This last issue of The Bulletin for 2007 finds Canadians still engaged in a colonial war in Afghanistan and support of the illegal occupation of Iraq. While the redirection of our resources towards destructive activities continues unabated, we also see within Canadian society a creeping militarism. For example, disguised as an effort to support our troops, the Canadian Broadcorping Castration (CBC) plays reruns of the their radio drama series, Afghanada. Touted as “a grunts’-eye-view of the conflict”, it fails to confront the fundamental issues facing the the main victims of this occupation, Afghan civilians. This Sunday, we see further that Mr. Rex Murphy will be hosting Rick Hillier. From the CBC web site we learn that “Some think he’s too powerful. Some say he hogs the spotlight. Not everyone likes CDS Rick Hillier. But Rex sure does!”. This typifies the sort of pro-war coverage by state media. The German newspaper, Frankfurter Allgemeine Zeitung, for example, found that the BBC gave only 2% of air time to dissenting views prior to the invasion of Iraq - less even than Fox and CNN. We see, too, how the culture of war has established itself in other public institutions. The Metro Toronto Police force now routinely call concentrated activities names resembling military operations.

Thus, it seems that we need to identify the social, political and economic mechanisms that continue to drive an agenda of confrontation and conflict, including those which aim specifically at the oppression and subjugation of peoples outside of our country through our economic policies. Further, reclaiming our public spaces where the lexicon of peace, conflict resolution and reconciliation will require that we identify the forces which promote and antithetical agenda. It was in this spirit that Science for Peace organised the recent conference entitled “Canada and the Culture of War”. We hope this year to follow up on these ideas and efforts by raising the awareness of all of us of the many ways that we can resist the continuing militarization of this country and the planet. We seek your active participation in these efforts.
Findings on Extreme Violence

Judith Deutsch

It is difficult and yet essential to understand extreme violence that leads to death or crippling. The attribution of extreme violence only to criminals or to particular ethnic/racial groups is a politically and psychologically convenient way to deflect attention from other forms of violence. Vilifying a particular subgroup of violent offenders is politically opportunistic, such as when political campaigns focus on law and order. On a psychological level, there is great reluctance to fully understand violence. A defense that appears very early developmentally is reversal of feelings such as when violence becomes an enticing and excited feeling that redirects attention from more stressful states such as fear, suffering and responsibility (Fraiberg). An easy feeling can defensively replace a difficult feeling: right after 9/11, a sensitive and thoughtful child who empathized with the victims and who initially sought to understand the feelings that led to such an attack, later told me that the teachers at her school organized a contest to raise money for the victims and that everyone was excitedly preoccupied with the pizza prize.

The defense of rationalization leads people to feel entitled to be violent or to identify themselves as victims, not aggressors. A radio commentator exemplified sheer denial of violence in stating that the NATO high altitude bombing of Serbia differed in the extent of sadism from ground combat because the fighters did not actually see each other. This is like the early childhood belief that if you do not see something, it does not exist. Impulsive action itself is a defense against a range of psychological tasks and ultimately precludes accurate perception and analysis of reality, such as the violent reaction to 9/11.

Historically, the predominant mode of understanding violence has been the moral and legal approach in which violent crimes and criminals are seen as evil, senseless, and non-human. The moral and legal solution is imprisonment and punishment even though punishment mainly leads to more violence. The moral/legal paradigm rationalizes and justifies the violence of the punishment and prison system. More recently, “scientific” approaches similarly neglect personal history, socio-economic conditions, and interrelated psychological factors. Both North American psychiatry and the neurosciences search for a biological substrate or deficit that could simplistically explain violent behavior. At present, presumption of a biological deficit becomes linked with concerning reactionary policies such as when criminals are a priori identified as incorrigible, or when particular biological markers a priori designate criminal tendencies (see Meloy, for example) – a presumption of guilt even before a violent act is committed (Webb).

Stepping into this field is Dr. James Gilligan, a psychoanalyst who became director of mental health services for the Massachusetts prisons for twenty-five years. Through working with the most violent offenders, he hoped to understand the violence of both the criminals and the entire prison system. Gilligan concluded that violence is a public health problem that was only
exacerbated by the moral and legal approach. He was able to institute reforms that led to the complete cessation of violence within the prisons he supervised: no homicides, suicides, gang rapes, prison riots.

He states that the “pale abstractions” of the social sciences cannot do justice to the criminals’ catastrophic lives. “In the worlds I have worked in, Oedipus is not a theory or a ‘complex.’ I have seen Oedipus – a man who killed his father and then blinded himself, not on the stage and not in a textbook, but in real life. I have seen Medea – a woman who killed her own children in response to her husband’s affair with another woman... The blinding of Samson, Tiresias and the Cyclops, the blinding of Gloucester in King Lear, are not so much mythic ‘fictions’ as they are tragic depictions of real acts that real people commit in real life.”

The criminals’ early family life, and their life in prison, is extreme in its level of sadism, terror, and degradation. Gilligan found that their violent acts occurred in moments of profound humiliation. Their specific acts were symbolic, a way of speaking with the body in order to ward off overwhelming feelings of shame. The frequent acts of blinding their victims and themselves signified symbolic attempts to not being seen and exposed as weak and impotent. Trivial incidents often seemed to precipitate violence, primarily because the triviality itself was felt to confirm their sense of being utterly inconsequential human beings.

In examining the results of his own prison reforms, and in analyzing epidemiological data and other major hypotheses about violence, he established that violence is not caused by heredity, hormones, or neurological abnormalities. He does find that the necessary psychological vulnerability to shame and powerlessness corresponds with extreme inequities of wealth. He writes that “...the most effective way to increase the amount of violence and crime is to do exactly what we have been doing increasingly over the past decades, namely, to permit – or rather, to force – more and more of our children and adults to be poor, neglected, hungry, homeless, uneducated, and sick. What is particularly effective in increasing the amount of violence in the world is to widen the gap between the rich and the poor. We have not restricted that strategy to this country, but are practicing it on a worldwide scale, among the increasingly impoverished nations of the 3rd world.”

The social sciences amply confirm that poverty kills. In the U.S., a 1% rise in unemployment increases the mortality rate by 2%, homicides and imprisonments by 6%, and infant mortality by 5%. According to the UN Development report, the three richest individuals on earth have assets that exceed the combined GDP of the 48 poorest countries. The 225 richest individuals have a combined wealth of over $1 trillion, equal to the annual income of the poorest 47% of the world’s population, or 2.5 billion people. By comparison, it is estimated that the additional cost of achieving and maintaining universal access to basic education for all, reproductive health care for all women, adequate food for all and safe water and sanitation for all is roughly $40 billion a year. This is less than 4% of the combined wealth of the 225 richest people in the world. The impoverished people of the world increasingly inhabit urban slums and live in conditions fundamentally caused by the economic policies of globalized capitalism. In these slums, people live in a state of humiliation and insignificance – without education, without the chance of employment or health care, where typically thousands of people share several latrines (see
Davis), where daily they face the loss of their history, culture, and land.

Gilligan writes of the pathological state of shame. On the other hand, a crucial step in psychological development is acquiring the capacity to bear usable guilt and shame. “Usable” means that these distressing feelings are tolerated in order to take on the tasks of realistic responsibility and reparation which reflects an accurate appraisal of the state of the world. In October, 2006, George McGovern and William Polk proposed a plan for redressing some of the wrongs inflicted on Iraq by the U.S. They projected a cost of $17.5 billion to compensate for lives and property lost, to rebuild the health and education systems and to restore infrastructure. Predictability, the consideration of reparations is completely ignored at all levels of government. It is an essential ingredient in the pursuit of peace.

Climate change, war, and extreme economic inequity are interrelated in terms of their causes and effects. They are the consequences of “free” trade and “free” market capitalism in which “free” is conflated with democracy. The result is needless suffering and premature death for millions of innocent people. James Gilligan’s effective prison reforms indicate that an integrated public health approach is one place to start, while remaining wary of the pull to obfuscate the enormity of the problems.

Bibliography:

Where does peace begin?
Phyllis Creighton

In a world addicted to war, with ubiquitous violence, soaring military expenditures, vast material resources and scientific brains sucked into the war machine, and warring madness in the media, how do we build peace? Religion now seems more the source of violence – thanks to George Bush’s claim to God’s direction in his Shock and Awe attacks. (Remember Operation Enduring Freedom raining death on Afghanistan?)

Mahatma Gandhi famously observed: “There is no way to peace, peace is the way.” There’s a perceptive hymn that opens with “Let there be peace on earth, and let it begin with me…” Peace must, I think, come from inside us, from a centre of stillness and aliveness in which we rest. From the practice of centering comes a humble awareness of being connected with Earth and with others, a sense of who and why you exist: to care and to share your life, treasuring and nurturing it.

In the press of urban life, for most people, busyness – the ceaseless round of things and doings that trap people in getting and spending – crowds out that stillness and peace. Email, the phone, meetings, lectures to give or attend, articles, books, to write or read, protests to make, demonstrations to attend, the pressure for peace
activists never ends.

Grounding in inwardness is no mere religious option. Many meditative processes (Yoga, Qigong, Tai- Chi, and so on) lead people into such spirituality. Building peace requires the inward strength found in being centred, however people achieve that centredness.

Science for Peace founding president Eric Fawcett spent his retirement on two things: becoming an accomplished pianist, and learning and practising yoga. He was increasingly caught up in yoga, and just before his terminal illness was pleased that he was about to become a yoga master. Yoga is one of the many ways of being spiritually centred. Distinguished former diplomat James George, in his acclaimed book Asking for the earth: waking up to the spiritual/ecological crisis (Saftesbury, Dorset: Element Books Limited,1995) -- which has a preface by the Dalai Lama and a foreword by Maurice Strong -- says that only through centredness will we experience the interconnectedness that brings peace with ourselves and others. Centredness will, he says, release the values of humanity, of heart, and conscience (love, compassion, joy, equanimity) within a global perspective. And he cites Carl Jung, that “the work of saving the world has to begin by changing ourselves,” and Mahatma Gandhi, that “We must be the change we wish to see in the world” (See pp.108, 148).

To achieve peace within and between nations is not rocket science. In the 21st century we have a great deal of knowledge about techniques and processes of conflict management, mediation, negotiation, inter-positioning, accompaniment. These means to prevent, interrupt, and stop the drive for power from escalating to destruction and war are being employed. Techniques of anger management are even taught in public schools.

But peace can only begin with rejection. Our society has to reject war and violence. But for centuries Western governments and societies have pursued the preparations for war that naturally lead to warring. Years ago, Allan Newcombe, of the Dundas Peace Research Institute, on the basis of close study claimed where war would break out could be predicted by the extent of arms build-up in countries. Leaders driven by lust for power and possessions, with the tentacles of weapons’ manufacture like an octopus strangling society: is that the mirror image of the United States?

To move towards peace, the agenda of many citizen organizations must undo the mesh of destructiveness by achieving abolition of weapons step by step, stopping the war machine’s access to resources of taxes, deconstructing the lie that patriotism requires youth’s dedication to killing, developing such instruments of peace as non-violent defensive national forces, international humanitarian law, non-violent international enforcement capability, world government by citizens. These are dreams? There will be no life on earth -- given nuclear weapons of apocalyptic potential and space weapons of doom – if we and our descendants don’t end war. Warring madness? Choose justice, sharing, and caring, and believe that a different world must be born. Peace is possible!
The definition of a Culture of Peace in Table 1 was developed by the United Nations.

**Table 1**

<table>
<thead>
<tr>
<th>Culture of Peace</th>
<th>Culture of War</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transforming values, attitudes and behaviours based on violence to those which promote peace and nonviolence;</td>
<td>Retaining violence as one of the accepted ways of settling disputes, within and between nations, and promoting it through violence in the media and entertainment; fomenting war, for example by supplying armaments to third parties;</td>
</tr>
<tr>
<td>empowering people at all levels with skills of dialogue mediation and peacebuilding;</td>
<td>retaining top-down structures that impose the wishes of the hierarchy;</td>
</tr>
<tr>
<td>democratic participation of people in decision making;</td>
<td>decision making essentially in cabinet or by small cliques;</td>
</tr>
<tr>
<td>equal representation of women in decision making at all levels;</td>
<td>perpetuating male dominance, especially at the highest decision making levels;</td>
</tr>
<tr>
<td>the political and economic empowerment of women;</td>
<td>preserving male political and economic pre-dominance;</td>
</tr>
<tr>
<td>the free flow of information and transparency and accountability of governing structures;</td>
<td>maintaining secrecy as an essential tool of the power structure;</td>
</tr>
<tr>
<td>the elimination of poverty and sharp inequalities within and between nations;</td>
<td>protecting the wealth and power of the rich without regard to the consequences;</td>
</tr>
<tr>
<td>the promotion of sustainable human development for all;</td>
<td>pursuing dominance through competition backed up by military might;</td>
</tr>
<tr>
<td>the preservation of the planet and all its species;</td>
<td>exploitation of the planet’s resources so as to maintain dominance;</td>
</tr>
<tr>
<td>advancing understanding, tolerance and respect of diversity among all peoples.</td>
<td>accentuating cultural, racial or class difference so as to target others as the enemy;</td>
</tr>
<tr>
<td>*working toward arms control and the elimination of armaments</td>
<td>maintaining an arms industry in a position of economic privilege.</td>
</tr>
</tbody>
</table>

*This clause was added to counterbalance the last clause in the Culture of War, and is not in the United Nations definition of a Culture of Peace.

This table is taken from a letter to academics, written 7 September 2003, extended 25 August 2007.
Wanted: Writers Who Will Work for Change
Metta Spencer

We know the essential facts about the world’s looming dangers – global warming, the ongoing possibility of an accidental nuclear war, the destruction of species habitats, and all the rest. Most of us even know what to do. The problem is our failure to act, to become engaged in saving the world. What can be done to motivate people to become activists?

Here’s my solution: let’s tell some stories. Yes, stories as in entertainment. They are unsurpassed as a means of influencing large numbers of people, but we haven’t been making good use of them. Not all stories have such effects, of course, but a great one may. It will inform us (as magazines, schools and newscasts also do), and — more importantly — it stimulates our emotions. It’s our feelings that get us to act on what we know. How can a great story touch us and make us act? By making us empathize and identify with characters who are working on a particular global issue, so we want to help them.

People sometimes form strong bonds to fictive characters — an experience that is perfectly normal, though it doesn’t happen every day. Only outstanding writing and acting is likely to make you care enough about characters to change your worldview and lifestyle. Long-running stories that appear in installments are especially powerful, for we may have years to form a bond with the characters. We need many inspiring stories that can influence audiences to do what needs to be done.

Let me give you six examples of fiction that has influenced humankind.

1) In most societies around the world birthrates are dropping, long before they were expected to do so. Apparently people emulate the small, happy families they see on television and limit the number of their own children. As a result, there will be one billion fewer human beings on earth than had been predicted fifteen years ago.

2) In developing countries, special soap operas have turned out to be the most effective way of prompting people to enroll in adult literacy programs; abolish child marriage; use condoms to prevent HIV transmission; and open up jobs for women. Posters and public service announcements have little or no influence.

3) Uncle Tom’s Cabin, Harriet Beecher Stowe’s best-selling novel, which was originally published in installments, was a main cause of the abolition of slavery and the American Civil War.

4) IQ is increasing in all affluent countries by about three points per decade, apparently largely because of mental workouts provided by following complex TV dramas.

5) The new acceptability of homosexuality; the decrease in smoking; and the practice of appointing a “designated driver” have all occurred because television writers deliberately wrote these ideas into their scripts.

6) In 1989 most Communist regimes were overthrown around the world without bloodshed by dissidents who applied methods of nonviolent resistance they had learned from the film Gandhi.

If these findings are all news to you, that fact proves another point: that people often do not know when they are being influenced. Indeed, the impact of entertainment can be harmful, beneficial, or a combination of both, and those who are affected may never realize what has happened. For instance, smoking became fashionable through the influence of films and then unfashionable through the influence of
television. Millions of people have died and other millions will live as a result, without ever recognizing why.

Entertainment affects your health in ways that you probably don’t notice: through stimulating strong emotions that have major physiological effects. For decades, scientists have been using film clips in their laboratories to stimulate particular emotions in subjects, monitoring the effects on their immune, cardiovascular, and nervous systems. Their research shows that positive emotions benefit your health, whereas emotional stress harms it.

Love and laughter, for example, greatly enhance your biochemistry and your ability to ward off diseases. Watching a funny movie will relax the lining of your blood vessels by about 20 percent for an hour or so, whereas watching, say, the battle scene from *Saving Private Ryan* will constrict them by about 35 percent. If you are recovering from a heart attack, your doctor will tell you to stress your cardiovascular system with physical exertion but to avoid emotional stress, which can cause arrhythmia and a lop-sided enlargement of the heart. Even if your health is normal, it pays to heed the same warning. Try humor or love stories instead. Most people spend several hours a day watching dramas or reading stories, which means that entertainment is a public health issue.

Nevertheless, sometimes we all seek out stress as a source of pleasure. Suspense and tragedies are popular. Why so? There are several explanations. First, individuals simply differ, for inborn reasons. Some persons are born with a variant gene (the Dopamine Receptor D4) that makes them especially crave excitement, risk, and novel experiences. They may even enjoy the thrill of warfare, and prefer such films as *Saving Private Ryan*.

Second, even the rest of us sometimes have good reasons for willingly undergoing the stress of painful stories. A great tragedy, for example, may make us wiser and more compassionate by inducing us to pity a person whose flaws have brought about his downfall. You may expand your moral insights by undergoing vicarious experiences with fictive characters who are very unlike yourself. Your sympathetic nervous system may pay a price for this wisdom, but it may be worth it.

Or, on the other hand, your morality may be impaired by identifying with heartless or violent characters. Certainly there are countless instances when people (and not only children) have directly imitated crimes they observed on a screen. Unfortunately, it is not always predictable whether a particular story will coarsen most viewers’ sensibilities or, conversely, deepen their insights.

Even when we are sure that the outcome will be mainly harmful, few of us would endorse censorship as a solution. It is understood that adults have a right to choose their own entertainment, even if it is bad for their health and bad morally for the public. Although it is urgently necessary to improve our culture and mobilize people to become activists, we won’t achieve that result by banning deleterious stories. Instead of wasting energy opposing harmful stories, a more promising approach is to foster beneficial ones.

The whole world needs movies and TV shows that inspire us to make social changes for humankind’s survival. Instead of banning war movies, we need to demand equally exciting films that illustrate astuteness in handling conflicts and preventing violence. Television series dramas are the ideal medium for this purpose, since they may go on for years, featuring an ensemble of lovable characters. The important thing is to create stories in which those characters are working on global problems, so we will
want to support their project.

That will require some major changes in television and films. Unfortunately, the average TV show is abysmally uninspiring — which is not necessarily the fault of the producers (who know how bad their shows are) but rather is a financial problem. Viewers have no way of giving feedback to the industry except through box office receipts or cable subscriptions, which are poor indicators of cultural needs. Besides, viewers themselves typically are resigned to expecting poor quality television, and cultural critics review the stories as if they were socially inconsequential. Most reviewers avoid being considered as censorious or prissy in their taste, so they don’t appraise stories in terms of the emotional or ethical effects on the audience, which is the true basis of most stories’ importance.

Stories teach us how to live. Every story imparts messages, wise or unwise. Unless we demand that critics discuss the ethical, political, spiritual, and emotional meaning of films and television, we will never see the quality of our cultural environment improve.

Superficially it may seem that we have no grounds for complaining. With hundreds of channels available to watch at every moment, if you don’t like one show, you can just pick something else. So what’s your problem?

The problem is that when you turn on your TV, you’ll find little worth watching. Society needs screenwriters who will stimulate our minds and emotions about society’s problems. They aren’t doing the job. Why not?

Cultural products are considered commodities that, like shoes, cars, or food, we consume individually. That’s a mistaken notion. My selection of shoes, car, and food affects only me, not you. But my selection of entertainment will affect my worldview in ways that may be exceedingly consequential for you. The shows I watch may influence my business ethics, say, or my willingness to conserve the energy that is changing our climate. Or my responses toward sexual harassment. Or my preferred solutions to terrorism. Or the number of children I want to bear. Or my willingness to risk HIV infection. Or my feelings about slavery. Or my readiness to march in the streets to oppose a dictator. Or my willingness to be a designated driver. Or to attend a gay wedding. My attitudes do affect you. We cannot rightly censor entertainment, so we must find a different way of influencing others’ choices: by supporting excellent cultural products.

Culture is always subsidized. Some things can only exist when shared collectively by a community or a society, not as items of private consumption. Parks, operas, expressways, universities, and cathedrals are examples, Culture is like that. To create and support a rich culture, we have to subsidize it — even some aspects of it that we may never personally use. For example, although I rarely go to the ballet, I’m glad that public funds support ballet companies. I want ballet to exist in my world.

You and I do care about the cultural environment that surrounds us, for it determines the quality of our lives. However, there’s a political problem with cultural subsidies: people don’t all agree about what to subsidize. Some of your tax dollars subsidize certain productions, publishing, and broadcasting ventures that are not accountable to the public, but which succeed or fail only on the basis of private purchases. It would be more democratic to let every taxpayer to allocate, say, $200 per year of her taxes to her preferred type of cultural product. This process would also avoid censorship, while providing substantial funding for innovative storytellers.

But that change is not enough. We also need for the public to realize how important entertainment is for societal well-being. And we need bold reviewers who tell us how a particular show or book affected them emotionally, politically, and morally. Unfortunately, ethical criticism is unfashionable, so reviewers rarely inform us about the message of a story.

Samuel Goldwyn told his writers: “If you want to send a message, use Western Union.” He was wrong. It is precisely stories with inspiring messages that showbiz is uniquely able to deliver. Indeed, if the entertainment industry does not inspire us to address our global problems, who will?
The Work of the Global Issues Project and the Wasan Action Framework
Compiled by Derek Paul

The Global Issues Project of Science for Peace obtained its seed funding in November 2005. Its objective was to create strategies to deal with crucial global issues. Initially we decided to develop the strategies by means of roundtables that would bring together a wide range of people, not merely scholars and experts on the issues. We identified issues as crucial if civilization itself would be threatened by neglecting them. The following is taken from our prospectus:

“Unless the present usage pattern is controlled, global resources and environmental sinks that seem to be stretched well beyond sustainability are:

- food and agriculture,
- forests,
- water,
- oceans and fisheries,
- energy,

“The other factors or issues that can lead to collapse are:

- population,
- climate change,
- disease,
- waste and pollution,
- war and military consumption and waste,
- inappropriate technologies and inappropriate myths
- faulty social structures.”

We held a Roundtable on Forests (2006) and one on Climate Change and Energy (2007). The processes of the roundtables are roughly as follows. We invite enough international and Canadian experts to be sure of getting the science right. Next we keep things focused on the Big Picture and the interactive aspects between one crucial factor and another. Third, we allow much time for free discussion, and fourth, we

form a follow-up team for each roundtable, a group willing to take the results of the roundtable to the next stage, whatever that is. In addition, at our first roundtable, we made extensive use of a model developed by members of the Canadian Association of the Club of Rome. The model is intended to educate the user in what is and is not likely or possible in future. It yields rapidly and in simple graphical representations the results of whatever assumptions you feed into it. Thus, if you feed it only the global average expectation of life and the trends in that average, and the global average birthrate and the trends in that average, you obtain projections of world population. These assumptions lead to a projected a peak in human population about the end of this century, slowly changing to a population decline. But the projected peak is 11 billion people, more or less, a formidable prospect leading to speculation whether such population growth could in practice occur without causing some disaster along the way. In the model, the onset of a major disaster, generally leads to projections of earlier peaking of population and the onset of population decline rather sooner.

The Prospectus of the Global Issues Project is available from Helmut Burkhardt (h.burkhardt@rogers.com) or Derek Paul (farp@sympatico.ca).
The first clear warnings of danger due to emissions of greenhouse gases due to human activity emerged 25 years ago. Prudence would have called for precautionary action at that time to slow down the growth in emissions of greenhouse gases. Since then, the scientific understanding of the impact of human activity on global warming has been overwhelmingly confirmed; key predictions based on that understanding have started to occur. Evidence has emerged that the potential impacts of global warming will be much worse than predicted even five years ago.

Individuals, corporations, and all levels of government around the world have a duty to act as global citizens on the basis of the danger posed to life on Earth and to the well-being of the human race as whole.

1. **We declare** that human induced climate change and energy security, in particular peaking of the world oil supply are crucial issues requiring immediate action.

2. **We declare** agreement with the IPCC working group 1 on the physical basis of climate change that: "Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations".**

3. **We identify as the root causes of this crisis:**  
   a) the large per capita overconsumption and waste of natural resources in the industrialized countries  
   b) the growth paradigm (economic growth for its own sake)  
   c) the large and growing human population  
   d) the very large dependence on fossil fuel based energy  
   e) the resistance by vested interests to necessary change in energy technology  
   f) the lack of appropriate political leadership  
   g) the lack of global governance to protect the global commons

**4. A global solution framework**  
We must begin immediately to:  
   a) curb overconsumption and give priority to efficiency, conservation and the avoidance of waste  
   b) promote lower birthrates by empowerment of women through educational, economic and social measures, including access to birth control information and services  
   c) focus globally and locally on developing low impact renewable energy infrastructure and technologies (e.g. biomass, geothermal, hydro, ocean energy, solar, wind) to its full potential, so as to avoid large scale biofuel usage and nuclear energy  
   d) reduce carbon emissions by creating a just and universal framework through the implementation of appropriate incentives, government regulation, legislation and taxation  
   e) preserve forests, especially tropical rainforests

5. **Implementation of solutions:** We urge that  
   a) all levels of government as well as the UN and international organizations can and should embrace the Wasan Action Framework  
   b) media, corporations, the educational system from kindergarten to university and all civil society should collaborate on implementing this Wasan Action Framework

* For a list of participants, contact Derek Paul (farp@sympatico.ca).