ONE INCREDIBLE YEAR

On behalf of the American people, DOE has compiled an impressive list of accomplishments for 2019. Highlights are here and the full report can be found ENERGY.GOV.
Made Significant Cleanup Progress
Background: Over the past year, DOE has made significant progress in the treatment and disposal of nuclear waste, and in the fulfillment of its promise to do so. Highlights include completing transfer of K Basin radioactive sludge at Hanford to safer on-site storage away from the Columbia River and issuing the Department’s interpretation of the term high-level radioactive waste, which could open up additional pathways to address tank waste and expedite cleanup of DOE sites across the country.

FOSSIL ENERGY (FE)
Led Substantial Increases in LNG Exports
Background: In 2019, DOE granted 11 new long-term LNG export approvals. Two new large-scale terminals came online, and the U.S. is now exporting two cargos of LNG nearly every day, enough to support the daily combined natural gas needs of up to a half dozen European countries.

Launched Coal FIRST (Flexible, Innovative, Resilient, Small & Transformative) Initiative
Background: FE launched the Coal FIRST initiative to develop the coal plant of the future needed to provide secure, stable, reliable power, with near zero emissions, including carbon dioxide capture.

INTERNATIONAL AFFAIRS (IA)
Advanced the Partnership for Transatlantic Energy Cooperation (P-TEC)
Background: DOE hosted two successful P-TEC Ministerial meetings with partner countries from Central and Eastern Europe (CEE), who are on the front lines of Russian malign influence.

LEGACY MANAGEMENT (LM)
Resumed Activities in the Uranium Leasing Program (ULP)
Background: ULP manages 31 lease tracts covering approximately 25,000 acres in southwestern Colorado. It is preserving our nation’s ability to provide uninterrupted domestic uranium production.

LOAN PROGRAMS (LPO)
Supported the Advancement of U.S. Nuclear Leadership at Vogtle
Background: LPO has continued to work closely with the owners of Vogtle Units 3 & 4 as they advance the only new nuclear construction underway in the U.S. today, and has guaranteed a total of up to $12 billion in loans for the project.

NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)
Completed the W76-1 Life Extension Program
Background: The W76 1 Life Extension Program was completed under budget and ahead of schedule, strengthening U.S. safety and security by extending the warhead’s service life from 20 years to 60 years.

Advanced Exascale Computing
Background: NNSA signed a $600 million contract for its first exascale supercomputer, El Capitan, slated for delivery in 2022 at Lawrence Livermore National Laboratory to support NNSA's weapons programs.

NUCLEAR ENERGY (NE)
Established the National Reactor Innovation Center (NRIC)
Background: Led by Idaho National Laboratory, the National Reactor Innovation Center (NRIC) provides a platform for private sector technology developers to assess the performance of their reactor concepts through testing and demonstration.

Supported Advanced Nuclear Technology Development and Microreactor Deployment
Background: DOE has invested more than $170 million over the last two years to accelerate the development of advanced nuclear reactor technologies. DOE is also working with the Department of Defense to demonstrate and deploy microreactors as early as 2023.

DOE’s Summit and Sierra are now the two fastest supercomputers in the world.

OFFICE OF TECHNOLOGY TRANSITIONS (OTT)
Hosted Three InnovationXLabs
Background: OTT forged new connections with the private sector in 2019 by hosting Innovation XLab Summits on Grid Modernization, Advanced Supercomputing and Artificial Intelligence.

Won 41 R&D 100 Awards
Background: DOE researchers won 41 R&D 100 awards for exceptional new products and processes that were developed and introduced into the marketplace last year. Since the competition began, DOE's National Labs have won more than 900 R&D's.

SCIENCE (SC)
Won Nobel Prize
Background: The 2019 Nobel Prize in Chemistry was awarded to John B. Goodenough, M. Stanley Whittingham, and Akira Yoshino for the development of lithium-ion batteries. Both Goodenough and Whittingham are longtime DOE Office of Science-supported researchers.

Led in Supercomputing, Artificial Intelligence and Quantum Computing
Background: Summit at Oak Ridge National Lab remained atop the TOP500 list of the world’s most powerful computers, and researchers at the lab also teamed with Google on a proof-of-concept project in quantum computing that demonstrated quantum supremacy.