The Challenges Ahead

new century brings with it new environmental challenges.

As a nation, we have made remarkable progress in combating the most obvious threats — for instance, pollution from auto tailpipes, factory smokestacks, and sewage treatment plants. And we are making significant headway against subtler, more diffuse problems not as readily addressed, such as polluted runoff and habitat loss. In meeting these challenges, we have developed more sensible, more effective approaches to environmental stewardship. We have learned that environmental protection cannot be a goal unto itself — that it can truly be achieved only when fully integrated with our broader social and economic aspirations.

Our task now is to bring these lessons to bear against new, more profound environmental challenges. As we venture into this new century, we must carefully weigh emerging new technologies to ensure that we reap their benefits without exposing ourselves and our environment to undue risk. We must provide our communities with better tools to maintain a healthy environment, a strong economy, and a high quality of life. And, increasingly, we must look beyond our borders and provide the leadership needed to put all nations on a cleaner, more sustainable path to prosperity.



Protecting Global Biodiversity

Worldwide, species are disappear at an alarming rate. By some estimates, half of all species could be gone by the end of this century. The leading threat to biodiversity is the destruction of tropical forests, which support half the known species on earth. These forests play an important role in maintaining a stable climate, and are a vital source of medicines and new materials. Only half the tropical forests that stood in 1800 survive today, and another 50 acres disappear every minute.

Leading causes of deforestation include illegal logging, subsidies that promote overlogging, and deliberate burning to clear land for agriculture. President Clinton has proposed a new Greening the Globe initiative to help stem the loss of tropical forests worldwide. The \$150 million initiative would nearly double funding to provide training and technical assistance to developing countries; support debt-for-nature swaps that preserve rain forests while relieving poor nations of crippling debt; and protect endangered tropical species. Through these efforts, the United States can help developing nations strengthen their economies by preserving, rather than destroying, their irreplaceable forests.

Building a Clean Energy Future

As the new global economy brings rising prosperity, the worldwide demand for energy will soar. Much of this rising demand will occur in developing countries seeking a higher quality of life for their growing populations. By 2020, energy use in developing countries is expected to overtake that of industrial countries. By 2050, developing countries will invest a projected \$15 trillion and \$25 trillion in new energy systems.

Our challenge is to ensure that these countries choose clean energy, leapfrogging past the polluting technologies that powered the growth of the industrialized world. Advanced, low-polluting technologies available today can help developing countries grow their economies while reducing harmful air pollution and avoiding dramatic increases in greenhouse gas emissions. American businesses can help provide these technologies, building jobs and exports for the United States. President Clinton is proposing a \$200 million International Clean Energy Initiative to promote U.S. exports and accelerate the deployment of clean energy technologies around the world.

Conserving Private Lands and Local Green Spaces

Even as America has made great strides in protecting wilderness areas and other natural treasures, the loss of farmland and other open space close to home has continued at an accelerating rate. A recent report by the Department of Agriculture found that the conversion of farmland and other open space to development more than doubled in the mid-1990s. The report found that the loss of farmland is no longer centered predominantly around major metropolitan areas, but is affecting growing numbers of small- and mid-sized cities in virtually every part of the country.

Our challenge is to provide landowners and communities with new tools to conserve private lands and public green spaces. The Administration is proposing several initiatives: a \$1.3 billion Farm Conservation Initiative to significantly expand conservation partnerships with farmers, ranchers and other landowners; Better America Bonds, which would provide \$10.75 billion in bonding authority over five years for state and local efforts to preserve green space, protect water quality, and clean up brownfields; and Lands Legacy, which would provide permanent funding of \$1.4 billion a year to protect lands, with at least half dedicated to state and local conservation efforts.

Strengthening the Clean Water Act

Despite tremendous progress in cleaning up our rivers, lakes, and coastal waters, nearly 40 percent of America's surveyed waterways are still too polluted for fishing and swimming. Hundreds of times each year, health authorities issue warnings against the consumption of contaminated fish or shut beaches because of contaminated waters. Excess runoff of pollutants like nitrogen and phosphorous contributes to algal blooms, outbreaks of harmful organisms like Pfiesteria and a 6,000-square-mile "dead zone" in the Gulf of Mexico.

The Administration's Clean Water Action Plan is helping to address these challenges by providing new tools and resources to states and communities to reduce polluted runoff from farms and city streets. But ultimately, to fulfill the promise of the Clean Water Act — clean, healthy waters for all Americans — the Act itself must be strengthened. President Clinton has defended the Act against repeated attempts in Congress to weaken it. The Administration remains committed to the goal of a strengthened Clean Water Act that provides the tools and authorities needed to fully meet our remaining clean water challenges.

Carefully Assessing New Technologies

The 21st century promises an extraordinary array of new technologies barely imagined even a generation ago. Each holds enormous potential — for the environment, and for society at large. New information technologies will allow real-time monitoring of environmental conditions, remote sensing, and rapid response to spills or other threats. Nanotechnology will allow the creation of microscopic machines and computers that could revolutionize our use of resources. And genetic engineering will allow the creation of new organisms that can reduce our reliance on pesticides and polluting fossil fuels.

One of the most profound lessons of the 20th century is the importance of assessing the full potential of a technology — both benefits and pitfalls — before unleashing it. Enormous resources have been expended over the past quarter century overcoming the legacy of past technological excesses. As we develop and explore a new generation of powerful technologies, it is imperative that we apply the lessons of the recent past, and carefully assess their potential impacts on our environment.