

1. Electric Generation

This topic includes generating electric power from sources of primary energy such as coal, natural gas, nuclear and utility-scale and distributed generation from renewable sources such as wind, solar, biomass and hydroelectric.

2. Fuels and Resource Extraction

This topic includes resource extraction of coal and natural gas, including hydraulic fracturing (fracking), renewable biofuels production for transportation (ethanol and biodiesel) and propane supplies.

3. Energy Distribution

This topic focuses on pipelines, propane distribution, electric transmission lines, and electric distribution issues including smart grid (remote technologies used to modernize the electric utility grid) and distributed generation.

4. Energy Usage

This topic includes energy efficiency in buildings (new construction and retrofits), appliances, space conditioning and lighting, commercial and industrial operations, at military installations and in the agricultural sector. It includes demand response, which is an intentional change in electricity use patterns usually at times of high prices or demand. Alternative transportation fuels from fossil fuels such as compressed natural gas (CNG), liquefied natural gas (LNG) and propane as well as electric vehicles are included in this topic area.

5. Energy Storage

This topic focuses on storing available energy or energy resources to be used at a later time. This could include storage of electricity through thermal, mechanical or chemical processes utilizing technologies such as batteries, flywheels, electrochemical capacitors, superconducting magnetic energy storage, power electronics and control systems. Storage of fuels such as natural gas, propane and petroleum could be considered as well.

6. Energy-Related Land Use

This topic addresses how we use our land and natural resources to meet our energy needs including electricity generation from coal, wind, solar and biomass, transmission and distribution, and waste disposal such as coal combustion residue. This topic will also include land use considerations associated with biofuels.

7. Energy/Water Nexus

This topic focuses on the interdependencies between water and energy systems including water use for fuel extraction or manufacturing, cooling water for electric generation, barge transportation, water end-use efficiency and water and wastewater treatment efficiency.

8. Energy Pricing and Rate Setting Processes

This topic includes electric, natural gas and water utility regulatory processes and structures related to pricing and setting rates for consumers and how current and emerging market forces can be addressed while assuring consumer affordability. This could also address issues associated with prices of other fuels such as propane and transportation fuels.

9. Energy Security and Assurance

This topic focuses on efforts to ensure a secure and reliable energy infrastructure (including electricity, oil, natural gas, propane and petroleum fuels) by reducing risk and vulnerabilities from severe weather, system failures, deliberate attacks and other events.

10. Energy Resources in Emergencies

This topic addresses energy emergency response efforts to assure that critical infrastructure facilities such as power plants, critical care facilities, fuel distribution systems and other essential services have the energy resources they need to operate in times of natural or man-made disasters.