China and the United States Pledge to Use the Strengths of the Montreal Protocol to Phase-Down HFCs

14 June 2013. The HFC agreement between US President Obama and Chinese President Xi Jinping makes phasing down HFCs all but inevitable, although there is undoubtedly some hard negotiating ahead for all the big players. India and other countries that have been reluctant in the past have been showing grater flexibility in allowing control of HFCs production and consumption under the Montreal Protocol as a complement to the UNFCCC process, although they have yet to signal that they will support the US and China. Control of HFCs under the Montreal Protocol has the advantage of a highly capable Ozone Secretariat, strong Scientific and Technical Assessment Panels that provide timely information, a dedicated Multilateral Fund that pays the "full agreed incremental cost" for developing country Parties to switch to safer substitutes, agile and efficient implementing agencies, as well as National Ozone Units and Regional Networks staffed by well-trained professionals.

More than enough technology is fully commercialized and cost effective to begin the HFC phaseout under the Montreal Protocol, following the treaty's tradition of "start and strengthen." The Montreal Protocol requires that developed countries take on control measures first, followed by a grace period for developing countries that allows them to see which technology triumphs in each application. Encouragingly, there is already evidence that developing countries will be an early part of the technical solution as evidenced by the development and commercialization of energy efficient low-GWP room air conditioning occurring first in China and India, and the breakthrough in thermal insulating foam demonstrated first in developing countries that now supply next-generation products worldwide.

The most cost effective and proven path forward will be to: 1) accelerate the penetration of natural refrigerants in domestic refrigerators and freezers, beverage vending and display cases, stand-alone commercial refrigerated equipment, and integrated supermarket refrigeration using carbon dioxide and ammonia as refrigeration, 2) stay the course on the EC Mobile Air Conditioning F-Gas Directive that is scheduled to phaseout HFC-134a (Global Warming Potential – GWP of 1430) by 2017 by prohibiting refrigerants with GWP above 150, and continuing the US EPA strategy to award credit toward fuel efficiency standards for low GWP refrigerants, and to remove HFC-134a from the list of refrigerants allowed to be used in automobile air conditioners; and 3) to improve refrigeration and air conditioning service to minimize emissions and to recycle or destroy HFC at the end of product life.

National governments need to be stronger in rejecting campaigns to delay the HFC-134a phaseout in automobile air conditioning, as well as claims of an application patent for low-GWP HFCs that can be used in any refrigeration or air conditioning application. Companies need to be stronger in promoting new technology, standards organizations need to be faster in approving manufacturing, installation, and service standards for safe use of flammable and toxic refrigerants, and environmental authorities need to be more

confident and agile in removing approval for high GWP HFCs once they approve climate superior alternatives.

Controls under the Montreal Protocol will reenergize international technical cooperation and strengthen voluntary partnerships like the Refrigerants Naturally! partnership that is replacing HFC beverage coolers with CO2 technology, the Consumer Goods Forum that is pledged to accelerate phaseout of HFCs beginning in 2015, and the Mobile Air Conditioning Climate Protection Partnership that is phasing out HFC-134a, with goals of also reducing refrigerant leakage by at least 50% and improving automobile air conditioning energy efficiency by at least 30%. Montreal Protocol controls will also put all countries on coordinated schedules that avoid a patchwork of trade barriers that protect domestic industry phasing out HFCs under national regulations from the unfair competition of obsolete imports using HFCs.

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Dr. Andersen's views are not necessarily the views of TEAP.