OPINION

State's enviro industry must adapt or waste away

GUEST OPINION

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Enthusiastic forecasts that portray this state's environmental technology industry as one of the top five growth areas for the economy may be in need of re-examination.

A dramatic drop in activity and a downward revision of growth projections at several local environmental firms underscore the reality that Washington is not a leader in environmental technology, nor is it likely to be in the future.

Washington could become a national and international leader in the environmental industry. But if that occurs, it will be an industry that looks very different from the one that exists in this state today.

Nationally, environmental technology exports are expected to exceed $400 billion by the year 2000, and the industry is one of five key industries targeted for promotion by the U.S. Department of Commerce.

Now a newly published book, "Green Gold: Japan, Germany, the United States, and the Race for Environmental Technology," compellingly casts grave doubts on those rosy claims and forecasts.

The former West Germany has a population of about 60 million people — 12 times the population of Washington state — squeezed into an area the size of the state of Oregon. The world's three largest chemical companies are within its borders. The combination of heavy industry and high population density has created an environment where impacts of pollution are likely if they are not controlled.

This first became evident in the 1970s and early 1980s with the observation that the forests of Germany appeared to be dying off at an alarming rate. Germany quickly developed the world's most stringent environmental rules to ensure industry and citizens could co-exist in its small area. Japan, with similar constraints, followed suit.

But in contrast to being an impediment to economic growth, Germany and Japan feel their stringent approach to environmental protection will help them to become even more globally competitive. In the current edition of *Sierra* magazine, "Green Gold" author Curtis Moore states, "As ethically committed as Germany's citizens and government are to protecting the earth, they also perceive the process of eliminating pollution as an opportunity to further strengthen their nation's economy."

There is some evidence this is true; German- and Japanese-developed environmental technology well surpasses that of the United States on several fronts.

In contrast, the United States views eliminating pollution as an obstacle to the nation's economic development. This is not a political difference; this view has held true for the past three administrations. It is a basic difference between our societies that won't be solved simply by increasing regulations in the United States. We need to develop a fundamental understanding that a clean environment is integral to a healthy economy, not an obstacle.

There is an international role for the state in environmental science, but likely not in engineering or product design or development.

These basic societal differences in economic philosophy have profound implications in the marketplace well beyond environmental technology. According to Moore, Germany believes its environmental regulations, "easily the world's most stringent, will stimulate the development of a wide range of new 'green' technologies in response to increasing demand."

Moore claims that new efforts to "curb pollution by boosting efficiency will further reduce operating expenses in their already efficient economy," providing them with an all-important edge in their quest to unseat the United States from its position as the world's leading exporter of merchandise. Like Avis, Germany is trying harder.

Making sheet rock from the residues of air pollution control devices is one such novel approach Moore describes. Originally developed in the United States, the technology was exported to Germany in 1980 where it took off thanks to a supportive regulatory structure.

Germany required its power plants to better contain its emissions, and required a way other than land filling to deal with the resulting scrubber sludge. The technology was never successful in the United States, where the regulatory solution was to allow taller stacks on power plants to disperse emissions over wider areas, rather than controlling it at the source.

The situation in Washington state is quite different. We don't have much in the way of heavy industry, and what we do have we seem to be trying to chase off to other states. We don't have pressing environmental problems to deal with on the scale of many other states and countries. We don't have a problem with population density, if you forget King County and Interstate 5 for the moment. Hanford remains the driving force for environmental industry in the state, where we face tough competition from well beyond our own borders.

In short, we don't have the basic drivers that would create a world-class environmental technology industry. The state's environmental industry is 85 percent services, 15 percent technology and products. Most of the service providers work on site cleanups, the area coming under closest scrutiny for costs far exceeding benefits.

Even bioremediation, often thought of as Washington state's major force in the environmental technology arena, has been spectacularly unsuccessful, both scientifically and financially.

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Accurate assessment of health impacts should be the focus of environmental decision-making, not an afterthought. This is what the current debate about risk assessment is all about.

The future of the environmental industry will belong to those who can accurately assess the impacts to health and the environment (i.e., life scientists, not engineers), who have ready access to the sea of scientific and technical information that now doubles each year through online services (as Bill Gates well knows); and who can make informed, balanced decisions with limited time and budget constraints.

The good news is, the elements to make that happen are already here as perhaps nowhere else: the University of Washington, Western Washington University, Evergreen State College, Battelle, Microsoft, the Hutch, the Poison Control Center, and the many satellite health, biotechnology, software and information services companies. Research on biomarkers, the Human Genome Project, species diversity and countless other topics are well under way at these locations and will be integral to the future of protecting human health and the environment.

Washington state may yet prove itself an international leader in providing scientific solutions to environmental problems.

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