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The Integrated Global Greenhouse Gas Information Systematic Services (IG3IS) Implementation Plan

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The World Meteorological Organization (WMO) in partnership with UN Environment (UNEP) and other partners has initiated the development of an Integrated Global Greenhouse Gas Information System (IG3IS). IG3IS will work closely with the inventory builders and other stakeholders who need to track GHG emissions to develop methodologies for how atmospheric GHG concentration measurements (the top-down) can be combined with spatially and temporally explicit emission inventory data (the bottom-up) to better inform and manage emission reduction policies and measures. IG3IS will focus on existing-use cases for which the scientific and technical skill is proven and on where IG3IS information can meet the expressed (or previously unrecognized) needs of decision makers who will value the information. The ultimate success criteria are that the IG3IS information is "used" and guides valuable and additional emission reduction actions, building confidence in the role of atmospheric composition measurements as an essential part of the climate change mitigation tool kit.

This presentation will focus on IG3IS implementation, which is now underway. The IG3IS team defined four implementation objectives, the first three being: 1) support for reducing uncertainties in national emission inventory reporting to UNFCCC; 2) locate and quantify previously unknown emission reduction opportunities such as fugitive methane emissions from industrial sources; 3) provide subnational entities such as large urban source regions (megacities) with timely and quantified information on the amounts, trends and attribution by sector of their GHG emissions to evaluate and guide progress towards emission reduction goals, and 4) support for the Paris Agreement Global Stock Take activities.