

Olympia -- AP Americans are gobbling energy at dizzying rates and are making crucial decisions without considering future generations, Dan Evans, chairman of the regional power council, said Friday.

But the former three-term Washington governor, now president of the Evergreen State College here, also said Americans finally have realized there are limits to the Earth's resources and that wise use is crucial.

Evans gave what he admitted was "an apocalyptic view" at Options Northwest, a conference designed to "develop positive visions" for the region and to help influence changes.

Modern society is caught in the hinges of two seemingly immutable laws of nature, he said. One is "entropy," which says matter and energy can be changed only in one direction, toward instability, disorder and unavailability.

Once a gallon of gasoline is used in your car, it never again will be available for use in the same fashion, he said.

The other is the "Law of Doubling," which says if you want to know how fast something is going to double, divide the rate of growth into 70. If the population is growing 2 percent a year, for instance, it would double in 35 years.

An investment at 14 percent interest will double your money in five years, he noted.

As populations boom and more and more resources are needed to sustain them, "escalating amounts of energy" will be depleted, Evans said.

"We are using more energy and spending more of our work and Gross National Product to find energy," he said. "It is less and less efficient."

Even technologies which seem to be using renewable resources, such as solar, wind power and hydro power, are using increasing shares of the power they produce, he said.

"We are the world champions at creating and then abandoning products," such as the seven million autos discarded last year, and recycling can only slow the drain of energy, he said.

We are seeing "a slow, persistent, inexorable running down of the universe and the world," Evans

said. "We are only now realizing that limits do, indeed, exist. We are the first generation with the recognition of limits.

"We have discovered how to escape territorial limits (with space travel), but also the ability to destroy civilization itself. It is most awesome."

Evans said new data shows that if the 10 leading minerals are mined at a 3-percent annual growth rate, "in several hundred years, we will have mined the total mass of the Earth."

Today's farmers are super-efficient in the volume of their crops, but use 100 times more energy than peasant farmers did to produce one calorie of food, he said.

And another tidbit which shows the coming changes: The 20 largest cities of the world by 2000 all will be in Third World countries, he said. Mexico's population will go from 70 million to more than three billion in the next 100 years, severely affecting the United States, he said.

Americans make virtually all of their key decisions without worrying about future generations, Evans added. The unborn children are "standing outside the poker table as we gamble with the world's resources. They have no voice, or money or stake."

Wall Street talks about commodities futures, "but what about human futures? That ought to be what we think about more and what ought to be an element of every decision we make."

The audience of several hundred roared its approval.

Evans says he has a couple of antidotes to his "apocalyptic view."

One is to acknowledge the spirit side of man, the essence of man which can transcend the bounds of the physical world, he said.

"That is subject to eternal expansion, thank heaven," Evans said.

The other is to band together as people in organizations to affect the future positively, he said. Government is the "glue" which can hold society together and must not be ridiculed or ignored, he said.

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promotion of business. "Energy Turns The World" was the official theme of the 1982 World's Fair in Knoxville, Tenn., but this Fair obviously was intended to be primarily a commercial and political exposition, and only secondarily was it to be about energy.

Some of the displays were farther from the stated theme of the fair than others. The U.S. pavillion, while showing little awareness of the social implications of the use of energy, at least was devoted exclusively to energy and science. But the People's Republic of China had little to say about energy; they devoted most of their space to other things -- ideology and handicrafts. Russia and Taiwan were not represented.

Nowhere in the fair was there any description of the tremendous disparity in living standards that exist in the world in terms of energy and natural resources. For instance, a World's Fair, with energy as its theme, could appropriately have commented on the extreme difference in the kinds of problems that people must deal with. Thirty million Ethiopians exist on a technological energy level of about nine-tenths of one horsepower-hour per person per day while we, in U.S. and Canada, live at an energy level of three-hundred-twenty horsepower-hours of energy per day -- and waste much of it in a poorly contrived social system, one that grew out of the low energy level of times past. Our problem in North America is the proper management of our technology; the Ethiopians have virtually no technology and have problems of a different kind -- lifetimes of poverty and disease.

"Energy Makes Everything Go" was the logo of the U.S. government's pavillion, largest at the fair. The entire exhibition space was devoted to an account of energy sources, production, distribution, and usage in the United States and was presented as well as could be expected from a Price System

standpoint. In fact, it was possibly the most dramatic graphic energy-display ever shown, but its social significance was very small.

It started with a long three-dimension energy growth chart, with jagged curves for recent decades, reaching a 27-foot height to show close to 79 quadrillion BTU of energy consumption for the all-time peak year of 1979, this according to figures from the Department of Energy. (Note: 1980's total was 75.9, and 1981's was 73.9 -- a slide toward Depression in spite of the massive Cold War pump-priming!)

End-use of energy in the U.S. was graphically depicted -- 40% is for primary production (mining, agriculture, industry, construction) -- 25% for transportation -- 20% for residential (space and water heating and cooling, lighting, appliances) -- 15% for offices and stores.

Visitors to the Knoxville World's Fair found representations of the beneficial application of energy from all over the world. The effects, physical and cultural, were all derived from the universal knowledge of science and engineering, but the belief, as usual, was promoted that the predation and misinformation of Price System operation somehow created those benefits. Nowhere at the Fair was there any delineation of science, the Scientific Method and engineering; yet, without science and engineering, there could have been no Fair.

A visit to the Knoxville World's Fair reinforces the conviction that only from Technocracy will the people of this continent learn how energy is inextricably connected with their social system, and that this is no small matter; survival itself depends upon our social system being designed to be compatible with a high-energy state.