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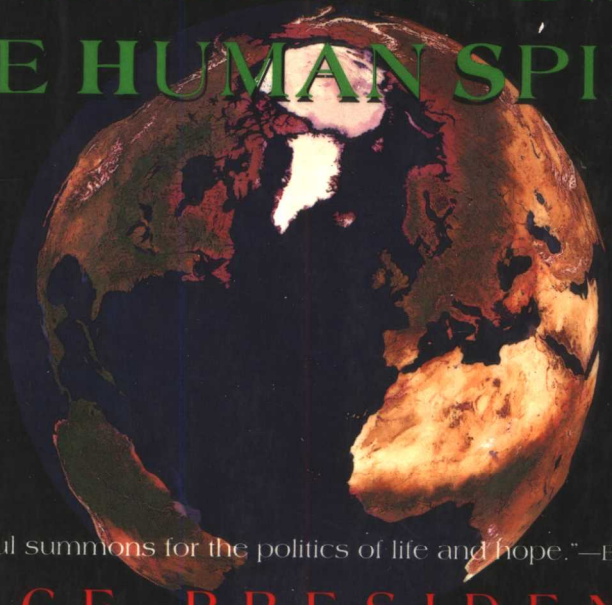
EARTH IN THE BALANCE

ECOLOGY AND THE HUMAN SPIRIT



powerful summons for the politics of life and hope."—Bill Moyer

VICE PRESIDENT
AL GORE

WITH A NEW FOREWORD

EARTH in the BALANCE

Ecology and the Human Spirit

Vice President Al Gore

A PLUME BOOK

PLUME
Published by the Penguin Group
Penguin Books USA Inc., 375 Hudson Street, New York, New York 10014, U.S.A.
Penguin Books Ltd, 27 Wrights Lane, London W8 5TZ, England
Penguin Books Australia Ltd, Ringwood, Victoria, Australia
Penguin Books Canada Ltd, 10 Alcorn Avenue, Toronto, Ontario, Canada M4V 3B2
Penguin Books (N.Z.) Ltd, 182–190 Wairau Road, Auckland 10, New Zealand

Penguin Books Ltd, Registered Offices: Harmondsworth, Middlesex, England

Published by Plume, an imprint of New American Library, a division of Penguin Books USA Inc.
Published by arrangement with Houghton Mifflin Company.

First Plume Printing, January, 1993
10 9 8 7

Credits appear on page 408.

LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA
Gore Albert, 1948–
Earth in the balance : ecology and the human spirit / Al Gore.
p. cm.
ISBN 0-452-26935-0
1. Human ecology. 2. Environmental protection. 3. Environmental policy. I. Title.
[GF41.G67 1993]
363.7—dc20 92-34013
CIP

Printed in the United States of America

"*EARTH IN THE BALANCE* IS AN IMPORTANT BOOK . . . THE BEST OF MANY SUMMARIZING THE STATE OF THE WORLD ENVIRONMENT TODAY. . . . IT SHOULD BE READ BY POLICY MAKERS AND THE PUBLIC FOR WHOM THEY WORK. . . . This remarkable book is fact filled and well written, providing a sobering look at problems such as climate change and the loss of species as well as solutions both thoughtful and practical . . . and a strong thread of values and ethics. . . . GORE DOES NOT MINCE WORDS." —*Christian Science Monitor*

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VICE PRESIDENT AL GORE was a journalist for seven years before winning a seat in the House of Representatives in 1976. In 1984, he was elected to the Senate, where he became a leader in the movement to save and nurture the global environment. With his wife, Tipper, and their four children, the Vice President lives in Washington, D.C., and Carthage, Tennessee.

"IF THERE LIVES A MEMBER OF CONGRESS WHO KNOWS MORE THAN AL GORE ABOUT THE ENVIRONMENT, HE OR SHE ISN'T TALKING, MUCH LESS WRITING." —*Washington Post*

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—M. Scott Peck

Foreword to the Plume Edition

A great many changes have taken place in the United States and throughout the world during the twelve months since this book was first published in hardcover at the beginning of 1992, but none has required any modification of the text for this new edition. And although the book has occasionally been attacked—chiefly by political opponents of the sweeping changes in policy it recommends—no challenge to the accuracy of its facts or the fairness of its analysis has been sustained. Indeed, quite to the contrary, I have been gratified by the outpouring of support it has received, both from the scientific community and from the general reading public. In any event, the purpose of this foreword to the paperback edition is not to qualify the original text but rather to discuss several events that have occurred since the book was written, events that I believe have special relevance to ideas contained in the text.

To begin with, in June of 1992, the leaders of almost every nation on earth gathered in Rio de Janeiro for the United Nations Conference on Environment and Development. Popularly known as the "Earth Summit," this meeting was criticized by many for producing weak and watered-down agreements with few meaningful commitments to change the behavior of nations. But in spite of the Bush administration's decision to avoid any agreement containing a real commitment to act, the Earth Summit nevertheless marked a historic turning point in the long struggle to increase international awareness of the true nature of the global environmental crisis. And it effectively moved the world a long way down the road toward a better understanding of how and why future economic progress is inex-

tricably linked to sound policies promoting protection of the environment and wise stewardship of our natural resources.

Indeed, there is little doubt that a powerful learning experience took place in Rio as leaders from all parts of the world shared a common realization that the particular concerns which had led them to attend the Earth Summit in the first place were actually just different outward manifestations of the same underlying global crisis. The burning and clear-cutting of the tropical rain forests, the thousand-fold increase in the rate at which living species become extinct, the poisoning of our air and water, global warming and stratospheric ozone depletion—all these tragedies and more were suddenly recognized as different pieces of the same puzzle, or to put it another way, different consequences of the collision between our worldwide civilization and the ecological system of the earth.

This collision is occurring principally because of three large changes in the nature of our relationship to the earth: first, the population explosion is now adding the equivalent of China's population every ten years; second, the scientific and technological revolution has increased our power to manipulate nature and has vastly magnified our ability to have an impact on the world around us; and third, for reasons discussed in Part II of the book, our way of thinking about our relationship to the environment has changed (not for the better, unfortunately) as we have yielded to the intense modern pressures to deny responsibility for the future consequences of our present actions.

But there are many reasons for renewed hope. The Earth Summit laid the groundwork for important shifts in policies throughout the world designed to stop the destruction of the global ecological system. Even though the formal documents signed at Rio were short on substance, the Summit spawned widespread recognition of a powerful change in thinking that is now underway in both industrial and developing countries. Moreover, most participants and observers agreed that this conference would be only the first in a continuing series of worldwide meetings to discuss and implement a new generation of global treaties aimed at promoting sustainable economic progress and healing the relationship between civilization and the fragile ecological system of the earth.

In addition to the formal meetings of the official delegates, the Earth Summit also featured a remarkable variety of less formal

opportunities for dialogue among people from every nation on earth. Indeed, the great riches of human creativity were on full display in Rio: a giant "Tree of Life" was decorated with the heartfelt messages from children around the world, written in crayon on paper leaves; representatives of indigenous peoples like the Kayapao, Yanomami, Inuit and Penan presented songs, dances and impassioned speeches in defense of the endangered remnants of wildness within which their ancient cultures are struggling to survive; scientists displayed sophisticated and startlingly beautiful computer images of every square inch of the earth—as seen from space—along with voluminous data describing the damage now taking place on a daily basis; artists crafted spectacular sculptures, paintings, music, graphics and films covering almost every aspect of the eleven-day agenda. And they all seemed more alike than different: the indigenous person and the artist, the scientist and the child, the tourist and the diplomat. All seemed to share a deeper understanding—a recognition that we are all part of something much larger than ourselves, a family related only distantly by blood but intimately by commitment to each other's common future and to the global environment of which we are all a part.

That recognition may have been the Earth Summit's most important achievement. In much the same way that the first photographs taken of the earth floating above the moon's horizon produced a profound change in the way we pictured this planet in our minds, the Earth Summit has begun to produce a change in the way nations throughout the world picture their relationship and responsibility to one another.

But if the Earth Summit was a success for the world as a whole, it was a serious setback for our nation. At a crucial moment in history, when the rest of the world was requesting and eagerly expecting American leadership—not to mention vision—our nation found itself embarrassed and isolated at Rio. Although we were ably represented by a fine delegation of negotiators (headed by Environmental Protection Agency Administrator William Reilly), the Bush administration insisted that our delegation argue in favor of so many nonsensical positions that a deadlock was virtually guaranteed.

This process had actually begun during the preparatory negotiating sessions throughout the two years preceding the Earth Summit

itself. For example, long before the summit, almost every other industrial nation in the world had stated its willingness to set binding targets for reducing and stabilizing carbon dioxide (CO_2) emissions. But the Bush administration threatened to torpedo the entire Earth Summit in order to prevent the adoption of targets and timetables for CO_2 reductions—even though its own studies showed that we could easily meet the most commonly debated goal (stabilization of CO_2 emissions at 1990 levels by the year 2000) with purely voluntary, nonbinding measures.

Japan signalled early in the process that although it was willing to adopt targets and timetables, it would eventually follow the U.S. lead on this issue. By contrast, several European nations—led by Germany—attempted to pressure and persuade the United States to change its view. Although in the end the threat of a U.S. decision to pull out of the Earth Summit forced every other industrial nation to acquiesce to the Bush position, most of these countries did sign a separate declaration reaffirming their commitment to reducing their own CO_2 emissions to 1990 levels.

Tragically, as a direct consequence of U.S. insistence on having no binding agreement to reduce CO_2 emissions in industrial countries, the developing nations of the world abandoned their willingness to negotiate an international treaty to protect endangered rain forests and other fragile ecosystems lying within their national territories. From the beginning they were angered by the Bush administration's insistence that only tropical forests were in need of protection. In addition, they had insisted on an implicit link between the reduction of CO_2 emissions on the part of industrial countries and the protection of forests in tropical countries: in their view, rain forest resources are the lifeblood of the economy in many developing countries, just as carbon dioxide from the burning of fossil fuels is the exhaling breath of industrial economies. Not surprisingly, they called for sacrifice on both sides, and refused to accept the idea that they should enthusiastically join a global effort to preserve tropical rain forests while meekly tolerating continued rapid growth in the volume of carbon emissions from the north. They understood what the Bush administration failed to see: that true global sustainability requires action both to preserve the forests and to reduce greenhouse gas emissions. Thus, when the United States forced the industrial world to abandon any commitment to

stabilize CO_2 emissions, we simultaneously destroyed any chances for an agreement to protect the rain forests.

These developments had poisoned the atmosphere at Rio even before the conference began, but there was at least some remaining hope for a separate agreement on protecting "biodiversity"—that is, a set of measures designed to slow down the extraordinary increase in the rate of species extinction around the world. Here, too, the intransigence of the Bush administration at the preparatory sessions—especially the last one, in Nairobi, less than a month before the Earth Summit—set a negative tone. But as soon as William Reilly arrived in Rio, a few days prior to the Earth Summit's opening ceremonies, he identified a way to resolve the remaining problems with the Biodiversity Treaty and save the United States (and President Bush) from embarrassment. After clearing his proposed solution with the State Department, the Commerce Department and the rest of the negotiating team, he sent a confidential cable to the White House requesting permission to proceed with the last-minute negotiations necessary to finalize the treaty. But then, just as the Earth Summit began, the Bush White House not only denied Reilly permission to proceed, it humiliated him by leaking his memo to the press along with statements by unnamed sources ridiculing his efforts. The entire sequence of events created a firestorm of criticism of U.S. policies, and of President Bush, and guaranteed the embarrassment that Reilly had tried so hard to avoid. We thus became virtually the only nation in the world to refuse to sign one of the major treaties at the Earth Summit.

Our isolation at Rio was especially unfortunate because the Earth Summit represented the first meeting of the entire global community, and marked the emergence of what I refer to in Part III of this book as the new "central organizing principle" of the post–Cold War world—namely, the task of protecting the earth's environment while fostering economic progress. In the aftermath of communism's collapse, the United States is obviously in the preeminent position to lead the world community: the large ideas we have championed—political and economic freedom—are ascendant throughout the world; we have earned the moral authority necessary to lead the world; our economy is still twice as large as that of our closest competitor, Japan; and we are the sole remaining superpower.

Consequently, the rest of the world quite naturally expects the United States to offer leadership—especially in confusing times of transition like these. So the disappointment at Rio was keen when the United States not only failed to lead but actively fought against needed progress on the environment. The mood, however, was one of astonishment and sorrow more than of anger—at least in part because of widespread recognition that the views of the Bush administration were not those of the American people. And sure enough, every public-opinion poll that has asked the question has found that Americans want our nation to lead the world community on this issue more than on any other. In conversations throughout the United States, I have found confirmation that people are determined to see that our nation does offer leadership on the environment—with vision, courage and a real commitment to the future—because they are convinced it is the right thing to do.

Americans also expect U.S. leadership on the environment for a second reason: they are convinced that it is in our economic interest. By overwhelming majorities, the American people reject the argument proffered by the Bush administration that we must choose between jobs and the environment. Instead, they believe that we can prosper by leading the environmental revolution and producing for the world marketplace the new products and technologies that foster economic progress without environmental destruction.

I think they're right. Indeed, many experts believe that we can create millions of new jobs by *leading* the environmental revolution and speeding up our efforts to manufacture and sell environmentally superior products and technologies. In fact, Japan and Germany have been openly proclaiming that new and more efficient products that minimize environmental damage now represent the biggest new market in the history of world business. Perhaps an image from Brazil last summer provides the best illustration of my point: while the Earth Summit was underway, a parallel exhibition of new environmental technologies was staged in São Paulo. The contrast was striking between the tiny U.S. exhibit—made up of a handful of small businesses selling such wares as pipe connectors and dosimeters—and the enormous, highly sophisticated Japanese effort consisting of hundreds of exhibits by businesses representing every sector of the Japanese economy, all working together within the framework of an ambitious "100 Year Plan" to save the

global environment, coordinated by MITI and the Keidanren.

It is important to remember an ominous precedent for the business challenge we are now facing from Japan (and Europe) in the market for environmentally efficient products and technologies. What businessmen now refer to as the "Quality Revolution" also began in Japan—in the late 1960s—at a time when most leaders of U.S. industry assumed that prevailing market forces had already established the proper level of product quality, and that no significant improvement in quality could be attained without a loss of productivity, profits and jobs.

As a result, prominent U.S. experts on improving quality and productivity—such as the legendary Dr. W. Edwards Deming—found it difficult to gain an audience here at home, and took their insights to Japan instead. The rest is history: Japanese businesses proved that the prevailing American assumptions about product quality were simply wrong. By redesigning the entire production process with greater attention to detail, and with accurate monitoring of efficiency and performance trends, they were able to achieve dramatically higher levels of quality, productivity and profitability—all at the same time! And before we fully realized the implications of their accomplishment, we were already losing our leadership position in dozens of critical industries, such as televisions, semiconductors and steel, industries now largely dominated worldwide by Japanese firms.

Some business experts claim that Japanese industry is now poised to replicate their stunning coup in the quality revolution with a similar series of breakthroughs in the environmental revolution. For example, Stephan Schmidheiny, the billionaire Swiss industrialist who led the Business Council at the Earth Summit, argues that several of the same U.S. businesses that were wrong about quality improvements are now making the same mistake by assuming that environmental improvements cannot be economically justified: in other words, that we have to choose between jobs and the environment.

Many Japanese businesses, by contrast, are again searching for ways to redesign the entire production process, this time with an eye to eliminating unnecessary pollution at every step along the way. What they are finding is that waste in the form of pollution is also economic waste. By eliminating the inefficiencies that lead to the

initial production of pollution, they have discovered that it is often possible to simultaneously improve productivity, profits and environmental efficiency.

To use an analogy: if you are hunting a bear and you go into the woods and don't see the bear, you look for the bear's tracks, or you use a dog trained to follow the bear's scent. Similarly, if you are an industrialist looking for ways to eliminate inefficiency and you don't see inefficiency in the operations of your factory, you can try to look for its tracks or follow its scent. Here is where the need for efficiency and environmental protection intersect: it turns out that pollution is often the best marker by which to identify and eliminate inefficiency. Northern Telecom, for example, a communications manufacturer with a large factory in Nashville, set out to be the first in its industry to completely eliminate chlorofluorocarbons (CFCs), which threaten the stratospheric ozone layer. In the process, they found a cheaper and better way to accomplish the same task (producing clean circuit boards) with higher levels of quality and productivity. Indeed, so many recent success stories illustrate this phenomenon—in the United States as well as in Japan—that many forward-looking executives now see major opportunities in this new way of thinking about efficiency.

Better profits are important; equally important is a frequent side effect of the effort to reconcile profitability with a larger social good. Companies that pursue this fresh approach often see a new sense of common purpose arise, a feeling among the employees and managers alike that their work has new dignity and their lives have new meaning, because they are not only earning profits and paychecks but are also joining the pursuit of a greater goal. During visits to such companies, I have seen the sense of purpose in the faces of men and women who have been challenged by their employers to work and think in a new way. I have heard them speak with pride about their role in a mission worthy of their best labors.

I saw and felt the same sense of common purpose at the Earth Summit, and it invigorated those present with a unanimity of resolve. The creative search for more effective ways to reconcile protection of the global environment with the imperatives of economic progress provided the participants with a challenge they knew to be worthy of their best efforts. This is what so disappointed them

about President Bush's performance in Rio; he failed to understand this great moral challenge, and he was deaf to the world's heartfelt cry for leadership from the United States.

That challenge still lies before us; the sword is still in the stone. How will we—as a country and a global civilization—respond? Our circumstances in the aftermath of the Cold War justify both exhilaration and despair. The Berlin Wall has fallen, and Eastern Europe is free, but cruel and hideous hatreds are rampant, and once again our collective conscience is somehow tolerating mass ethnic slaughter. Apartheid is being dismantled, but violence, bloodshed and chaos threaten to claim hope as their next victim. Having been treated to such vivid displays of the best and worst of humankind's rich repertoire of potential, can we not answer the call to nurture and fight for the best within us? One point is clear: we need leadership to defend our shared heritage and our common future.

As I write these words, I see the first light of dawn from my hotel window in Sioux Falls, South Dakota. I am in the middle of a campaign to change the leadership of our country, and though I do not yet know the result, I do know that whatever happens in this contest, the larger struggle will continue. Before I became involved in this campaign, and just before I left for the Earth Summit last spring, I helped organize a meeting in Washington of scientists and religious leaders to discuss the global crisis. The statement that emerged from our discussions spoke powerful truths, and I close with an excerpt:

> We are people of faith and of science who, for centuries, often have traveled different roads. In a time of environmental crisis, we find these roads converging. As this meeting symbolizes, our two ancient, sometimes antagonistic, traditions now reach out to one another in a common endeavor to preserve the home we share.
>
> We accept our responsibility to help make known to the millions we serve and teach the nature and consequences of the environmental crisis, and what is required to overcome it.
>
> Despite the seriousness of this crisis, we are hopeful. We humans, in spite of our faults, can be intelligent, resourceful, compassionate, prudent and imaginative. We have access to great reservoirs of moral and spiritual courage. Deep within us stirs a commitment to the health,

safety and future of our children. Understanding that the world does not belong to any one nation or generation, and sharing a spirit of utmost urgency, we dedicate ourselves to undertake bold action to cherish and protect the environment of our planetary home.

Al Gore
September 16, 1992
Sioux Falls, South Dakota

Credits

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