

endeavor would create millions of new jobs for our economy, regenerating American manufacturing and capturing the energy efficient technologies of the twenty-first century for America's middle class communities.

Studies, such as those conducted by economists for the Apollo Alliance and Redefining Progress, have detailed how the investments in tackling global warming through energy efficiency, renewable energies like wind and solar power, and mass transportation systems would create three million new jobs, largely in manufacturing. An important step to spur the production of fuel efficient vehicles in North America would be the expansion of tax incentives for the production of hybrid and beyond-hybrid vehicles.

Thus, we have concluded, that as we examine the environmental challenges in front of us, we should always remember that in solving those problems we are creating the jobs and the work force of the twenty-first century. Indeed, the jobs that will last are those that are based on sound environmental principles. The jobs that are

disappearing are those that continue the destruction of our environment. As we examine our current environmental challenges we will come back to this fundamental truth.

### **Global Warming**

Global warming is the greatest environmental and economic challenge of our generation. Its disruptive effect on the economic life of our planet will be far greater than that caused by the possible disruption of oil flows from the Middle East. Some have compared its possible consequences to the aftermath of nuclear war. Scientists have already documented an average increase in global temperatures during the twentieth century of 1 degree Fahrenheit. That doesn't sound like much, but the effects are significant.

In a recent publication, the Union of Concerned Scientists wrote, "Global warming is already under way. The evidence is vast and the urgency of taking action becomes clearer with every new scientific study. Some of the most obvious signs are visible in the Arctic, where rising temperatures and



melting ice are dramatically changing the region’s unique landscapes and wildlife — as well as people’s lives and livelihoods.”

And despite the millions spent on fraudulent science by the oil industry, the national science academies of all G-8 nations plus China, India and Brazil have unequivocally stated that global warming is real, caused by human beings, and about to have extraordinary social and economic consequences.

Global warming, as we use the term today, is a gradual rise in the temperature of the Earth itself, caused by gases we are pumping into the atmosphere. Fifteen years ago we predicted, “A temperature rise of just 4 degrees Centigrade could melt the polar ice caps, flooding huge areas. Changing weather patterns could turn forests to grasslands and grasslands to deserts. Coastal cities would be submerged, major agricultural regions would be devastated and the weather would turn more violent.” Fifteen years ago such statements were considered speculative. Today, the evidence has proven these statements correct. The polar ice cap has been reduced by 20 percent since 1979. The 2005 hurricane season with 27 named storms, including three Category 5 hurricanes, is the worst on record. The question is not whether global warming is happening, but how to slow it, reverse it, and manage its current devastating effects. Ignoring it or doing nothing are simply not options.

What causes global warming? Our atmosphere contains a number of “trace” gases, present in very low concentrations. The most important is carbon dioxide. Carbon dioxide has a special property — it traps heat that otherwise would radiate out into space — much like the glass in a greenhouse. Hence the name “greenhouse effect.” Without some carbon dioxide in our air, the Earth would cool to well below freezing. The problem is having too much. Carbon dioxide results from the burning of fuels containing carbon, like petroleum, coal, natural gas or wood. One mile of driving a car, or one-half kilowatt-hour of coal-generated power, releases about a pound of carbon dioxide. Altogether, 18 billion tons are released every year. Most of the Earth’s population contributes three tons per person to this total; North Americans contribute twenty tons each. Over the last century, the carbon dioxide concentration in the atmosphere

has risen by 25 percent. At the present rate, it could double in the next century, triggering massive changes in the global climate, far beyond what we have witnessed in the last decade.

In fact, carbon dioxide could increase even faster. This past century’s rapid industrialization in the United States, Canada and Europe was fueled by the massive burning of coal and petroleum. As developing countries take the same route, huge increases in the amount of carbon dioxide are being pumped into the atmosphere. China alone has 800 billion tons of coal reserves. This reliance on coal, combined with double digit economic growth for the last 15 years, has already made China one of the largest emitters of greenhouse gases. Rapid industrial growth in India is also accelerating the threats of global warming.

Nonetheless, the U.S. remains the largest producer of greenhouse gases, contributing over 25 percent of the world’s emissions. Since 1990, the nations of the world have taken some important steps to confront the challenges of global warming. As stated earlier, in 1995 the Kyoto Treaty on global warming was negotiated by over 150 countries setting specific targets for reducing carbon dioxide emissions to 5 percent below 1990 levels. In February, 2005 the Kyoto Treaty went into effect when

141 countries adopted its protocols. Unfortunately, two industrial countries, the United States and Australia, refused to participate in Kyoto. In fact, the Bush Administration, continuing its go-it-alone role in world affairs, has refused to even bring the Kyoto Treaty to the U.S. Senate for a vote. In the meantime, U.S. carbon emissions have increased by 15 percent. Ironically, the Chinese government has reduced its level of emissions by 17 percent.

In Canada, with our union’s support and the support of the Canadian Labor Congress, the national government ratified the Kyoto Treaty. The debate in Canada is not about whether global warming exists, but which program should be enacted to effectuate the cuts in greenhouse gases. The Conservative Party, however, has threatened to abrogate Kyoto entirely should it be elected. This is an important debate. Business-oriented political forces in the Liberal Party want to use the threat of global warming to push the “Green Plan” (#3) which relieves most industrial emitters of significant responsibility and relies heavily on government

**The US remains the largest producer of greenhouse gases, contributing over 25 percent of the world’s emissions.**



funded trading credits. It amounts to a huge bailout for industry — while no mention is made in their program of workers and the effects of global warming on their jobs and livelihoods.

The New Democratic Party, the third major party in Canada founded on social democratic principles and supported by the USW, promotes an alternative with a strong program to cut greenhouse gases by investing in new renewable energies, mass transportation systems and energy efficiency, thereby creating hundreds of thousands of new jobs in Canada. Workers who are adversely affected by

**Can we act fast enough to halt the changes of global warming and its devastating economic impact? We don't know, but we must try.**

the change in energy policy will be protected through well-funded “just transition” programs.

In the U.S. there are encouraging signs at the local level in spite of the federal government's inactivity and the Bush Administration's intransigence on energy policy. Mayors from 194 U.S. cities have signed on to the U.S. Mayors Climate Protection Agreement, pledging to take local action to curb global warming. And 20 states now have renewable energy standards. Three states, California, Oregon, and Washington have passed “clean car” legislation mandating increased fuel efficiency above current federal standards for automobiles sold in their states.

- The USW, along with the United Mineworkers and United Auto Workers unions, has endorsed a proposal put forth by the National Commission on Energy Policy (NCEP) in which our union was a leading participant. This proposal calls for real reductions, but requires a review of the progress of other economies in greenhouse gas reductions - so as not to give them a competitive advantage over the U.S.

- Taking action on global warming is also the right policy for protecting North America's manufacturing infrastructure. Our countries have a long history of creating jobs through innovation and technological breakthroughs. The future of manufacturing in the global economy will belong to those nations who solve the problem of the world's

growing shortage of fossil fuels through energy efficiency technology and building redesign, mass transportation systems, and new forms of renewable energy. Important economic studies, produced by the Apollo Alliance, Redefining Progress, and the Union of Concerned Scientists have demonstrated the significant economic benefits of public investment in these areas. The Apollo study demonstrates that 3 million new jobs, mostly in the manufacturing sector, would be created by this approach.

New environmental regulations, enacted through state and national legislation like increased CAFE standards (Corporate Average Fuel Efficiency) and RES (Renewable Energy Standards) that mandate increased use of wind, solar, biomass from waste wood and slash, and even landfill methane for generating electricity, and public bonding for mass transportation and clean energy development are critical for rebuilding North America's manufacturing base. Continuing the Bush Administration policies of ever greater reliance on the shrinking pool of Middle Eastern oil guarantees that more and more manufacturing jobs will leave North America as industry tries to offset the rising costs of energy with the low costs of Third World labor.

Global warming is, as we predicted, the most important environmental challenge of our lifetimes. But meeting that challenge provides us with the opportunity to fix some of our most significant economic problems. Imagine a twenty-first century Clean Energy Authority whose mission is to bring renewable energy to our communities, much as the Tennessee Valley Authority and the Bonneville Power Administration brought electrification to millions of Americans during the 1930's and 40's with their hydroelectric projects. Good jobs, a cleaner environment, and a world made safer by less reliance on foreign oil can become a reality for both our countries.

Global warming is affecting many other industries, in addition to those that consume large amounts of energy, where USW members are employed. In Canada, the infestation of pine bark beetles in the western provinces threatens the country's timber supply and the long-term viability of its forest products' industries. The pine bark beetle's habitat was once limited by severe Canadian winters; three weeks of constant -40 degree weather killed off the beetles each year, stopping their spread. Now, warmer winters are allowing the beetles to reproduce uncontrollably, killing off huge sections of the boreal forest, permanently, and changing it forever.

Can we act fast enough to halt the changes of global warming and its devastating economic impact? We don't know, but we must try. Over 12,000 USW members and retirees were affected

by Hurricanes Katrina and Rita. The economic losses of these two storms were in the hundreds of billions of dollars. Doesn't it make more sense to invest those billions of dollars in a preemptive program to develop new clean sources of energy and create millions of jobs, thus avoiding future economic catastrophes?

Our union faces powerful corporate interests that care more about the next quarter's profit report while we care about saving our children's world. Eventually, corporate interests will have to recognize the severity of this problem, but at much greater cost. And as our experience shows in Canada, the programs to deal with global warming can differ widely. Conservative programs will force these costs off on consumers and taxpayers, while protecting corporate interests. We have no choice but to fight around this vital union issue.

### Air Pollution

Steelworkers know about air pollution. In October of 1948 a temperature inversion trapped the smoke and dust from zinc smelters and railroad locomotives in Donora, Pennsylvania. By the time it was over, 20 people had died from breathing polluted air. More than six thousand suffered lung problems. Shortly afterward, the Donora smelters shut down forever.

Almost 60 years after the Donora incident and, in spite of significant steps forward, many public health risks remain as a result of air pollution. In the U.S., for instance, the rates of childhood asthma more than doubled between 1980 and 2001 according to the Environmental Protection Agency. Asthma now affects 8.7 percent of all children in the U.S. or 6.3 million kids.

Today's air in some industrial settings may be cleaner, but is it clean enough? Union members must contend with dirty air in many of the plants where they work. And what children breathe outside the plant is similar to what their parents breathe inside the plant. A great deal of pollution is also caused by non-industrial sources, like automobiles, power plants, and waste incineration.

New laws in both countries have led to cleaner air. Through our union's involvement, the exposures to toxic air pollution that affected millions of North Americans have been substantially reduced. In particular, criteria pollution control has improved in the U.S. And it was with Steelworker leadership that the first community right-to-know laws were passed which made it possible for nearby residents to monitor their exposures to toxics, thus forcing companies to control their emissions.

However, since the passage of the 1990 amendments to the Clean Air Act, we have moved backward in the U.S.

The Bush Administration is attempting to roll back the "New Source Review" permits on power



### Some pollutants are especially common:

- Sulfur dioxide, emitted by power plants, nonferrous smelters and coke batteries, causes severe respiratory problems and contributes to acid rain.
- Oxides of Nitrogen, from auto exhaust and industrial plants, cause lung irritation, increase susceptibility to viral infections, and are a secondary cause of acid rain.
- Particulates, tiny particles of dust from many industrial sources, also cause lung damage.
- Carbon monoxide, mostly from automobiles, affects the blood's ability to carry oxygen, thereby leading to heart disease.
- Hydrocarbons, from automobiles, chemical plants, spray painting and many other sources, react with other chemicals and sunlight to produce urban smog and cause breathing problems.
- Ozone is formed in the atmosphere by reactions between hydrocarbons and oxides of nitrogen. Thirty miles above the Earth, naturally-occurring ozone helps protect us from harmful solar radiation. But at ground level, ozone formed from pollutants is a corrosive poison, irritating the respiratory system and aggravating heart and lung disease.
- Air toxics are thousands of especially dangerous chemicals such as benzene and lead, mostly emitted from industrial plants. They cause a variety of diseases, including cancer.

plants which will greatly increase power plant emissions of sulfur dioxide. Auto emissions which were on the decline 15 years ago are now increasing again as a result of the doubling of vehicle miles driven, combined with the failure of Congress to pass improved fuel efficiency standards. And lastly, 52 percent of the U.S. population, or 152 million people, still live in areas that fail the U.S. Environmental Protection Agency's health-based air quality standards.

In Canada, "Smog Days" have become a regular feature in many large cities, leading to increasing public health concerns and in remote smelter communities like Flin Flon and Thompson, Manitoba, our members children have higher rates of respiratory illness and risk of cancer because of the continuing smelter emissions. More than 4.1 billion kilograms (4,165,490,502 kg) of pollutants were released into the air from industrial facilities in 2003.

Alarmingly, of the ten top emitters of carcinogens in Canada in 2002, six were in workplaces organized by the USW.

Clearly we have work to do. We have shown our ability to succeed. For instance, lead emissions in the air dropped by 93 percent when it was phased out of gasoline. But until we force our governments to act, millions of North Americans will continue to be threatened by polluted air.

### Water Pollution

North America is blessed with abundant water.

Canada alone has 20 percent of the world's fresh water. But there are regional shortages, especially in the American Southwest.

Today, our two countries' water quality is threatened as never before. Although new regulations have cut the amount of pollutants flowing directly from municipal sewage treatment and industrial plants, it is still possible to detect pesticides, toxic metals and industrial chemicals in many of the lakes and rivers we depend on for our water. The pesticides come from agricultural runoff and aerial spraying of forests and residential areas; toxic metals and chemicals come from industrial sources, and from consumer products dumped down the drain.

In the U.S. 48 of our 50 states have fish advisories because of mercury pollution. The quality of life that our members enjoy in their non-working hours has been seriously impaired by the continuing pollution of our rivers, lakes and groundwater. In Wyoming, USW local unions have joined active coalitions of ranchers and environmentalists to make important public lands "off limits" to coal-bed methane drilling that leads to long-term contamination of ground water supplies. Many of our members live in rural parts of the U.S. and Canada where enjoyment of outdoors' lifestyles depends on sound conservation of our natural water systems. Our union supports protecting the natural environment in which our members hunt, fish, hike, and camp.

In Canada, the Great Lakes, the Fraser River, and the St. Lawrence River are, and continue to