

Powering what's next in Oil & Gas

Solutions and services to drive
success across your value chain

Smarter
technology
for all

Lenovo



The Oil & Gas industry is on the brink of a remarkable transformation where innovation and sustainability will take center stage. While challenges are inevitable, the key to success will lie in turning those challenges into opportunities.

Lenovo understands the unique needs of the Oil & Gas industry.

Let's explore how our industry-specific solutions can help you build connected, scalable, and intelligent systems to guide you through the transformation process while generating long-term value.

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Navigating complexity

We partner with some of the world's largest Oil & Gas suppliers, equipping them with the tools they need to overcome the industry's biggest challenges:



Cost reduction

Tackling rising financial demands with cost-efficient solutions



Operational efficiency

Streamlining processes for peak productivity



Safety concerns

Ensuring the safety of workers and the environment during complex operations



Digital transformation

Seamlessly integrating new technologies and managing digital transitions



Sustainability

Addressing environmental concerns and reducing carbon footprint



Supply chain challenges

Ensuring a consistent supply amidst fluctuating demands

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Streamlining success

Lenovo solutions and services can support the entire Oil & Gas value chain. Our cutting-edge technology can be fine-tuned to meet the diverse demands of your entire ecosystem across:

Read on to find out how Lenovo can support you in these areas.

Upstream: Exploring opportunity

The upstream sector, covering exploration, drilling, and production, is the cornerstone of the Oil & Gas industry. As energy demands and environmental challenges grow, the need for advanced technology in these early stages becomes crucial.

Lenovo's leading-edge solutions drive businesses forward and help them to grow and explore in a sustainable way.



Data in the wild

Oil & Gas companies generate, collect, and manage data in some of the most remote locations on Earth. Exploration generates massive volumes of data from seismic surveys, drilling, and reservoir modeling. While this data can provide valuable insights into their operations, these environments present unique set of obstacles, ranging from data storage, data visualization and connectivity issues to security concerns, AI implementation and training costs.

Lenovo address these challenges head on. Our solutions empower companies to optimize data collection and processing, boost productivity, and make informed decisions based on real-time data. Our technology transforms raw data into actionable insights, enabling companies to make better choices about exploration, drilling, and production activities. This edge-processing approach streamlines processes, reduces latency, and enhances operational efficiency.

Beyond tackling data-related changes, Lenovo's technology empowers companies to enhance their IT infrastructure, streamline training with mixed reality, and safeguard critical assets with robust cybersecurity solutions.

Our solutions provide secure and scalable platforms for managing complex data workloads, allowing companies to meet the demands of the digital oil field. Furthermore, our cybersecurity solutions assist companies in protecting their critical assets and data from cyber attacks.

Recognizing the immense volume of data generated globally, we provide robust storage solutions that enable secure, off-site and on-site storage of project data during exploration and production phases. This accelerates timelines and makes data readily available at source so future projects can scale faster.

Our advanced HPC (high-performance computing) capabilities streamline seismic data processing, deploying hundreds to thousands of nodes tailored for individual customers, ensuring rapid and accurate results.



From the wells to the world

Optimize every part of your upstream operations using Lenovo's cutting-edge technology.



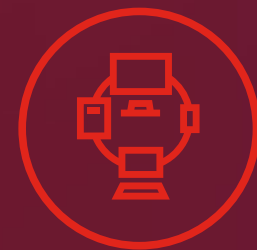
Scalability for success

Having an infrastructure that easily adapts to sudden change ensures that exploration efforts can scale efficiently as needed.



Edge computing

Process real-time data from remote sites to ensure uninterrupted monitoring of operations and better-informed decision making.



Remote collaboration tools

Through remote collaboration tools, seamlessly connect geoscientists, engineers, and data analysts from anywhere and manage projects efficiently and in real-time.



Security and data protection

Safeguard sensitive oilfield data from cybersecurity threats and ensure the integrity and confidentiality of critical information while maintaining regulatory compliance.



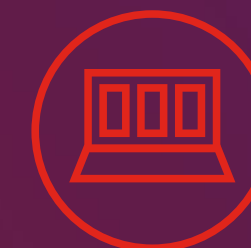
Integrated AI and analytics

Unlock insights from vast datasets such as seismic surveys, drilling, and reservoir modeling to enhance exploration accuracy. Predict equipment failures and take preventative action, optimize maintenance schedules, and prevent costly downtime across upstream operations.



HPC solutions

Process seismic data to facilitate faster exploration and reservoir management. Execute accurate reservoir modelling and simulation to accelerate decision-making to optimize production and recovery rates.



Robust hardware

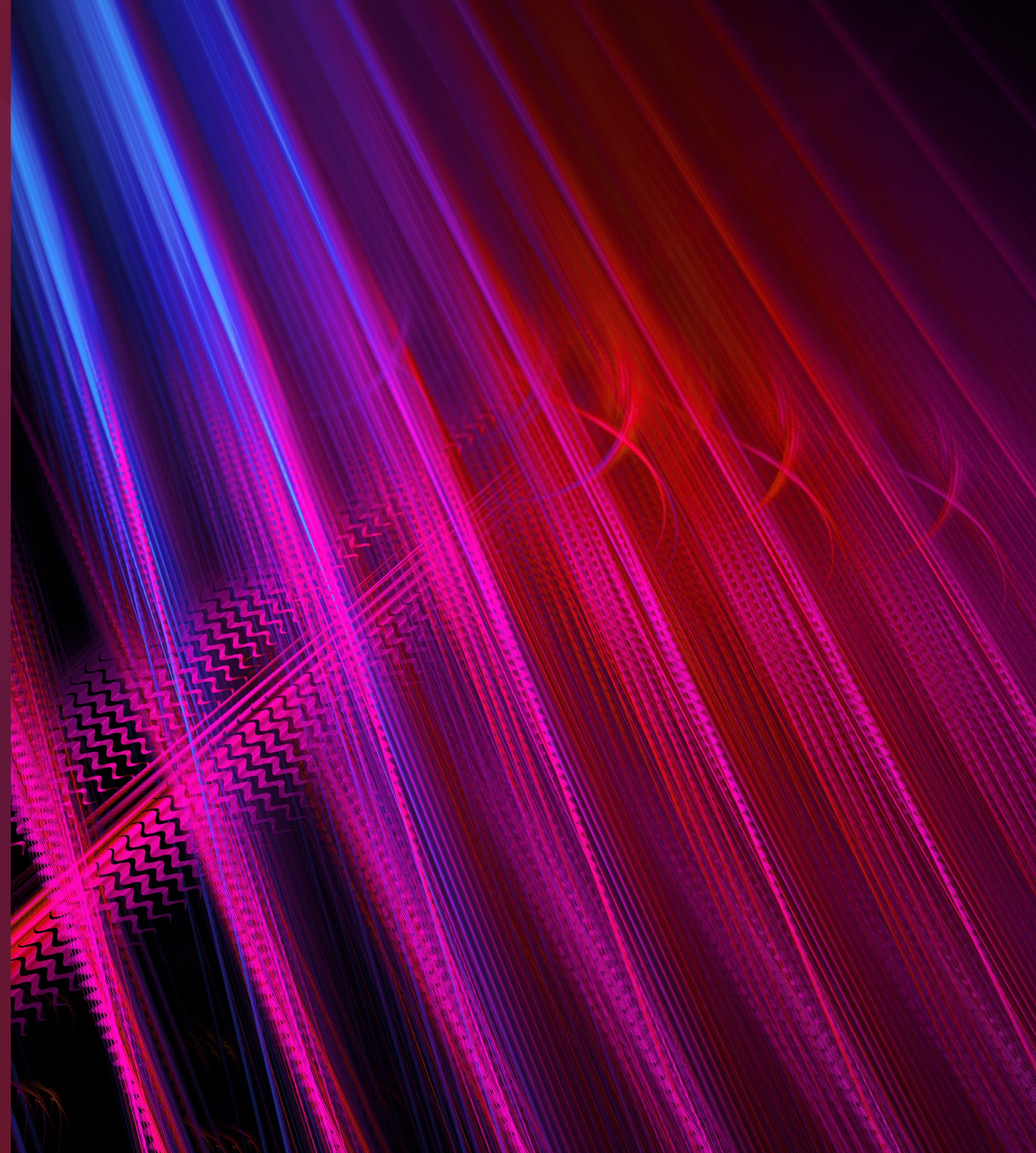
Maintain a reliable connection and access critical information from remote sites in the harshest conditions with resilient edge hardware.

Midstream: Precision in production

The midstream sector of the Oil & Gas industry stands as the pivotal link between production and consumption. It plays a critical role in ensuring the reliable and efficient refinement of energy resources worldwide.

When fully optimized, the midstream can become a hub of innovation, sustainability, and long-term value.

Lenovo's innovative solutions empower companies to transcend manufacturing challenges, optimize operations, and ensure future growth and innovation.



Smarter manufacturing

Lenovo solutions will help shape your midstream operations around a future where safety, security, and predictive maintenance converge seamlessly.

Real-time analytics can deliver the timely insights you need to make critical decisions. Industrial automation solutions such as asset tracking, guided forklifts, and industrial AR will ensure streamlined operations and empower your teams to work from anywhere.

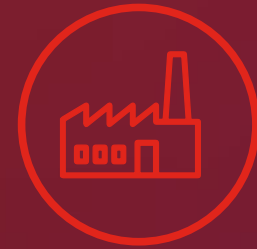
Mixed reality tools enable immersive, cost-effective training, frictionless workflows, and first-time fix rates.

Together, these technologies laid the groundwork for scalability and unprecedented growth.



The pathway to success

Here are some of the ways Lenovo's leading-edge solutions and services can help you unlock the full potential of your midstream operations.



Infrastructure optimization

Ensure the continuous operation of critical infrastructure. Through industrial IoT you gain insights into equipment performance, detect anomalies, and predict maintenance needs so you can optimize efficiencies from anywhere.



Security and compliance

Protect critical infrastructure and sensitive data to ensure complete compliance with industry regulations.



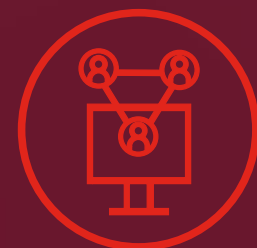
Efficiency and automation

Maximize operational efficiency and minimize downtime by enabling real-time control of critical systems. Increase operational efficiency and reduce costs through process automation and remote management.



Scalability

Ensure cost-effective growth with flexible technology solutions that expand or contract based on operational requirements.



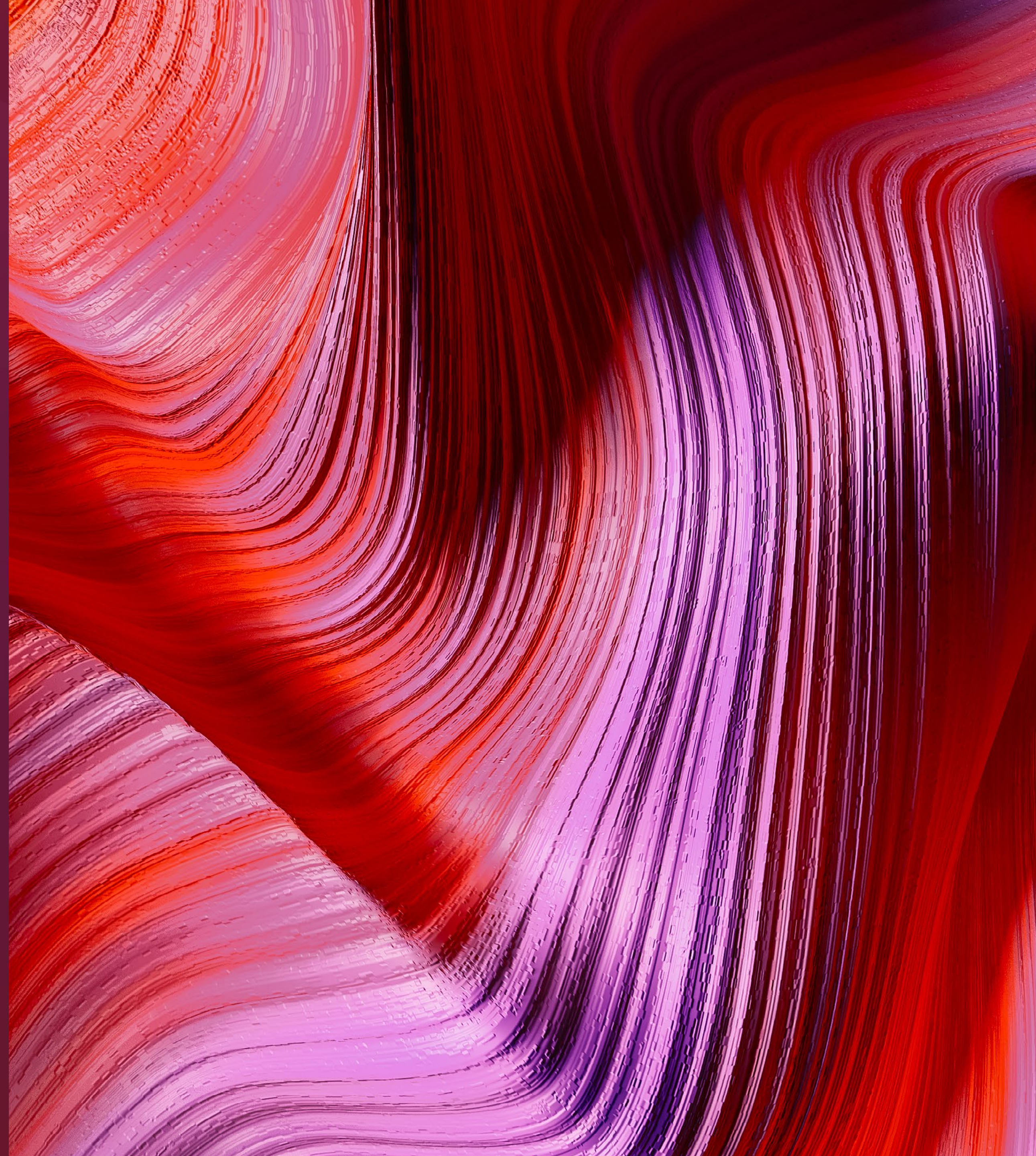
Cloud-based data management and HPC

Manage vast amounts of data to accelerate data processing for better pipeline operations. Streamline data sharing among remote teams through cloud-based data management collaboration platforms and HPC for better decision-making and resource allocation.

Downstream: Beyond the pump

The downstream sector stands as a vital connection point between customers and Oil & Gas companies.

Lenovo's innovative solutions are designed to optimize this interface, enhance operational efficiency, and elevate the customer experience.



Fuelling efficiency inside and out

Unlike with many other businesses, customers must physically visit a fuelling station to obtain the product they need. This creates the perfect opportunity to engage with them in person.

With our digital tools, you can turn every visit into an enjoyable experience, making the station a destination of choice to refuel.

Success lies in balancing customer enjoyment with smooth operations. Ensuring services remain uninterrupted, even in unforeseen circumstances,

is essential to delivering a seamless customer journey and maximising sales. The key lies in real-time data collection and AI-powered analytics. These insights empower you to make informed decisions in the moment, ensuring profitability and enhancing the customer experience while keeping property, staff, and customers safe.



Inside matters

Six ways technology can help you create a more engaging and personalized customer experience at your fuel stations and give you real-time insights into your store:



Digital signage

Provide real-time information, promoting relevant offers to enhance customer engagement and inspiring additional purchases.



Security cameras with data analytics

Keeping everyone secure, preventing merchandise shrinkage and keeping aisles unobstructed are some of the benefits of security cameras. They can also be used to analyze customer behaviour and queue lengths to make informed staffing and inventory management decisions.



Electronic shelf labels

Display up-to-date product information to ensure that the prices displayed on the shelves accurately match the checkout prices.



Point of sale systems

Streamline the checkout process and reduce wait times by offering the convenience of simple, contactless transactions.



Data analytics for store layouts

Through data analytics, study customer traffic patterns to optimize store layouts, manage inventory and staffing schedules in-line with peak hours, and ensure high-demand products are placed prominently. Process these analytics at the edge and display through a central management system for more accurate and informed decision making.



Self-service kiosks

Empower customers to place orders and customise their purchases through self-service kiosks that cater to individual preferences.

Reinventing the forecourt

Technology isn't limited to just transforming the experience inside the fuelling station; it also has the power to reshape the forecourt.

Lenovo's cutting-edge technology solutions can be the driving force behind this transformation, enabling stations to thrive in this dynamic environment.



AI-driven queue management

Leverage AI-driven analytics to make informed, data-driven decisions, optimizing traffic flows at peak purchasing times to develop customer-centric strategies that minimize wait times and traffic congestion.



EV charging enhancement

Use smart grid integration and data analytics to ensure EV owners benefit from reduced charging times, lower costs, and more reliable service.



Remote operational management

Through secure, reliable, and uninterrupted connectivity, you can prevent downtime and deliver a seamless experience to all, including enabling staff to monitor and manage various aspects of the operation remotely.



Environmental impact tracking

Monitor fuel dispensing data in real-time to help customers understand the environmental impact of their choices.



Contactless fuelling

Empower customers to pay for fuel quickly and safely through mobile apps and touchscreen interfaces for seamless digital payment options.

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Artificial Intelligence. Real results.

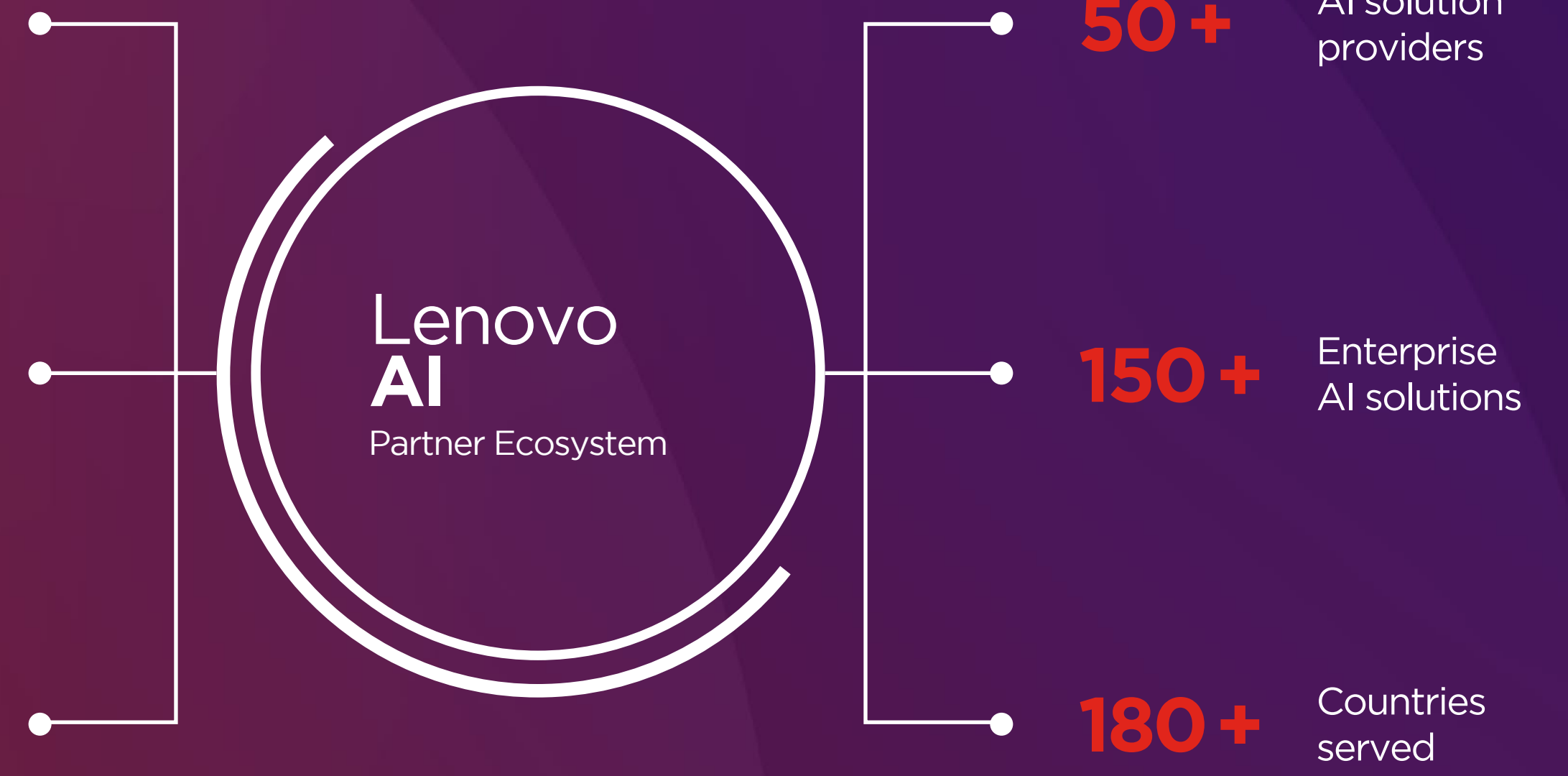
Lenovo brings the new era of AI-powered innovation to you.

Our pocket-to-cloud product portfolio delivers powerful, adaptable, and responsible AI solutions to transform the Energy industry and empower individuals. We create a future of **AI for all**. It takes an ecosystem to deploy cognitive solutions that deliver business value.

Solution providers

Strategic alliances & vendors

Delivery partners



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Working toward a brighter, smarter future

Environmental, Social, and Governance (ESG) Solutions

At Lenovo, we understand the decisions we make today will impact future generations. That's why we're designing our solutions to last longer, be more energy efficient, and help our customers reach their own sustainability goals.

We have a vision to reach net zero by 2050, and we're working with the Science Based Targets initiative to establish goals that support this vision. Read our [report](#) for full details of our progress and ambitious sustainability targets.

Download our infographic to learn more about how our smart technology can help you build a smarter, more sustainable future.

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We believe innovation must serve the purpose of a better life for humanity — more inclusive, more environmentally friendly, and constantly changing for good.”

Yang Yuanqing
CEO | Lenovo





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Lenovo ThinkShield

Protect what matters

As the Oil & Gas industry continues to digitize and embrace advanced technologies, it becomes more vulnerable to cyber threats. Successful attacks disrupt operations and pose severe risks to safety, security, and the environment.

Lenovo ThinkShield can protect your business against these evolving threats.

ThinkShield is a fully customisable portfolio of hardware, software, services, and processes designed to secure critical data and technology across your entire value chain.

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Solutions and Services

Empowering organisations to unleash the full power of technologies.

Lenovo Solutions

End-to-end technology solutions focusing on business outcomes to transform your vision into value.

- High-Performance Computing
- Digital Workplace
- Hybrid Cloud
- Sustainability Solutions

Lenovo Services

Full lifecycle services to accelerate your digital transformation.

- Consulting Services
- Development Services
- Managed Services
- Support Services
- Security Services

Lenovo TruScale

The industry's broadest portfolio delivered to you as a service with the simplicity and scalability of a flexible, pay-as-you-go model — anywhere.

- Device as a Service
- Infrastructure as a Service
- Software as a Service

Lenovo empowers digital transformation in the Oil & Gas industry.

Contact us today to learn more about how Lenovo can help enhance productivity, security, and collaboration at every step of your value chain.



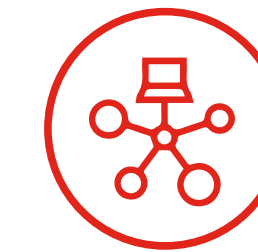
ThinkShield security



Environmental commitment



Smart solutions



Customized infrastructure

Find out more by visiting:
www.lenovo.com/energy-solutions

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