

Gathering, analyzing and managing data: U.S. experiences on Policies and Measures

In-Session Facilitative Dialogue

June 10, 2024

## Agenda

Reporting History

Institutional Arrangements and Agency Participation

Data Management System

Policies and Measures Reporting

Gathering, Managing, and Analyzing Policies and Measures Data

Updates to PAMs Approach for BTR

Lessons Learned and Key Takeaways

## U.S. Reporting History

- 25+ National GHG Inventories
- 8 National Communications
- 5 Biennial Reports
- Intend to submit 1st BTR by December 31, 2024

# U.S. Reporting Institutional Arrangements: BR/NC/BTR

- Department of State, as Focal Point, leads with White House
- Some agencies agree to take the lead on chapters/annexes
- Some agencies provide guidance or participate in QA
- Data is held by different stakeholders governmental and non-governmental;
- Informal arrangements
- Definition of Roles and Responsibilities is Key!

## BR5/NC8 Interagency Participation

Executive Office of the President (White House)/Climate Policy Office (CPO)	U.S. Department of State, Office of Global Change
Office of the Special Presidential Envoy for Climate (SPEC)	U.S. Dept. of Housing and Urban Development (HUD)
Council on Environmental Quality (CEQ)	U.S. Dept. of Interior (DOI)
Office of the U.S.Trade Representative (USTR)	U.S. Dept. of Transportation (DOT)
U.S. Dept. of Agriculture (USDA)	U.S. Agency for International Development (USAID)
U.S. Dept. of Commerce/National Oceanic and Atmospheric Administration (NOAA)	U.S. Environmental Protection Agency (EPA)
U.S. Dept. of Energy (DOE)	U.S. Global Change Research Program (USGCRP - 14 federal member agencies)
U.S. Dept. of Health and Human Services (HHS)	U.S. Patent and Trademark Office (USPTO)

## BR5/NC8 Chapters and Annexes (Lead Agencies)

CHAPTER 1. EXECUTIVE SUMMARY – White House Climate Policy Office (CPO), State **CHAPTER 2. NATIONAL CIRCUMSTANCES - State** CHAPTER 3. GREENHOUSE GAS INVENTORY SUMMARY – EPA CHAPTER 4. POLICIES AND MEASURES – CPO CHAPTER 5. PROJECTED GREENHOUSE GAS EMISSIONS – EPA with DOE CHAPTER 6. CLIMATE CHANGE IMPACTS AND ADAPTATION - USGCRP CHAPTER 7. SUPPORTING THE GLOBAL COMMUNITY - State CHAPTER 8. RESEARCH AND SYSTEMATIC OBSERVATIONS - USGCRP CHAPTER 9. CLIMATE EDUCATION, ENGAGEMENT, WORKFORCE DEVELOPMENT, AND TRAINING - NOAA FIFTH BIENNIAL REPORT (BR5) - State ANNEX 1. SUMMARY TABLE OF POLICIES AND MEASURES - CPO ANNEX 2. METHODOLOGY FOR QUANTIFIED POLICIES AND MEASURES - CPO ANNEX 3. METHODOLOGY FOR PROJECTED GREENHOUSE GAS EMISSIONS - EPA ANNEX 4. PROVISION OF PUBLIC FINANCIAL SUPPORT TABLES - State ANNEX 5. ANNEX 6. METHODOLOGY FOR REPORTING FINANCIAL INFORMATION - State

## U.S. Data Management System

- The United States government does not use one single, comprehensive data management system
  - Too expensive! (Budget: \$0)
  - Too time consuming to set up
  - Multiple teams, many data sources
  - Lack of interagency interoperability
- Focus on coordination
- Simple tools for data collection and report management (Microsoft Word, Microsoft Excel)

### BR5/NC8 Policies and Measures

#### Annex 2. SUMMARY TABLE OF POLICIES AND MEASURES

This table provides information on key federal policies and measures, including several longstanding federal efforts that were reported in previous National Communications. For entries with quantified estimates of mitigation impacts, explanations of the estimation methodologies are provided in Annex 3. This table does not present a comprehensive account of every policy and measure that supports U.S. climate goals, but rather a selection of significant actions underway. Key provisions of the Inflation Reduction Act are described in Chapter 4, but not presented in this table, given the law's recent enactment.

Name of Policy or Program	Objective of Policy or Program	Brief Description	Affected Gases	Status	Type of Instrument	Impleme ntation Start Year	Implementing Entities	Estimate of Mitigation Impact (kt CO2e) in 2030
Transport				let	la:			
National Program for Light-Duty Vehicle GHG Emissions and Fuel Efficiency Standards*	Reduce GHG emissions from the light-duty vehicle sector	Establishes fuel efficiency and GHG emission standards for new light-duty vehicles (LDVs) produced for sale in the U.S.	CO2, CH4, N2O, HFCs	Implemented and Ongoing	Regulatory	2012 (model year)	Environmental Protection Agency, Department of Transportation	271,000
National Program for Heavy-Duty Vehicle GHG Emissions and Fuel Efficiency Standards*	Reduce GHG emissions from the heavy-duty vehicle sector	Establishes fuel efficiency and GHG emission standards for work trucks, buses, and other heavy-duty vehicles (HDVs)	CO2, CH4, N2O	Implemented and Ongoing	Regulatory	2011	Environmental Protection Agency, Department of Transportation	148,000

## Gathering, Managing, and Analyzing Policies and Measures Data

- White House leads
- Data collection template/survey utilized
- Informal arrangements enable interagency participation
- Data is compiled over several months → some follow up with individual agencies necessary during compilation QC
- White House compiles, drafts chapter, and develops PAMs table

### BR5/NC8 Policies and Measures Template

#### NC8/BR5 - Policies and Measures

Sector: [Choose one - energy: supply; energy: residential, commercial, industrial end use; transport; agriculture; waste; or cross-cutting]

#### Name of Policy or Measure:

#### US Agency Name:

Proposed one-paragraph narrative for inclusion in NC8 Chapter 4 - Policies and Measures:

Key parameters for policy and measures GHG benefits methodology documentation for BR5

#### Timeframe:

- a. In what year did the program start?
- b. If emissions were calculated using a year other than the start year as the "zero" point for reductions, what was that year?

#### 2. Emissions:

- a. Which gases are measured?
- b. For non-CO<sub>2</sub> gases, what global warming potential (GWP) values were used?
- c. How are GHG impacts measured? (direct measurements, emissions factor, modeling)

#### Information quality:

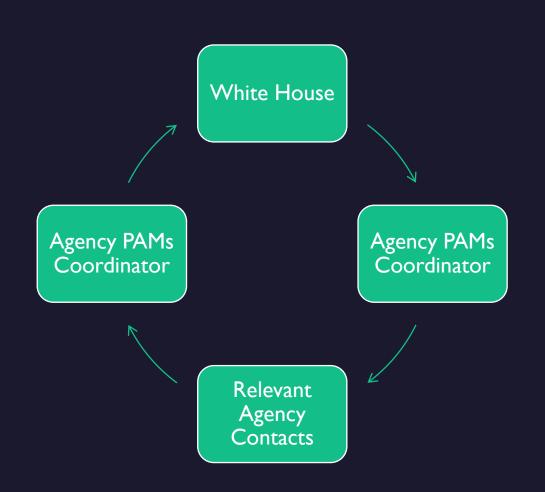
- a. What are the primary data sources used? (Federal estimates, industry reports, self-reporting, etc.)
- b. What approaches are used to ensure data quality, if any?

## BR5/NC8 Policies and Measures Template (cont).

#### Additional elements your agency may wish to include if available/applicable

- 1. Changes since NC7/BR3-4
  - a. What changes to the methodology occurred?
  - b. If applicable, do these changes increase or decrease historic values or projections?
- 2. Do these measured GHG impacts reflect all, most, or just some of the actions which your policy or measure targets to reduce GHG emissions?
- 3. Does your methodology account for GHG impacts related to actions that are occurring outside of its primary actions or sector (such as broader market impact or lifecycle effects)?
- 4. Are there other federal policies and measures that measure GHG impacts from similar or related actions? If applicable, does the program's methodology adjust for potential double counting?

# PAMs Data Collection: An Agency Perspective



# Updates to Policies and Measures Approach for the BTR

- Restructuring of chapter to follow MPGs
- Updates to Data Collection Template:
  - Sectors
  - Metrics
  - Achieved and Projected Emissions
  - Costs

## Lessons Learned & Key Takeaways

- Institutional knowledge is important
- People learn over time
- Some consistency in the team helps
- Supplement with recording of lessons learned, archiving of materials such as templates
- Keep it simple/straightforward

Reporting every 2 years is helpful!

## Thank you

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