IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

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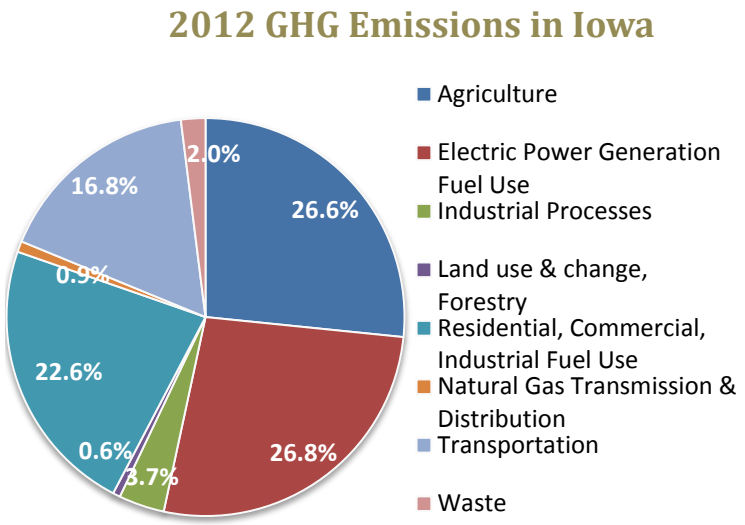
2012 Iowa Statewide Greenhouse Gas (GHG) Emissions Inventory

Report Summary

- Iowa GHG emissions decreased 3.27% from 2011 levels but remain 8.30% above 2005 levels.
- Iowa emits 1.98% of United States' GHG emissions.
- Iowans emit an average of 43.45 metric tons of GHGs per person.
- 27% of Iowa GHG emissions are from agriculture, compared to 7% nationally.
- Emissions from the combustion of fossil fuels account for 66% of Iowa GHG emissions.
- The percentage of electricity generated in Iowa from coal has decreased from 78% in 2005 to 63% in 2012, while the percentage generated from wind increased from 4% to 25% in the same time period.
- This report annual report is required by Iowa Code 455B.104.



Background

GHG emissions for 2012 were calculated using the most recent version of the United Sates Environmental Protection Agency's (EPA) State Greenhouse Gas Inventory Tool (SIT) and data reported by individual facilities to the federal GHG reporting program. The report is required by Iowa Code 455B.104 and is used to track emissions trends and develop baselines to track progress in reducing emissions.

Summary of Emissions

In 2012, total Iowa greenhouse gas emissions were 133.56 million metric tons carbon dioxide equivalents ($MMtCO_2e$). The pie chart above shows the relative level of greenhouse gas emissions from each sector. Agriculture; electric power generation; residential, commercial, and industrial fuel use, and transportation comprise about 93% of all emissions.

Emissions from agriculture; electric power generation; residential, commercial and industrial fuel use; and transportation all decreased in 2012. Table 1 details the changes in greenhouse gas emissions from 2011 to 2012 from each sector.

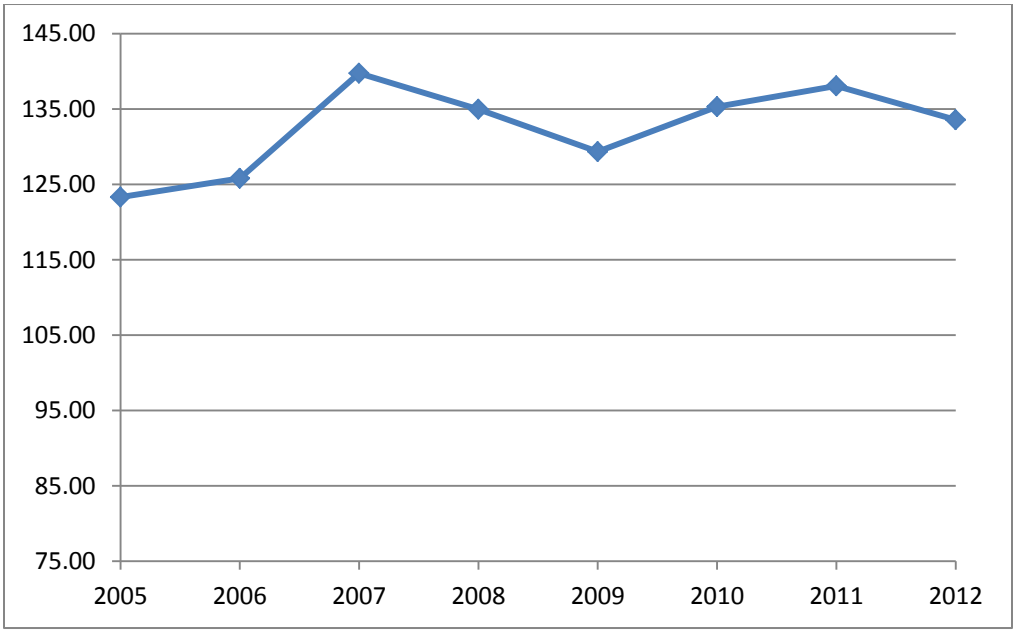
Table 1: Iowa GHG Emissions, 2011 - 2012

Emissions ($MMtCO_2e$)	2011	2012	Difference	% Change	
Agriculture	36.61	35.53	-1.07	-2.93%	↓
Electric Power Generation Fuel Use	38.98	35.76	-3.22	-8.27%	↓
Residential, Commercial, and Industrial (RCI) Fuel Use	31.31	30.23	-1.08	-3.45%	↓
Industrial Processes	4.23	4.96	+0.72	+17.20%	↑
Natural Gas and Oil Transmission and Distribution	1.18	1.18	+0.00	+0.19%	↑
Land Use, Land Use Change, and Forestry (LULUCF)	0.66	0.80	+0.14	+21.73%	↑
Transportation	22.68	22.45	-0.23	-1.03%	↓
Waste	2.43	2.65	+0.22	+9.08%	↑
Total Emissions	**138.08**	**133.56**	**-4.52**	**-3.27%**	↓

Emissions Trends

Total 2012 statewide GHG emissions decreased 3.27% from 2011 but were 8.30% above 2005 levels as shown in the chart below.

Iowa Gross* GHG Emissions 2005 – 2012 ($MMtCO_2e$)



*Does not include carbon sinks from land use, land use change, and forestry.