

Vision, Courage, and Sustainability

An Address

by

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Your Imperial Highnesses, the Crown Prince and Crown Princess, Mr. Prime Minister,
Mr. Juro Saito, Excellencies, Ladies and Gentlemen,

It is an honor to address the opening session of this “Global Environmental Action Conference for a Sustainable Future.” It is especially meaningful for me to be here in Japan for this occasion given the warm relations three generations of my family have had with Japanese friends and colleagues over the past 80 years. I am among the many members of my family who have been deeply influenced by Japan’s aesthetic and spiritual traditions. It is always an inspiration to return to this great country, which today is providing much-needed international leadership in the transition to sustainable development.

It is the purpose of this GEA conference to explore the opportunities humanity has to achieve sustainability and to chart a course toward that goal. This focus is especially significant at this time when efforts to combat terrorism and the proliferation of weapons of mass destruction can lead the international community to sideline or postpone the pursuit of sustainability. As the Japanese government has recognized, global ecological security is fundamental to every nation’s national security and to a peaceful world order.

The theme of my remarks this morning is the following: achieving the goal of sustainability is both a possibility and an ecological and social necessity. However, success in this endeavor will require an inspiring ethical vision of the next phase in the evolution of human civilization and the courage to undergo a far-reaching transformation in our values, ways of living, and institutions. Since GEA has given its support to the Earth Charter by joining a World Summit on Sustainable Development Type II Partnership entitled, “Educating for Sustainable Living with the Earth Charter,” and since I have been invited to speak about this declaration and its principles for building a just, sustainable, and peaceful world, I will use the Earth Charter to focus my reflections on the theme of “Vision, Courage, and Sustainability.”

Under the impact of economic globalization, the information revolution, and new systems of global governance, human societies everywhere on Earth are undergoing a major transformation comparable to that caused by the emergence of settled agriculture or the Industrial Revolution. In short, we have entered what can be described as the planetary phase in the development of civilization and the era of global history. What distinguishes the emerging situation from the past is the increasing interdependence of all peoples economically, politically, culturally, and environmentally. As a result, our distinct individual, local, national, and regional stories are also part of one planetary story as never before.

These developments have, of course, generated a backlash. Paradoxically, as the world becomes more interconnected, it is also experiencing increased polarization. Furthermore, it is not at all clear where the forces and processes causing globalization are

leading the world. Futurists construct both negative and positive scenarios, emphasizing that the choices people make or fail to make will be the decisive factor determining the shape of the future.¹ It is clear that if we do not address the root causes of problems such as global warming, the loss of biodiversity, mass poverty, economic inequity, the spread of infectious disease, intolerance, and violent conflict, the security and well-being of every nation and all peoples will be gravely threatened.

Furthermore, in our increasingly interdependent and complex world no one nation—not even the most powerful—can protect itself and manage the challenges ahead by acting alone. Multilateral cooperation and new systems of international law and global governance are essential. In addition, building and maintaining an international order that promotes effective collaboration requires agreement on common goals and values. In other words, in order to ensure a promising future the process of globalization must be guided by a widely shared vision of a better world and a new global ethics that gives a unifying and healing spirit to the emerging planetary civilization, leading to the birth of a genuine world community in the midst of great cultural diversity.

The task of identifying the common goals and shared values that can unite people and inspire their cooperation is already well advanced. Over the past 50 years, through the United Nations and intergovernmental negotiations and through a growing worldwide dialogue in civil society, humanity has been developing a hopeful and profoundly meaningful vision of a planetary society that improves the quality of life for all people and protects the larger living world. This is not a static vision. It is continually developing in response to the evolving world situation. The various values and principles

that lie at the heart of this vision are set forth in the Charter of the United Nations, the Universal Declaration of Human Rights, and numerous intergovernmental reports, declarations, and treaties. They have also been articulated in hundreds of civil society declarations and peoples' treaties, including the Earth Charter.

This emerging widely-shared vision is an especially significant product of the first phase of global history and one of the most important legacies of the 20th century. The great challenge of the 21st century is to make it a reality, radically transforming society and building a free, just, sustainable and peaceful world community that honors diversity.

What does the Earth Charter contribute to this great work? Both the process that generated the Earth Charter and its content make the document especially significant. First of all, it is the product of a decade-long, worldwide, cross-cultural, interdisciplinary dialogue—the most extensive and inclusive consultation process ever undertaken in connection with the drafting of an international declaration. Second, the Earth Charter endeavors to articulate clearly and integrate the fundamental values and principles that the United Nations, international law, and the emerging global civil society have identified as widely shared and essential to achieving both equitable human development and preservation of Earth's ecological integrity. It builds upon, interconnects, and expands the ethical vision found in other international declarations and covenants.

Acting on a recommendation of the UN's World Commission on Environment and Development, the 1992 Rio Earth Summit under the leadership of Maurice Strong took up the challenge of drafting the Earth Charter. However, agreement on the text could not be reached. In 1994, Maurice Strong and Mikhail Gorbachev, therefore, joined

together to launch a civil society Earth Charter initiative with support from Prime Minister Ruud Lubbers and the Dutch government. An international Earth Charter Commission was formed in 1997, and an Earth Charter secretariat was established in Costa Rica, where today it is affiliated with the UN University for Peace. Japan has been represented on the Earth Charter Commission by Wakako Hironaka, a member of the House of Councillors, and I would like to express my deep appreciation for her outstanding leadership in promoting the Earth Charter as an ethical framework for sustainable development. She is the secretary-general of the Japan Earth Charter Initiative, which is supported by leaders from all the major sectors of society.

The drafting of the Earth Charter was completed during a Commission meeting at the UNESCO headquarters in Paris in 2000, and shortly thereafter, the Earth Charter was formally launched at the Peace Palace in The Hague in the presence of Queen Beatrix. Since then it has been translated into 28 languages and endorsed by thousands of NGOs and hundreds of cities around the world, including the United States Conference of Mayors. This spring the governing Council of IUCN (The World Conservation Union) endorsed the Earth Charter. In 2004 a resolution endorsing the Earth Charter will go before IUCN's World Conservation Congress meeting in Bangkok. The support of the Japanese government for this resolution would be extraordinarily helpful. The membership of IUCN includes 75 national governments and almost 1,000 NGOs, and an endorsement by the World Conservation Congress would be a major step forward in the effort to secure recognition of the Earth Charter by the United Nations General Assembly.

At the heart of the Earth Charter is an ethic of respect and care for the community of life as a whole. The ethical life begins with an attitude of respect. People will not protect what they do not respect. What is worthy of respect warrants moral consideration and care. The Earth Charter challenges us to expand our moral awareness and to recognize that we are all global citizens and have ethical responsibilities that extend beyond our local communities to the whole human family, to the greater community of life, and to future generations. The Johannesburg Declaration issued by the 2002 World Summit for Sustainable Development affirms this inclusive ethical outlook, using language almost identical to that in the Earth Charter.²

The Earth Charter's 16 main principles and many supporting principles set forth an ethical vision that integrates the four major concerns emphasized by the United Nations and recent world summit meetings.

1. Securing the human rights and fundamental freedoms of all people—women and girls, men and boys.
2. Eradicating poverty and promoting equitable human development.
3. Protecting and restoring the integrity of Earth's ecological systems.
4. Promoting systems of democratic governance and a global culture of peace.

Even though the Earth Charter puts a special emphasis on environmental concerns, it recognizes the interrelation of all the challenges that humanity faces.

More specifically, environmental degradation cannot be effectively addressed apart from building a global community that eradicates poverty and that promotes human rights, equitable human development, democratic governance, security, and peace.

Likewise, these goals cannot be realized without environmental protection and restoration. A comprehensive definition of sustainable human development will include all these different concerns. Promoting sustainability requires holistic thinking, long-term planning, cross-sectoral cooperation, and integrated ethically-oriented problem solving. There is an urgent need to adopt this approach at transnational, national, and local levels of governance.

The world envisioned by the Earth Charter is becoming a real possibility. While the obstacles and challenges that lie before us are great, the trends that cast a dark shadow over the future can be reversed. The human-assisted recovery of the magnificent *tancho* or red-crowned crane on the island of Hokkaido can be taken as a symbol of this hope. Solutions to many of the underlying problems that face humanity are in sight, and there are numerous promising developments and opportunities for creative environmental and social action.

In this regard, it is noteworthy that the World Resources Institute has put together a team of experts who are developing measurable indicators for the Earth Charter principles. These indicators, which will be adapted for use in different cultures, identify hundreds of concrete actions that governments and local communities can take to implement Earth Charter principles. They will greatly enhance the practical value of the Earth Charter for governments, NGOs and educational institutions.³

Regarding positive trends, the rate of population growth, for example, is slowing significantly. Demographers now predict that human numbers may peak at 8.5 billion in 2050 rather than 10.5 billion as predicted earlier. We have learned that the key to

sustainable population growth in the developing world is the empowerment of women through access to health care, education, and economic opportunity. Progress has also been made in reducing mass poverty, and the international community has set a target and timetable of cutting in half by the year 2015 the number of people living in absolute poverty. Another promising development is the spread of democratic forms of government to a growing number of nations in all regions of the world.

In an effort to show that the goal of sustainable development as set forth in the Earth Charter is an achievable goal, I would like in what follows to cite some additional specific examples of progressive change and innovation which, if accelerated, will go far in leading humanity to the sustainability revolution needed. It is instructive to look at three critical areas where major transitions are necessary: 1. Technology; 2. Global Governance and Market Reform; and 3. Knowledge, Values, and Education.

1. Technology

It is the technologies that we use in energy production, transportation, manufacturing, agriculture, and in our households that together with population numbers and affluence largely determine the human ecological footprint. Many technologies currently in use are enormously harmful to the environment. For example, the fossil fuel engine has brought great benefits to people but at huge environmental and social costs that include pollution, climate change, and health hazards. Even the head of the Ford Motor Company has acknowledged that the days of the fossil fuel engine are numbered.

A sustainable future means a technology revolution linked to a new industrial revolution. The goals of an ecologically beneficial technology revolution are three:

1. Greatly increased efficiency in the use of resources, with the objective of doing more with less.
2. A shift from non-renewable to renewable energy sources.
3. The prevention of pollution and elimination of all waste except what can be assimilated by ecological systems.

The good news is that the technology revolution is well underway. Here are some examples. Regarding energy efficiency, it has been my good fortune to own and drive a Toyota Prius designed in Japan. If all automobiles had hybrid electric/gas engines like the Prius or similar models from Honda, the global consumption of gasoline by cars would probably be cut 30% to 50%, dramatically reducing pollution and greenhouse gas emissions. In our lifetimes we will see the mass production of automobile fuel cell engines that are environmentally clean. Appliances, lighting systems, and buildings as well as motor vehicles, can be made much more energy efficient. Several years ago Ernst von Weizsäcker and Amory and Hunter Lovins, published a study entitled *Factor Four* which provides substantial evidence that we now have the technological know-how to achieve in cost effective ways a four-fold increase in resource productivity. In other words, we are in a position to do twice as much with half the energy and materials, greatly reducing our environmental impact.⁴

Renewable energy technology is developing rapidly. Wind now generates 20% of Denmark's electricity. Great Britain is planning to secure 10% of its electricity from offshore wind by 2010. The cost of solar energy technologies is decreasing rapidly and will before long be competitive with fossil fuels. If the environmental and health costs of

fossil fuels were factored into prices, solar technologies would be competitive today. Many businesses are introducing and refining systems for reducing, recycling, and reusing materials, and these systems are dramatically cutting down waste as well as increasing resource productivity and lowering costs.

If the technology revolution has been slow in gaining momentum, it is not for a lack of scientific and technical expertise. It has more to do with public awareness, consumer demand, the funding of research, limited technology transfer, a market that does not promote clean technologies, and governments that do not correct the market and provide incentives for change.

2. Global Governance and Market Reform

Economic development, especially in the developing world, is a basic part of the solution to overcoming poverty and achieving equitable and sustainable human development. However, the evidence does not exist to justify the widespread faith in the industrialized world that accelerating economic globalization, involving trade liberalization and private capital flows, will by itself promote acceptable standards of global environmental protection and economic equity. On the contrary, as the world economy has grown, environmental deterioration has steadily worsened and almost half the world's people have experienced few if any benefits. In addition, governments and transnational institutions have failed to correct the market.

One is forced to conclude that the economic system and the process of globalization must be managed far more aggressively to ensure that they protect

ecosystems and benefit people equitably. This means new systems of global governance and market reforms that fully integrate the Rio Earth Summit sustainable development agenda with the market globalization agenda. A new synthesis of humanity's economic, social, and environmental goals is required.

As the World Business Council on Sustainable Development has proposed, there appear to be at least two complementary ways in which this challenge can be met. The first involves stronger government leadership and policy reform at the national and transnational levels and the adoption and enforcement of appropriate international law agreements.⁵

There are many steps that governments can take to reform the market such as ending the billions of dollars in annual subsidies for unsustainable patterns of production and consumption and adopting green taxes to ensure that the price of using harmful technologies reflects their full environmental and social cost. Germany's Ecological Tax Reform adopted in 1999 is a good model. It has resulted in a decline in national fuel consumption, an increase in the use of public transportation, and the creation of new jobs.

The generosity of the Japanese government in the field of foreign aid over the past decade is an example all nations should follow. Furthermore, Japan is the leader in setting high social and environmental standards for its international loan and foreign aid programs. In this regard, the Japanese Foreign Ministry and Finance Ministry are to be commended for working closely with local NGOs in developing these standards.

One way to improve the implementation of international treaties in the field of environmental law is to create a World Environmental Organization comparable to the

World Trade Organization or World Health Organization. A new WEO could become a much stronger version of UNEP, and it could be given responsibility for coordinating implementation of all existing international environment and sustainable development law. The IUCN Commission on Environmental Law is circulating a Draft International Covenant on Environment and Development that consolidates and simplifies this large and complex body of hard law. If the international community were to adopt a covenant of this nature, it would greatly facilitate the work of a WEO.

The second approach to global governance and market reform involves nongovernmental initiatives that are voluntary and decentralized. The World Business Council on Sustainable Development calls this scenario “JAZZ,” because like jazz music, it involves improvisation on the part of a diversity of individuals and organizations. JAZZ governance requires the existence of well-organized consumer groups and environmental and human rights NGOs who have ready access to information about corporate conduct. In this scenario, transparency and social and ecological responsibility on the part of corporations is generated by consumer demand, and corporations come to view good community relations and environmental protection as good for business. Furthermore, corporations can become players that voluntarily contribute to JAZZ. The Johannesburg World Summit on Sustainable Development strongly encouraged the development of JAZZ with its program of Type II partnerships.

The JAZZ scenario is especially promising. Drawing on the research and work of the Rockefeller Brothers Fund, I would like to share with you two examples of the way

JAZZ is generating new systems of good global governance and market reform in the fields of natural resources and climate change.

The first example involves the story of the Forest Stewardship Council, a nongovernmental organization founded ten years ago. The Council's mission is to set standards for sustainable forestry worldwide, to certify forest management operations that adhere to these standards, to label forest products generated by certified operations, and to develop the market for FSC-certified products. FSC standards take into consideration and integrate ecological, economic, and social concerns, including the needs and interests of indigenous peoples. There are some FSC standards that are universal guidelines, but FSC standards are also adapted to the needs of the communities and regions where they are applied. FSC standards are so strict that all the leading global environmental organizations endorse them as the gold standard for forest management.

Already FSC certification is changing the forest products industry and leading it toward ecological sustainability and social responsibility. To date, 100 million acres of forests worldwide have been certified under FSC's gold standard, which is about 10% of the world's working forests. Over 500 forest management certificates have been issued to companies in 57 countries. More than 2,600 companies in 62 countries have been issued "Chain of Custody" certificates so they can produce and sell FSC certified products. The success of the FSC system has had the effect of forcing competing certification systems created by the forestry industry to raise their standards repeatedly to the point where many of them are approaching the FSC gold standard. As a result, some experts estimate

that nearly half the world's working forests now reflect the influence of FSC standards and guidelines.

The FSC model is an effective governance mechanism because it is borne of consumer demand and involves the cooperation of nongovernmental organizations and the business community. Other certification systems are now being developed for bananas, coffee, cocoa, the mining industry, agricultural products, and financial institutions.

Another example of JAZZ is the way the world is beginning to respond on a unilateral basis to the challenge of global warming, even though the Kyoto Protocol has not yet entered into force and the U.S. government has sadly failed to provide constructive leadership on the issue. The JAZZ in this example is being played by corporations, national governments, and hundreds of cities as well as NGOs.⁶

Between 1990 and 2000, one of the largest U.S. chemical companies, DuPont, reduced its greenhouse gas emissions by 40% while increasing its productivity by 40%. Further reductions are underway, and DuPont will soon have a total reduction of 75% below 1990 levels. By 2010 the company's goal is to meet 10% of its energy needs by means of renewable energy sources. The oil company giant BP has reduced its emissions by 20% below 1990 levels and reportedly saved over \$600 million in the process. The world's largest cement maker, Lafarge, has reduced its emissions by 11% below 1990 levels and has set for itself the goal of a 20% reduction by 2010. Many other corporations are implementing similar greenhouse gas emission reduction programs and are achieving

substantial savings in the process in and through energy efficiency and a turn to renewable energy sources.

A number of national governments in Europe are unilaterally developing greenhouse gas emissions reduction programs with targets of up to 75% by 2050.⁷ Hundreds of cities, towns, and counties throughout the world are designing and implementing such programs. Many of these efforts have been prompted by the Cities for Climate Protection initiative of the International Council for Local Environmental Initiatives (ICLEI), which has endorsed the Earth Charter and uses the document as an ethical guide.⁸ Heidelberg, Germany, for example, has reduced greenhouse gas emissions 36%, and as a result, the city annually saves \$1.5 million on its energy bill.

Led by the state of California, fourteen states in the U.S. have adopted their own plans to achieve reductions in greenhouse gas emissions.⁹ Twelve of these states together with a group of environmental organizations are suing the federal government in an effort to prompt the government to set automobile emissions standards.

These developments lead to the following conclusions. First, it is quite possible as a practical matter for corporations and national and local governments to reduce greenhouse gas emissions way beyond the 6% reduction target set by Kyoto. Second, emissions reduction programs are cost-effective and profitable contrary to the fears of many critics. Third, a more rapid increase in climate change JAZZ could be brought about by the sharing of information and best practices. A network with its own secretariat is being created to address this need with the assistance of the World Wildlife Fund-UK.

The challenge of ecologically and socially responsible governance and market reform is very complex. However, the examples of new governance mechanisms cited indicate that with the collaboration of civil society, government, and business the challenge can be met.

5. Knowledge, Values, and Education

If the positive changes and trends that we have identified, and the many others that are at work, are to continue and intensify, the driving force will be an awakened, concerned, and mobilized global civil society. Governments and corporations will respond to voter and consumer demand, and a vibrant global people's movement could inspire endless variations on the theme of sustainable development JAZZ. It is relevant here to recall the Ethiopian proverb: "When spider webs unite, they entangle a lion." With the aid of the internet, it is not fantasy to imagine the building of a global network of scientists, educators, religious leaders, NGOs, and citizens that drives the world ever more rapidly in the direction of sustainability over the next four or five decades. Moreover, there are groups working now on how to better organize a global civil society network and people's movement.

This brings us to a discussion of knowledge, values, and education. Fundamental to all the changes that have been considered is a major transformation of human awareness. This shift in attitude and thinking, which is already underway, involves a new intellectual understanding informed by contemporary science, a new global ethics along the lines of the Earth Charter, deepened aesthetic appreciation of the larger living world,

and spiritual insight. Nurturing this new awareness is the great challenge before educational institutions at all levels. It is also a responsibility that religious institutions should take to heart, and those that do will experience a powerful spiritual renewal.

Both knowledge and ethical values are vitally important. As chapter 35 of Agenda 21 makes clear, a scientific understanding of ecological and social sustainability is fundamental to realizing the goal of sustainable development. Encouraging progress has been made in this regard. However, there continues to be an urgent need to develop the necessary scientific capacity in all nations, to advance research, to build international networks of scientists and educators, and to share knowledge worldwide. Japan's new national Environmental Conservation Initiative for Sustainable Development and its Type II Partnerships involving the Asia-Pacific Forum for Environment and Development and the Asia-Pacific Network for Global Change Research are excellent examples of how these concerns can be effectively addressed.

It is important to remember that at any particular point in time, the scientific knowledge on certain subjects will be incomplete. When the science on the environmental impact of a new technology or development project is limited, as a matter of ethical responsibility and prudent policy, the precautionary principle should be applied.

In addition, scientific knowledge by itself cannot answer the questions: How shall we live? What is the good life? In the final analysis our answers require making ethical choices about what kind of persons we want to be and what quality of community life we want to sustain that go beyond the scope of science. Science can help communities understand the consequences of different choices and courses of action, but

it cannot determine what is right and wrong. This is the domain of the human heart and the will. Our best planning, decision making, and action will reflect the integration of the head and the heart, knowledge and compassion.

Many of the Earth Charter principles are informed by science, especially those that deal with ecological sustainability. These principles also give expression to an inclusive ethical vision that recognizes humanity's interdependence with nature at large and moral responsibility to care for the greater community of life as well as the human family. As Aldo Leopold, the American ecologist put it fifty years ago: "A land ethic changes the role of *homo sapiens* from conqueror of the land community to plain member and citizen of it."¹⁰

This expansion of moral concern may strike many modern men and women in industrial societies as a radically new moral idea. However, respect for nature is part of many ancient indigenous spiritual teachings and is part of the Jain, Hindu, Buddhist, Confucian, and Shinto traditions. There have also been Christian, Islamic, and Jewish prophets and teachers with this moral sensitivity. This is important, because unless the world's religions come to promote respect and care for the larger living world, it will be very difficult to persuade the mass of humanity to embrace this new global ethic wholeheartedly. Fortunately, this is beginning to happen. Religious leaders, such as the Pope and Dalai Lama, have issued strong statements on the subject, and thousands of theologians and religious scholars are doing the research and analysis required to promote the idea in the various institutional religions. Interestingly, it was an Iranian Islamic scholar, Seyyed Hossein Nasr, who in 1968 published the first book defining the

environmental crisis as a global spiritual crisis and calling on all the world's religions to promote the spiritual rebirth of humanity necessary to deal with it.¹¹

This brings us to a consideration of the role of schools and universities. Earth Charter Principle 14 is a call to “integrate into formal education and lifelong learning the knowledge, values, and skills needed for a sustainable way of life.” The Japanese government has initiated a major step forward in the international implementation of this principle by leading the UN General Assembly to proclaim a Decade of Education for Sustainable Development beginning in 2005. UNESCO has been charged with directing the initiative. A special worldwide educational focus on sustainable living is essential in order to train and inspire the next generation of leaders, to ensure that workers have the necessary technical skills, and to generate widespread public understanding of the need for change. Inquiry into shared social and ecological values should be a basic part of the sustainable development curriculum at all levels.

During the 2002 World Summit for Sustainable Development, eleven of the leading international scientific and technology organizations, including the United Nations University and UNESCO, issued the Ubuntu Declaration on Education and Science and Technology for Sustainable Development calling for major new initiatives in the field of education and sustainability. The Ubuntu Declaration endorses “the Earth Charter as the inspiring, fundamental and balanced set of principles and guidelines for building a just, sustainable and peaceful global society in the 21st century, which should permeate all levels and sectors of education.” Last week, as a result of the leadership of Princess Basma Bint Talal of Jordan, UNESCO's General Conference of member states

formally adopted a resolution recognizing the importance of the Earth Charter as an ethical framework for sustainable development and as a valuable educational tool. It is the hope of the Earth Charter Commission that, with the support of GEA, UNESCO will, in accord with the Ubuntu Declaration and the resolution of its General Conference, use the Earth Charter as a conceptual framework and ethical guide for this very important educational undertaking. The Earth Charter Secretariat is already putting a special emphasis on the educational use of the Earth Charter in schools, universities, and local communities.

In conclusion, neither a complacent optimism nor a despairing pessimism will serve us well at this critical moment in history. Rather, we must recognize that the hour is late and the challenges that face us are large, but the possibilities for healing and constructive action are many. We must summon the courage to act decisively to transform our ways of thinking and living, guided by the vision of a just, sustainable, and peaceful planetary society. To undertake this great work is our spiritual destiny as human beings. Here lies the only sure path to inner and outer peace.

¹ Paul Raskin et. al, *Great Transition: The Promise and Lure of the Times Ahead* (Boston: Stockholm Environment Institute, 2000).

² See the Johannesburg Declaration paragraph 6, which reads: “From this Continent, the Cradle of Humanity, we declare, through the Plan of Implementation and this Declaration, our responsibility to one another, to the greater community of life and to our children.”

The last sentence in the first paragraph of the Earth Charter Preamble includes the following statement that concisely expresses the Earth Charter’s inclusive ethical vision: “. . . it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.”

³ *World Resources 2002-2004: Decisions for the Earth: Balance, voice, and power* (Washington: UNDP, UNEP, World Bank, WRI, 2003), pp. 208-14.

⁴ Ernst U. von Weizsäcker, *Factor Four: Doubling Wealth - Halving Resource Use* (London: Earthscan, 1997).

⁵ Gustave Speth, *Red Sky at Morning* (New Haven, Yale University Press, forthcoming), chapters 8 and 9.

⁶ See Michael Northrop, “Cutting Greenhouse Gas Emissions is Possible and Even Profitable,” a summary of a meeting of the Conference of Reducers, The Hague, May 2003. For a copy of the report, please contact Lydia Brown at the Rockefeller Brothers Fund (lbrown@rbf.org).

⁷ *Ibid.* Germany, Great Britain, and Denmark have committed to achieve reductions of 20% or more by 2010. Several European nations including Great Britain, France, and Sweden are setting reduction targets of 50% to 75% by 2050. In support of these initiatives, the European Union is taking aggressive legislative action to promote emissions reductions in all twenty-five member states

⁸ *Ibid.* One hundred and seventy-one municipalities in Australia with two-thirds of the country’s population, 107 municipalities in Canada involving half the nation’s population, 135 municipalities in Europe, and 141 municipalities in the United States are participating in the ICLEI program. The cities involved in the ICLEI Climate Protection program report financial savings derived from increasing the energy efficiency of building design, public lighting systems, public transportation systems and vehicles, and from the capture and sale of methane gas and improved recycling.

⁹ *Ibid.* Among other measures, California is beginning to regulate carbon emissions from vehicles, is planning to generate 20% of its electricity from renewable resources by 2010, and is setting energy efficiency standards for appliances, and it will offer tax credits to those who develop and use solar and wind power systems. Twelve states in the U.S. have formed the Clean Energy States Alliance (CESA), which is incorporated as a nonprofit organization and will endeavor to accelerate development of a market for clean energy technologies like solar, wind, and fuel cells.

¹⁰ Aldo Leopold, “The Land Ethic,” in *A Sand County Almanac* (New York: Ballantine Books, 1966), p. 240.

¹¹ Seyyed Hossein Nasr, *Man and Nature: The Spiritual Crisis of Modern Man* (Kuala Lumpur: Foundation for Traditional Studies, 1968). New ed. New York: Harper Collins, 1991.