A World Fit For Children

Varda Burstyn

For people who care about the environmental health and safety of children, three different campaigns in 2005 modeled intelligent, effective strategies for using public institutions -- in this case, schools -- to bring about change. In September, newspaper headlines announced that England had banned junk food in its schools. In the United States, the State of New York, following in the State of Washington's footsteps, banned the use of toxic cleaning products in schools. And, in a number of other states including California and Minnesota, yet another crucial initiative -- the 'Safe Schools Project' -- has been gaining ground. School board by school board, and state by state, the schoolyard use of toxic pesticides especially harmful to children has been banned.

These three campaigns show that we can use our political institutions and public agencies to say no to harmful products and technologies -- and that schools can be very valuable in this process. Even more promising, these examples also contain within them some of the potential seeds of a future child-honouring economy, because they create big markets for producers of environmentally benign technologies to provide Earth- and child-friendly products.

A world fit for children is what all our children deserve: a world where they may grow and live toxic-free, free of the harmful human-made threats to their well-being. Safeguarding children begins with an identification of harms posed by toxic substances early in life, and in utero, where many toxic compounds impact. When Theo Colborn and her colleagues Dianne Dumanoski and John Peterson Myers published the groundbreaking book *Our Stolen Future: Are We Threatening Our Fertility, Intelligence,*
and Survival? A Scientific Detective Story in 1996, documenting the special vulnerability of children to chemicals found in everyday pesticides, plastics, solvents and cleaning materials, most of us got our first look at the profound damage that our chemically-dependent economy has been doing to the delicate but all-important 'inner-space' of developing cells, tissues and organ systems in our smallest people. Since then, people like Colborn, as well as Philip Landrigan (represented in this volume) and many others have been working hard to get governments to recognize children's special vulnerability to environmental harms, and to legislate and enforce on the basis of this knowledge.

Creating a world fit for children means acknowledging that we are a species in crisis and we must act quickly. The degree to which our air, soil and water pollution has reached into the very flesh and blood of our children is itself cause for grave concern. Every day brings new reports of ecological decline so great as to indicate that we have already reached the 'tipping point' on a number of fronts. Estimates from scientists tell us we have five to twenty-five years to deal with the big problems. Global warming, melting glaciers, droughts, destructive hurricanes, hurricanes where there have never been any before -- extreme climate change is now believed to be accelerating much more rapidly than was thought even two years ago. Authority studies show that we are tapping most of our natural resource systems beyond sustainability or renewal. The longer it takes us to reverse the ratio of positive change to encroaching harm, the harder — and costlier — it will be in the long run.

Addressing the imperiled state of our biosphere and the dangers this poses to children requires systemic change on a massive scale. Tinkering with how we provide health care or how we package and manufacture goods, or driving hybrid cars — while
necessary — won’t be enough. We do have the *technical* means -- the technologies and processes that can reduce our pollution and reverse our use of natural capital to sustainable levels. We will, however, require broad *social* changes to (re)organize the ways we live: how we work (and what work we do), how we grow and prepare food, how we use energy, how we educate and care for ourselves, how we make and use everyday products.

The real key to achieving the rapid and systemic change required is for a large majority of us to become 'eco-citizens'. It is my conviction that only a massive 'greening' of how we all understand and practice citizenship, parenting, economics and politics can actually produce the government leadership and public participation we'll need for these transformations. Only such widespread awareness can create the weight and momentum required to undertake the major programs that can green the harmful technologies that now threaten both our children and our biosphere. Here, I would like to offer two types of suggestions for socio-political action geared to safeguarding our children in their natural and constructed worlds. The first are suggestions for crucial health strategies that are generally applicable in almost all countries and cultures. The second are elements of a global, systemic plan — universally applicable at all levels and in all countries – for making the massive transitions in production that Nature requires of us.

**Identifying The Harms, Supporting the Harmed**

Both the acceleration of biospheric decline and the related dangers to our children demand that we take aggressive initiatives, from local to global levels, to identify and support those injured by toxic exposures and to accelerate the cleanup of identified toxic
sources. Here are a number of proposals -- a platform of health action, if you will -- that we need to undertake:

1. **Ensure that governments adequately fund research in the public interest that identifies the substances harming children, their extent and their effects.** Numerous scientists and medical clinicians are working to identify and to heal where possible the harms to children from environmental exposures. Names such as Philip Landrigan, Herbert Needleman, Theo Colborn, Shanna Swan and David Schindler, to mention just a few North Americans, are becoming more and more familiar to people outside specialized circles. But the pace at which their work can get funding and move ahead still lags far behind the need for their wisdom.

2. **Promote environmental health care education.** The curriculum of medical doctors, nurses and allied health professions need to include new programs to help practitioners identify and treat environmentally induced health problems. In particular, learning how to identify the effects of endocrine-disrupting and neurologically harmful chemicals, heavy metals, food additives and agricultural hormones, and air pollution -- ubiquitous problems -- need to become their regular curricula. Far too many children with such problems are being ignored or wrongly diagnosed and treated. Professional and government certification of health education facilities and programs should require such education.

3. **Public health agencies and programs must become community guardians of environmental health.** Since environmental health issues are so profoundly 'population' health issues and public health agencies are the only organizations structurally placed to address these as such, we need much stronger and more powerful public health agencies,
with funding commensurate with their duties, than we have today. Their mandates must be changed to include the active monitoring and identification of the symptoms and consequences of environmental harms among their populations. They also need the legal clout and funding to be able to halt the production of toxic materials or the circulation of toxic goods in their jurisdictions, just as they are empowered to address epidemics of infectious diseases.

4. Hospitals, community clinics, and individual health practitioners need to provide environmental health services. Environmental health services must be incorporated rapidly into pediatric services, given what we now know about the special vulnerability of children. Such services presuppose education, understanding, diagnostic capacities and knowledge of treatment, as well as coordination with other health and social services. And they must be provided to whoever needs them, regardless of ability to pay.

5. Put the school system to work in serving children's environmental health. School boards, school administrators and teachers all need to be educated into the issues involved in environmental harm and safety for children. With such information, they can become pivotal organizations for children's environmental health at the local level. They can reach parents more directly than any public institution; they have buildings in which to house health and educational activities; they can influence politicians and health authorities to address pediatric issues. Indeed, schools are the natural public agencies to take the lead in child-honouring. Schools that provide safe and nurturing environments for children can have a significant impact on commerce. By switching to organic foods, for example, schools would provide an enormous market, a huge economic incentive to the agricultural sector to go green.9
6. **Build new health programs that provide many different kinds of support to families with children.** Most parents are not aware of the harms their children are exposed to, and don't recognize the signs of environmentally induced illnesses when they see them. This leads often to long, expensive, frustrating and demoralizing searches for diagnosis or no treatment at all. What’s more, where children are diagnosed correctly and their treatment requires remedial schooling, long-term administration of non-toxic foods, pristine and chemical-free environments, special pharmaceuticals and treatments, and nutritional supplements, many families are drained well beyond their capacities to provide these supports.

7. **Integrate law enforcement into the project of environmental health.** Depending on the location and size of a given police force, special officers working with public health officials and government officials should regularly take on the monitoring of their jurisdictional environments for environmental crimes, support public health initiatives to stop toxic wastes or products as necessary, and assist with the full force of the law in taking whatever actions are necessary to safeguard children's environmental health.

**Greening the World**

**Twin Crises: Ecological Decline and Human Livelihood**

The global environmental crisis and the crisis of human livelihood are two aspects of survival that must be considered together. This is one excellent reason we need another word for 'economy', a word that in common usage separates money and work from their effect on workers, communities and nature. Perhaps Raffi Cavoukian's term 'bionomy' better captures the connections.
Environmentally created illnesses are rooted in a corporate economy that still largely relies on 'dirty' technologies'. This corporate economy has gained in independence and non-accountability in the last two decades, as public power -- what I call 'pro-social government' -- has declined and neo-liberal policies ('free-trade', 'globalization') have grown. To understand the degree to which democratic sovereignty has given over to corporate rule, consider that nation states are unable to stop many polluting industries or practices, or are unable to enact environmental protections, because trade law declares these to be 'barriers to trade'. Yet the life-threatening consequences of toxic technologies require a much stronger public realm than we have ever had -- an unprecedented level of environmental sovereignty. Democracy is only meaningful if we can control the deployment of technologies, and the economic actors who produce them.

There is a social justice face to resource inequity and toxic pollution. The poor (poor communities in wealthy nations, and poorer nations as a whole) always suffer disproportionately: they are nearer to toxics production and dumping sites, and they have the fewest resources for treatment and remediation. Poor children in every nation carry an appalling burden of environmental harms. At the same time, people of all classes, colours and nations are suffering at least some of the dangerous consequences of our decades-long global chemical spree. Epidemics of learning and behaviour disorders, obesity and asthma among the middle classes in North America, for example, attest to this reality.

In recent years, we have seen a growing equity deficit. While the wealth of the super-rich -- the top 5 percent of the world's population -- increases every year, more and more people live in precarious economic circumstances. Certainly there has been a
shrinking of the middle classes globally. But there has also been a dramatic increase in numbers of the poor, the destitute and the environmentally endangered.

This development itself, as the United Nations among other organizations have noted, is a major obstacle to sustainability. A destitute farmer in Malaysia may have no other means to support his family than to slash and burn some hectares of forest -- contributing, with many like himself, both to forest destruction and to vast clouds of toxic air pollution. A working-poor single mother in the United States may want to buy organic food for her kids and pay the premium on benign cleaning products, but she simply can't stretch her subsistence budget to do it. Communities in British Columbia or Quebec may want to throw the forest companies out rather than log threatened ancient forests and protect biodiversity, but if logging jobs are the only ones available, they may feel they have no choice. Many farmers worldwide want to shift to organic food production and to end the health risk to themselves and their families from toxic agricultural chemicals, but find they can't afford to. The Jamaican Organic Agriculture Movement, for example, lags far behind its goal of turning 10 percent of the island's production organic by 2010. Today, perhaps 1 percent of Jamaican farmers use organic methods, despite the fact that they get many requests for specialized organic products such as mango puree or ginger.

It is impossible to overstate how much the world needs organic agriculture. Arguments against it based upon productivity are no longer valid. Recent reports of long-terms studies at Cornell University show that organic farming not only produces healthier food and healthier farmers, but over a five-year period, surpasses the yields of chemically-based farming, produces one-third less greenhouse gasses and turns organic fields into carbon sinks -- actually absorbing greenhouse gasses and reducing global
warming threats. But most farmers have no incentive and no support make the change because it takes at least three years of fallow fields to achieve organic capacity. Just as few agribusiness corporations would want to lose three years of income, few farmers can afford to earn little or nothing for three years while their fields detoxify. They need more effective support to go organic.

A Global Green Deal

Assessment -- Problems and Solutions

During the years of the Great Depression, years of great suffering and crisis for the United States, president Franklin Delano Roosevelt initiated what he called the New Deal: a set of economic policies that collected and redistributed his country's wealth to simultaneously rebuild the country's infrastructure, economy and even its culture, at the same time as giving Americans a living wage, meaningful work and a way out of penury and starvation. The New Deal rescued the United States. It helped lay the basis of the pro-social state in that country -- though American federal administrations since Ronald Reagan have greatly eroded that state, and the Bush administration seems philosophically and practically committed to finishing it off.

To bring about technological and economic changes of adequate pace and scale, the world needs a model of political change unprecedented in scope. We need much more than a few new regulations here, an incentive or two there. We need an over-arching and comprehensive framework -- a systemic and flexible strategy with myriad creative tactics -- for thoroughly ‘detoxing’ and greening our world from the most local to the most global level. We need a Green Deal: a set of coordinated policies, agencies, programs and powers that can shift human society from environmental toxicity and economic
poverty to environmental sustainability and economic viability. In my view, and in the view of many experienced and insightful people, only an initiative as comprehensive and powerful as this truly has a chance of succeeding in our race against time.\textsuperscript{15} A Green Deal would use the collective wealth and will of humanity to create a fundamental shift in how we organize our lives; and that includes reclaiming government to represent the human majority -- reviving pro-social states, not oligarchies.

The Green Deal would have three major components that can be adapted to work at virtually all levels of government, from the municipal to the international. None of these components need await action until each or all of them are in motion or complete -- each can be started in local and partial ways, and be built upon so that eventually the actions and initiatives meet across levels and jurisdictions to create a vast web of connected change. For this crucial function, we need extensive public agencies with a triple mandate:

* Identifying what's 'bad' today: to determine accurately what harms are being done by what substances, processes and technologies in given sectors and jurisdictions, using the vulnerability and susceptibility of children as an important benchmark in all evaluations. Some of this information is already known and simply requires codification and collection in accessible ways. But the effects of many chemicals and production technologies -- especially synergistic effects -- are still unknown and require urgent research. As well, these agencies should be charged with thoroughly assessing the environmental and social impacts of economic development proposals.

* Identifying what's 'better' in the short term: to determine what substances, processes, technologies and organization of economic activities represent better or benign
alternatives and strategic improvements. Remarkable new ways of doing almost every human activity have already been developed, and every day new and better ways of producing plastics, fibers, papers, energy, food, clean water -- you name it -- are being devised. In agriculture, water conservation, urban transportation and other fields, older and better ways have been revived or rediscovered. From the agricultural Navdanya movement initially begun by Vandana Shiva to public bicycle programs in Lille France, the revitalization of existing benign technologies will be as much a part of the greening of society as the mass production of brand new technologies.

* Identifying what is 'best' in the long term: Here we need far-seeing, multi-faceted and coordinated programs that look at medium and long term directions and strategies for change. Minimizing air travel and transport, regional sufficiency in food production, long term energy and water conservation, wholesale phasing out of toxic chemicals and oil-based plastics -- these ideas involve multiple issues, multiple jurisdictions, multiple answers. They need to be organized democratically because technocratic control more often leads to errors in judgment, not to wise decisions in the public interest. (These discussions cannot be limited to scientists and technicians but must include citizens in all their capacities.) The concepts of 'bioregionalism' and 'eco-urbanism' suggest the co-development of economic activities and polities in ways that safeguard very specific ecological systems as well as the people within them.

**Funding the Transition**

No green plan can be effective unless it addresses the question of transitional funding and sources for it. Governments, in their capacity of gathering and redistributing society's wealth, will be a primary source for transition funding and for creating the
economic conditions necessary to widespread change. Beginning immediately, all
government budgets -- all levels, all departments -- should be required to create green
transition lines as part of their normative budgeting processes, and pools of transitional
funding should be established whenever surpluses are declared. Military budgets are
another obvious source for the rerouting of capital to productive ends. A version of the
proposed Tobin Tax could also yield substantial funding for greening the global
economy -- or 'bionomy'. Without question, funding must also come from tax shifts and
reverse subsidy disincentives on harmful technologies and industries, for these have a
direct effect on the targeted technologies and are immediately understandable by citizens,
who are also taxpayers."

Disincentives are the 'Big Sticks'. Especially at the beginning of the Green Deal
process, these are crucially important. All direct and indirect subsidies to polluting
industries and technologies must be redirected to subsidize green alternatives including
helping people in sunset industries weather the ensuing transition. Disincentives will
inevitably change the price of many commodities and induce consumers to turn
elsewhere.

The most harmonious lasting way to effect economic change is to make it
worthwhile, rewarding and positive. Hence for producers and employers, we are speaking
of a variety of forms of subsidy -- the 'Big Carrots' -- for desired processes and products,
a reversal of the disincentives. These incentives can be developed in appropriate, sensible
and sufficient ways so as to enable capitalizing the production and distribution of given
technologies and processes. In some case, simply banning a product, such as toxic
cleaning materials by a school board, can create a large market for benign alternatives.
Sometimes, the cost of changing from a dirty to a clean production technology will require a great deal of help. For example, switching to clean hydrogen power for cars demands not just the production of such cars, but also their fuel, service stations to dispense that fuel and repair the cars, and ensuring that consumers have the incentives to buy the new technology. Moving rapidly to change the fleets of public sector agencies (post offices, utilities, municipal transport, for example) to clean hydrogen technologies, and establishing fuel distribution stations for them would immediately help the whole of society move in that direction. Serving only organic food not just in schools but in the eating facilities of all public agencies, including in restaurants licensed on limited-access highways, would push agriculture toward sustainability by leaps and bounds.

Where the transition to green is time-consuming and costly, transitional funding — to help employers and employees weather the change to new production processes, or to retrain, or to convert to benign alternatives — is the only way to ensure that we move quickly enough but avoid creating unintended socio-economic hardships. Going green, however, will lead to extraordinary economic opportunity and should be welcomed, not feared. Retrofitting the majority of residences with solar-panels, to take just one example, creates manufacturing jobs, installation jobs, planning and public policy jobs. Going green will be good for everyone.

**Enforcement**

Making legislation and jurisprudence work for Nature, not against it, will be crucial for a green transition, and for making the Global Green Deal work, especially in the early years, when change is always more challenging. In many places, political bodies will need to re-orient the judiciary -- both personnel and jurisprudence -- in order to mobilize
the justice system towards environmental protection. For example, in many countries new norms that disallow the endless postponement of trials for polluting industries will be needed; governments will have to enact a variety of new laws and assert political control over wayward courts; and stiff penalties — not a license to pollute — will be needed. Clearly, sending CEOs to jail for a long time (as would have been appropriate in the case of Bhopal or the Exxon Valdez) or setting fines that break the profitability of an intransigent company’s business are two ways to make this strategy meaningful. Creating environmental crime units in police forces, from the international to the local level, will be important to ensure detection and enforcement.

To restore the sovereignty of communities and nations, we will need to instruct our governments to redraft international agreements that restrict a country’s protection of its environment and citizenry. Such agreements should be replaced with override clauses stating that any trade activity likely to result in the wider distribution or use of toxic substances must be halted regardless of any previous agreements between governments or private corporations. It’s a pity that we need these additional big sticks, but we do. To create them, as well as to bring about the other components of the Green Deal, we will have to enact and enforce the strictest of conflict-of-interest guidelines with respect to government and judicial personnel.

The means to keep children -- all the world’s children -- from toxic harm while giving them an excellent quality of life already exist and, with government support, can go from good to great. From wind turbines and solar panels, to herbal anti-infectives and pro-biotics, to scientifically enhanced methods of organic farming, to filtration systems that use plants to produce pure drinking water without depositing one ounce of sewage in
our waterways, to methods of manufacturing that take no resources from the biosphere, to plastics made of corn and soya from sustainable agriculture, to paper and everything else made without chlorine, we can help our biosphere to survive and protect our children and their children after them — if we prioritize their health, and control the deployment of technologies and the major actors who drive them.

The coalitions that made schools ban junk food, toxic cleaning products and pesticides got political, and successfully so. To fully protect the children, concerned citizens have to extend the scope and degree of political action even further. We’ve got to stop separating environmental issues from economic or health issues in the belief that somehow we’ll be able to ‘deal with those later.’ Everywhere, we must make a peaceful revolution that recreates government in the public and biospheric interest. We can replace the strictures of the international corporate order with a new politics: a Global Green Deal that respects children and protects environmental health. It's the most worthy and rewarding challenge of all.

I would like to acknowledge and to thank David Fenton, who has done such a wonderful job of assisting and carefully checking the research for this article.

1 The UK campaign was led by British chef Jamie Oliver, who launched a television series and led a huge campaign with many parents, educators and politicians. This announcement occasioned a tremendous hue and cry from its opponents - candy and junk food manufacturers who lost a huge, captive market. Alphonso, C. (2005, September 29). “Jamie Oliver Forces British Schools to Ban Junk Food.” The Globe and Mail, page A-1.


3 In California, the Los Angeles Unified School District initiated a policy called Integrated Pest Management (IPM), to use low-risk methods to eliminate pests and weeds. The policy was the first in the United States to embrace the Precautionary Principle and parents’ “Right to Know” about products used in or around school sites. The success of the policy — a policy that has become the model for many school districts and communities throughout the nation — led to the California Healthy Schools Act 2000. This inspiring initiative is, of course, the result of the work of untold activists in parent, school and environmental organizations, but it was catalyzed by the active intervention of a young boy named Nicholas Baker. When he was 6 years old, he had to walk through a cloud of toxic pesticide as he entered school. As a result of the exposure, Nicholas suffered a severe asthma attack. Following his recovery, Nicholas became a Healthy Schools advocate, testifying about children’s vulnerability to toxic chemicals at the California Environmental Protection Agency, Air Quality Management Board, California Assembly, Los Angeles Unified School Board and California Air Resources Board, which in turn influenced public policy in the Los Angeles Unified School District and California as a whole. “I’ll continue my work by encouraging others to embrace the Precautionary Principle and Right to Know,” Nicholas recently said at an award ceremony in Los Angeles. “It’s important to prevent harm not only to our generation, but future generations to come. Everyone knows it’s much better to be safe rather than


7 Best example: the Millennium Ecosystem Assessment. As reported in New Scientist, April 2–8, 2005, pp. 8–11 (and widely reported elsewhere), in April 2005 this report, the first-ever global inventory of natural resources, was published. It cost $24 million and took more than 1,300 scientists in ninety-five countries four years to complete. The report is backed by the UN, the World Bank, and the World Resources Institute. The assessment reached the overwhelming conclusion that we are living well beyond our environmental means. Approximately 60 percent of the planet’s natural products and processes that support life, such as water purification, are being degraded or used unsustainably. The New Scientist editorial “Save the Humans,” in the same issue (p. 5), called the message of the Millennium Ecosystem Assessment (MA) “explosive” and concluded: “The most compelling reason for acting on the MA stems from one of its chief conclusions: there is a clear link between healthy ecosystems and healthy humans. Destroy those ecosystems and our economies—and our quality of life—will suffer.”

8 Ref the work of Louise Vandelac, UQAM, on eco-citizenship -- still to come

9 Schools and public health authorities are natural partners. In November 2004, Dr. Sheila Basra, the Chief Medical Officer of Ontario, presented a report to the Ontario legislature that recommended banning fast and processed foods in schools, and including vegetables
and fruit with every meal served, implementing portion control, along with a variety of other measures in a public war on childhood obesity. Dr. Basra has recognized that the health of school children is a public health issue par excellence.


In several countries in Southeast Asian environmentalists have attempted, unsuccessfully, to stop the destruction of the mangrove groves by commercial shrimp farming. There attempts were characterized as barriers to trade, and the groves were destroyed. We know what effect this type of destruction had when last winter's tsunami went through, and


14 Lang, S. (2005, July 14). “Organic Farms Produce Same Yields As Conventional Farms.” Cornell University, Ithaca, NY. (http://www.news.cornell.edu/stories/July05/organic.farm.vs.other.ssl.html.) According to the lead author of the study, David Pimentel, a Cornell University professor of ecology and agriculture: “Organic farming offers real advantages for such crops as corn and soybeans.” And under drought conditions, organic was significantly better. Further, “The fact that organic agriculture systems also absorb and retain significant amounts of carbon in the soil has implications for global warming.”

15 Many environmental thinkers have come to the conclusion that we cannot continue simply doing business as usual and expect to move forward without changing the role of government in fundamental and assertive ways. In a controversial but very important monograph, The Death of Environmentalism, presented in October 2004 to a large gathering of US environmental grantmakers, Michael Shellenberger and Ted Nordhaus declared that the US environmental movement, using its traditional methods and analyses, was completely unable to address the profound and multi-sectoral challenges presented by catastrophic global warming and and new strategies, tactics and ways of
working together were needed. (Monograph available at www.grist.org/news/maindish/2005/01/13/doe-reprint.) I agree. My own inspiration for the comprehensive multi-faceted transitional strategy we need today comes from President Roosevelt's New Deal. But many environmental thinkers have come up with similar ideas, at least in part, and going back quite a while. In 1992, in his book *Earth in the Balance*, former US Vice President Al Gore suggested a 'Global Marshall Plan' to help green the world. (Gore, A., revised edition 2000, *Earth in the Balance*, New York: Houghton Mifflin, pages 297-301.) Gore was inspired by the original plan that saw the United States send billions of dollars Europe to rebuild its economies after World War II. He states, “a Global Marshall Plan must focus on strategic goals and emphasize actions and programs that are likely to remove the bottlenecks presently inhibiting the healthy functioning of the global economy. The new global economy must be an inclusive system that does not leave entire regions behind.”

Subsequent to what I thought was my origination of the term Green Deal, our web search on the term revealed that the American environmental author Mark Hertsgaard had used the phrase “Global Green Deal” in the last two chapters of his book: *Earth Odyssey: Around the World In Search of Our Environmental Future* (1999, New York: Broadway), and in some articles after its publication. In particular, he was calling on international organizations such as the World Bank, and other international agencies, to use their financial resources to subsidize the development of green technologies, rather than the continuation of toxic and harmful ones. Hertsgaard, also inspired by Roosevelt's approach, said that the idea is “to renovate human civilization from top to bottom in environmentally sustainable ways.” It is worth noting that even mainstream economic
analysts such as Thomas Friedman have started calling for a new New Deal, or a “geo-green strategy”, to pull the American economy and American workforce out of the deep hole into which they are plunging. (See Friedman, T.L. (2005, October 14), "Keeping Us in the Race," *NY Times*, and Friedman, T.L. (2005, March 27) “Geo-Greening by Example,” *NY Times.*) A far more integrated vision, however, can be found in Vancouver-based environmental writer and consultant Roy Woodbridge's *The Next World War: Tribes, Cities, Nations and Ecological Decline* (2004, Toronto: University of Toronto Press). Woodbridge presents a highly-developed plan, a 'Green Deal' in effect, for what he calls “the provisioning of societies” that depends on major government and intergovernmental mobilization of citizens, capital, industry, agriculture, education -- all our key sectors -- at a level of intensity and coordination we have so far devoted only to making war (for Woodbridge, “ecological decline is the enemy”) -- to brake environmental degradation and substitute viable ways of producing and living for our current practices. Like Jared Diamond (*Collapse: How Societies Choose to Fail or Succeed*, 2004, New York: Viking) and Ronald Wright (*A Short History of Progress*, 2005, Toronto: Anansi), Woodbridge has traced the huge costs of humanity's path from hunter gatherers to global industrial producers. Many thinkers from different fields have been coming to similar conclusions: we must use the power of government and international organizations to move us in the right direction; indeed, without that power, we risk decline and fall, like other civilizations before us.

To get a sense of the remarkable technologies and processes that already exist as benign alternatives for harmful ones, that may be deployed in the immediate, the medium, and in some cases, also the long term, see Hawken, P., A. Lovins and H.
Lovins, (1999), *Natural Capitalism*, New York: Little, Brown & Co.. This book can serve as an extraordinary booster of hope and optimism, because it shows that the objectives are within reach, if we can organize ourselves to implement them.


18 Roy Woodbridge (*The Next World War*, op cit) provides good summaries of these important ideas for polities rooted in environmentally based entities -- the natural environment of specific geographical regions, the constructed environment of cities.

19 A trillion dollars or more every year is spent on war-related expenditures. The current Iraq War has already cost the US more than six-hundred billion dollars -- and it’s certainly not over yet. Wars kill the innocents - children high on the list - and they maim them in immediate and long-term ways (land mines, radiation from depleted uranium, chemicals) and do terrible damage to the environment. Clearly, the military budgets of major powers should be diverted to saving children and doing biospherical good. But even the military budgets of small countries can be transformed into pools for green growth: Costa Rica decided in 1948 that they would dispense with a military sector and use the freed funds for pro-social purposes -- and this now includes organic farming and Green University initiatives.

20 The name “Tobin Tax” and the original concept derives from James Tobin, a Ph.D. Nobel-laureate economist at Yale University. The proposal is an excise tax on cross-border currency transactions. Currency speculators currently trade over $1.8 trillion dollars *each day* across borders. The market is huge, and volatile. The proposal is that each trade would be taxed at 0.1 to 0.25 percent of volume (about 10 to 25 cents per
hundred dollars). This miniscule percentage would generate $100-300 billion dollars of revenue at current rates of trade. The tax can be enacted by national legislatures, and followed by multilateral cooperation for effective enforcement. The revenue is intended to go to global priorities: basic environmental and human needs, and to help tame currency market volatility and restore national economic sovereignty. (For more information see http://www.ceedweb.org/iirp/.)

21 Last December the US Supreme Court decided against Aviall, a company that used a longstanding clause in the Superfund legislation to collect monies from the company that had previously polluted the property bought by Aviall. In effect, the court said that the polluter didn’t have to pay. This is just one example of a decision in which the judiciary went in the wrong direction. As noted earlier, in Europe last December a European court decided against a longstanding law in Germany that made manufacturers responsible for their packaging -- a huge defeat for the environment, and, hence, for children. If the courts are to be the final arbiters of behaviour that affects the environment, they too will have to be greened.