

OKLAHOMA ACADEMY OF SCIENCE STATEMENT ON  
GLOBAL CLIMATE CHANGE

Approved November 8, 2013

Consistent with the 2013 report of the International Panel on Climate Change, OAS affirms that

*“Warming of the climate system is unequivocal. Each of the last three decades has been successively warmer at the Earth’s surface than any preceding decade since 1850. In the Northern Hemisphere, 1983-2012 was likely the warmest 30-year period of the last 1400 years. Atmospheric concentrations of carbon dioxide (CO<sub>2</sub>), methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. [Concentrations of CO<sub>2</sub>] have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from net land use change emissions. The largest contribution to [global warming has been] caused by the increase in the atmospheric concentration of CO<sub>2</sub> since 1750. Climate change will affect carbon cycle processes in a way that will exacerbate the increase of CO<sub>2</sub> in the atmosphere. Most aspects of climate change will persist for many centuries even if emissions of CO<sub>2</sub> are stopped. Human influence on the climate system is clear. Limiting climate change will require substantial and sustained reductions of greenhouse gas emissions.”*

We affirm, along with the Oklahoma Climatological Survey, that these changes will have an impact on the ecology and economy of Oklahoma. Finally, we affirm the right and responsibility of Oklahoma scientists to speak out, and science educators to teach, about global climate change.