The toll of carbon pollution continues to mount and with remarkable consequences. Human activities have increased atmospheric levels of greenhouse gases to levels unprecedented in at least the past 800,000 years. Our own state has experienced long-term warming, a lengthening of the frost-free season and more frequent nighttime heat waves. Sea level is rising along most of Washington's coast, coastal ocean acidity has increased, glacial area and spring snowpack have declined, and peak stream flows in many rivers have shifted earlier in the year.

These and other factors are likely to have negative outcomes for our state. Three key areas of risk — changes in the natural timing of water availability, sea level rise and ocean acidity, and increased forest mortality — will likely bring significant consequences for the economy, infrastructure, natural systems and human health of the Pacific Northwest region.

Estimates are that the effects of climate change on water supplies, public health, coastal and storm damage, wildfires and other impacts will cost Washington almost $10 billion per year after 2020 unless we take additional actions to mitigate these effects.

Indeed, decisions made today about greenhouse gas emissions will have a significant effect on the amount of warming that will occur after mid-century. It is imperative we act now to put policies in place that will halt the damage.

To this end, Governor Jay Inslee has issued an executive order to limit the state’s carbon emissions. By so doing, we will boost our energy and economic independence and preserve the quality of life we prize in Washington for future generations.

The key elements of the executive order are as follows.

Limiting carbon
The Governor’s Carbon Emissions Reduction Taskforce will recommend the design and implementation of a carbon emission limits and market mechanisms program. The carbon emissions reduction program must establish a cap on carbon pollution emissions with binding requirements to meet our statutory emission limits. In developing its recommendations, the taskforce will consider measures to help offset any cost impacts to consumers and workers, protect low-income households and assist energy intensive, trade-exposed businesses in their transition from carbon-based fuels. Its proposals will inform legislation to be requested by the Governor for consideration during the 2015 legislative session.
**Coal-fired electricity**

Though coal is used for a relatively small share of our electricity, it generates most of the carbon pollution emissions from this sector. We have affordable, reliable and cleaner alternatives at hand. We will seek negotiated agreements with key utilities and others to reduce and eliminate — over time — the use of electrical power produced from coal. Working with the departments of Commerce and Ecology and other state agencies, we will engage key electrical utilities that generate electricity through coal-fired facilities located outside the state and that rely on this electricity to meet their Washington electrical loads with the objective of reducing overall greenhouse gas emissions from the generation of electricity.

**Clean transportation**

Transportation represents by far the largest share of our carbon pollution emissions. In fact, cars, trucks and other transportation-related sources accounted for 44 percent of the state’s total greenhouse gas emissions in 2010, with 23 percent coming from gasoline consumption. This means vehicle emissions must be reduced to achieve significant reductions in overall carbon emissions. Accordingly, the Office of Financial Management will work with other state agencies — and with advice from subject matter experts, affected industries and public interests — to evaluate the technical feasibility, costs and benefits, and job implications of requiring the use of cleaner transportation fuels through standards that lower the carbon intensity of these fuels over time.

In addition, the Department of Transportation — in concert with federal, state, regional and local partners — will develop an action plan to advance electric vehicle use. The plan will include recommendations on targeted strategies and policies for financial and non-financial incentives for consumers and businesses, infrastructure funding mechanisms, signage and building codes. The department will continue to build out the electric vehicle-charging network along state highways and at key destinations, as funding and partnerships allow.

Among a number of other directed actions, the departments of Transportation, Commerce and Ecology will work with the regional transportation planning organizations, counties and cities to develop a new program of financial and technical assistance. This new program will help local governments institute measures to improve transportation efficiency and update their comprehensive plans to produce travel and land-use patterns that maximize efficiency in movement of goods and people, and cut costs and greenhouse gas emissions.

**Clean technology**

We must increase our support for clean energy technology and help our research institutions, utilities and businesses develop, demonstrate and deploy new renewable energy and energy efficiency solutions. In this vein, the Department of Commerce — in cooperation with Washington State University and others, as appropriate — will recommend a new state program to assist and support our research institutions, utilities and businesses in this endeavor. The department’s recommendations must include proposals for dedicated and sustained funding for launching and operating the program.

**Energy efficiency**

We know energy efficiency is one of the most cost-effective ways to cut emissions, slash costs, increase our productivity and competitiveness, and accelerate the creation of thousands of local jobs. To accomplish this, the Department of Commerce — working with the WSU Energy Program, the State Building Code Council and others — will develop and put in place a new, statewide program to significantly boost the energy performance of public and private buildings. The program must
accelerate the cost-effective energy efficiency retrofit of existing buildings with a support system that provides information, consumer protection and assistance to businesses and homeowners. The program must ensure that all new buildings are as energy-neutral as possible, with advanced envelopes, efficient appliances, on-site generation, smart controls and other features, where practicable.

**State government operations**

The Department of Enterprise Services — in collaboration with other state agencies — will evaluate progress and develop recommendations for improving efficiency and reducing emissions from state government operations. The department — in collaboration with the Department of Commerce, the Office of Financial Management and the WSU Energy Program — will evaluate progress and develop recommendations for improving the energy efficiency of public buildings.

The Department of Commerce — in collaboration with the departments of Enterprise Services and Ecology — will evaluate incentives and life-cycle costs for the purchase of electric vehicles and other clean-fuel cars for the state and other public fleets. The Department of Enterprise Services will move forward with state procurement of these vehicles where the life-cycle costs and benefits are comparable, including consideration of the benefits of emission reductions.

The benefits from the preceding actions to shrink Washington’s carbon pollution emissions are as compelling as they are clear. These actions will:

- improve job growth in clean energy businesses and technologies;
- benefit farm and forest landowners who provide the feedstock for cleaner energy fuels while also providing a means to offset carbon emissions; and
- expand energy efficiency investments that will benefit consumers and ratepayers while growing jobs in construction and associated sectors.

In fact, studies conducted for the Western Climate Initiative indicated that a program to limit carbon emissions — implemented through market mechanisms — would result in a net increase of 19,300 jobs and increased economic output of $3.3 billion in Washington by 2020.