Storage and Battery System Design:** Battery system development requires rapid trade-offs between chemistries, assemblies, and duty cycles—trial-and-error slows deployment.

What We Deliver

NobleAI enables leading operators and oilfield-services teams to move faster, reduce risk, and deliver measurable results across the energy value chain.

- Accelerate critical decisions **up to 100× faster**, improving asset performance in complex, multi-well developments.
- Achieved a **>1,000× reduction** in reservoir model calibration time for a Global 25 operator—cutting hours of simulation down to under a minute.
- Shorten downstream R&D and testing cycles by **up to 75%**, accelerating product innovation from months to weeks.
- Predict key surfactant, polymer, and flow-assurance properties using **AI-driven molecular modeling** for higher performance and lower cost.
- Enable practical AI workflows that **connect subsurface to formulations**, allowing teams to innovate confidently and scale results across operations.

Energy Use Cases

- Accelerated multi-bench, multi-well reservoir simulation for unconventionals
- Decline-curve analysis with uncertainty quantification
- Sustainable aviation fuel (SAF) blend optimization to address decarbonization and feedstock volatility
- Polymer formulation optimization for performance and material efficiency
- Surfactant modeling and optimization for product reliability and faster validation
- Flow-assurance product optimization to reduce operational risk and downtime
- Battery-system optimization for advanced energy storage and resilience

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About NobleAI

Backed up by Chevron Technology Ventures, Microsoft M12 and several leading VC firms, NobleAI supports decision-making and accelerates innovation across the energy value chain for top global energy operators and OFS. Our VIP Platform helps reduce risk, improve asset performance, and speed time-to-impact from reservoir simulation to energy storage systems to better petrochemical products.

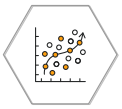
With SBAI models on the VIP Platform, teams can quickly run experiments in software and eliminate unviable options, democratizing AI and enabling faster, more confident innovation.

VIP Platform

Deploy Your Own Models (DYOM)
Run your existing models to accelerate insights, reduce bottlenecks, and enable collaboration.

Model Builder for Formulations (MBFF)
Build and train your own SBAI models. No coding or data science expertise needed.

Inverse Designs With Parameter Sweeps
Identify the optimal results based on multiple, predefined goals and constraints.



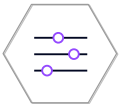
Forward Prediction With Parameter Sweeps
Generate formulation predictions and run unlimited experiments in software with parameter sweeps.

Dynamic Visualization
Visualize and analyze data using customizable data, graphs, and tables.

Deep Insights
Understand predictions through uncertainty, confidence, probability, and feature impacts.

SBAI Models

Ensemble Model Architecture
SBAI Models are built from multiple individually trained model elements.



Customized Solution
SBAI models are structured, created and optimized for each specific use case.

Multi-Science, Multi-Scale
SBAI can incorporate any physical law, chemical property, scientific principle or constraint.

Data Efficiency and Privacy
SBAI models don't need to learn scientific principles from data and are inherently private.