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GUEST COMMENTARY

A solution to global warming

By Howard Geller

Global warming is occurring at an unprecedented rate and is starting to have adverse consequences, such as increased frequency and severity of droughts, heat waves and floods. The World Health Organization estimates that global warming is already killing 150,000 people a year. Here in Colorado, rising temperatures and changes in precipitation are hurting farmers, ranchers and Colorado's ski industry.

Most of the carbon dioxide added to the atmosphere comes from burning coal, oil and natural gas, the so-called fossil fuels. The United States, with less than 5 percent of the world's population, is responsible for 27 percent of worldwide carbon dioxide emissions. The federal government under President Bush has failed to take significant action to reduce U.S. carbon dioxide emissions. This policy must change if the world is going to limit global warming to acceptable levels.

Taking meaningful action to limit global warming does not require a massive expansion of nuclear power plants, or new government subsidies to facilitate this. The nuclear power industry received more than \$140 billion of U.S. taxpayer subsidies during the past 50 years. It is now a mature industry that should stand (or fall) on its own.

In spite of the hefty subsidies, no U.S. utility has ordered a new nuclear power plant in over 25 years. Among the reasons for this: nuclear power is not economically competitive; nuclear energy lacks public support; highly radioactive nuclear waste still cannot be safely disposed of over the long term; and safety concerns remain. Given these wide-ranging problems, a nuclear power revival does not look promising.

So, if nuclear energy is not the cure to our planetary "fever," what is? How can we reduce our use of fossil fuels and carbon dioxide emissions while maintaining our economic health and high standards of living? The best response today is to improve our energy efficiency, i.e., using less energy for a given level of service, and expand energy production from renewable sources such as wind power, solar energy and biofuels.

U.S. energy intensity (energy consumption per unit of GDP) declined 46 percent over the past 30 years. Most of this reduction was due to real energy-efficiency improvements: increases in the fuel efficiency of cars, appliances, lighting, buildings, industries, etc. Large additional increases in energy efficiency are technically and economically feasible. Raising energy-efficiency standards as well as expanding federal, state and local energy-efficiency programs will do far more to reduce carbon dioxide emissions than new subsidies for the nuclear energy industry. And stimulating greater energy efficiency saves money while cutting pollutant emissions.

The U.S. gets only 6 percent of its energy from renewable energy sources today. But wind power and solar energy are the fastest-growing energy sources in the world. Wind power has become cost competitive with other electricity options in regions with good wind speeds. Solar energy technologies are

rapidly advancing and are becoming more economical every year. If U.S. energy policy emphasized increased use of renewable energy as well as energy-efficiency improvement, the U.S. could obtain more than 15 percent of its energy from renewable sources by 2020 and even more over the long run.

These are not theoretical solutions. European countries that are taking the global warming threat seriously are not building new nuclear power plants. Instead they are focusing on improving energy efficiency and increasing renewable energy production. Denmark and Germany are the world's leaders in wind power production. The European Union has set a goal of getting more than 20 percent of its electricity from all renewable sources by 2010. And 14 U.S. states - including Arizona, California and Texas - have established renewable energy requirements for their utilities.

The next U.S. president should make energy-efficiency improvement and renewable energy development the cornerstones of our national energy strategy. This will reduce carbon dioxide emissions more than new subsidies aimed at reviving the nuclear power industry. It will also lower energy bills, lower oil imports, and support more jobs than an energy strategy centered on building new nuclear power plants.

U.S. citizens seem to have this figured out: Energy efficiency and renewable energy, not nuclear power, are the energy sources most favored by the public. When will our political leaders get it?

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