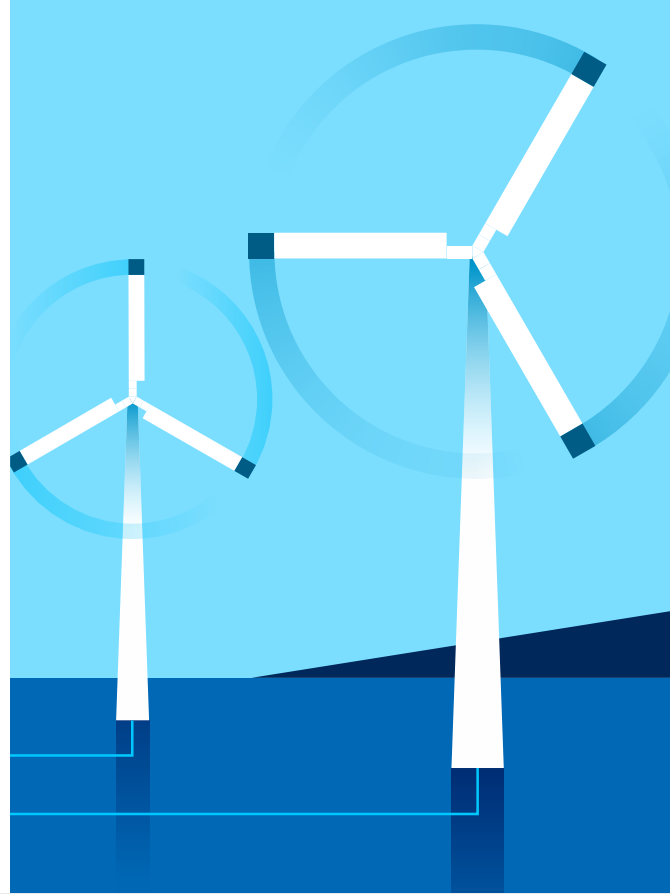


Advance your energy initiatives

Speed complex modeling and simulations to improve energy yields and reduce carbon footprints

With the expansion of smart grid technologies, new energy sources to explore, and the promise of new advancements from AI, the energy sector is poised for a new level of modernization. In today's shifting energy landscape, you need a solution that balances performance, cost, security, and power efficiency.



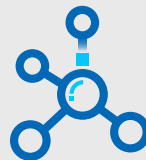
Run faster simulations to boost energy yield

Up to 2x the Ansys Fluent performance¹

5th Gen Intel® Xeon® processors

vs. 3rd Generation

Whether you're working with wind turbines, solar panels, hydropower, or oil rigs, your teams need accurate data to maintain their systems and optimize efficiency. The ability to quickly run realistic simulations with tools such as Ansys Fluent can help both identify problems and make improvements. Fortunately, new Intel Xeon processors significantly boost performance for these compute-intensive simulations.



Solve fluid dynamics problems faster

Up to 2x the OpenFOAM performance²

5th Gen Intel Xeon processors

vs. previous generation

Mechanical engineers use computational fluid dynamics (CFD) software to test complex chemical reactions, heat transfer, and liquid and gas flow scenarios that would be dangerous to recreate in the real world. With new Intel Xeon processors, CFD software, such as OpenFOAM, provides actionable data in less time.



Help protect critical power infrastructure

A cyberattack against an energy provider can result in widespread power outages, unhappy customers, and substantial earnings losses. New Intel Xeon processors offer the most comprehensive Confidential Computing portfolio in the industry, including application isolation with Intel SGX, VM isolation with Intel TDX, and independent verification services with Intel Trust Authority.





Improve power system management with more efficient natural language processing (NLP)

Up to 9.9x higher BERT-Large performance³

5th Gen Intel® Xeon® processors



vs. 3rd Generation

You may leverage the BERT deep learning model to build predictions based on historical power data or create reports that summarize data from dashboards and gas meters. With up to 9.9x higher BERT-large performance, new Intel Xeon processors are better able to handle the growing complexity and diversity of load forecasting requirements than ever before.



Reduce environmental impact with better intelligence

Up to 2.14x higher average HPC performance⁴



3rd Generation

vs. 5th Gen Intel Xeon processors

Today's energy companies rely on high-performance computing (HPC) to minimize the environmental impact of subsurface activities and operations, bring real-time intelligence to the edge, and increase accuracy of operations. By backing your computing solutions with new Intel Xeon processors instead of processors from two generations ago, you'll be getting up to 2.1x higher HPC performance.



Extract knowledge from power consumption data for less

Up to 72% TCO savings running DLRM workload⁵



3rd Generation

vs. 5th Gen Intel Xeon processors

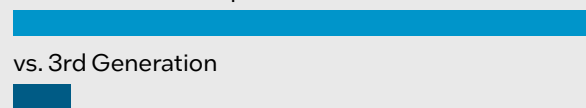
New Intel Xeon processors deliver AI-based performance gains that translate to TCO savings on even demanding Deep Learning Recommendation Model (DLRM) workloads. And because they're powerful enough to run data-driven predictive analytics applications, you save by needing fewer systems for the same work.



Boost power efficiency to advance sustainability initiatives

Up to 10x higher performance per watt⁶

5th Gen Intel Xeon processors



vs. 3rd Generation

Responsible for powering our world, energy producers and providers are on the cutting edge of the drive toward sustainability. Whether you're modernizing your central data centers or your edge infrastructure, you need to maximize power efficiency to both cut costs and hit your sustainability goals. New Intel Xeon processors can help maximize the value of your power by delivering dramatically more performance per watt.

To learn more, visit [Intel.com/Energy](https://www.intel.com/Energy).

1. See [H6] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
2. See [H5] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
3. See [A19] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
4. See [H1] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
5. See [T12] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
6. See [A21] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.



Performance varies by use, configuration and other factors. Learn more at www.intel.com/PerformanceIndex.

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See above for configuration details. No product or component can be absolutely secure. Your costs and results may vary.

Intel technologies may require enabled hardware, software or service activation.

© Intel Corporation. Intel, the Intel logo, and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.

Printed in USA 0324/GM/PT/PDF US001 ♻ Please Recycle