



*Transforming* **ENERGY**  
Through Computational Excellence

## **Computing for a Clean Energy Economy**

The National Renewable Energy Laboratory (NREL) provides high-performance computing (HPC) and related capabilities to support the mission of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE). EERE's mission is to create and sustain American leadership in the transition to a global clean energy economy. Research and development projects in energy efficiency, renewable energy, and sustainable transportation that are funded by EERE offices or aligned with the EERE mission are eligible to utilize NREL's advanced computing resources. EERE HPC focus areas include energy systems integration, materials science, forecasting, manufacturing, and fluid dynamics.



### **Meet Kestrel!**

Kestrel is NREL's latest HPC system dedicated to advancing renewable energy and energy efficiency technologies. Kestrel is a HPE Cray EX supercomputer composed of a balanced capability of Intel Sapphire Rapids processors and NVIDIA H100 Tensor Core GPUs and features HPE Slingshot, an Ethernet fabric to address higher speed and congestion control for larger data-intensive and artificial intelligence and machine learning workloads. With high-speed connectivity connecting more than 75 petabytes of parallel file system storage using the Cray ClusterStor E1000 from HPE, users are empowered to tackle complex, data-centric workflows and immerse themselves in interactive data analytic visualizations.

## **STUDENTS:**

**See reverse for more information on how to request time on Kestrel for your clean energy research.**





**STUDENTS:**

## Request time on Kestrel for your clean energy research

**There are limited opportunities available for university access to this resource:** apply for time on Kestrel for your mission-relevant clean energy project: <https://bit.ly/Kestrel-Student-Application>

**You will be asked to include:**

- **Abstract** of your research project and an EERE mission impact statement.
- **Computing plan** that includes details on software and data requirements, and a statement on code-readiness for Kestrel
- **Contact information** must include your **name, institution and department**, and your **academic email address**.

Project applications will be evaluated for mission relevance and scientific impact.



### Additional Information

[www.nrel.gov/hpc/kestrel-system-configuration.html](http://www.nrel.gov/hpc/kestrel-system-configuration.html)

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NREL/FS-2C00-88061 • November 2023