



The Cornwall Stewardship Agenda

Executive Summary

God calls us to steward creation, but presently much environmental advocacy and activism contradict sound theology and sound science. In response to this, a diverse task force representing a wide range of the theological, scientific and economic disciplines has been brought together to craft the Cornwall Stewardship Agenda. This agenda is designed to flesh out the broad principles of the 2000 *Cornwall Declaration on Environmental Stewardship* (endorsed by over 1,500 clergy, religious leaders, and other people of faith), **and answer the practical question of what public policy principles religious leaders and policymakers should support in their desire to achieve Biblically balanced stewardship.**

The Cornwall Agenda will address a variety of stewardship issues, the first of which are “*poverty and development*” and “*climate and energy*.” This Introduction lays the philosophical groundwork for the rest of the document. In summary:

- Mankind has a divinely ordained responsibility to exercise faithful stewardship. Because we and our neighbors are created in God’s image, Scripturally sound stewardship honors God’s emphasis on meeting human needs (particularly those of the poor), cultivating human creativity and helping people flourish. Therefore, **environmental policies should harness human creative potential by expanding political and economic freedom**, instead of imposing draconian restrictions or seeking to reduce the “human burden” on the natural world. Suppressing human liberty and productivity in the name of environmental protection is antithetical to the principles of stewardship and counterproductive to the environment.
- When addressing environmental problems, **we should respond first to firmly established risks in ways that are cost-effective and have proven benefit.** Prudent stewardship will avoid siren calls to action on speculative problems that are based on politicized science or media-driven hype, focusing instead on well-understood and well-argued evidence. In the world of policy priorities, arguments that millions *may* die in the next century (due, for example, to poorly-understood and wildly exaggerated claims about climate change) must yield primacy of place to well-understood problems (like unsafe drinking water, dirty fuels like wood and dung, and malarial mosquitoes) that cause some 4-5 million deaths annually and that could be solved for a fraction of the proposed cost.
- Because of its emphasis on human productivity and the priority of people in God’s created order, supporters of the Cornwall Agenda are frequently mischaracterized as not caring at all about environmental stewardship. Many seek to create an artificial paradigm in which a person either embraces the idea that there are too many people on the planet causing all manner of environmental devastation (including catastrophic man-made global warming), or he is written off as simply unconcerned about “creation care.” That paradigm, however, is false: **Cornwall supporters believe the best way to care for both people AND the planet is through policies that allow increasing numbers of people around the world to fulfill their role as stewards of God’s good creation.**

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Introduction

Secularist thought provides no rational basis for a stewardship ethic, for according to it humans are simply a product of random causes in a random universe. Some modern environmentalists take an even more extreme view of humans, seeing such a limitless obligation to nature as to make the existence and prosperity of humanity a curse on the world. In this view, untouched nature is the ideal and virtually all human activity results in degradation. Thus, the ethical ideal is not to tend nature wisely but to restrict most human activity.

The Bible, in contrast, places humanity both within and above nature. We are created out of the dust of the Earth and are commanded to be fruitful, yet we have stewardship over the Earth and all its creatures. Thus, humans are not merely a part of nature; we have obligations towards nature. As Biblical Christians, we reject the secular extremes in favor of the balanced Biblical picture: God has made humans for his eternal purpose and has given us an earthly home to tend and care for and to be sustained by for a time. As a consequence, Biblical revelation provides a sound basis for humane creation stewardship, particularly as it relates to energy supply and climate change.

Consistent with these observations, the *Cornwall Declaration* proclaims that human beings are created in the image of God, given a privileged place among creatures, and commanded to exercise stewardship over the Earth. God's law, outlined in the Decalogue given to Moses and summarized by Jesus as loving God and loving our neighbors as ourselves (Exodus 20; Mark 12:31), provides the framework for the proper exercise of the stewardship with which humans have been charged.

A fundamental principle of the *Cornwall Declaration* is, "Human persons are moral agents for whom freedom is an essential condition of responsible action." The *Declaration* also declares, "Sound environmental stewardship must attend both to the demands of human well-being and to a divine call for human beings to exercise caring dominion over the Earth."

These insights imply that advancing human political and economic freedom and harnessing human creative potential in scientific and technological knowledge are vital in order for mankind to respond fully to God's charge to be fruitful and bring forth good things from the Earth (Genesis 1:26-30). Consequently, policies should further both of those ends. Widespread disease, malnutrition, pollution, and mismanagement of the Earth and its resources are among the byproducts of man's sin, and policies that exacerbate these problems violate God's two great commandments mentioned above.

Some mistakenly believe that humanity has become so corrupt and tainted that mankind must minimize activities that impact the natural world. Under such a pessimistic viewpoint, which

denies even the potential for responsible environmental stewardship, mankind must withdraw from the Earth in order to save it.

Others have issued dire warnings of impending ecological doom, not warranted by the evidence, to frighten people into following drastic policy prescriptions they claim are necessary to save the planet, including policies that require individuals to needlessly alter their lifestyles while empowering government officials with greater regulatory authority. This viewpoint, too, devalues human beings created in the image of God (Genesis 1:27).

In contrast, signatories to the *Cornwall Declaration* believe that good stewardship policy begins with a proper perspective of God's Word, or "rightly dividing the Word of truth" (2 Timothy 2:15), particularly as it centers on the individual. Proper policy should be designed to empower individuals both to be wise stewards of the natural world and to liberate themselves from poverty and oppression and other unfruitful practices, and to enjoy the material and spiritual benefits of their labor. As the *Cornwall Declaration* states, "human well-being and the integrity of creation are not only compatible but also dynamically interdependent realities."

Cornwall signatories also believe that representative governments have a responsibility to secure the blessings of liberty for their own citizens and to encourage the peaceful development of liberty throughout the world. For this reason, the Cornwall Alliance has created this Stewardship Agenda, which outlines specific actions we believe will foster wise environmental stewardship and the freedom upon which it depends—focusing on governmental actions that will undergird and complement personal and cooperative outreach efforts.

A fundamental principle underlying this Agenda is the encouragement of individuals to serve one another in ways that will unleash the power of the human spirit and contribute to reversing the results of past disobedience that started in the Garden of Eden (Genesis 3)—disobedience that has left many poor, sick, or dead, has led to much environmental devastation, and, worst, has alienated men, women, and children from God their Creator.

Cornwall signatories recognize the importance of addressing environmental concerns in ways that are cost effective and bring about improvements in human life and health and in the Earth itself. A critical element in achieving these goals is achieving political, economic, and spiritual liberty so as to unlock people's creativity and potential for responsible stewardship. Because human political and economic freedom, within the boundaries of God's moral law, is not only a God-given right but also critically important to economic development, *Cornwall* signatories argue that suppressing it in the name of environmental protection is both antithetical to the principles of stewardship and counterproductive for the environment.

The *Cornwall Declaration* recognizes that achieving a clean environment while providing for the needs of current and future generations requires strategies that employ human and material capital to encourage technological innovation and reduce high and firmly established risks to human life and health in ways that are cost effective and maintain proven benefit.

Such strategies must first address the need for basic infrastructure—access to running water, water purification, roads, communications, housing, sanitation, and hospitals, among other things. But

equally important is spreading the understanding that economic development and human freedom are integrally interrelated, in the hope that governments may increasingly make the benefits of infrastructure construction and other forms of economic development available to all levels of a society. *Cornwall* signatories recognize that expanding access to private property and business ownership for ordinary citizens is crucial to ending poverty and thus providing a solid foundation for long-term environmental stewardship.

It is for these reasons that the Cornwall Stewardship Agenda addresses, as its first area of critical concern, the reduction of poverty through economic development and expanding human freedom. The primary focus in this first segment of the Agenda is on the developing world, with an eye to strategies that have been used successfully to expand human freedom and economic opportunity in the developed world.

A key factor in assessing the potential of an individual policy is whether it leads to ownership of the solutions by those it seeks to help. History has demonstrated that only when they are able to assert ownership will people have the incentive to acquire and transmit the knowledge of how to maintain infrastructure and the wise use of property—and to build on what they have already achieved to provide for the needs of their progeny.

Underlying all efforts at economic development, however, is securing and maintaining inexpensive access to adequate sources of energy to operate the infrastructure and everyday tools that keep a society up and running. While energy development may be seen as just one element in economic development, the future use of certain sources of energy (fossil fuels, nuclear energy, and even hydropower) is under assault by well-meaning people who fear that the use of these fuels is a threat to the environment and even to the future of all life on the planet.

The Cornwall Stewardship Agenda, therefore, addresses energy policy as a second special category in light of concerns about climate change and other concerns raised in the name of environmental protection. The Cornwall assessment will begin with the assertion that supplying sufficient energy for alleviating poverty in the developing world is a very clear and real challenge of the utmost importance that cannot be subverted or delayed by speculative claims about future impacts that might well be mitigated through adaptation should they prove to have scientific and real-world merit.



The Cornwall Stewardship Agenda

Chapter 1: Poverty and Development

The 1,500 signatories to the *Cornwall Declaration* state that they “aspire to a world in which advancements in agriculture, industry, and commerce not only minimize pollution and transform most waste products into efficiently used resources but also improve the material conditions of life for people everywhere.” This language speaks directly to the responsibility of those blessed by modern improvements in human health, nutrition, and life expectancy, as well as by other benefits of advances in science and technology, to make those benefits available to increasing numbers of people around the globe. *Cornwall* signatories recognize that the best way to accomplish this goal is to empower the poorest peoples in the world to be free to choose to seek those benefits for themselves.

The billions of people who today are at the bottom of the world economic pyramid typically lack access to essential services, including electric power, which is necessary to operate lights, refrigerators, stoves, and heaters in homes or to construct and operate sanitation, medical, and other facilities that provide the essential infrastructure for modern societies. They also lack access to credit and other financial services, cannot utilize the value of their lands and property to invest in their futures, and often have no access to educational opportunities that would prepare them to advance in today’s society.

Recent history provides numerous examples of government-led efforts to end poverty. Four decades ago President Lyndon B. Johnson launched what was perhaps the most noteworthy of these efforts with his massive “war on poverty,” which focused on providing direct assistance through government bureaucracies. The huge sums spent under these mostly redistributivist programs have been matched over the past decades by foreign aid to developing countries that, for the most part, was directed through governments in those nations. The broad failure of all of these top-down anti-poverty initiatives, many with no accountability mechanisms, is well documented.

Poverty reduction depends largely on economic development and growth. Economic theory and history teach that economic growth is the product of the development of the division of labor, capital accumulation, technological advance, and wise entrepreneurship, with efficient allocation of resources guided by freely floating prices reflecting supply and demand. Consequently, any effort to achieve sustainable economic prosperity and reduce poverty must include initiating and maintaining the social institution that makes such catalysts for growth possible: a free market (in both products and labor) based on the rights to own, invest, and freely exchange private property at voluntarily agreed prices.

For that reason, unlocking the potential of the world’s poor through private initiatives is a better solution to the problem of poverty and the related challenge of human and environmental health

than government-led, redistributivist programs. Wealth creation is more effective at eliminating poverty than wealth redistribution. In 2006, the Grameen Bank in Bangladesh and its founder Muhammad Yunus were awarded the Nobel Peace Prize for their 30-year campaign to create economic and social development through micro-loans to the entrepreneurial poor. Grameen's approach also focuses on advancing democracy and human rights, including the rights of women and others who had lacked access to formal society. These small loans, however, provide only marginal opportunities and benefits. Investment by multinational corporations has also employed millions of poor people in developing countries and increased their incomes.

Corporate strategist C. K. Prahalad has long championed the idea that large-scale entrepreneurship can and should be a driver of economic development for the world's poor. In *The Fortune at the Bottom of the Pyramid* Prahalad called upon large firms to invest their capital in partnerships with non-governmental organizations (including faith-based groups) to empower people in poor communities to start businesses and create new products that are affordable to poor consumers, so as to create locally based economic growth. Prahalad, too, sees economic development as linked to human freedom and social transformation, including the empowerment of women. This is consistent with many studies showing that a country's index of economic freedom and its economic growth and development are positively correlated.

Government also has a role to play in eradicating poverty, but its most vital roles are to eliminate barriers to economic growth; establish legal and economic systems that foster and encourage business formation, entrepreneurship, trade, innovation and patents, banking, and the construction of roads, power generators, and other essential facilities; encourage freedom of contract and equal opportunity; maintain sound money; ensure improved public health; and prosecute corruption that often involves disbursing public monies for private personal gain. Donor governments, as well as other lending and charitable institutions, must incorporate accountability by the recipients of aid as a condition for continuing aid and as a cause for taking action against those who knowingly misuse aid monies.

Governmental pressure has been exercised prudently in expanding the fight against AIDS, tuberculosis, and malaria in sub-Saharan Africa, where those diseases kill millions every year and leave many times that number unable to work, often for extended periods of time. Responding to a private petition campaign, the U.S. Agency for International Development wisely reversed its longstanding policy against the use of the pesticide DDT as a weapon in the fight against malaria; other international bodies soon followed suit, though this battle is far from over. Government-led campaigns promoting sexual mores to minimize the spread of AIDS are also proving successful, as are programs to provide education and modern drugs for the fight against tuberculosis (TB)—which will be reduced significantly as countries develop electricity generating capacity so that their people can have modern appliances in their homes and cease burning wood and animal dung, which is the primary cause of TB in developing countries.

Perhaps the greatest impact in reducing poverty can be made by those who live among the world's poor and actively desire to help them achieve both temporal and spiritual rewards. Faith-based institutions (missions, in particular) and faith-driven individuals (whether in the private or public sector) who have earned the trust of their poor neighbors have opportunities to bring together like-minded individuals with needed skills and access to capital.

In 2005, *World* editor Marvin Olasky reported on how a Maryland church provided nearly \$300,000 to purchase a 99-year lease on 10,000 acres of developed property in Zambia, where they have helped local residents build an elementary school, an orphanage, and homes for students and teachers, and provide assistance to farmers who participate in a 3-year Bible study program. In Nicaragua, another group is raising \$120,000 to build a prototype orphanage that will also host a greenhouse to grow crops for revenue to pay back the loan (so that the money can be reused at other locations) and make the facility financially self-sufficient over time.

The common thread in these and many other efforts to reduce poverty and improve human well-being in developing nations is the fundamental belief, expressed in the *Cornwall Declaration*, that human beings have great potential, as bearers of God's image, to add to the Earth's abundance. As these efforts increase prosperity, improve human health, and enhance humanity's access to technology and abundance, they will improve the ability of the poor to safeguard the environment, because they will no longer have to focus on mere survival and will have the technological and financial resources to reduce pollution and their impact on ecological resources.

Prahalad's entire framework for poverty alleviation is based on the proposition that, "If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up." To Yunus, the solution for overcoming poverty is to concentrate on promoting the will to survive and the courage to rely on "the first and most essential element of the economic cycle—man" and what the late economist Julian Simon called "the ultimate resource," human ingenuity.

In summary, the Cornwall Stewardship Agenda for alleviating poverty and improving the health and well-being of the poorest among us begins with the recognition that human beings are the crown of creation (Psalm 8:5) and the natural stewards of their environment (Genesis 1:28). Liberating people from poverty and providing them with the essential tools for creating wealth and making wise personal choices is far more effective than treating the poor as dependents who have neither the ability nor the will to manage their own affairs.

The United States Declaration of Independence rightly asserts that governments are instituted among men in order to secure such fundamental human rights as those to life, liberty, and the pursuit of happiness. By extension or implication, this includes the right to own and utilize private property, as the source of the financial and natural resources needed to generate wealth, health, technology, personal fulfillment, and happiness. *Cornwall* signatories believe this obligation goes beyond national borders and should apply to all economic, environmental, trade, and aid policies set by national governments.

The Cornwall Alliance therefore proposes the following items for alleviating poverty and improving human health and the health of the environment.

Food and Agriculture

- The Cornwall Alliance strongly supports the use of high-yield, pest- and disease-resistant food crops that provide increased yields and lower the price of staples in poor nations plagued by hunger. The Cornwall Alliance concurs with the assessment of John Wafula of the Kenya Agricultural Research Institute that “The use of high-yielding, disease-resistant and pest-resistant crops would have a direct bearing on improved food security, poverty alleviation and environmental conservation in Africa.” By making it possible to increase food production without using more land, high-yield varieties also play a vital role in preserving the rest of nature.
- The Cornwall Alliance calls for caution in the use of the “precautionary principle” to label biotechnology a threat to biodiversity and impose rigid procedures on trade in bioengineered products. With a regulatory framework in which people can have confidence and safeguards against monopolistic practices, bioengineering of some livestock and crops may contribute greatly to reducing hunger and thus should not be ruled out categorically.
- The Cornwall Alliance calls for the phased removal of prohibitory tariffs on the importation of agricultural products grown in developing nations, but calls for the continuance of fair-minded, health-based standards for agricultural products from seed to shipping. The Cornwall Alliance recognizes that developing nations must also remove protective tariffs on certain goods they import to foster good will and free trade, but under a timetable that does not inordinately disrupt their local economies.
- The Cornwall Alliance calls for an expanded effort to assess farming practices in developing nations and to encourage more efficient, less polluting, and less environmentally detrimental farming practices. The Cornwall Alliance applauds efforts such as those in Niger, where farmers ended the traditional practice of clearing saplings from their fields before planting, an activity that had led both to deforestation and to loss of topsoil and reduced ability of soil to hold water. The key to this change was a governmental action that allowed farmers for the first time to claim ownership of the trees on the lands they were farming so that they could earn money from selling branches, pods, fruit, and bark. Similar programs that rely on private initiative should be pursued.
- The Cornwall Alliance calls for peaceful privatization and formal ownership of real property, in a way that is consistent with existing informal rights, to further encourage more efficient use of land resources on a worldwide basis. Such policies, according to economist Hernando de Soto, would provide a foundation for capital accumulation and unlock the wealth in land that is now informally held.
- The Cornwall Alliance calls for the creation of reservoirs that would provide energy through hydropower, create more reliable water supplies that could be linked to new rural and urban water purification systems, reduce the risks of floods and droughts, and provide irrigation water to enable higher crop yields.

- In support of agricultural production and trade within the developing world, The Cornwall Alliance supports the development of an intra-continental highway system and upgrading of rail transportation in sub-Saharan Africa so as to link every major city, along with appropriate trunk lines that would link areas of high agricultural production with local and regional markets.
- The Cornwall Alliance also supports the creation of a network of agricultural experiment stations and information and technology transfer to promote ecologically sound pest control and agricultural practices.

Health and Sanitation

- The Cornwall Alliance strongly endorses the prudent use of the pesticide DDT, in conjunction with medications and other anti-mosquito tools such as bed nets, as a means to control malaria. The Cornwall Alliance also strongly supports funding for scientific research to create genetically modified mosquitoes that will help halt the spread of this dreaded disease.
- The Cornwall Alliance strongly supports efforts to provide clean water for drinking and general use throughout the developing world, along with educational programs that explain how parasites and micro-organisms can be removed to lower rates of death and disease.
- The Cornwall Alliance supports the construction, operation, and maintenance of water purification plants, sanitary sewer systems, and other infrastructure intended to improve the health and well-being of developing world residents, and proper training of local personnel who will operate these facilities.
- To bolster the supply of usable water, The Cornwall Alliance supports continued research and funding of desalination technology to transform ocean water and brackish inland waters into fresh water.
- The Cornwall Alliance supports efforts to remove trash and refuse, including animal waste, from public streets, parks, waterfronts, roadways, and buildings in developing world nations—including the provision of funds to pay residents to collect trash for recycling, reuse, or proper disposal. Trash and improper sanitation remain conduits for disease and for vermin that spread disease.
- The Cornwall Alliance supports the development of regional hospitals and local clinics that have continuous power supply, as well as backup power supply, so that high-quality medical care will be more widely available.

Development and Aid

- The Cornwall Alliance supports expanded private efforts to bring aid to developing countries through both nonprofit and profit-making enterprises and considers these

generally more cost effective than government-to-government foreign aid. For example, businesses that employ immigrants from poor countries play an important role in reducing poverty in developing countries as immigrant workers send money back to relatives. Such remittances are the largest source of money going to the poor in developing countries. Immigration policies that provide employers with adequate numbers of immigrant workers are crucial in this regard. Alternatively, businesses could open operations in developing countries, enabling the poor to earn an adequate living within their own countries, thus empowering them to provide for their families and increasing the economic well-being of their entire communities.

- As the US government continues to provide foreign aid, the Cornwall Alliance calls for redirecting a larger percentage of that aid through the Millennium Challenge Corporation and expanding the reach of this institution beyond the lowest income countries to the poorest people in middle income developing nations, such as Mexico.
- Moreover, while the Cornwall Alliance recognizes that immediate and unconditional aid may be appropriate in the face of life-threatening disasters, it endorses the principle of determining eligibility for economic assistance—whether in the form of direct aid, support for direct foreign investment, or other types of assistance—based on a nation’s commitment to, and public record of, just governance. This includes securing political rights and civil liberties, the rule of law, control of corruption, investing in public welfare (e.g., education and health care), and the encouragement of private property ownership and economic freedom, especially for women and ethnic minorities.
- The Cornwall Alliance endorses joint efforts to create micro-finance and other programs that encourage savings and investment by those at the bottom of the economic pyramid. Such programs create a better understanding of and opportunities for capital investment and will aid localities with new business startups that are critical in their efforts at defeating poverty.
- The Cornwall Alliance supports free and unsubsidized trade—in goods, services, and ideas—because it plays an important role in increasing access to modern technology and reducing poverty.
- Because foreign investment is important to economic development and investors need confidence that their investments are secure, the Cornwall Alliance encourages efforts by the Millennium Challenge Corporation and other entities to assist governments in developing nations to establish legal policies on copyright, intellectual property, and dispute settlement and to provide new incentives for private investment that would include prohibitions on the arbitrary seizure of real or personal property.



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Chapter 2: Energy and Climate Change

Signatories to the *Cornwall Declaration* aspire to a world “in which advancements in agriculture, industry and commerce . . . improve the material conditions of life for people everywhere.” For these advancements to occur, however, the supply of energy will have to be increased many-fold, especially in the developing world, because energy is the linchpin for advances in all other areas.

Imagine our own lives, homes, and communities without abundant, reliable, affordable energy. Without motor fuels, our transportation system would be unable to move people, raw materials, food, and finished products. Without electricity, we would have no lights, refrigeration, modern homes, heating and air-conditioning, computers, televisions, hospitals, schools, offices, water treatment facilities, or factories. Our standards of living, and even the well-being of the environment, would plummet.

Yet, even today, that is daily life for nearly a third of the world—almost two billion people. For them, roads, vehicles, electricity, and the benefits they bring are virtually nonexistent. Africa today has 13 percent of the world’s people but accounts for only 2 percent of global gross domestic product, and nearly 95 percent of its sub-Saharan population does not have access to electricity. Outside major cities in China, India, Indonesia, and Latin America, the deprivation is just as bad.

For these people, it is not merely a matter of convenience, basic necessities, modern living standards, or economic development. It is a matter of life itself. The lack of electricity means people must burn wood and animal dung and constantly breathe polluted smoke, drink unsafe water, and eat bacteria-tainted food. Up to ten million women and children die annually from lung and intestinal diseases, half of the children before their first birthday. Rampant poverty and deficient insect and disease control programs result in two million additional deaths per year from malaria.

Abundant, reliable, and affordable energy also is often a prerequisite for the success of a democratic people. Totalitarian and other repressive political systems thrive on a dearth of communication and mobility by restricting the knowledge base and experience of their enslaved peoples. For many, the spread of knowledge and ideas, fueled by energy availability, has directly led to the spread of democratic principles and freedom for many, which, in turn, has enhanced their economic opportunities and development.

It is no wonder energy and economic development are top priorities for impoverished nations. Developing countries desperately need vastly increased energy to support economic growth and basic infrastructure, as Pakistan’s Jamil Ahmad emphasized during a 2006 meeting of the Commission on Sustainable Development. Even major cities are energy-deprived and rural villages often have no electricity whatsoever, or get electricity for only a few hours at a time, once every few weeks. Instead of rolling blackouts, they have rolling electricity.

These nations, Ahmad said, cannot afford to let fears of catastrophic global warming dissuade them from increasing their reliance on fossil fuels. While they remain very interested in advanced and cleaner fossil fuel technologies, as well as in energy conservation and renewable energy, what matters most to them is the generation, transmission, and distribution of ample supplies of dependable energy at affordable prices.

Many energy and development experts view wind and solar power as valuable interim measures, especially for remote villages. These energy sources can also add electricity to power grids, as they do in the United States. However they have major limitations. At present levels of technology, they cannot provide enough electricity for modern economies that generate jobs and material well-being for populations that want and deserve to take what Rabbi Daniel Lapin calls “their rightful places among the Earth’s healthy and prosperous people.” Only fossil fuels, hydroelectric, and nuclear energy can, at present and for the foreseeable future, do that—taking advantage of the coal, oil, natural gas, water power, and uranium that many of these nations have in abundance.

Activist organizations, however, often maintain that economic development in poor countries should be driven solely by energy sources that they describe as “renewable” and “sustainable.” They oppose fossil fuel projects out of a well-meant but misplaced concern about cataclysmic climate change, hydroelectric power because it requires the damming of rivers and restricts aquatic mobility and diversity, and nuclear power because of concerns about potential radioactive emissions and the disposal of radioactive waste. They have successfully, but regrettably, blocked the financing and construction of numerous, important power projects in India, Nepal, Uganda, and many other countries.

The *Cornwall Declaration* affirms that “the Earth, and with it all the cosmos, reveals its Creator’s wisdom and is sustained and governed by His power and lovingkindness” (Job 37:10-13). While climate has changed many times during Earth’s history—often dramatically—God established many self-regulating mechanisms (including the greenhouse effect) to make our planet habitably warm, and precipitation and storms to keep it habitably cool and provide life-sustaining water to plants.

At times, God altered Earth’s weather and climate to compel mankind to obey His command “to do justly, to love mercy, and to walk humbly with your God” (Micah 6:8). He sent the great flood (Genesis 7:11), used regional climate change to help Joseph gain power in Egypt and protect the Israelites (Genesis 41:25-40), and set a drought upon Israel to expose the false prophets of Ba’al (1 Kings 17:1).

Geologists have described how mile-thick ice sheets may have once blanketed much of North America, Europe, and Russia. Many archeologists believe lengthy droughts ended the Anasazi and Mayan civilizations. Historians have chronicled how the Medieval Warm Period (circa 900-1300 A.D.) enabled Vikings to colonize Greenland, while the Little Ice Age that followed (circa 1300-1850 A.D.) brought illness, agricultural failures, famines, and profound social changes to Europe. Agriculture, civilizations, and cultures have flourished during warmer periods and struggled during times of reduced global temperature.

These Scriptural and historic records reveal that profound climate changes are neither new nor unique to our generation. They demonstrate that God created the Earth with a dynamic climate, whose remarkably variable weather and climate ultimately serve both humanity's and nature's needs. They also make it clear that changes in the global climate and weather have been driven primarily by variations in non-human forces, such as solar energy and solar wind levels, cosmic ray influx, Earth's tilt and orbit around the Sun, volcanic activity, and dynamic and turbulent forces of our oceans and atmosphere.

Many scientists believe greenhouse gas emissions can affect the global climate, as can large-scale land use/land cover changes. But few claim to know how much these changes matter, what they will mean for the future, or whether they are, on balance, good or bad. Scientists also understand that natural forces guarantee that our climate will fluctuate and change, regardless of human activities.

Emerging evidence suggests that at least some of the slight increases in temperatures at the Earth's surface in recent years can be attributed to increased solar activity, which is also warming Mars and other planets. Satellite and weather balloon measures show little to no significant warming trend in the troposphere over the tropics. Hence the available data cast doubt on the claim that recent (1975-1998) warming has purely anthropogenic causes and that rapid global warming is impending. Many studies also underscore the benefits of moderate (2-5 degrees F) warming and higher atmospheric carbon dioxide levels, which improve the growth of crops and other plants.

Average global temperature, measured by satellites and weather sondes, has not increased since 1998. Some experts believe the pattern of solar cycles suggests that cooling could soon set in and continue for several decades.

These analyses support the *Cornwall Declaration's* admonition that some environmental concerns are without foundation or greatly exaggerated and that we should be wary of warnings of speculative problems of global or cataclysmic scope a century in the future. Indeed, only three decades ago, human activity was blamed for the prolonged "global cooling" that had followed nearly three decades of warming between 1905 and 1940. One can only contemplate how many resources might have been squandered—and how much economic hardship unnecessarily endured—had huge investments been made to address that now discredited problem.

It is for this reason that *Cornwall* signatories warn that we should be especially careful when the proffered "solutions" to theoretical problems require major cutbacks in consumption, energy use, and economic development—particularly when policies proposed to combat the alleged threat would dangerously delay or reverse actions to improve human life or human stewardship of the environment. Such policies, tragically, almost always prolong the suffering of the poorest people.

Direct restrictions on energy use, or increased prices to discourage use, impact low and fixed-income families most severely. Studies by the US Energy Information Administration and others calculate that the Kyoto Protocol and other climate change proposals would cost an average US family of four between \$1,000 and \$4,000 a year and result in extensive unemployment.

Even worse, such actions would be little more than symbolic gestures that will not stabilize CO₂ levels, much less the climate, especially if China, India, and other developing countries continue building fossil fuel power plants at their present rates of construction. It is now generally

recognized that, even if the Kyoto Protocol were fully implemented by every nation, global temperatures would be reduced by no more than 0.2 degree F by 2050. But it would cost the global economy \$200 billion or more per year, depending on how it was implemented, in lost economic productivity and jobs. Moreover, scientists also acknowledge that it would require the equivalent of 30 or more Kyoto treaties, costing the global economy trillions of dollars annually, to achieve the levels of reductions in carbon dioxide emissions necessary to minimize the temperature increase—if carbon dioxide levels are the primary cause of climate change (a highly debatable assumption).

The most severe impacts of such policies, however, would be on the world's poorest families and countries. They would be prevented from developing the energy, jobs, and modern housing needed to eradicate poverty and disease, thus perpetuating the misery, despair, and death that pervade the developing world. Indeed, stabilizing atmospheric CO₂ levels would require that global emissions be reduced by 60 percent or more, making it virtually impossible to meet growing energy needs without building hundreds of new nuclear plants (assuming that we could overcome some environmentalists' concerns about nuclear energy)—or covering tens of millions of acres with wind turbines and solar panels that provide only intermittent energy.

It is therefore essential that the real, immediate, often life-or-death needs of poor countries be fully considered in evaluating climate change programs. However, the “precautionary principle,” various “cap-and-trade” proposals, and “Clean Development Mechanism” (CDM) projects often undermine efforts to meet those very needs. (CDM projects allow developed-world companies to claim carbon credits by helping less-developed nations undertake “clean energy projects” that minimize the use of fossil fuels.)

Even Yvo de Boer, executive secretary for the UN Framework Convention on Climate Change and a staunch advocate for the Kyoto Protocol, admits that the world's least developed countries would see few benefits from most CDM projects. They simply do not provide sufficient supplies of reliable, affordable energy that modern industrialized nations need, he acknowledges. Many policy analysts and ethicists are likewise concerned that climate change initiatives will put narrowly focused activists and regulators in charge of virtually every important energy, transportation, housing, and economic decision in rich and poor countries alike. They fear that this will reduce living standards while providing little or no environmental gain. Others note that reduced economic activity and expenditures on climate change initiatives would deprive humanity of the funds that could otherwise be spent on critical health and infrastructure needs.

For example, UNICEF estimates that spending just \$80 billion a year—a fraction of the cost of complying with Kyoto—could give inhabitants of developing countries access to basic health, education, clean water, and sanitation services. Similarly, a panel of Nobel Laureates and other economists issued the Copenhagen Consensus, which concluded that money spent on climate change would bring few benefits, whereas spending much smaller amounts on HIV/AIDS and malaria would save millions of lives and help reduce poverty in many countries.

Throughout the Scriptures, God warns against oppressing widows, orphans, and foreigners who are hungry and in need of basic human kindness (James 1:27). From the beginning, those who recognized God's intervention in this world understood that His call was always to love and serve Him and to love our neighbors as ourselves (Leviticus 19:18). Indeed, as James says, “If a brother or sister is naked and destitute of daily food, and one of you says to them, ‘Depart in

peace, and be warmed and filled,' but you do not give them the things which are needed for the body, what does it profit?" (James 2:16).

In today's world, access to affordable, plentiful, reliable energy is fundamental to life, liberty and the pursuit of happiness. Can we deny these rights to anyone, especially on the basis of conjectures about global warming? The historical record is clear: When countries become wealthy, they also become clean. Air (indoor and outdoor) and water pollution levels are highest in poor countries. Environmental protection is a costly good, and in developing countries it is often a luxury people cannot afford. There, the need to develop the economy and lift people out of poverty must take priority. Abundant, inexpensive electricity, even when generated with fossil fuels, is an engine for prosperity that, for example, greatly increases women's efficient use of time, facilitates industrial investment and growth, eliminates the need for filthy indoor combustion, and reduces health risks through improper food storage. Environmentalism largely has become a preoccupation of rich Westerners who take these things for granted and never consider that their activism may prevent these benefits from flowing to the people who need them most.

Cornwall signatories favor policies that expand people's access to energy and the innumerable benefits it brings: clean air and water, transportation and healthcare infrastructure, motor vehicles, lighting, refrigeration, modern agriculture, jobs, life-enhancing machinery, and much more. We must place priority on God's command to feed the hungry and care for those suffering from misfortune, pestilence, and disease (Luke 10:25-37). The fundamental flaw in global warming alarmism is the assumption that the ordinary betterment of human lives—in keeping with God's commandments—is incompatible with the survival of creation. *Cornwall* signatories believe that God's sovereignty over climate assures us that we may continue to pursue human development, confident that the world is fit for this purpose.

Specifically, the Cornwall Alliance supports the following public policies:

Climate Change

- The Cornwall Alliance supports continued study of climate change science—with full peer review, public access to all data and analytical methods, and, very importantly, open, robust, and civil debate about the results and their implications. Scientific journals and institutes must make provision for the findings of respected scientists and academics of various viewpoints about climate change science, even if they challenge prevalent opinions.
- The Cornwall Alliance agrees with the opinions of the Asia-Pacific Partnership on Clean Development and Climate that “development and poverty eradication are urgent and overriding goals”; of the World Summit on Sustainable Development, which made clear the need for increased access to affordable, reliable, cleaner energy; and of the Delhi Declaration on Climate Change and Sustainable Development, which emphasized energy and economic development for poor nations in considering any approach to climate change. The Cornwall Alliance supports an expanded partnership program to encompass more countries and spur increased technological research and development, and the installation of modern energy generation and pollution control technologies in poor nations.

- The Cornwall Alliance believes there should be delays in the enactment of proposed bans on, or mandates in favor of, specific technologies, until (a) their costs and benefits have been assessed by independent analysts who do not have an ideological or economic stake in the results; and (b) the imminent threat of catastrophic climate change, or other environmental threats, can be ascertained with replicable scientific evidence and reasonable certainty, and not be based on conjecture, an asserted “consensus,” or computer models, whose predictions are tenuous at best.
- The Cornwall Alliance supports the elimination of climate-based restrictions on energy and economic development projects in poor nations so that they can create jobs, build vibrant economies, improve human health, and ensure improved environmental quality for their people and wildlife. Such prohibitions are scientifically unjustified, vestiges of colonialism, a denial of basic human rights, and an indifference to the plight of the world’s poor.
- The Cornwall Alliance supports and encourages the establishment of improved free and legal economic and property rights systems under the rule of law that foster foreign and domestic investment, the construction of energy generation and manufacturing facilities, improved health and economic opportunity for all people, and an ability to adapt to any dangers that may arise as a result of changing climate conditions, whether caused by natural forces or human influences.

Fossil Fuels and Nuclear Energy

- The Cornwall Alliance agrees with the World Energy Council’s assessment that fossil fuels will remain the largest energy source for the next several decades, especially for use in the large-scale electricity and transportation sectors. Expanded fossil fuel use is also critical for the economic development of many nations struggling with poverty. For this reason, technology advance and transfer are critical to efforts to limit emissions of pollutants, as well as of heat-absorbing (“greenhouse”) gases.
- The Cornwall Alliance opposes attempts under the Kyoto Protocol and other international agreements or domestic laws to curtail the use of fossil fuels, or to subsidize the production or use of alternative energy sources, such as biofuels. Fossil fuels continue to be among the least costly ways of providing energy and are thus helpful to strong economic development. The Cornwall Alliance encourages ongoing environmentally sensitive exploration and production of fossil fuels and mining of uranium.
- The Cornwall Alliance endorses policies that favor the development of nuclear energy as an option for both the developed world and developing nations. South Africa, Namibia, and other African nations have ample reserves of fissionable materials, and modern nuclear energy technology can provide electric power safely to sizable populations, especially in areas remote from fossil fuel sources. The Cornwall Alliance also supports research and development of other nuclear technologies that hold promise for the supply of low-polluting energy.

New Energy Technologies

- The Cornwall Alliance supports the use of wind and solar power as sources of electricity for poor nations and remote areas, but principally as interim measures, until large-scale power generation facilities (coal, oil, natural gas, nuclear, or hydroelectric) can be constructed to better meet the needs of large, sustained economic development.
- The Cornwall Alliance endorses increased private-sector and publicly supported spending on research and development of new, clean energy technologies for fossil fuels, nuclear energy, and renewables such as solar and wind. Increased R&D spending, according to Australian economist David McMullen, is the only long-term option for meeting world energy demand with clean energy technologies, and such spending on energy R&D can increase considerably without becoming an economic burden.
- The Cornwall Alliance also endorses the vision of the Asia-Pacific Partnership to promote and create an enabling environment for the development, diffusion, deployment, and transfer of existing and emerging cost-effective, cleaner technologies and practices through concrete and substantial international cooperation. The Cornwall Alliance also believes careful analysis of the energy, economic, agricultural, and environmental impacts of all such proposals must be carried out prior to their enactment to avoid harmful unintended consequences.
- The Cornwall Alliance agrees with the Group of 77 and China on the need to increase accessibility to energy through such measures as expanding energy services to the poor, particularly in rural and remote areas. Such efforts would contribute to energy security, provide jobs, and improve air quality and health in areas where the most common current sources of energy are often dung and wood.
- The Cornwall Alliance encourages the revision of cost recovery and regulatory rate setting structures to empower utilities to work with customers to reduce energy consumption through acquisition of energy-efficient appliances and HVAC systems and building materials (such as windows and roofing materials). It also supports international efforts to provide energy-efficient materials in new construction in the developing world and efforts to encourage governmental entities (schools, hospitals, office buildings, etc.) to invest in energy efficient technologies and methods. Such activities are motivators for making technological advances more affordable and, if designed appropriately, are often economically beneficial over time.

Energy and Economic Development

- The Cornwall Alliance supports regional and international cooperation in the energy sector, including the interconnection of electricity grids and oil and natural gas pipelines in developing nations (particularly in Africa), and linking competent centers on energy technologies that could support capacity building and technology transfer activities.
- The Cornwall Alliance supports the efforts of the Asia-Pacific Partnership and the Group of 77 and China to secure improvements in the power generation sector, including

improving the thermal efficiency of power plants, reform of electricity markets, reduction in electricity loss during transmission, and demand-side power management technologies.

- The Cornwall Alliance agrees with the World Energy Council on the needs for stable legal frameworks in developing nations to lower the cost of capital; for gathering and dissemination of data on real energy costs in developing nations; to build a “maintenance culture” in which expatriate Africans, for example, contribute their skills, experience, and finances to African projects; and for improved education and information regarding the fundamentals of energy supply and demand.

In summary, the Cornwall Alliance supports energy and environment policies that will facilitate global social responsibility—for all corporations, including nonprofit activist corporations; for all people, especially the Third World’s poor, and families on low and fixed incomes; and for all concerns—for human and environmental health and welfare.