



Canadian Friends Service Committee (Quakers)

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Report to Monthly Meetings Regarding Friends' On-going Search for Unity on Uranium Issues

(send feedback to: gianne@quakerservice.ca by April 4th, 2011)

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Introduction

In 2007, QPASC received minutes from Prairie and Vancouver Monthly Meetings requesting the formation of a Uranium Issues Working group. QPASC agreed to support the group as they sought guidance from Yearly Meeting regarding these issues.

We are grateful for the attention that Monthly Meetings and Worship Groups have given to this since. We hope to bring this search for guidance to a conclusion at Yearly Meeting 2011. In order to facilitate that, we have prepared this report in collaboration with QPASC's Uranium Working Group. **We hope that Monthly Meetings who feel moved to continue to participate in this process will send us feedback by April 4 so that we can incorporate it into a new draft minute that will be published in the documents in advance for Yearly Meeting**, and so avoid some gaps in communication that occurred last year. The report has six pages plus an appendix.

This report has several sections:

- 1) Brief history of work on the peaceful energy minute to date
- 2) Further thoughts arising from dialogue with monthly meetings
- 3) Possible points for inclusion in a statement of nuclear issues
- 4) Appendix: selected CYM minutes about ecological responsibility and climate change, included here in case Friends wish to refer to them.

1) Brief History of Work on the Peaceful Energy Minute to Date

After special interest group discussions during at least one Yearly Meeting, the Uranium Working Group was established as a sub-group of QPASC in 2008. About 25 Friends joined by signing up for the email list. A draft of a "peaceful energy minute" was sent to Monthly Meetings that year. It was hoped that approval of this minute by Yearly Meeting would give QPASC guidance about work on Uranium issues. QPASC's role is to facilitate individual Friends or

Friends' groups to work on concerns of the Yearly Meeting.

A steering committee was then created to educate Friends on nuclear issues and dialogue with Monthly Meetings. It produced background information and references which were distributed to Monthly Meetings early in 2009 with a request that they support a redrafted "peaceful energy minute".

To address Friends' concerns, two information sessions were held at Yearly Meeting in 2009 with invited speakers Gordon Edwards and Bob Deltredichi of the Canadian Coalition for Nuclear Responsibility, and Tim Wies of the Pembina Institute. Monthly Meetings were provided with a videotaped copy of both presentations. Unity was not reached at CYM 2009 to approve the minute and discussion of the matter was therefore deferred.

The draft minute was resubmitted to Monthly Meetings for consideration, in preparation for the following CYM (2010). Some Meetings hesitated to support the minute. Feedback from Monthly Meetings was received by the steering committee of the Uranium Working Group and is summarized in the following section, "Further Thoughts Arising from Dialogue with Monthly Meetings", which also gives responses to it.

The "peaceful energy minute" was reworked at CYM 2010, where 30 Friends attended a presentation by Mark Bigland-Pritchard and 25 participated in a Special Interest Group. The Clerks of CYM and CFSC decided it was best to withdraw the minute from the floor principally because some Meetings had not yet been able to complete their discernment on the minute before CYM and because a few concerns were being raised from the floor that would take time to season.

Follow-up steps were identified at a subsequent meeting between CFSC staff, the Clerk of CFSC, and members and the steering committee. These include

- 1) Report back clearly to Monthly Meetings, and asking for feedback in preparation for a new draft minute that can be included in Documents in Advance for Yearly Meeting 2011.
- 2) Appoint a member of CFSC, who serves on QPASC, to the Uranium Working Group.
- 3) Ask those on the UWG email list to express their interest in being members of the working group, which will imply that they actually participate in some way. Once the membership is clearly established, QPASC will consult the membership and appoint a steering committee, if this is deemed useful.
- 4) Narrow the focus to the dangers associated with the nuclear industry which are real and long-lasting, regardless of climate change issues, energy consumption patterns, and peace concerns.
- 5) Change the name of the Uranium Working Group to "Friends Uranium and

Nuclear Working Group" (FUN Working Group).

This report is to fulfill the first step. Nathan Egan-Pimblett is the CFSC representative on the Uranium Working Group (nathaniel.ep@gmail.com). At this date the remaining steps are still in process.

2) Further Thoughts Arising from Dialogue with Monthly Meetings

Here is a summary of feedback from Monthly Meetings, followed by some information provided in an attempt to bridge the opinion gap.

- 1. One Monthly Meeting suggested that we should specifically use the phrase, nuclear fission, since we are not necessarily opposed to nuclear fusion.*
- 2. Several meetings asked about the implications of nuclear power phaseout with regard to nuclear medicine.*
- 3. Some have raised the question of possible retraining for workers currently employed by the nuclear industry.*
- 4. Some have objected that there is no relationship between nuclear reactors and nuclear weapons.*
- 5. Some have wondered whether renewable energy and greater energy efficiency could fill the gap that would be left by a phaseout of nuclear energy.*

1. Fission/Fusion: There is no objection to using the term “nuclear fission”. Hydrogen fusion, sometimes called nuclear fusion, constitutes another use of nuclear-related knowledge for the purpose of energy production. Today, human-generated hydrogen fusion is not a viable energy source. (The sun, of course, is a large naturally occurring hydrogen fusion reactor from which we are protected by a fragile layer of ozone.) Some are researching hydrogen fusion in the laboratory, but the most optimistic estimates are that hydrogen fusion as an energy source is at least fifty years away. While there may be valid concerns about hydrogen fusion from a Quaker perspective,, it is not necessary for Friends to take a position on it at this time. The phrase, “nuclear fission” will be used when referring to the phaseout of fission-based nuclear reactors.

2. Nuclear medicine: There is also no objection to using nuclear technology in the field of medicine. The production of medical isotopes does not require large-scale nuclear power reactors. Most isotopes can be produced in smaller devices such as cyclotrons and linear accelerators which do not produce plutonium. There are one or two isotopes which currently can only be produced in a small research-scale reactor, so we cannot phaseout these smaller reactors immediately. There is, however, the possibility of either finding substitutes for those particular isotopes or finding ways of producing them without the small research-scale reactors. Uranium is used in nuclear medicine; some have wondered if we could phaseout uranium mining and still have nuclear medicine. Given the small

amount of uranium that is actually required for nuclear medicine, there is enough uranium that has already been mined to satisfy global nuclear medicine needs for some two hundred years.

3. Retraining workers: Friends can advocate a just transition process for workers, in which workers may be retrained for more ecologically sound types of work. Since QPASC is recommending a step-by-step phaseout of nuclear power over a period of years, while creating jobs in the field of energy efficiency, alternative energy research, and renewable energy production, a transition process for workers should be quite workable, as some retire and others are retrained. There will be jobs for workers working to continue to secure the waste from Canada's reactors.

4. Nuclear power/nuclear weapons connection: There are a couple of ways in which nuclear power and nuclear weapons are connected. There are primarily two fissionable substances that are used to enable nuclear weapons to explode: enriched uranium and plutonium. Naturally occurring uranium consists of about 99.3 percent uranium 238, (U238) and 0.7 percent uranium 235 (U235). The U235 is the more fissionable substance, and in order for uranium to be useful for nuclear weapons, and for power production in most nuclear reactors, it needs to go through a process called *enrichment*. This involves removing about eighty percent of the U238, so that the percentage of U235 is increased to about 3.5 percent.

The same uranium enrichment process that is used to make reactor-ready uranium can also be used to make weapons-ready uranium. Any country that wants to build nuclear weapons, and decides to produce enriched uranium toward that end, can build uranium enrichment facilities and claim that they are just enriching the uranium for civilian uses (i.e., nuclear power). As the atomic age unfolded in the years after 1945, the leaders of Britain, France, the Soviet Union, Israel, India and Pakistan all stated publicly that their country was only interested in nuclear technology for peaceful uses, while secretly they started nuclear weapons programs in their respective countries. Today, the government of Iran claims they only want nuclear technology for peaceful uses, but is widely suspected of having a nuclear weapons program. An honest critical study of the last seventy years will conclude that nuclear disarmament is not possible unless we also phase out nuclear reactors.

Although Canada has never developed nuclear technology for weapons purposes, there are a couple of ways in which even our nuclear energy industry has a nuclear weapons link. All the plutonium that our reactors in Canada have produced could be used at some point in the future to make nuclear weapons. While we might not envision building nuclear weapons today, no one can say what type of government Canada might have in a hundred years, or five hundred years, etc. The plutonium produced will remain weapons-usable for tens of thousands of years.

Another context in which there is a link is when Canada exports nuclear reactors to countries with various motivations. India used one of our early research

reactors to help fuel its first atomic bomb, which it exploded in 1974. Military dictatorships in Argentina, in the late 1970's, and South Korea, in the 1980's, bought Canadian Candu reactors at a time when both countries' governments were widely suspected of being interested in nuclear weapons. A Candu reactor is of particular interest to those interested in building nuclear weapons since it uses natural uranium with heavy water to produce plutonium. A country can therefore acquire plutonium from one of our reactors, and start building bombs, without having to go through the more expensive and complex process of enriching uranium.

5. Filling the energy gap: On the question of whether greater energy efficiency and renewable energy can fill the gap as Canada phases out nuclear power while reducing fossil fuels, there have been numerous studies that have demonstrated not only that the renewable option is viable, but that it makes far more economic sense to do so. Most recently, the Pembina Institute and Green Peace have released "Ontario's Green Energy Plan 2.0"¹ which looks at the feasibility of moving to green energy in Ontario. The Uranium Working Group provided some copies of this report for people attending CYM 2010.

3) Possible Points for Inclusion in a Statement on Uranium and Nuclear Issues

It is proposed that work on these issues in the future have a narrower focus. The points below could form the content of a Yearly Meeting minute to guide this work. As with other CFSC and CYM work, any work on nuclear issues would be guided by the existing Yearly Meeting minutes on ecology and climate change (see appendix for relevant minutes). **We invite feedback on these ten points. We welcome other points or questions that Monthly Meetings or Worship Groups consider relevant.**

- 1) Uranium mining and milling and processing exposes the environment to toxic and radioactive chemicals virtually forever due to the long decay periods for radioactive elements.
- 2) After two-thirds of a century of effort, there is still no method for long-term safe disposal of wastes from nuclear fission-based energy programs.
- 3) The spread of nuclear fission technology around the world has led to an increase in the number of countries who have or are developing nuclear weapons.
- 4) The expense of nuclear fission energy programs diminishes the money and technological expertise available for research and development of environmentally and socially friendly alternatives.

¹ <http://pubs.pembina.org/reports/ontario-green-energy-report-august-web.pdf>

- 5) Nuclear fission energy is a greenhouse gas generator in the development, mining, processing, transportation and decommissioning phases.
- 6) Nuclear fission is incapable of making a substantial contribution to total world energy requirements as it only supplies electricity and is very expensive and very slow in its development phase.
- 7) Including nuclear fission as an energy source for the future implies constantly escalating radioactive and chemical contamination of the natural environment and those communities in the vicinity of nuclear fission plants.
- 8) With these concerns in mind, it is proposed that CYM call for a phase-out of (1) the use of nuclear fission-based energy, (2) the mining, refining and exporting of uranium, and (3) the exporting of fission-based nuclear power reactor technology and fissionable materials.
- 9) Nuclear science can continue to be applied to the field of medicine, which does not require the use of nuclear fission reactors for electricity production. There is enough mined uranium currently on hand to supply the very small amount of uranium required in nuclear medicine applications for some two hundred years. .
- 10) In moving to a more ecologically sound energy economy, it is proposed that CYM affirm the right of affected workers to a just and reasonable transition process during which they may be retrained for more ecologically sound work.

Appendix:

Selected Minutes of Canadian Yearly Meeting Regarding Ecology

Introduction

As Friends work towards unity on a Yearly Meeting minute about uranium, it may be helpful to note that Yearly Meeting has already passed minutes that express a commitment to reducing resource consumption, among other points about ecologically responsible living. As such, these commitments do not need to be restated in a minute about uranium.

Below are selected minutes from 2001 and 2004. In almost every year from 1998 onward, CYM has minuted something relating to ecology, but these are the two most comprehensive. The first is a minute of record developed through a process led by the Quaker Ecology Action Network. This is accompanied by a report of the pre-CYM workshop of that year. The second is the adoption of the Earth Charter (including its text).

Minute on Sustainability:

2001. 52. Quaker Ecology Action Network: We approve the proposed minute on Sustainability, which now can serve as a Minute of Record, to be used by any Friend or meeting as an expression of our beliefs on sustainability.

Minute on Sustainability

Friends believe we are all manifestations of the Creator, the Divine Spirit, God. As our knowledge has grown we have come to realize that indeed all life forms are exquisitely inter-related and inter dependent; thus all life is sacred. We envision a Religious Society of Friends in the 21st century that includes in its testimonies a clear call of responsibility to live in harmony with all life on Earth.

We see that our traditional peace testimony of nurturing peace with each other must be clearly expanded to include nurturing peace with all of the Created world. We are inspired to do this with a renewed respect for Creation which goes beyond self-interest. We envision a relationship with Earth that allows us to see ourselves as an integral part of God's creation and not as the sole inheritors of it, to use as we will. We seek non-violent ways of meeting the needs of our species without compromising the viability of other species with whom we share this Earth. While Friends respect science as a useful tool for understanding aspects of reality, we recognize there are divine mysteries that remain beyond our ability to understand.

Human exploration has revealed the Earth to be a beautiful blue-green sphere in the vastness of space - our home in the Universe. We will further strive to understand and respect Earth processes - among these, the growth and respiration of living things, the flow of the Earth's waters, and the natural flow and mixing of gases in the atmosphere-- and do our utmost not to upset its balance, and to strive to restore balance where it has been upset.

Given the implications of Friends testimonies on peace, on simplicity, on equality, and on respect for integrity of Creation, we pledge ourselves to the Precautionary Principle, by which new technology is embraced with great caution. Holistic accounting of impacts, including scientific,

moral, and ethical accounts may or may not confirm technology's benefits. These things may only be known in the fullness of time.

We further pledge to share these concerns with the wider human society outside the Society of Friends, and to support and love one another as we carry these concerns forward.

While evidence of ecological disaster is all around us, we can and must make changes now which will heal our spiritual and physical connections with the Earth. In the tradition of First Nations Peoples we work to ensure a better future for, at the very least, the next seven generations. We see that significant changes in the way we live our day-to-day lives are necessary for life on Earth to survive and flourish.

To follow up from this 2001 session, Canadian Yearly Meeting prayerfully encourages all Meetings and individual Friends to take action to measure and reduce our ecological footprints. QEAN offers suggestions and resources:

- Conduct ecological audits
- Establish monthly meeting ecology working groups or networks to address issues and facilitate change within meetings, and as bodies which can network with other faith-based groups and beyond the faith community.
- Make use of resources provided by Friends Committee in Unity with Nature, QEAN and other groups.

QEAN will welcome news from monthly meetings and individual Friends about their activities and results so we can share with one another through reports, poster displays and other means at Yearly Meeting 2002. News can be sent to QEAN through its Email forum or to one of the Co-Clerks, Vince Zelazny or Bill Curry (s.t.c.)

Earth Charter:

**MINUTES OF CANADIAN YEARLY MEETING OF THE
RELIGIOUS SOCIETY OF FRIENDS APPENDIX B
A Report from the Visions and Strategies Sessions of the Pre-CYM Workshops
August 11-12 2001**

We encourage Friends to discern the spiritual basis for caring for Creation, and to see how all is interconnected. As a way to do this, the Visions and Strategies sessions listed personal projects which could make a difference to the Earth. Then we brainstormed on strategies Friends could use in our Meetings, Working Groups and Committees. We offer them under the following headings:

Advocacy

- National bodies such as CYM could pressure government to act on issues of climate change;
- We could encourage local governments to promote change in local bylaws, e.g. allowing for household systems that are healthful and practical such as composting toilets and use of grey water.

Education

- We could invite visitation to allow visitors to see Friends' organic farms.

- Work Camp concept to assist sustainable development, to train youth and ourselves and share as part of another community in either Canada or the wider world.
- Youth training in non-violence.
- Funds for education in appropriate technology.
- Friends' schools and colleges emphasizing sustainable living.

Information and Communications

- Search, compile resources (from, on the Web) for the various topics of sustainable life.
- Information-sharing exchanges.
- More communication via electronic mail for Committees.
- Meet via telephone or teleconference at least half the time.

Economics

- Reform the national and international credit union movement, starting with our local Credit Union's or co-ops
- Invest in socially responsible ways.
- Monthly Meetings, Canadian Yearly Meeting and other Quaker bodies should hold their investments only in ethical instruments, giving priority to funds such as OIKO Credit.

Our Homes

- Designing homes that embrace appropriate technology, and nurturing environmentalists to live in them.
- Retrofitting existing housing for solar energy and heating.

Within our Meetings (our structure and contents); we could:

- use only re-usable plates, cups, utensils,
- use compact florescent light bulbs,
- hold sustainable meetings free of non renewable energy resources and fast food imports,
- construct Eco-Friendly Meeting houses,
- do energy audits on Meetinghouses and correct problems.

Within our Meetings: Programs

- Help establish groups who may wish to join in sustainable living re: loans, management, etc.
- Explore ways to change attitudes (our own and the public's) so that "giving up things" evolves to "voluntary simplicity", evolves to a "world of Enough for all"
- Create Simple Living support groups
- Monthly Meetings could have discussion groups, sharing ideas and supporting other members acting in sound ecological ways.

Within our Meetings: Yard and Transportation

- Reduce or eliminate the need to mow and water lawns with less lawn, mowing with rotary mower.
- Make Meetinghouses available to committed groups to reduce need for added buildings.
- Friends could consider whether we are using the world's resources well, in the amount of travel we do by our memberships in so many organizations, and consider how much paper we use in our communications.
- Share transportation, encourage Friends to carpool, bike, walk, or take public transport to Worship, committee meetings, CYM.

Within our Meetings: Food

- Serve only organic, fair trade coffee and tea, compost food scraps, encourage those without gardens to bring their own compost to the Meeting,
- Set regular or time of prayer for change in humans' use of God's Creation, similar to worldwide Prayers for Peace.
- Hold Meetings for Business on same day as Meetings for Worship to reduce transportation needs.

- Re CYM: make a commitment to prioritize buying first: organic locally grown foods, then locally non-organic foods, then our nationally produced foods, then all others.
- Monthly Meeting's and Canadian Yearly Meeting could commit to buying fairly traded coffee, tea, chocolate and sugar.
- Share excess food with Friends who have less.

CYM minute endorsing the Earth Charter:

2004.27. **Endorsement of the Earth Charter:** Carol Bradley, on behalf of Wolfville Monthly Meeting, asked Canadian Yearly Meeting to endorse the Earth Charter. Friends felt that although this document is not perfect, it is a document that deserves our support because it arises from many groups which have a deep concern for the protection of God's earth. We agree to endorse the principles of the Earth Charter, recognizing that this will require us to make changes and sacrifices in the way we live. We ask Friends in Canada to begin a discernment process with respect to this document and with how we might begin to implement these principles in our lives and in our Meetings. We ask our Quaker Ecology Action Network to help our Clerks develop a process for follow-up with Monthly Meetings, the Government of Canada, First Nations associations, and the United Nations.

TEXT OF THE EARTH CHARTER

PREAMBLE

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, 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.

Earth, Our Home

Humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution. The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global environment with its finite resources is a common concern of all peoples. The protection of Earth's vitality, diversity, and beauty is a sacred trust.

The Global Situation

The dominant patterns of production and consumption are causing environmental devastation, the depletion of resources, and a massive extinction of species. Communities are being undermined. The benefits of development are not shared equitably and the gap between rich and poor is widening. Injustice, poverty, ignorance, and violent conflict are widespread and the cause of great suffering. An unprecedented rise in human population has overburdened ecological and social systems. The foundations of global security are threatened. These trends are perilous—but not inevitable.

The Challenges Ahead

The choice is ours: form a global partnership to care for Earth and one another or risk the destruction of ourselves and the diversity of life. Fundamental changes are needed in our values, institutions, and ways of living. We must realize that when basic needs have been met, human development is primarily about being more, not having more. We have the knowledge and technology to provide for all and to reduce our impacts on the environment. The emergence of a global civil society is creating new opportunities to build a democratic and humane world. Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions.

Universal Responsibility

To realize these aspirations, we must decide to live with a sense of universal responsibility, identifying ourselves with the whole Earth community as well as our local communities. We are at once citizens of different nations and of one world in which the local and global are linked. Everyone shares responsibility for the present and future well-being of the human family and the larger living world. The spirit of human solidarity and kinship with all life is strengthened when we live with reverence for the mystery of being, gratitude for the gift of life, and humility regarding the human place in nature.

We urgently need a shared vision of basic values to provide an ethical foundation for the emerging world community. Therefore, together in hope we affirm the following interdependent principles for a sustainable way of life as a common standard by which the conduct of all individuals, organizations, businesses, governments, and transnational institutions is to be guided and assessed.

PRINCIPLES

I. RESPECT AND CARE FOR THE COMMUNITY OF LIFE

1. Respect Earth and life in all its diversity.

- a. Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings.
- b. Affirm faith in the inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity.

2. Care for the community of life with understanding, compassion, and love.

- a. Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people.
- b. Affirm that with increased freedom, knowledge, and power comes increased responsibility to promote the common good.

3. Build democratic societies that are just, participatory, sustainable, and peaceful.

- a. Ensure that communities at all levels guarantee human rights and fundamental freedoms and provide everyone an opportunity to realize his or her full potential.
- b. Promote social and economic justice, enabling all to achieve a secure and meaningful livelihood that is ecologically responsible.

4. Secure Earth's bounty and beauty for present and future generations.

- a. Recognize that the freedom of action of each generation is qualified by the needs of future generations.
- b. Transmit to future generations values, traditions, and institutions that support the long-term flourishing of Earth's human and ecological communities. In order to fulfill these four broad commitments, it is necessary to:

II. ECOLOGICAL INTEGRITY

5. Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.

- a. Adopt at all levels sustainable development plans and regulations that make environmental conservation and rehabilitation integral to all development initiatives.
- b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth's life support systems, maintain biodiversity, and preserve our natural heritage.
- c. Promote the recovery of endangered species and ecosystems.
- d. Control and eradicate non-native or genetically modified organisms harmful to native species and the environment, and prevent introduction of such harmful organisms.
- e. Manage the use of renewable resources such as water, soil, forest products, and marine life in ways that do not exceed rates of regeneration and that protect the health of ecosystems.
- f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage.

6. Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach.

- a. Take action to avoid the possibility of serious or irreversible environmental harm even when scientific knowledge is incomplete or inconclusive.
- b. Place the burden of proof on those who argue that a proposed activity will not cause significant harm, and make the responsible parties liable for environmental harm.
- c. Ensure that decision making addresses the cumulative, long-term, indirect, long distance, and global consequences of human activities.
- d. Prevent pollution of any part of the environment and allow no build-up of radioactive, toxic, or other hazardous substances.
- e. Avoid military activities damaging to the environment.

7. Adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being.

- a. Reduce, reuse, and recycle the materials used in production and consumption systems, and ensure that residual waste can be assimilated by ecological systems.
- b. Act with restraint and efficiency when using energy, and rely increasingly on renewable energy sources such as solar and wind.
- c. Promote the development, adoption, and equitable transfer of environmentally sound technologies.
- d. Internalize the full environmental and social costs of goods and services in the selling price, and enable consumers to identify products that meet the highest social and environmental standards.
- e. Ensure universal access to health care that fosters reproductive health and responsible reproduction.
- f. Adopt lifestyles that emphasize the quality of life and material sufficiency in a finite world.

8. Advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired.

- a. Support international scientific and technical cooperation on sustainability, with special attention to the needs of developing nations.
- b. Recognize and preserve the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being.

c. Ensure that information of vital importance to human health and environmental protection, including genetic information, remains available in the public domain.

III. SOCIAL AND ECONOMIC JUSTICE

9. Eradicate poverty as an ethical, social, and environmental imperative.

- a. Guarantee the right to potable water, clean air, food security, uncontaminated soil, shelter, and safe sanitation, allocating the national and international resources required.
- b. Empower every human being with the education and resources to secure a sustainable livelihood, and provide social security and safety nets for those who are unable to support themselves.
- c. Recognize the ignored, protect the vulnerable, serve those who suffer, and enable them to develop their capacities and to pursue their aspirations.

10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable manner.

- a. Promote the equitable distribution of wealth within nations and among nations.
- b. Enhance the intellectual, financial, technical, and social resources of developing nations, and relieve them of onerous international debt.
- c. Ensure that all trade supports sustainable resource use, environmental protection, and progressive labor standards.
- d. Require multinational corporations and international financial organizations to act transparently in the public good, and hold them accountable for the consequences of their activities.

11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity.

- a. Secure the human rights of women and girls and end all violence against them.
- b. Promote the active participation of women in all aspects of economic, political, civil, social, and cultural life as full and equal partners, decision makers, leaders, and beneficiaries.
- c. Strengthen families and ensure the safety and loving nurture of all family members.

12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being, with special attention to the rights of indigenous peoples and minorities.

- a. Eliminate discrimination in all its forms, such as that based on race, color, sex, sexual orientation, religion, language, and national, ethnic or social origin.
- b. Affirm the right of indigenous peoples to their spirituality, knowledge, lands and resources and to their related practice of sustainable livelihoods.
- c. Honor and support the young people of our communities, enabling them to fulfill their essential role in creating sustainable societies.
- d. Protect and restore outstanding places of cultural and spiritual significance.

IV. DEMOCRACY, NONVIOLENCE, AND PEACE

13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice.

- a. Uphold the right of everyone to receive clear and timely information on environmental matters and all development plans and activities which are likely to affect them or in which they have an interest.
- b. Support local, regional and global civil society, and promote the meaningful participation of all interested individuals and organizations in decision making.
- c. Protect the rights to freedom of opinion, expression, peaceful assembly, association, and dissent.
- d. Institute effective and efficient access to administrative and independent judicial procedures, including remedies and redress for environmental harm and the threat of such harm.
- e. Eliminate corruption in all public and private institutions.
- f. Strengthen local communities, enabling them to care for their environments, and assign environmental responsibilities to the levels of government where they can be carried out most effectively.

14. Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life.

- a. Provide all, especially children and youth, with educational opportunities that empower them to contribute actively to sustainable development.
- b. Promote the contribution of the arts and humanities as well as the sciences in sustainability education.
- c. Enhance the role of the mass media in raising awareness of ecological and social challenges.
- d. Recognize the importance of moral and spiritual education for sustainable living.

15. Treat all living beings with respect and consideration.

- a. Prevent cruelty to animals kept in human societies and protect them from suffering.
- b. Protect wild animals from methods of hunting, trapping, and fishing that cause extreme, prolonged, or avoidable suffering.
- c. Avoid or eliminate to the full extent possible the taking or destruction of non-targeted species.

16. Promote a culture of tolerance, nonviolence, and peace.

- a. Encourage and support mutual understanding, solidarity, and cooperation among all peoples and within and among nations.
- b. Implement comprehensive strategies to prevent violent conflict and use collaborative problem solving to manage and resolve environmental conflicts and other disputes.
- c. Demilitarize national security systems to the level of a non-provocative defense posture, and convert military resources to peaceful purposes, including ecological restoration.
- d. Eliminate nuclear, biological, and toxic weapons and other weapons of mass destruction.
- e. Ensure that the use of orbital and outer space supports environmental protection and peace.
- f. Recognize that peace is the wholeness created by right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part.

THE WAY FORWARD

As never before in history, common destiny beckons us to seek a new beginning. Such renewal is the promise of these Earth Charter principles. To fulfill this promise, we must commit ourselves to adopt and promote the values and objectives of the Charter.

This requires a change of mind and heart. It requires a new sense of global interdependence and universal responsibility. We must imaginatively develop and apply the vision of a sustainable way of life locally, nationally, regionally, and globally. Our cultural diversity is a precious heritage and different cultures will find their own distinctive ways to realize the vision. We must

deepen and expand the global dialogue that generated the Earth Charter, for we have much to learn from the ongoing collaborative search for truth and wisdom.

Life often involves tensions between important values. This can mean difficult choices. However, we must find ways to harmonize diversity with unity, the exercise of freedom with the common good, short-term objectives with long-term goals. Every individual, family, organization, and community has a vital role to play. The arts, sciences, religions, educational institutions, media, businesses, nongovernmental organizations, and governments are all called to offer creative leadership. The partnership of government, civil society, and business is essential for effective governance.

In order to build a sustainable global community, the nations of the world must renew their commitment to the United Nations, fulfill their obligations under existing international agreements, and support the implementation of Earth Charter principles with an international legally binding instrument on environment and development.

Let ours be a time remembered for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the quickening of the struggle for justice and peace, and the joyful celebration of life.

ORIGIN OF THE EARTH CHARTER

The Earth Charter was created by the independent Earth Charter Commission, which was convened as a follow-up to the 1992 Earth Summit in order to produce a global consensus statement of values and principles for a sustainable future. The document was developed over nearly a decade through an extensive process of international consultation, to which over five thousand people contributed. The Charter has been formally endorsed by thousands of organizations, including UNESCO and the IUCN (World Conservation Union). For more information, please visit www.EarthCharter.org.