

# Possible State Uses of EPA GHG Reporting Program (GHGRP) Data

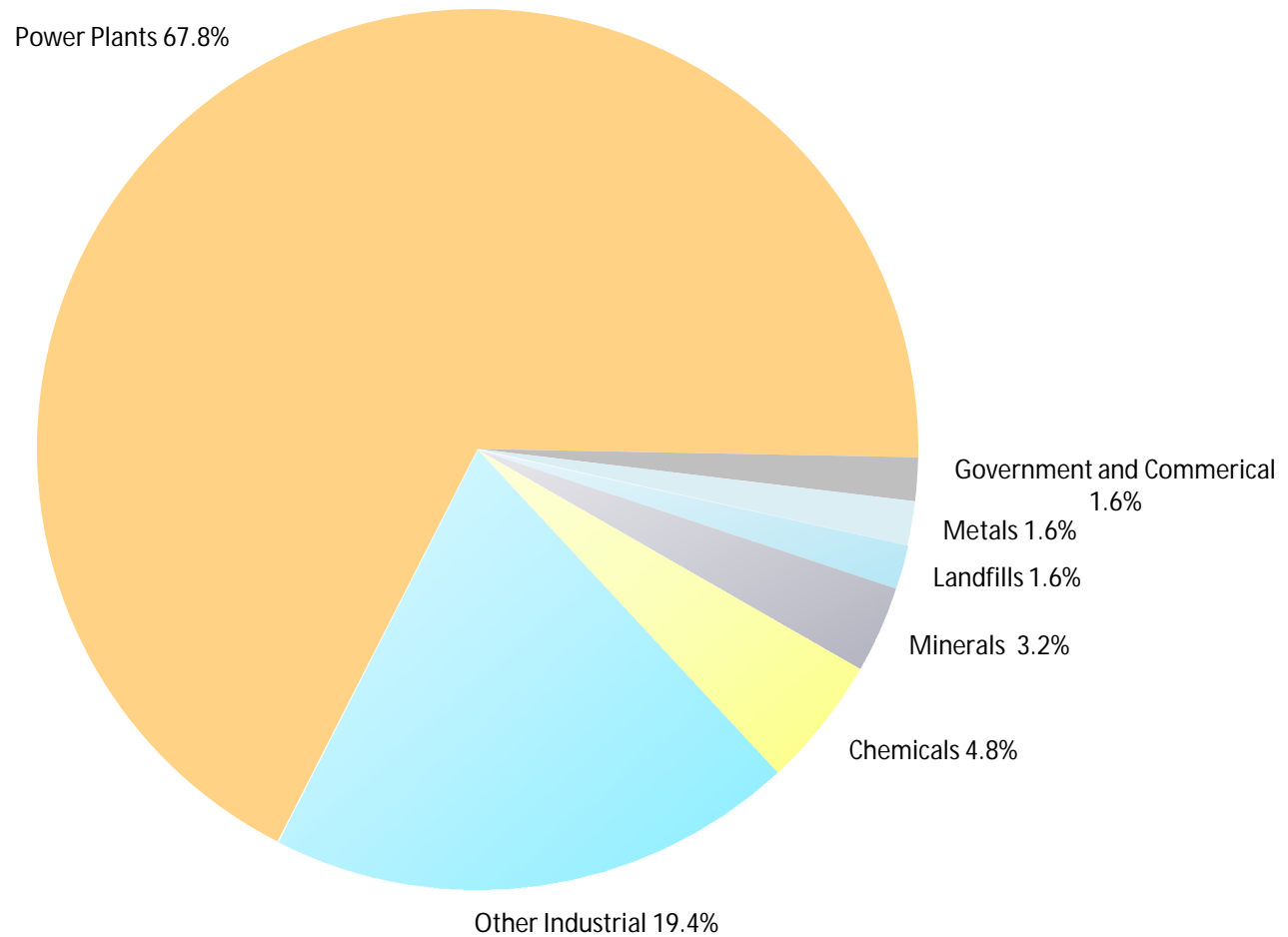
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# Iowa Direct-Emitting Source Categories Reported in 2010

<b>Reported for 2010:</b>	Iron and Steel Production (Q)
Stationary Combustion (C)	Lime Production (S)
Electricity Generation (D)	Nitric Acid Production (V)
Ammonia Manufacturing (G)	Petrochemical Production (X)
Cement Production (H)	Landfills (HH)
Glass Production (N)	CO <sub>2</sub> Supply (PP)

- 135 facilities total
- Source categories in red have only 1 – 3 reporting facilities

## Breakdown of Reported GHG Emissions (MMT CO<sub>2</sub>e) from Iowa Stationary Sources by Industry Type - 2010\*



# What could DNR use the data for?

- Allows us to easily compare Iowa emissions to those of the nation, other states, and regions
  - Data provided to States in a compatible format
  - Participant in EPA/ECOS Integrated Project Team
  - In future EPA site will graph and chart trends
- Public information requests
- Fulfills statutory requirement for Iowa GHG mandatory reporting program
- Marketing for Pollution Prevention Services
  - EPA grant to offer pollution prevention interns to highest emitters of GHGs

# What could DNR use the data for?

- Did not previously have site-specific landfill methane emissions
  - Could be used to identify future landfill gas-to-energy projects
- GHG Permitting and NSPS applicability
  - Phase 3 of Tailoring Rule
  - Emission guidelines for existing power plants
- Statewide GHG Inventory
  - Statute requires the inventory must be completed by Dec 31 for the previous year.

# Use in Statewide GHG Inventories

## 1. *Bottom-up inventories*

- EPA GHGRP data is “bottom-up” data
  - i.e. direct emissions from individual sources
  - Generally more accurate than “top-down” inventories that calculate emissions based on national or regional data aggregated down to the state level
- Iowa has 3 years of bottom-up of direct emissions reported to Iowa prior to federal program (2007 – 2009)
  - stationary fossil fuel combustion, industrial processes, ethanol fermentation
- We can use EPA GHGRP data for our bottom-up inventory
  - Generally same sources reported and calculated using similar method
  - Shows emissions trends; can be used to show effectiveness of mitigation measures

# Use in Statewide GHG Inventories

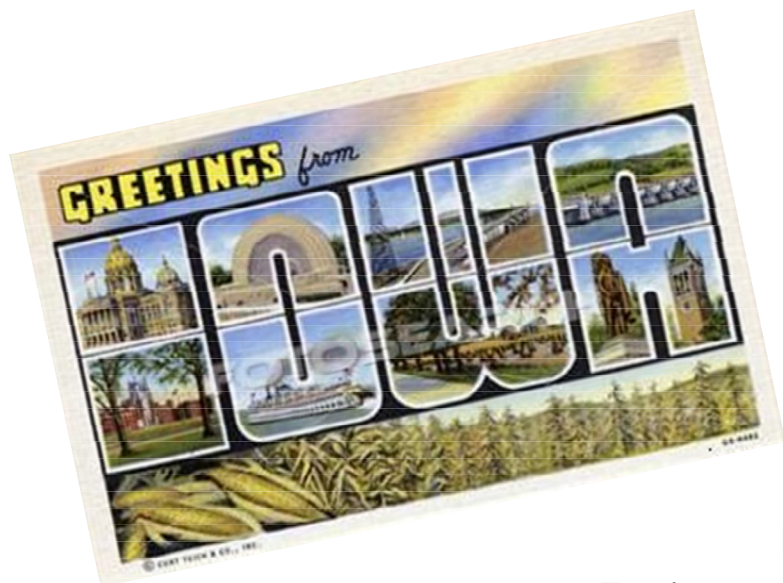
## 2. *Top-down Inventories*

- Iowa has conducted 4 “top-down” statewide GHG inventories using EPA’s State Inventory Tool (1990, 2000, 2005, 2010)
  - More categories than our bottom-up inventory:  
fossil fuel combustion, agriculture, industrial processes, natural gas T & D, transportation, waste
  - Sector-wide emissions, not individual facilities
  - Difficult to do in 12-month time frame allowed because many data sets (eGRID, EIA energy data, national inventory, etc.) are released 6 months – 3 years after Iowa’s report is due.

# Use in Statewide GHG Inventories

- We can make our statewide, bottom-up inventory more timely and/or accurate by supplementing it or replacing it with EPA GHGRP data.
  - EPA GHGRP data is more current than other data sets (eGRID, EIA data, etc)
  - Emissions reported by some industrial categories can replace emissions calculated by the SIT.
  - Investigate how emissions reported under Subpart C and D could be used to supplement or replace forecasted emissions from the electric power and industrial sectors.





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