

# Learning from Emissions and Policy Tracking Systems in China, Germany, Italy, and the United States

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# About Climate Policy Initiative (CPI)

Climate Policy Initiative (CPI) is a global policy effectiveness analysis and advisory organization.

Our mission is to assess, diagnose, and support nations' efforts to achieve low-carbon growth.

CPI's headquarters are in San Francisco, and we also have operations in Europe, the Americas, and Asia.

## Global findings

1. **Defining goals and measuring progress** is a critical component of policy effectiveness.
2. Countries have a **wide range of emissions and policy tracking systems** that are helping them achieve their mitigation goals.
3. **International processes** can and do support effective domestic efforts.
4. **Tracking climate policies in a rigorous, comparable way** is a priority across the countries in our study. National systems to track emissions are currently more effective than systems to track mitigation actions.

# Agenda

Definitions

Scope of our study

Country findings

Global findings

Q&A

# Measurement, reporting, and verification (MRV)

Measurement, reporting, and verification (MRV) systems are the institutions and processes countries use to:

**Measure** GHG emissions and the impact of mitigation actions

**Report** the results

**Verify** the accuracy of reported information

These processes help nations achieve their goals by:

Tracking achievement of domestic policy targets

Informing future policymaking

Informing domestic and international stakeholders

## CPI's Work on MRV

What we studied:

National systems for tracking emissions and mitigation actions in China, Germany, Italy, and the United States

Our approach:

Describe MRV systems and their institutional and policy context

Evaluate how well systems are performing, identify good practices and gaps based on six criteria:

**Transparency, Comparability, Reliability,  
Usefulness, Timeliness, Completeness**

Identify emerging needs for MRV, assess how well countries are positioned to meet emerging needs

# Germany: Institutional and policy context

## Tracking emissions:

- Annual GHG inventory

- Annual facility-level reporting for EU ETS participants to EU registry

## Tracking mitigation actions:

- National Communication to UNFCCC

- Biennial EU Monitoring Mechanism reporting

- Energy Concept/Energy Transition Monitoring

- Annual reporting on renewable energy

- Individual policy tracking systems (e.g. Feed-in-tariff)

## Germany: Key findings

GHG emissions inventory is very comprehensive, with strong institutional expertise

Individual policy tracking is strong, especially for renewable energy

### Priorities:

Developing relevant indicators for the monitoring of the Energy Transition

Adapting and updating energy statistical system

Analysing of economic and environmental impacts, and cost-effectiveness of policy packages

Expanding methodology for evaluating energy efficiency programs



## Italy: Institutional and policy context

### Tracking emissions:

- Annual GHG inventory

- Facility-level reporting for EU ETS registry

### Tracking mitigation actions:

- National Communication to UNFCCC

- Biennial EU Monitoring Mechanism reporting

- Annual reporting on energy efficiency and renewable energy

- Individual policy tracking systems

## Italy: Key findings

GHG emissions inventory is very comprehensive, with strong institutional expertise

Italy has begun to measure and report on its energy efficiency and renewable energy policies in a more integrated, consistent way

### Priorities:

Expanding methodology for evaluating energy efficiency programs and establishing a catalogue of low-carbon technologies

Including information on economic impacts; and extending cost-effectiveness analysis

# China: Institutional and policy context

## Tracking emissions:

Two GHG inventories: 1994, 2005

Post-2014, biennial update reports with GHG data

## Tracking mitigation actions:

National Communications to UNFCCC

Statistics Indicators, Monitoring, and Examination (SME)  
system for energy statistics

Progress reports: China's Policies and Actions for Addressing  
Climate Change

## China: Key findings

Progress reports give a regular update across a broad range of policies and actions

Lack of transparency around methods

Focus on energy data

### Priorities:

More frequent, timely emissions reporting

Strengthening capacity at the provincial/local level

Improving transparency and reliability of data

# United States: Institutional and policy context

Tracking emissions:

- Annual GHG inventory
- Energy GHG reporting
- Facility-Level Information on GHG Tool (FLIGHT)



[ghgdata.epa.gov](http://ghgdata.epa.gov)

Tracking mitigation actions:

- National Communication to UNFCCC (U.S. Climate Action Report)
- Agency-level program evaluation and reporting
- General government oversight mechanisms

## United States: Key findings

Very strong GHG inventory and other emissions tracking capabilities

Lack of national climate policy architecture is reflected in lack of regular, consistent reporting on policies and their impact

### Priorities:

Coordinating national climate reporting across diverse policy portfolio

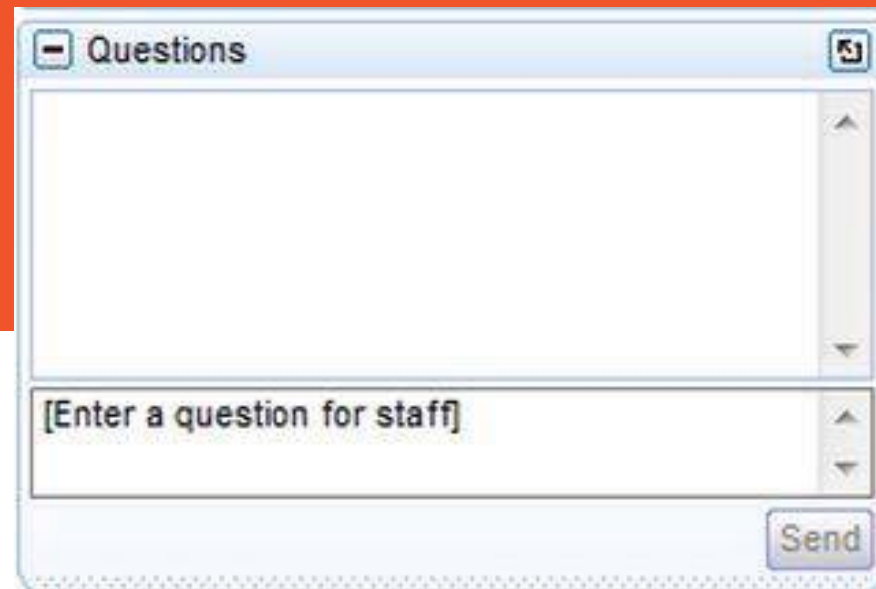
More regular post-implementation assessment of policy impact and cost-effectiveness

Connecting state and national information

## Global findings

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4. **Tracking climate policies in a rigorous, comparable way** is a priority across the countries in our study. National systems to track emissions are currently more effective than systems to track mitigation actions.

# Q & A



Questions

[Enter a question for staff]

Send

The image shows a standard Windows-style dialog box titled "Questions". It features a title bar with a close button on the right. The main area contains a large, empty text input field. Below this field is a smaller text input field containing the placeholder text "[Enter a question for staff]". At the bottom right of the dialog is a "Send" button. The dialog box is overlaid on a red background.



Thank you!

Reports and fact sheet online:

<http://climatepolicyinitiative.org/publication/tracking-emissions-and-mitigation-actions-mrv-systems-in-china-germany-italy-and-the-united-states/>

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Additional slides

## Good practices

Criteria for effective emissions and policy tracking systems:

Transparency, Comparability, Reliability,  
Usefulness, Timeliness, Completeness

International resources on good practices:

International Partnership on Mitigation and MRV

<http://mitigationpartnership.net/>

Greenhouse Gas Protocol:

Policies and Actions Standard, Mitigation Goals Standard

<http://www.ghgprotocol.org/mitigation-accounting>