



**Task Force on Hemispheric
Transport of Air Pollution**

Introduction to TF HTAP & Overview of This Workshop

Co-Chairs

Terry Keating, PhD

U.S. EPA

Frank Dentener, PhD

EU/JRC/IES

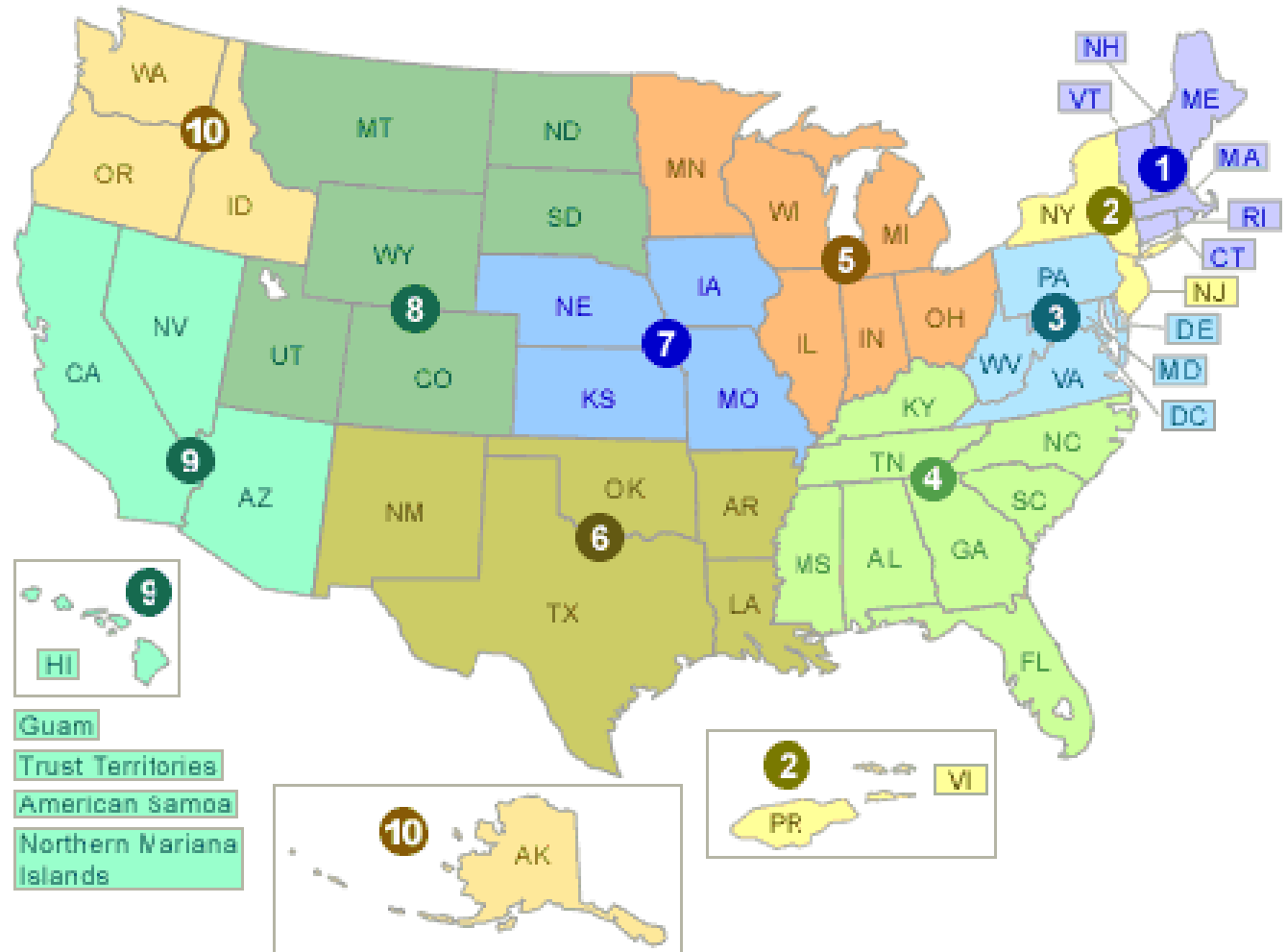
5-6 December 2013
San Francisco, CA, USA

Welcome to San Francisco

EPA's Pacific Southwest (Region 9) Headquarters

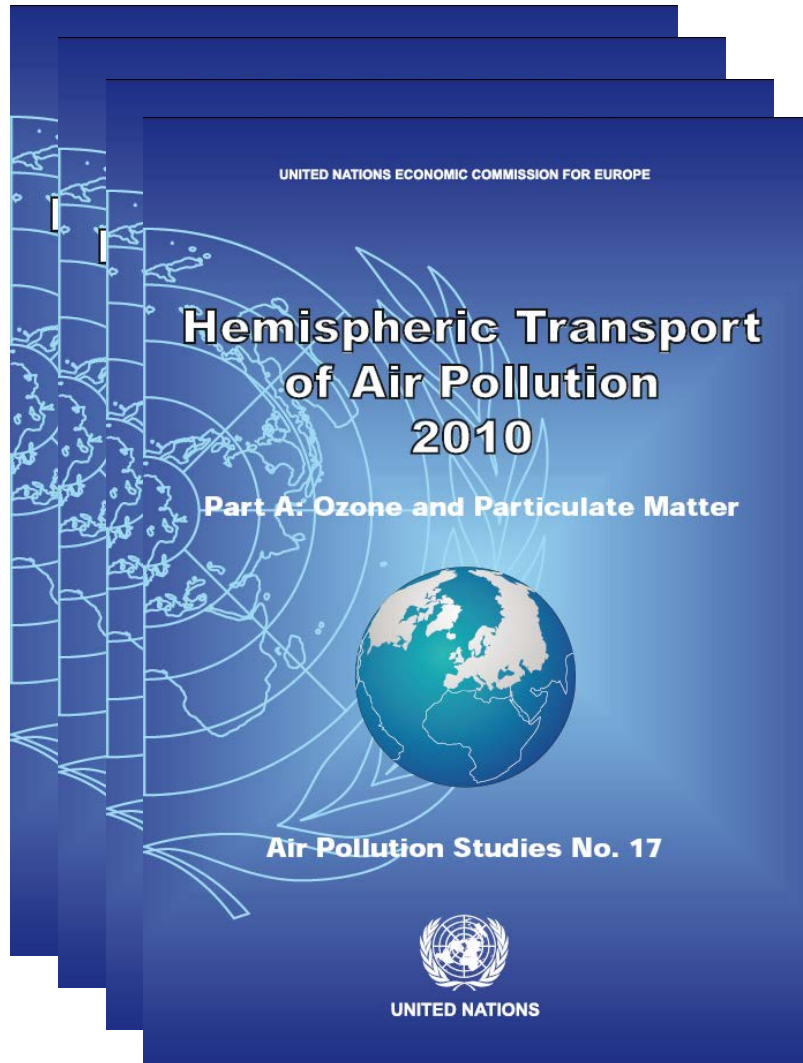
Serving:

- California
- Nevada
- Arizona
- Hawaii
- Pacific Island Territories
- 148 Tribal Nations



What is the TF HTAP?

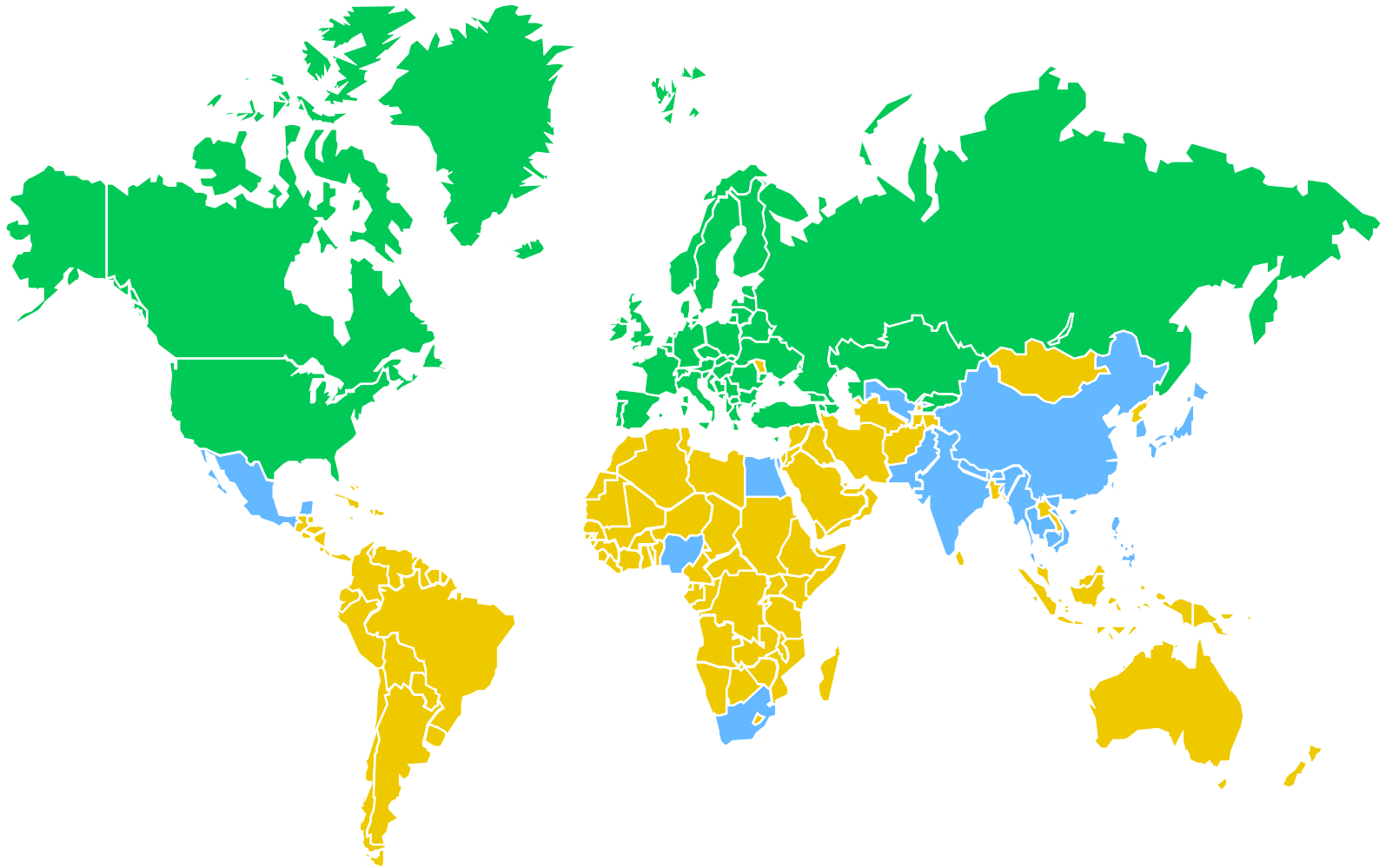
Task Force on Hemispheric Transport of Air Pollution



- An expert group established in 2004 by the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP)
- Co-Chaired by the European Commission (Dr. Frank Dentener, Joint Research Centre) & the United States (Dr. Terry Keating, EPA/OAR)
- Phase 1: 2005-2010, culminated in first comprehensive assessment of HTAP, addressing ozone, fine particles, mercury, and persistent organic pollutants.

www.htap.org

Parties to the Convention on Long-Range Transboundary Air Pollution And Other Participants in TF HTAP



Approximately 800 individual scientists have taken part in at least one TF HTAP activity since 2005.

What is the TF HTAP?

Mandate from LRTAP Executive Body (2010)

- Improve the understanding of the transport of air pollution across the Northern Hemisphere. Air pollution includes:
 - Ozone and its precursors, including NO_x, VOC, CO, and methane
 - Particulate Matter and its components, including black carbon
 - Mercury
 - Persistent Organic Pollutants (POPs)
- Assess potential emission mitigation options available inside and outside the UNECE region
- Assess the impacts of the options on regional and global air quality, public health, ecosystems, and near-term climate change
- Work in collaboration with other groups inside and outside the Convention.

What is the TF HTAP?

Objectives of 2012-2016 Work Plan

- 1. Deliver Policy Relevant Information to the LRTAP Convention, Other Multi-Lateral Forums, and National Governments**
- 2. Improve Our Scientific Understanding of Air Pollution at the Global to Hemispheric Scale**
- 3. Build a Common Understanding by Engaging Experts Inside and Outside the LRTAP Convention**

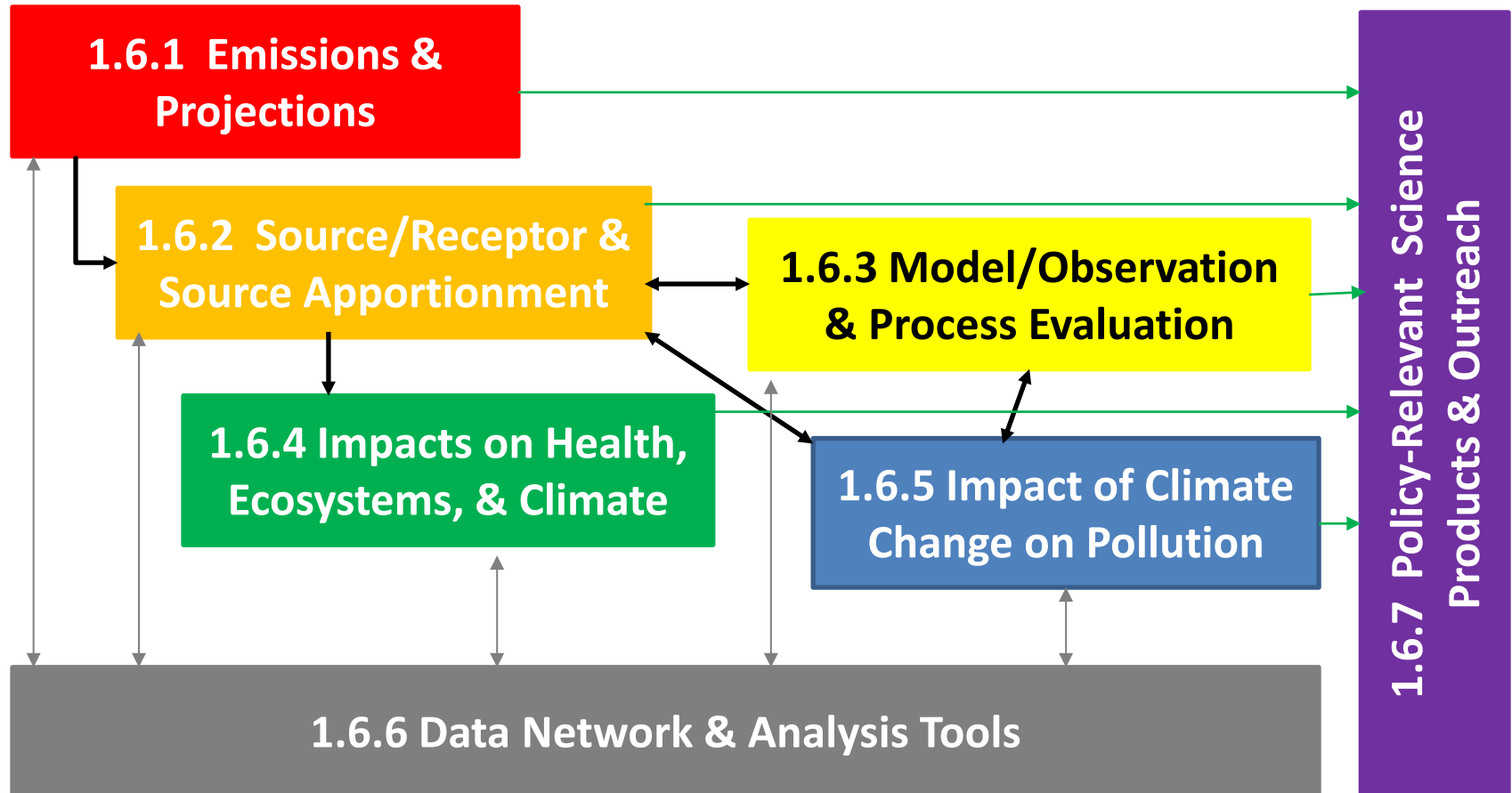
What is the TF HTAP?

Objectives of 2012-2016 Work Plan

1. **Deliver Policy Relevant Information to the LRTAP Convention, Other Multi-Lateral Forums, and National Governments**
 - a. What fraction of air pollution can be attributed to contemporary anthropogenic **regional** emissions sources **versus extra-regional**, non-anthropogenic, or legacy sources of pollution?
 - b. What is the contribution of each fraction to **impacts** on human health, ecosystems and climate change?
 - c. How **sensitive** are regional pollution levels and related impacts to changes in regional versus extra-regional emission sources?
 - d. How will the contributions of the fractions and their sensitivities **change in the future** as a result of expected air pollution abatement efforts or climate change?
 - e. How do the availability, costs and impacts of additional emission **abatement options** compare across different regions?
2. **Improve Our Scientific Understanding of Air Pollution at the Global to Hemispheric Scale**
3. **Build a Common Understanding by Engaging Experts Inside and Outside the LRTAP Convention**

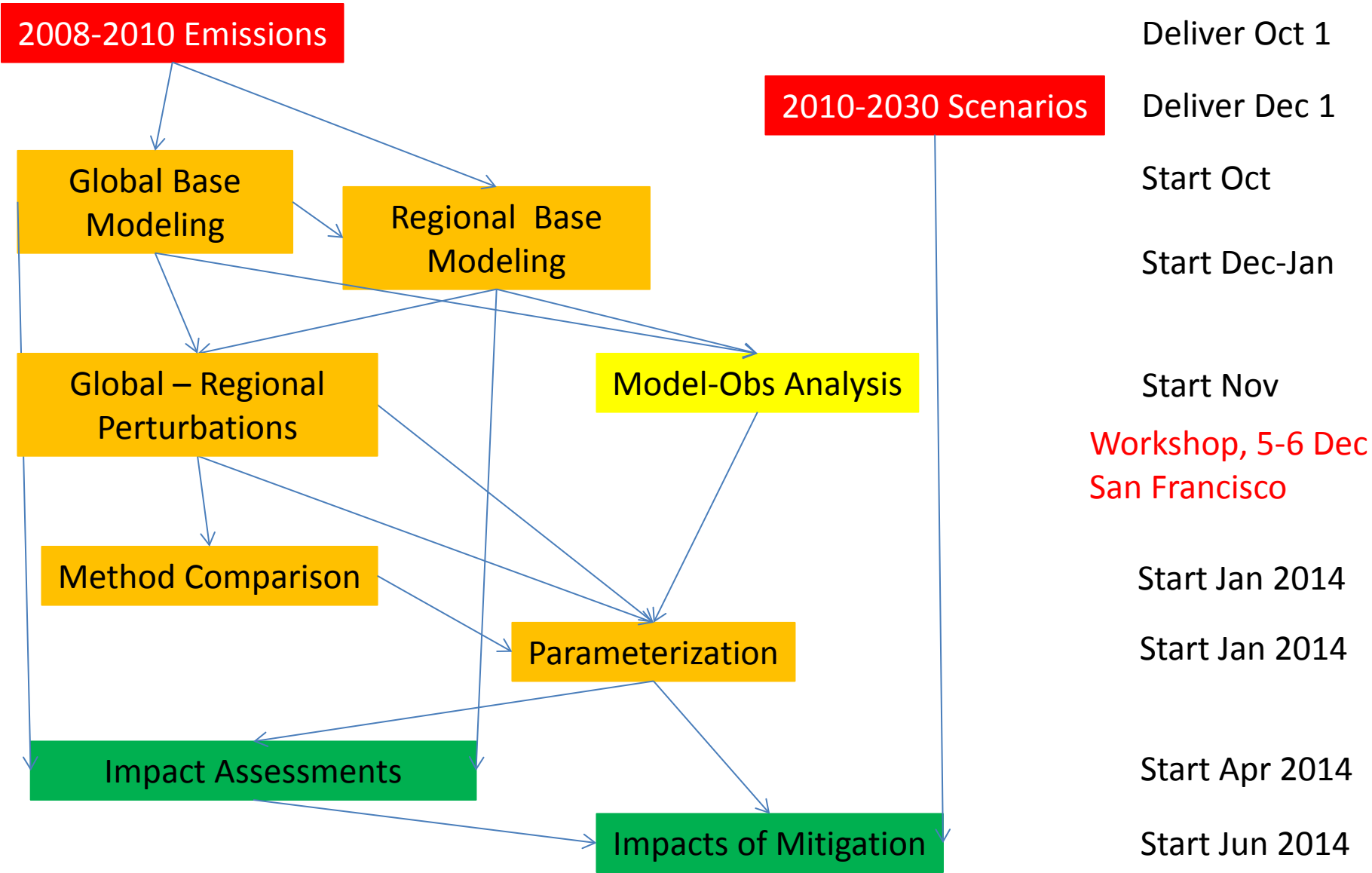
Themes of Cooperative Activities Under TF HTAP

As Numbered in Convention Work Plan



> 35 Work Packages identified, each with a volunteer leader.

Work Flow and Schedule (outdated)



Objectives for This Workshop

- Take Stock of Progress to Date
- Identify “Early” Course Corrections for Modeling
 - Experiment Set Up
 - Outputs Requested
 - Data Management Issues
- Review Plans for Analysis of Simulations
- Discuss Future Meetings and Follow Up
- Revise Schedule

Overview of Agenda

- Thursday through Friday Morning
 - Invited Presentations on Status of Work
 - Emissions → Modeling → Impacts
 - Identify Issues to be Discussed and Resolved on Friday
- Friday Afternoon
 - Additional Presentations of Initial Results or Issues
 - If interested, discuss with Frank and Terry
 - Discussion and Resolution of Identified Issues