## **Fairfax County Federation of Citizens Associations**

## RESOLUTION Carbon Dioxide Reduction

WHEREAS, production and removal of the Earth's carbon dioxide is unbalanced. The human use of coal, petroleum and natural gas has released large amounts of carbon dioxide (CO<sub>2</sub>) from geological deposits to the atmosphere. Clearing of forests and plowing of grasslands for agriculture has also released CO<sub>2</sub> from plants and soil. The rate of release is far larger than can be balanced by the biological and geological processes that naturally remove CO<sub>2</sub> from the atmosphere and store it in terrestrial and marine reservoirs as part of the Earth's carbon cycle<sup>1</sup>, and

**WHEREAS**, the concentration of CO<sub>2</sub> in the atmosphere is higher now than it has been at any time in history according to glacial ice cores dating back 420,000 years, and perhaps the past 20 million years<sup>1</sup>, and

**WHEREAS**, the Intergovernmental Panel on Climate Change (IPCC) has found that climate disruption is a reality and that human activities are largely responsible for increasing concentrations of atmospheric global warming gases, particularly CO<sub>2</sub>; and

**WHEREAS**, CO<sub>2</sub> is a known greenhouse gas, which means that it is transparent to solar radiation but retains the heat radiated from the earth and atmosphere into space; and

**WHEREAS**, the United States was the largest emitter of CO<sub>2</sub> from fossil fuels in 2002 (23% of the world's emissions), and approximately 25% of the cumulative global fossil fuel emissions between 1751 and 2002<sup>1</sup>; and

**WHEREAS**, approximately 30% of North American fossil fuel emissions are offset by CO<sub>2</sub> removal sinks including forest re-growth, fire suppression, and agricultural soil conservation<sup>1</sup>; and

**WHEREAS**, many measures that reduce emissions and increase CO<sub>2</sub> sequestration have significant co-benefits in terms of economic efficiency, environmental management and energy security, and

**WHEREAS**, recently documented impacts of climate disruption include global sea level increases inches since the end of the 19<sup>th</sup> century, and IPCC estimates projected additional increases of sea level over the current century<sup>2</sup>; and

**WHEREAS**, the National Oceanic and Atmospheric Administration (NOAA) has recognized that warmer ocean temperatures are likely to cause increases in the

frequency of tropical storm events, and others have also linked the warmer temperatures to increases in hurricane intensity; and

**WHEREAS**, over the last 45 years, losses from catastrophic floods and significant weather events have increased by a factor of 18, and most resulting material losses are uninsured; and

**WHEREAS**, heat waves kill more people than any other natural disaster and affect disproportionately the elderly, children and the urban poor; and

**WHEREAS**, warmer temperatures will increase the frequency and intensity of heat waves, cause fluctuations in weather patterns and extend the range of tropical diseases and their vectors, including, for example, mosquitoes carrying malaria and west Nile virus; and

**WHEREAS**, many leading US companies have adopted GHG reduction programs to demonstrate corporate social responsibility and have publicly expressed preference for the US to adopt precise and mandatory emissions targets and timetables as a means of remaining competitive in the international marketplace; and

**WHEREAS**, green buildings consume from 30% to 40 % less energy than conventional buildings; and

**WHEREAS**, since 1990, the population of Fairfax County has grown by more than 27% percent to approximately 1.1 million today; and

**WHEREAS**, over 200 local governments throughout the United States are adopting emissions reduction targets and programs; and

**WHEREAS**, Fairfax County has been a leader in reducing pollution in the Washington Metropolitan Area by:

- Committing to purchasing 5.7 million kilowatt hours of power from renewable sources (5% of the County's total load),
- Purchasing 90 hybrid vehicles including one with a plug-in conversion kit,
- Fitted 95 diesel vehicles with automatic idling shutdown and horsepower reductions.
- Funding free rides on the Fairfax Connector on ozone Code Red days, and
- Committed to increasing the tree canopy, thereby increasing the CO<sub>2</sub> sinks in the county.

**THEREFORE BE IT RESOLVED,** that the Fairfax County Federation of Citizens Associations (the Federation) commends the Fairfax County Board of Supervisors for several of its recent actions to improve air quality and to address climate warming, including:

- a. Taking measures to increase tree cover in the county. The Federation encourages the Board to expand these programs and to recognize in every land use action that mature trees reduce the ground level temperature that reduces air conditioning power demands, filters pollutants from the air, add to aesthetic value and sequester carbon dioxide; and
- b. Purchasing hybrid vehicles and automatic idling shutdown and reduced horsepower measures for County diesel vehicles. The Federation encourages the Board to expand the program and to adopt an average fuel efficiency standard for County vehicles, including buses and trucks; and
- c. Providing leadership in the region by committing to the use of renewable energy sources. The Federation encourages the Board to expand this program.

**BE IT FURTHER RESOLVED**, that the Federation asks the Fairfax County Board of Supervisors to set a CO<sub>2</sub> emissions reduction goal and take further deliberate steps to reduce the County's CO<sub>2</sub> emissions, such as:

- a. Supporting educational initiatives that promote acceptance of the County's emissions reduction measures and invite public participation from every sector of the County; and
- b. Modifying engineering standards for new construction to encourage the use of the Green Building Council's Leadership in Energy and Environmental Design (LEED) technologies to reduce energy consumption and/or encourage distributive energy production; and
- c. Adopting a Transit-Oriented Development (TOD) program to encourage transit and non-motorized transit use, to discourage private vehicle travel, and to provide improved pedestrian and bicycle access to transit, work and other daily activities.

## REFERENCES

- 1. US Climate Change Science Program, <u>The First State of the Carbon Cycle Report</u> (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle (Draft for Public Review), September 2006.
- 2. IPCC, Climate Change 2001, The Scientific Basis, (http://www.grida.no/climate/ipcc\_tar/).

Approved by the Federation membership on December 14, 2006