



The Bureau of Safety and Environmental Enforcement actively pursues research and development initiatives and evaluates current and emerging operational technologies to improve safety and reduce environmental risks across all offshore energy operations.

R&D informs the policies, technologies, and tactics needed for a spectrum of issues including installing renewable energy facilities, drilling oil and gas exploration wells, and the removal of platforms, pipelines and related infrastructure.

To properly inform its decision-making on offshore energy safety and environmental compliance, BSEE conducts research activities on oil spill response, emerging technologies, incident investigations, geohazards, risk analysis, infrastructure operations and maintenance, and compliance with existing mandates and regulations.

Our scientists and engineers identify needs, procure funds, and administer contracts to address these areas using basic, applied and developmental research. BSEE oversees studies and partners with scientific committees, other federal agencies, and academia to ensure regulatory decisions incorporate the most recent advances in scientific and technical understanding.



SCIENTIFIC INTEGRITY

BSEE is committed to maintaining scientific integrity, strictly adhering to the Department of the Interior policy on Integrity of Scientific and Scholarly Activities (305 DM 3).

Decisions based on peer-reviewed and replicable data are the foundation of BSEE's commitment to excellence and is vital to maintaining stewardship of our Nation's OCS resources.

Ensuring scientific integrity, is not only essential for credibility but critical to ensuring sound decisions and maintaining the public's trust.

ENVIRONMENTAL COMPLIANCE AND SAFETY RESEARCH

In addition to inspections and surveys of offshore work, BSEE researches relevant environmental issues (physical, biological, chemical, social) and monitors sensitive habitats.

The outcomes and new information from these research projects provide new understanding and reliable information to decision and policymakers to help them determine the best courses of action for environmental justice, habitat protection and for advancing BSEE's regulatory mission.

RESEARCH RECORD

BSEE's research projects include summaries, interim and final reports, and other related data and products.

TECHNOLOGY ASSESSMENT PROGRAM

The Technology Assessment Program supports R&D related to operational safety and environmental protection in offshore oil and natural gas exploration and development and is an important part of BSEE's safety program.

Operating through contracts with universities, private firms, and government laboratories to evaluate safety-related technologies, TAP has administered nearly 900 research and development projects since its inception.

OIL SPILL RESPONSE RESEARCH

BSEE research scientists and engineers perform R&D to advance the detection, containment, and cleanup of oil spills that may occur during offshore energy activities.

Specific research includes mechanical containment and recovery of hydrocarbons and other fluids, remote sensing, in-situ burning, chemical treatments, such as dispersants and herders, and incident management team decision-making tools.

Much of BSEE's research occurs at Ohmsett, the National Oil Spill Response Research and Renewable Energy Test Facility, located in Leonardo, New Jersey. The facility is available for use by government agencies, academia, and private industry from around the world.

OFFSHORE RENEWABLE ENERGY

BSEE leads the development of workplace safety and environmental compliance strategies for nascent offshore renewable energy projects on the Federal OCS. An interdisciplinary team of technical, inspection, and policy experts work on both oil and gas and now renewable energy programs.

This allows our agency to be efficient in our use of resources, engage expertise within the bureau, and be flexible with our use of personnel as the offshore renewable energy industry grows.

Through TAP, BSEE has funded more than 20 research projects addressing several science and technology questions related to wind, wave, and also ocean currents energy.

PEER REVIEW

It is essential that BSEE's research is based on solid, evidence-based science. Through peer review of its research products, BSEE takes steps to ensure that its research is salient, credible, objective, and accepted by experts in relevant scientific fields and by stakeholders.

Such research is used to inform regulatory changes, support BSEE's work on industry standards, employ the use of best-available technology on the OCS, contribute to operational safety and spill prevention, and improve the methods and technologies used for oil spill detection, containment, treatment, recovery, and cleanup.



The Bureau of Safety and Environmental Enforcement, established in 2011, is a U.S. Department of the Interior agency. BSEE promotes worker safety, environmental protection and conservation of resources through regulatory oversight and enforcement of the offshore energy industry on the U.S. Outer Continental Shelf.