

SOLUTION BRIEF

POWER YOUR ENERGY DECISIONS WITH LEAPFROG ENERGY

Understanding subsurface conditions is essential for ensuring informed decisions, efficient operations, and sustainable outcomes across Geothermal, Carbon Capture and Storage (CCS), Offshore Wind, and Oil and Gas projects.

Leapfrog Energy from Seequent is purpose-built geomodelling software for energy projects. Whether you're exploring geothermal resources, evaluating CCS storage sites, planning offshore wind developments, or understanding hydrocarbon reserves and resources, Leapfrog Energy simplifies workflows, improves team collaboration, and makes stakeholder communication easier. By quickly turning fragmented data into clear, visual 3D models, Leapfrog Energy enables your team to make confident, data-driven decisions—reducing risk and maximising returns at every project stage.

“

Leapfrog Energy combines multiple types of data to help us quickly visualise what’s happening beneath the ground, rapidly adapt to new information, build more reliable conceptual models, and improve how we communicate subsurface insights.”

Mike Dunstall

General Manager, Geothermal Resources
Contact Energy



Projects around the world rely on Leapfrog Energy to:



Accelerate subsurface decisions with 3D geological modelling



Optimise well planning and targeting for maximum return on investment



Reduce risk in complex offshore environments



Streamline multidisciplinary workflows and remove data silos



Keep energy projects on track with dynamic model updates



Improve stakeholder communications with intuitive models



Successful projects are powered by Leapfrog Energy



Accelerate subsurface decisions with 3D geological modelling

Leapfrog Energy enables geologists, geophysicists, and reservoir engineers to rapidly build implicit 3D conceptual models from diverse and often sparse datasets such as geophysical surveys, geological maps, and well logs. Its intuitive workflows allow modellers to explore multiple scenarios at once, improving decision-making.



Optimise well planning and targeting for maximum return on investment

Calculate well target locations and trajectories, and visualise them directly within your conceptual model. By proactively anticipating lithology, temperature, and subsurface hazards, drilling engineers, geologists, and subsurface teams can minimise drilling risks, optimise resource extraction, and reduce operational costs.



Reduce risk in complex offshore environments

Gain a comprehensive view of complex offshore subsurface conditions through powerful 2D and 3D visualisations that integrate geological, geophysical, and geotechnical data. Quickly identify risks and confidently inform foundation design decisions, optimising the positioning of offshore wind turbines and infrastructure.



Streamline multidisciplinary workflows and remove data silos

Leapfrog Energy integrates with reservoir engineering and geophysical tools, enabling geoscience and engineering teams to work effectively across multiple software platforms. Rapid data exchange of key geophysical data types including SEG-Y seismic data and compatibility with tools such as ECLIPSE, TOUGH, Volsung, and Oasis Montaj help teams streamline workflows, break down silos, and confidently collaborate across disciplines.



Keep energy projects on track with dynamic model updates

Automatically update geological and numeric models as new data or interpretations become available, significantly reducing manual effort and rework. Teams spend less time managing data and more time analysing subsurface conditions, accelerating decisions, and maintaining project timelines.

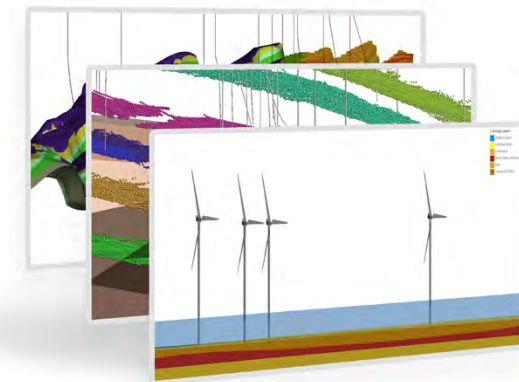


Improve stakeholder communications with intuitive models

Clearly communicate complex geological insights using interactive 3D models, cross-sections, and visual presentations with non-technical stakeholders. This ensures shared understanding, informed discussions, and smoother stakeholder engagements across management, regulatory bodies, investors, and local communities.

Explore the key features that power Leapfrog Energy

Leapfrog Energy quickly transforms subsurface data into clear, actionable insights. Here are the key features supporting faster workflows, improved collaboration, and informed decisions.



Geological modelling

Rapidly build 3D geological models from multidisciplinary data sources:

- Combine data from geology maps, cross sections, boreholes, geophysical surveys (MT, seismic, gravity), geochemistry, and more
- Quickly refine models as new data becomes available
- Create static models for comparison and reference

Well planning

Confidently plan well locations and trajectories in a visual environment:

- Model, test, and adjust drilling scenarios rapidly in 3D
- Anticipate subsurface permeability and reservoir conditions
- Improve targeting accuracy, reducing operational and financial risks

Numeric modelling

Integrate implicit numeric modelling seamlessly into geological workflows:

- Create numeric models directly from well data such as downhole well logs
- Dynamically update numeric models as data or interpretation changes
- Clearly visualise reservoir properties and behaviours

Visualisation

Effectively communicate complex subsurface information with clear visuals:

- Easily build 2D and 3D visualisations to identify geological patterns
- Simplify communication of complex subsurface concepts for technical and non-technical stakeholders
- Enhance decision-making through interactive scenes and animations

Industry interoperability

Ensure compatibility with industry standards and other common software:

- Integrate diverse geophysical data (MT, seismic, gravity, magnetic) directly into your models
- Connect to well and geotechnical data (Petrel deviation files, gINT, AGS, OpenGround)
- Perform geostatistical analyses (Kriging, IDW, RBF, Nearest Neighbour) in context

Flow simulation

Integrate geological and reservoir models to simulate fluid and gas flow scenarios:

- Export conceptual models into simulation software (e.g., Volsung, TOUGH, ECLIPSE, FEFLOW)
- Update models dynamically to reflect new information
- Inform better reservoir management and operational decisions

Collaboration tools

Share subsurface insights effortlessly with multidisciplinary teams:

- Export and share 3D scenes, movies, and cross-sections
- Annotate scenes for enhanced clarity
- Collaborate via Seequent Central for version control and team alignment

Intuitive interface

Leapfrog Energy is designed specifically for modellers, offering intuitive workflows that allow users to:

- Learn the fundamentals in just days
 - Start modelling faster and spend more time on analysis
 - Navigate tools with ease, focusing on subsurface tasks
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A world of support at your fingertips

Beyond the powerful features of Leapfrog Energy, Seequent offers comprehensive support and learning resources to help you get the most out of your investment.

Learning Centre

Maximise the value of Seequent's solutions with a range of flexible learning opportunities through the Seequent Learning Centre. Whether you prefer online learning paths, on-demand videos, or instructor-led courses, there are resources tailored to your needs.

4.9/5

rating for Seequent
e-learning from
16,000+ reviews

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Community

Connect with a global network of geoscientists and professionals through the Seequent Community. Whether you're looking for peer support, insights from industry experts, or practical tips to get the most from Seequent's solutions, the Community offers a space for shared learning and collaboration.

7,400+

customers in
145+ countries

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Support

Get the most from your Seequent solutions anytime, anywhere. Access our knowledge base, connect with technical experts, or explore specific support options for all Seequent products, keeping your projects running smoothly and efficiently.

95%

satisfaction with
our front-line help
and support

[Get support →](#)

One geomodelling solution. Four critical energy sectors.

Leapfrog Energy helps energy teams worldwide visualise the subsurface, improve stakeholder communication, and accelerate confident decision-making.



Geothermal



CCS



leapfrog[®] | ENERGY



Offshore Wind



Oil & Gas

Discover the power of Leapfrog Energy today

Visit seequent.com/leapfrog-energy to explore product videos and customer success stories, or request a free 14-day trial or live demo.

About Seequent

At Seequent, we've spent decades empowering geoscientists with the tools they need to make better, faster decisions. Trusted by industry leaders in mining, environmental, civil, and energy sectors, Seequent's innovative solutions help professionals turn complex data into actionable insights. Whether it's enhancing subsurface knowledge or supporting strategic decisions, Seequent is the global leader in transforming geological data into informed action. See more at seequent.com.

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