

# Quantifying Greenhouse Gas Emissions

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State and Local

Clean Energy-Environment Partnerships Programs

**16th Annual International Emissions Inventory Conference**

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# Logistics and Agenda

- Basic Logistics
- Agenda for the Day
- Context for Training Course



# Agenda

9:00 – 9:30	Welcome and Overview
9:30 – 10:30	eGRID
10:30 – 10:45	BREAK
10:45 – 12:15	State Inventory/Projection Tool
12:15 – 1:45	LUNCH BREAK
1:45 – 2:45	CACP Software
2:45 – 3:15	BREAK (demos)
3:15 – 3:45	GHG Equivalencies Calculator
3:45 – 4:30	Climate CHECK
4:30	Wrap-Up

# Context and Background

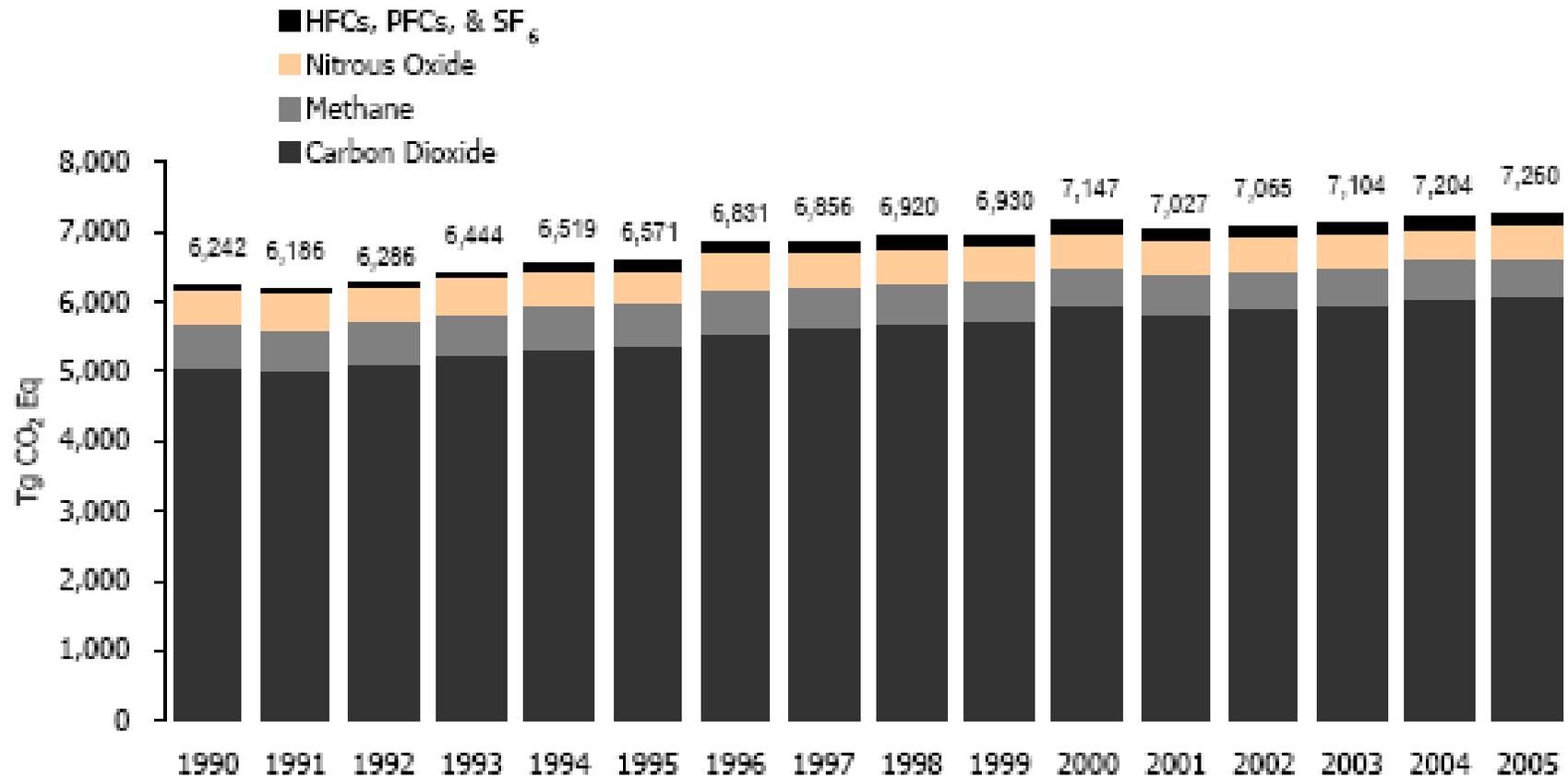
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- The US GHG Emissions Picture
- EPA's Role
- GHG Quantification Overview

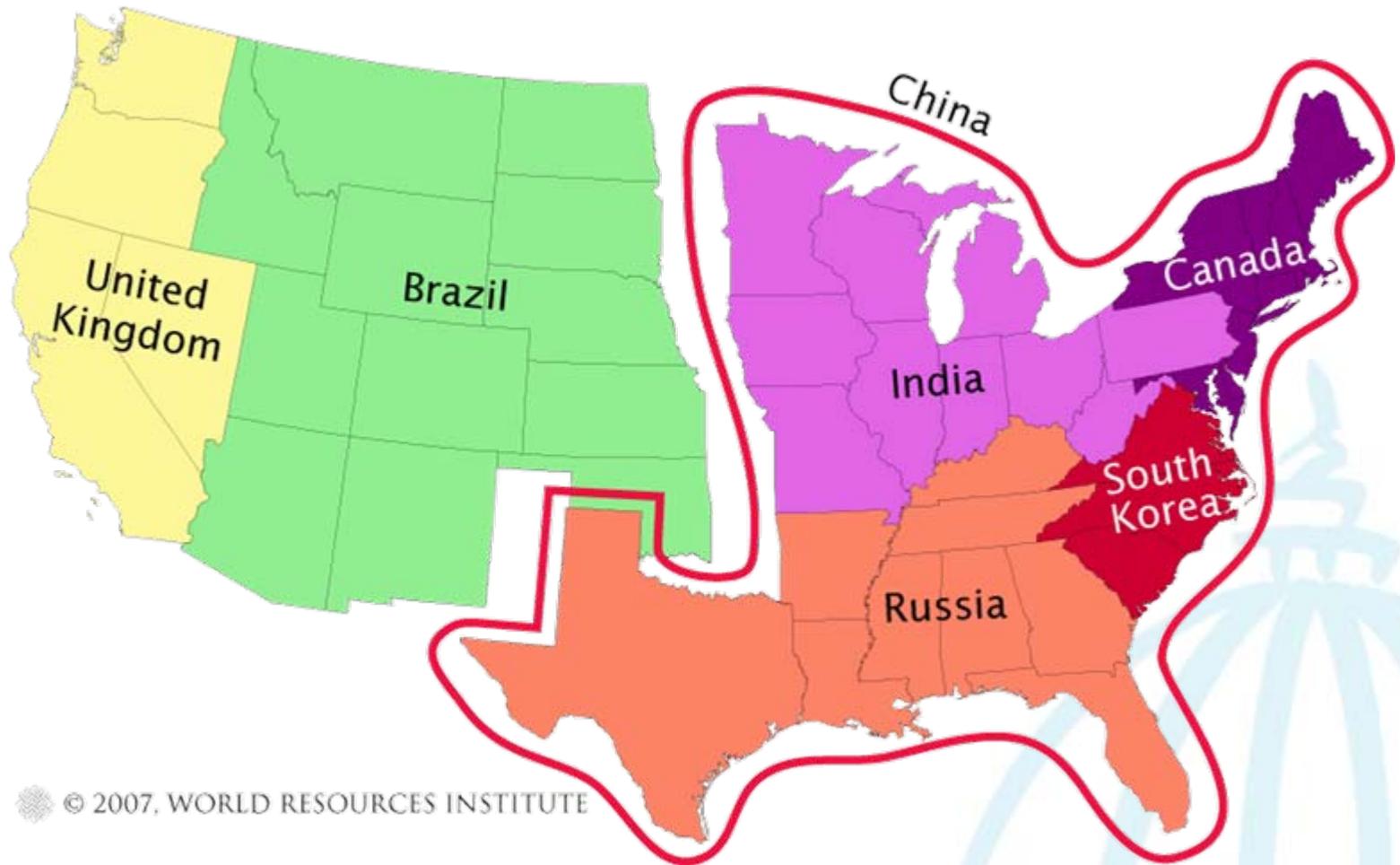


# US Greenhouse Gas Emissions

## U.S. GHG Emissions by Gas



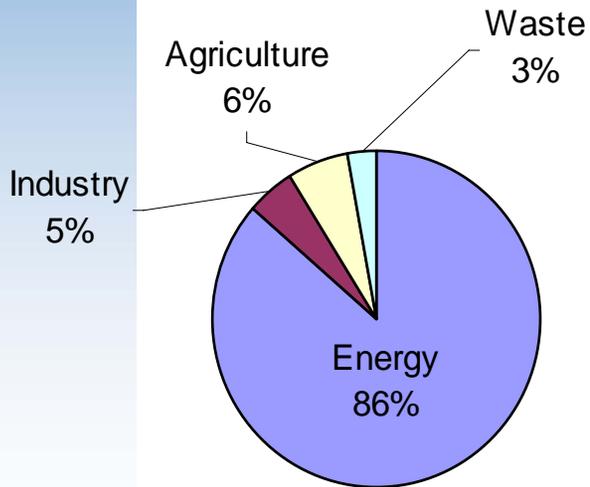
# The US Emissions Situation



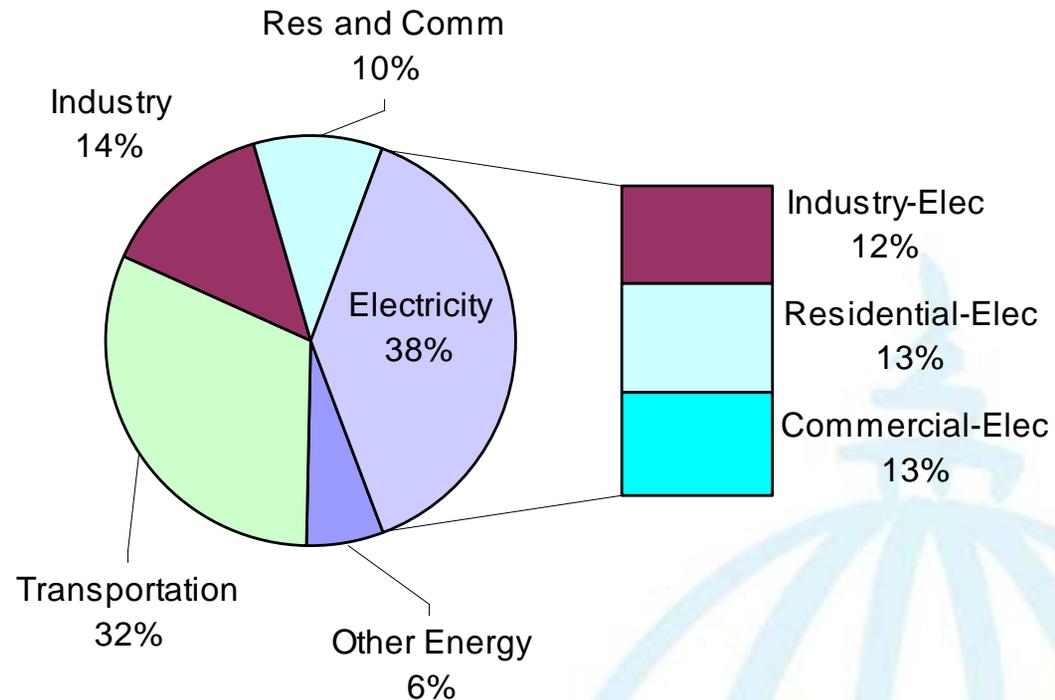
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# US Emissions by Sector (2004)

## 2004 US GHG Emissions



## 2004 GHG Emissions from Energy



Source: Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2004

# Elements of US Climate Policy

- **Slowing the growth of GHG emissions**
  - Reduce emissions intensity (tons/\$GDP) by 18% between 2002 and 2012
  - Improving fuel economy and expanding alternative fuel use
- **Expanding scientific research into key uncertainties**
- **Expanding technology research**
  - Focus on long term R&D
- **Enhancing international cooperation**
  - Reaffirm U.S. commitment to the UNFCCC
  - Multi-lateral and bi-lateral programs

# US EPA Voluntary Programs



Clean Energy Environment  
STATE PARTNERSHIP



HEAT ISLAND REDUCTION  
INITIATIVE



LANDFILL METHANE  
OUTREACH PROGRAM



*It all adds up to cleaner air*

# Clean Energy Environment Programs

- Promote cost-effective clean energy strategies that further environmental and clean energy goals and achieve public health and economic benefits
- Clean Energy Environment State Partnership
  - 15 State Partners
  - Handout in Packet
- Clean Energy Environment Municipal Network
  - Information Sharing Network
  - Handout in Packet

[www.epa.gov/cleanenergy/stateandlocal](http://www.epa.gov/cleanenergy/stateandlocal)

# GHG Quantification Overview

Tool	Primary Audience	Purpose
Emissions and Generation Resource integrated Database (eGRID)	Federal, State, NGO tools, modeling, and disclosure efforts	Inventory of environmental attributes of electric power systems
State Inventory Tool and Projection Tool	State Agencies	Comprehensive top-down analysis of state-wide ghg emissions over time
Clean Air Climate Protection Software	State and Local Governments	Inventory and mitigation planning for government and community wide emissions
GHG Equivalency Calculator	Education, Outreach, and Communications	Translate GHG metrics into understandable terms
Climate Change Emissions Calculator Kit (Climate CHECK)	Educators, High School Students	Teach about climate change, quickly inventory school emissions

# Issues to Consider When Selecting a Tool

- What will the results be used for?
  - What level of accuracy/detail is needed?
  - What sectors need to be included?
- What level of effort is available?
  - What data do you have/can you get?
  - How much expertise do the users have?
- Are the results comparable with peers?
  - What tools have equivalent organizations used?
  - How should boundaries be set?
  - What emissions should be included (direct vs indirect, etc)

## For More Information

- Tool Specific Contacts Included in Handouts
- For General Information:
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