

BOB DOPPELT

Carbon limits among steps needed to save future

BY BOB DOPPELT

For The Register-Guard

FEBRUARY 25, 2016

The Paris Agreement on Climate Change sets a goal of limiting the rise in global temperatures to “well below” 3.6 degrees Fahrenheit above pre-industrial levels. But each nation is left to decide how to cut greenhouse gases. How can emissions be reduced to meet the new goal?

It might be helpful to review a basic principle: The extraction and use of non-renewable resources (minerals, metals, fossil fuels) must not be allowed to forever impair the renewable resources (climate, water, forests) that are essential to everyone.

Yet this is what is happening. The burning of fossil fuels, initially by the United States and other Western nations, and now by China and a few other developing countries, is pushing global temperatures to dangerous levels, acidifying the oceans, raising sea levels, and disrupting hydrologic cycles, leading to more frequent and intense droughts and deluges.

Through practices such as fracking for natural gas and clear-cutting old-growth and mature forests, renewable resources that naturally sequester carbon are also being depleted and destroyed. The consequences now threaten human civilization.

The principles of ecological sustainability must form the basis of any successful resolution to this problem. Emissions from the extraction and use of non-renewable fossil fuel by a select group must be rapidly slashed in order to protect the whole. Further, a significant portion of the revenues generated from their use should be allocated to restoring the damage they have done to the

climate and other renewable resources, and to preventing further harm by developing new sources of clean energy.

Market mechanisms are one way to achieve these goals. For instance, “cap and trade” policies such as the Healthy Climate Act now before the Oregon Legislature would establish a continually declining statewide cap on emissions. Emission allocations are then given to emitters who are allowed to buy “credits” or “offsets” from carbon-saving projects, or sell credits themselves when they’ve cut their emissions far enough.

This approach provides emitters with flexibility in when and how they reduce their pollution, and the opportunity to save or make money. The revenue generated from the permits can be allocated to ecological restoration and other emission reduction strategies.

As seen in the European Union’s cap and trade program, however, low or volatile carbon prices can neuter market mechanisms. They can also be difficult to administer and lead to questionable practices such as carbon credits being issued for clear cutting up to 40 acres of forests, as California’s cap and trade program does, or gaming of the system by Wall Street.

Another way to slash emissions while paying to restore the damage they produce is to set a price on carbon, as President Obama recently proposed for oil. Done well, a price accounts for the actual costs of the harm done to society by the use of fossil fuels. It also avoids many of the limitations of market mechanisms because a price makes the cost of emissions clear and predictable, can be implemented quickly, is not easily manipulated by financial interests, and can apply across the board to all uses of oil.

However, the price must be set high enough to substantially cut energy use, which can be politically difficult to achieve. In addition, mechanisms must be established to offset higher energy costs for low-income groups.

Firm limits on emissions, enforced by regulations, are important backstops for market mechanisms, carbon pricing, and other approaches to emission reduction. Although the Supreme Court has temporarily blocked implementation, the Environmental Protection Agency’s ability to regulate power plant emissions is vital. Through a federal waiver, California regulates vehicle emissions, and Oregon and other states have adopted California’s Clean Car Standards. In

addition, strong federal and state forest management regulations will be needed to protect carbon dense forests and increase sequestration.

Not surprisingly, each of these mechanisms elicits opposition. Change is difficult, especially when major financial or ideological investments have been made in ways of doing business that conflict with the core principles of ecological sustainability. But if we want to maintain a livable planet for ourselves and our children, we must rapidly modernize our thinking, practices, and policies.

Bob Doppelt of Eugene is executive director of The Resource Innovation Group and writes a monthly column for The Register-Guard on issues related to climate change.