



# Taking Stock of Greenhouse Gas Emissions



Arlington conducts inventories of greenhouse gases (GHG) that are emitted into the atmosphere within the County.<sup>1</sup> These inventories help the Arlington Initiative to Rethink Energy (AIRE) identify tools and programs to help the community continue to reduce emissions through smart energy choices.

For 2000, 2007, and 2012, Arlington measured the GHG emissions from burning fossil fuels, creating solid waste, and generating electricity that is used in Arlington.

## A 13 PERCENT EMISSIONS REDUCTION IN FIVE YEARS

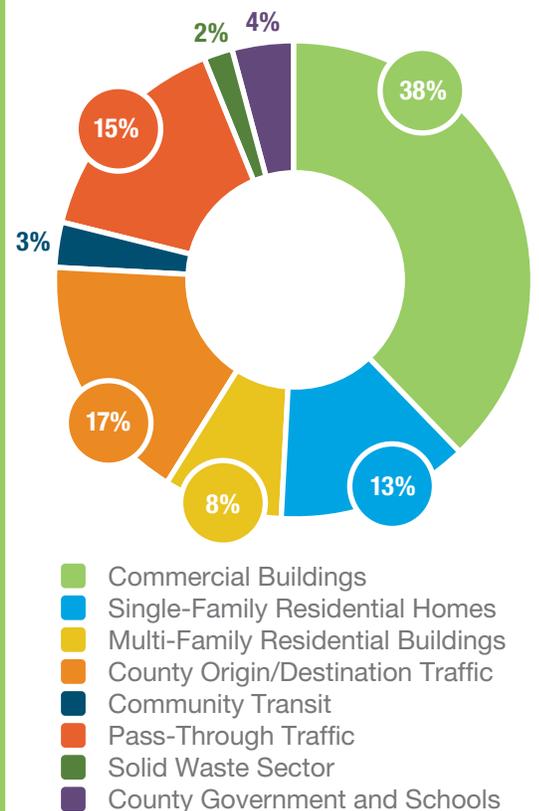
In just five years, per capita GHG emissions fell 13 percent to 11.3 metric tons of carbon dioxide equivalent (mtCO<sub>2</sub>e)—taking Arlington almost halfway to our 2020 emissions goal. This reduction, in effect, is the equivalent of one in three Arlingtonians taking a car off the road.

Future GHG emissions inventories will gauge progress toward the **Community Energy Plan** goal to reduce emissions to 3.0 mtCO<sub>2</sub>e per person by 2050. They also will help AIRE determine which programs are most effective in driving emissions reductions.

## ARLINGTON'S EMISSIONS SOURCES

More than one-third of the County's GHG emissions comes from commercial buildings, while one-fifth comes from single and multi-family homes. Another one-third comes from motor vehicles, while small percentages are generated by government and schools, community transit, and solid waste management.

### 2012 COMMUNITY EMISSIONS BY SUBSECTOR



### FAST FACT



Nearly two-thirds of Arlington emissions come from energy used in buildings.

1. <http://www.epa.gov/statelocalclimate/local/activities/ghg-inventory.html>

## FAST FACT



Arlington's population grew between 2007 and 2012, yet per capita GHG emissions fell 13 percent to 11.3 mtCO<sub>2</sub>e—taking Arlington almost halfway to our 2020 emissions goal.

## ABOUT AIRE

The Arlington Initiative to Rethink Energy (AIRE) helps our community make smart decisions about energy and supports individual actions to sustain and improve Arlington's quality of life. We are committed to energy practices that will make Arlington a more prosperous, healthful, and secure place to live, work, and play.

AIRE began in 2007 with an ambitious goal to significantly cut greenhouse gas emissions from County government operations by improving energy efficiency in our buildings, vehicles, and infrastructure, and by using clean fuels and green power. We also educate and encourage Arlington residents and businesses to use energy wisely, inspiring daily actions that will make a lasting difference.

By working together, we can ensure the health of our community for the long term. Come join us!

Visit us online at

[www.ArlingtonEnergy.us](http://www.ArlingtonEnergy.us)

## GLOSSARY OF TERMS

Visit the AIRE website at [www.ArlingtonEnergy.us](http://www.ArlingtonEnergy.us) to learn more about key terms related to energy use, emissions, and the GHG inventory.

## WHAT CAUSED ARLINGTON'S EMISSIONS CHANGES?

- Improved energy efficiency in buildings resulting from everyday actions, such as turning off the lights and turning down the heat or air-conditioning, and infrastructure investments, such as using low-flow water fixtures, lighting retrofits, and solar electricity.
- Reduced electricity emissions factor due to changes in the raw materials used at power plants, such as replacing coal with natural gas (i.e., generating one kilowatt-hour of electricity produced fewer GHG emissions in 2012 than in 2007).

Other factors may also have contributed to emissions changes—such as weather trends that reduced energy consumption and refined methods of measuring transit emissions. In addition, emissions from County government operations decreased in 2012. Actions that helped the County reduce its emissions included upgrading streetlights to light-emitting diode (LED) technology and adding 144 hybrid or electric vehicles to the County fleet. More details on these achievements are available in the AIRE 2012 Goal Report at [www.ArlingtonEnergy.us](http://www.ArlingtonEnergy.us).

## WHAT'S NEXT?

Arlington is almost halfway from its 2007 baseline emissions level to its first interim Community Energy Plan goal of 9.3 mtCO<sub>2</sub>e per person in 2020—on the way to the goal of 3.0 mtCO<sub>2</sub>e per person in 2050.

Arlington will continue to lead by example with energy efficiency improvements in County facilities and transparency through tools such as ENERGY STAR® Ratings and Building Energy Report Cards. These report cards track progress in reducing energy use for almost 70 buildings, with savings from projects like lighting retrofits, heating and air-conditioning upgrades, insulation enhancements, air sealing, and improved building controls.

To reach Community Energy Plan goals, Arlington will also continue encouraging energy efficiency in the community through programs such as Green Home Choice, to certify and recognize energy-efficient homes, and the Arlington Green Games, which spurs businesses and residents to set and meet emissions reduction goals.



DEPARTMENT OF ENVIRONMENTAL SERVICES