

Questions for Consideration

As one component of the Agency's pre-proposal outreach, U.S. Environmental Protection Agency (EPA) welcomes input on the questions for consideration below.

1. In both the Affordable Clean Energy (ACE) rule and Clean Power Plan (CPP) proposals, EPA identified options for systems of emission reduction that included fuel-switching or co-firing; carbon capture, utilization, and storage (CCUS); and improvements in operating efficiency. We would welcome your input on whether EPA should consider these systems in developing proposed emission guidelines under Clean Air Act (CAA) section 111(d).
 - a. What are your views on the feasibility, cost, air pollution impacts, energy impacts, or other advantages and disadvantages of these systems?
 - b. Are there particular types or subcategories of electric generating units (EGUs) for which one or more of these systems would be particularly appropriate or inappropriate?
 - c. Are there particular conditions, criteria, or limitations that EPA should consider with respect to any of these systems to address climate, public health or environmental justice considerations?
 - d. Are there other systems EPA should be considering, as alternatives to or in conjunction with these systems?
2. Standards under CAA section 111 have typically taken the form of a "rate-based" limit expressed in terms of a quantity of pollution per unit of product produced or per unit of energy consumed (for example, pound per kilowatt hour (lb/kWh) or pound per million British thermal units (lb/mmBtu)). What options should EPA be considering in expressing proposed limits on carbon dioxide (CO₂) from existing power plants?
3. CAA section 111(d) gives states responsibility for designing state plans that establish, implement, and enforce standards of performance for CO₂ from existing power plants.
 - a. What flexibilities should EPA offer to states with regard to designing such plans? How much time should an emission guideline provide for states to develop and submit plans to EPA?
 - b. Can EPA allow states to design alternative forms of emission limitations (*e.g.*, state-wide emissions budgets) and what limitations, conditions, or criteria should EPA establish to ensure such plans are satisfactory?
 - c. What requirements, guidance, or tools and resources can EPA provide to ensure state plans improve air quality and reduce emissions in communities with environmental justice concerns?
 - d. CAA section 111(d) provides that states must be allowed to consider "remaining useful life and other factors" in developing state plans. What requirements or guidance should EPA provide with respect to how such factors can be considered in the context of CO₂ from existing power plants?
4. EPA's regulations will be proposed and finalized in the context of transition within the power sector, which makes it important to ensure that any regulatory approach captures the most current information about investment decisions in the sector. Are there any significant recent announcements or commitments to transitioning generation of which the Agency should be aware?

5. In the spring, EPA's Office of Air and Radiation (OAR) released a draft whitepaper on greenhouse gas (GHG) control technologies and mitigation options for new combustion turbines. It included discussion of a range of technologies including efficient combustion, CCUS, and use of hydrogen. What are your thoughts regarding how EPA should consider those technologies as we consider developing proposed new source performance standards under CAA section 111(b)? In addition, what other factors do you think we should consider as we develop the CAA section 111(b) proposal?