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The [HPC for Energy](#) project is proud to present a short video on the challenges that our society faces in energy production and consumption and how exascale supercomputing helps to address them. The first showing of the video took place at the SC16 conference (Salt Lake City, USA), at the Barcelona Supercomputing Center **booth #2511**.

The video exposes how important activities of our daily life -transportation, shipping, food, communications- depend on energy and how a point of no return is approaching. As the potentially irreversible effects of climate change largely caused by the combustion of fossil fuels for heat and power become ever more prevalent, and global energy demand continues to grow, the need for sustainable, affordable and reliable energy is becoming increasingly urgent. The video shows the key role of HPC in meeting this need.

With the aim of tackling these challenges, the HPC for Energy project is working to develop beyond state-of-the-art high-performance **simulation tools** that can help the energy industry to meet future **energy demands** and respond to carbon-related environmental issues using cutting-edge HPC systems. The video also shows how the HPC 4 Energy project promotes **cooperation** between energy industries from the **EU and Brazil** and between leading research centres from both sides in HPC focusing on issues relating to the energy industry. The production of this new video has resulted in a **powerful and moving video**, which is available on YouTube and also on the HPC for Energy website (www.hpc4e.eu).

About HPC 4 Energy project

The HPC for Energy project, coordinated by Barcelona Supercomputing Center (EU) and COPPE (Brazil), brings together European and Brazilian partners that include both companies within the energy sector, such as REPSOL, TOTAL, Iberdrola and PETROBRAS, as well as the following research centres: Barcelona Supercomputing Center, CIEMAT, Inria, University of Lancaster (ULANC), COPPE, LNNC, ITA, Universidade Federal do Rio Grande do Sul and Universidade Federal de Pernambuco.

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Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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