A recent study by two researchers at the Pacific Northwest National Laboratory (PNNL) recently claimed that the benefits of short-lived climate pollutant (SLCP) reductions were smaller than previously thought.

While the CCAC welcomes new research on the subject of SLCPs, we urge caution in drawing far-reaching conclusions from any individual study. A previous assessment of the full body of relevant literature conducted in 2011, the UNEP/WMO Integrated Assessment of Black Carbon and Tropospheric Ozone, came to a far different conclusion about the effects of SLCP reductions. To understand the reasons for these differences, it is instructive to examine the assumptions and methodologies behind each set of conclusions.

The PNNL study assumed both that all control measures with a negative cost will automatically happen based on “rational economic behavior,” and that projected increases in wealth worldwide will lead to automatic adoption of the strict emission control standards of the US, Europe and Japan. In other words, most pollution will be cleaned up by default, and anything that has a net long-term cost savings (e.g., increased efficiency) will also happen by default. Once these default conditions are factored in, including emissions controls, any additional action on SLCPs would naturally have only a small effect.

By contrast, the UNEP/WMO analysis started from the situation today in attempting to quantify the benefits of additional actions. The analysis recognized that while advanced nations have indeed cleaned up their emissions dramatically over recent decades, it took a lot of work. Emissions controls don’t happen automatically, even those that lead to cost savings. Market barriers get in the way and require specific actions and policies to address, for example in the case of gas pipelines and buildings, where the party reaping the savings from a more efficient structure isn’t usually the one paying the costs. The PNNL study and the UNEP/WMO assessment agree that emissions controls have negative costs, but they differ in how those negative costs impact national policies. In addition, there were significant disparities in the modeling methodologies that created a portion of the differing results.

The two studies asked fundamentally different questions: The PNNL researchers asked what are the benefits of additional efforts to remove methane and black carbon-related emissions after many of the available emissions control measures (such as those in the UNEP/WMO assessment and promoted by CCAC) have already happened. Not surprisingly, the answer is not too large. The UNEP/WMO assessment asked what difference could be made by pushing for greater emissions reductions relative to what is expected to happen if nothing else beyond current policies takes place.

The experience of the member countries of the CCAC is that putting new emissions control measures into place requires intentional investments, dedicated work, and a proactive approach
to “make it happen”. The CCAC recognizes the need for rapid action, especially for sensitive regions such as the Arctic, and is therefore pushing for more immediate emission reductions than might otherwise occur. In addition, the CCAC fully supports complementary efforts to achieve immediate and dramatic reductions in carbon dioxide emissions, which all scientists agree are critical for addressing climate change over the long term. Scientists concur that climate change is happening now, and CCAC is moving forward to do its part in seeking achievable solutions to this global challenge.