



## BP supercomputer to aid global healthcare researchers in race to halt COVID-19

16 April 2020

---

BP is joining forces with the U.S. government, leading universities and the world's largest technology companies by providing access to its supercomputer to help researchers halt the spread of COVID-19.

BP will donate its significant supercomputing capability to the public-private consortium formed in March 2020 by the White House's Office of Science and Technology Policy, the U.S. Department of Energy and IBM.

The group, known as the COVID-19 High Performance Computing Consortium, will pool resources and expertise from Amazon Web Services, Google Cloud, Microsoft, Hewlett Packard Enterprise, BP and others. They aim to provide COVID-19 researchers worldwide with access to the most powerful high-performance computing resources that can significantly advance the pace of scientific discovery in the fight to stop the virus.

"The world is rallying together in response to this pandemic and our biosciences experts, computer scientists and mathematicians are proud to play their part by supporting groundbreaking and potentially life-saving research," said David Eyton, BP's executive vice president of Innovation & Engineering. "We're all in this together and BP is working with governments and communities to do everything we can to help fight this pandemic."

BP will provide access to its Center for High-Performance Computing (CHPC) in Houston, which houses one of the world's largest supercomputers for commercial research and processes enormous amounts of data for BP. It has 16.3 petaflops of computing capability, allowing it to process more than 16 million billion calculations per second and complete a problem in an hour that would take a laptop nine years. The Center's staff includes experts in data science, applied mathematics, and systems architecture.

BP will also make available the expertise of its Biosciences Center, located in San Diego, California. The center consists of dozens of scientists who have capabilities in biological sciences, chemical engineering and chemistry, and works across BP to support many aspects of its operations. These scientists will work closely with BP's high-performance computing team to understand research proposals as they come in and help prioritize work.

Researchers are invited to submit COVID-19 related research proposals to the Consortium via [the online portal](#), which will be reviewed and matched with computing resources from one of the partner institutions. An expert panel of top scientists and computing researchers will work with proposers to quickly assess the public health benefit of the work and coordinate the allocation of the group's powerful computing assets and resources.

The sophisticated computing systems available through this consortium can process massive numbers of calculations related to bioinformatics, epidemiology, and molecular modeling, expected to help scientists develop answers to complex scientific questions about COVID-19 in hours or days versus weeks or months.

Across the world, BP is supporting the communities where it works in their response to the COVID-19 pandemic – for more information see [here](#). In addition to the support from the CHPC in the U.S., this includes: providing first responders, doctors, nurses and hospital workers discounts on BP and Amoco fuel, and free food and coffee throughout our *ampm* network; donating personal protective equipment to health services; and supporting the volunteering efforts of its people and matching employee donations to organizations fighting the pandemic.

[Download images from BP's Center for High-Performance Computing](#)

## Notes to editors

- Announced by the [White House Office of Science and Technology Policy](#) on March 23, 2020, the COVID-19 High Performance Computing Consortium brings together federal government, industry, and academic institutions to quickly advance COVID-19 research.
- The Center for High-Performance Computing, located at BP's US headquarters in Houston, serves as a worldwide hub for processing and managing huge amounts of geophysical data from across BP's portfolio and is a key tool in helping scientists to "see" more clearly what lies beneath the earth's surface.
- The CHPC staff includes scientists trained in data science, applied mathematics, geophysics, software development, systems architecture – capable of adapting software packages to run in highly parallelized environments, automate processes, and optimize algorithms.
- BP's ambition is to be a net zero company by 2050 or sooner and to help the world do the same. Digital technology is at the heart of our business. Last year, BP established a new digital function with the goal of adding significant value over the next five years.

