

Quick Wins for Climate: A Three-Pronged Framework for International Mitigation Policy

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An effective international climate policy framework must satisfy the dual mitigation demands of near-term and long-term climate change. Mitigation of near-term climate change is critical in minimizing undesirable feedback effects and in slowing progress toward tipping points, particularly in the Arctic region. Mitigation of long-term climate change is important for ensuring long-term climate stability. Existing climate policy frameworks based on CO₂-equivalency are biased toward the long-term and are inadequate for simultaneously addressing near- and long-term mitigation needs.

Results show that the projected contributions to radiative forcing from emissions of short-, medium-, and long-lived pollutants are of comparable magnitude in the 20-year window, and are significant relative to historical anthropogenic forcing. Hence, all three categories of pollutants must be addressed simultaneously to mitigate near-term climate change. The source activities for the incremental radiative forcing in the near-term window are highly fragmented, and extend well beyond fossil fuel combustion.

A review of these source activities shows that few meet a modest measurability criterion: the units of pollutant X produced by source activity Y must be verifiable within 5% by three independent auditors. Application of this criterion on a global level implies that eligibility for cap-based policies should be limited to fossil fuel combustion and cement manufacturing. The wider range of policy instruments, such as codes and standards, must be applied to the remainder of significant source activities to maximize the environmental effectiveness of climate policy.

The Copenhagen climate treaty must thus have three prongs: 1) For the *measurable* long-lived pollutant source activities, the conventional basket approach with a CO₂-eq. cap is recommended; 2) For the other long-lived pollutant source activities and for the medium-lived pollutants, a model standard requiring best available control technologies and processes is recommended; and 3) For short-lived pollutants, a targeted policy is recommended in which best available control technologies and processes are required in key regions (e.g., Arctic exporters) in key seasons (i.e., spring and summer).