

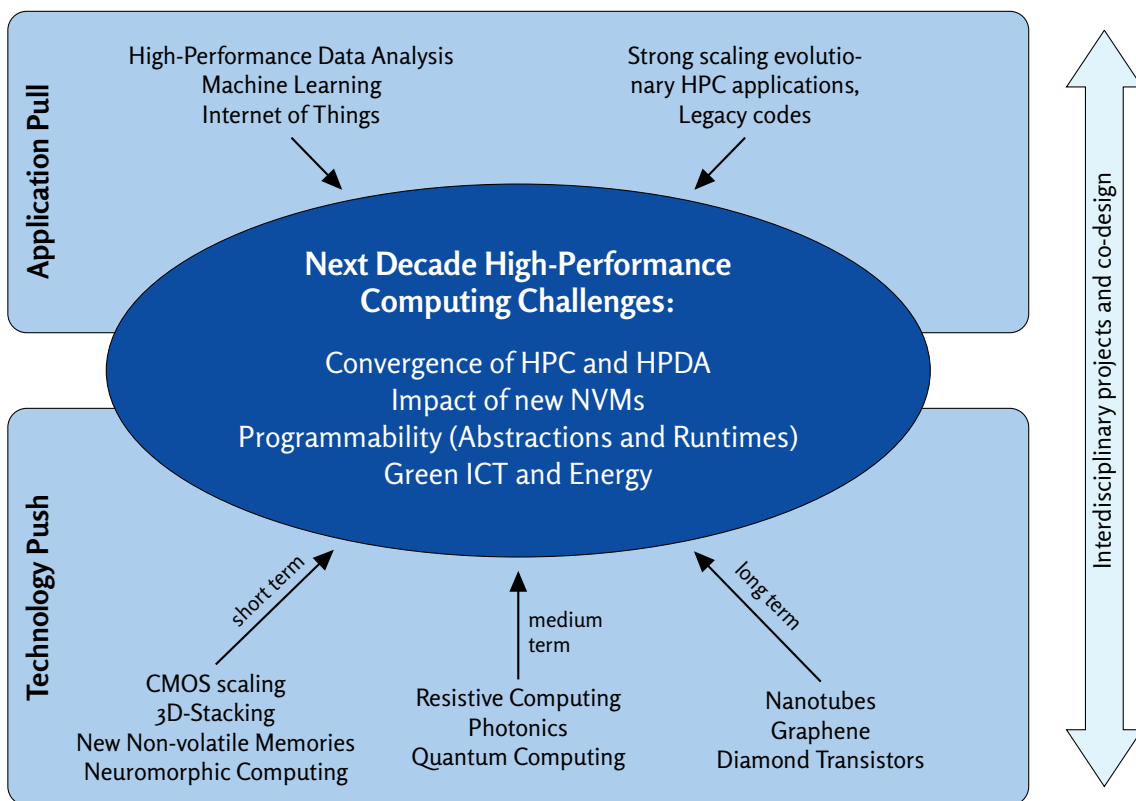
# Eurolab-4-HPC Long-Term Vision on High-Performance Computing

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Radical changes in computing are foreseen for the next decade. The “Eurolab-4-HPC Long Term Vision on High-Performance Computing” of August 2017 presents an assessment of potential changes for High-Performance Computing (HPC) in the period 2023 to 2030. The Vision is the result of a roadmapping effort within the EC CSA Eurolab-4-HPC.

High-Performance Computing in the next decade will continue to be driven by a technology push and an application pull. Enhancements of existing technologies and new inventions are expected to take place in different periods of time: in the short term, sustaining technologies will further advance, while disruptive technologies and alternative ways of computing are expected in the medium term. In the long term, new technologies will replace CMOS for processor logic. New applications and software technology will perform a pull on next-decade HPC, e.g. high-performance data analysis (HPDA), machine learning, and the internet of things.

Funding opportunities arise from the potential new hardware/software technologies, as a base for further European research in HPC. In return, this research will shape and influence next-decade high-performance computing.



The full Eurolab-4-HPC Vision document and a six-page executive summary are available at: <https://www.eurolab4hpc.eu/roadmap/>