CONFIDENTIAL MEMORANDUM

Attack on the North American Environment

DATE: October 1, 2015

TO: Ecological economists of North America

This memorandum is submitted as a basis for the discussion on *October 1, as part of the joint Canadian and US Ecological Economics conference (CANUSSEE 2015).*The original text was adopted from The Powell Memorandum, Lewis Powell wrote to the US Chamber of Commerce in 1971 fearing threats to the Free Enterprise System. Powell went on to become an Associate Justice of the US Supreme Court from 1972 to 1987. Please read the suggested changes (italicized) that identify the current problem, and suggest possible avenues of action for further consideration.

Dimensions of the Attack

No thoughtful person can question that the *North American environment* is under broad attack. *Part of this attack comes from the near invisibility of nature in mainstream economics*. This *invisibility* varies in scope *and* intensity, *depending* on the techniques employed. *This is a key reason for the emergence of ecological economics*.

There always have been some who opposed *ecological economics*, and preferred *neoclassical* or some form of *Keynesian (old-school or post-Keynesian) economics*. Also, there always have been critics of *ecological economics*, whose criticism has been wholesome and constructive so long as the objective was to improve rather than to subvert or destroy.

But what now concerns us is quite new in the history of *North America*. We are not dealing with sporadic or isolated attacks from a relatively few extremists or even from the minority *business* cadre. Rather, the assault on *environment* is broadly based and consistently pursued. It is gaining momentum and converts.

Sources of the Attack

The sources are varied and diffused. They include, not unexpectedly, *neoclassical economists* who *don't mind* destroying entire *ecosystems*, *both biotic and abiotic*.

These extremists are far more numerous, better financed, and increasingly are more welcomed and encouraged by other elements of society, than ever before in our history. They continue to blindly believe that GDP is a good proxy for well-being, that all forms of natural capital are replaceable, and that "technological progress" will solve environmental scarcities. While their pure ideology remains in a small minority, their prescriptions for the economy remain dominant. They are a principal, but not the only cause for concern.

The most disquieting voices joining the chorus of criticism come from perfectly respectable elements of society: from the college campus, the pulpit, the media, the intellectual and literary journals, the arts and sciences, and from politicians. In most of these groups *ignorance of ecological economics can be forgiven, considering the wide range of issues a capitalist society forces us to confront.* Yet, these often are the most articulate, the most vocal, the most prolific in their writing and speaking, and the issues they attempt to address share common roots with the environmental crisis.

There are also groups, including the federal, state and provincial finance agencies and various institutes and think tanks, that have yet to clue in to the most basic insights of ecological economics, either out of ignorance or for reasons of expediency, They continue to view the economy as somehow isolated from the environment, instead of a subsystem of it, to the long term detriment of societal prosperity and well-being

Moreover, much of the media -- for varying motives and in varying degrees -- either voluntarily accords unique publicity to *mainstream economists*, or at least allows them to exploit the media for their purposes. This is especially true of television, which now plays such a predominant role in shaping the thinking, attitudes and emotions of our people.

One of the bewildering paradoxes of our time is the extent to which *ecosystems* tolerate their own destruction.

The campuses from which much *active debate* emanates are *now reliant on* (i) tax funds generated largely from business, and (ii) contributions controlled or generated

by business. The boards of trustees of our universities overwhelmingly are composed of men and women who are *business* leaders . Research chairs are now partly funded by donations and professors' career advancement relies in part on their ability to secure public and private research funds.

Most of the media, including the national TV systems, are owned and theoretically controlled by corporations which depend upon profits, and the enterprise system to survive.

Tone of the Attack

This memorandum is not the place to document in detail the tone, character, or intensity of the attack. The following quotations will suffice to give one a general idea:

The Kansas State House Bill No. 2366, <u>proposed a law</u> that would make it illegal to use "public funds to promote or implement sustainable development."

In Canada, the Federal Natural Resources Minister had this to say about the broader environmental movement:

Virtually all our energy exports go to the US. As a country, we must seek new markets for our products and services and the booming Asia-Pacific economies have shown great interest in our oil, gas, metals and minerals. For our government, the choice is clear: we need to diversify our markets in order to create jobs and economic growth for Canadians across this country. We must expand our trade with the fast growing Asian economies. We know that increasing trade will help ensure the financial security of Canadians and their families.

Unfortunately, there are environmental and other radical groups that would seek to block this opportunity to diversify our trade. Their goal is to stop any major project no matter what the cost to Canadian families in lost jobs and economic growth. No forestry. No mining. No oil. No gas. No more hydro-electric dams.

These groups threaten to hijack our regulatory system to achieve their radical ideological agenda. They seek to exploit any loophole they can find, stacking public hearings with bodies to ensure that delays kill good projects. They use funding from foreign special interest groups to undermine Canada's national economic interest. They attract jet-setting celebrities with some of the largest personal carbon footprints in the world to lecture Canadians not to develop our natural resources. Finally, if all other avenues have failed, they will take a quintessential American approach: sue everyone and anyone to delay the project even further. They do this because they know it can work. It works because it helps them to achieve their ultimate objective: delay a project to the point it becomes

It is chilling that what is being taught in most of our campus economics departments barely mention the environment, as if it wasn't an essential input to production. Sustainability is not salient to most economics lecturers, and the disciplinary culture limits prospects that mainstream economics departments will integrate sustainability into their curriculum. In part, this inertia may exist because addressing sustainability has the potential to create problems of plausibility and coherence for mainstream economic theory.

It (is) crystal clear that the foundations of our *economy* (i.e. the planet's species, ecosystems, and minerals, or natural capital) are under wide-ranging and powerful attack -- not by any conspiracy, but by misguided *economists* parroting one another and unwittingly serving ends they would never intentionally promote, that is, the long term degradation of the environment and with it, human living standards and well-being.

In Canada, perhaps the single most effective antagonist of environmentalists is the current federal government, who has become legendary in its desire to curb their influence. Beyond castigating environmentalists (like the Natural Resource Minister, above), or shutting down the National Roundtable on Environment and Economy, a recent article in the Globe and Mail speaks of how the federal government is using the Canada Revenue Agency to target environmental groups.ⁱⁱ

Indeed some are calling the entirety of the current government's approach to the environment, and evidence-based policy more generally as a "war on science":

Above all else, it is a sustained campaign to diminish the government's role in evidence-based policy-making and environmental stewardship in three simple ways: reducing the capacity of the government to gather basic data about the status and health of the environment and Canadian society; shrinking or eliminating government agencies that monitor and analyze that evidence and respond to emergencies; and seizing control of the communications channels by which all of the above report their findings to the Canadian public.ⁱⁱⁱ

The foregoing references illustrate the broad, shotgun attack on *ecological economics, environmentalists and the environment* itself. There are countless examples of rifle shots, which undermine confidence and confuse the public. Favourite current *tactics are "scientists" paid by oil companies to sow doubt in the climate change literature and in the media.*

It is dismaying that many politicians make the same arguments, that *climate change is "exaggerated"*. iv The fact that this is either political demagoguery or economic/*environmental* illiteracy is of slight comfort. This *camouflaging of pitting* the "*environment*" against the "*economy*", is the cheapest and most dangerous kind of politics.

The Efforts and Courage of Environmentalists

What has been the response of *ecological economists* to this massive assault upon its fundamental economics, upon its philosophy, and indeed upon its integrity?

The painfully sad truth is that the ecological economists and their societies, do not currently have the ability or resources to respond fully to this rampant economic and environmental ineptitude or "ignoring of the problems". Academic societies have limited means: the membership is largely comprised of students, professors, and concerned citizens in government, NGO's or the private sector, who similarly are fairly stretched for time and money. There are, of course, some exceptions to this sweeping generalization. But the net effect of the status quo is that ecological economics is scarcely visible in discussions of economy and environment in North America.

In all fairness, it must be recognized that *ecological economists* have not been trained or equipped to conduct guerrilla warfare *against much more powerful and well-endowed foes* who propagandize against *rational sustainability economics*, seeking insidiously and constantly to *ignore or* sabotage it. The traditional role of *ecological economists* has been to *conduct research*, to produce *studies, to criticize mainstream economics*, to create *policy alternatives, to engage in debate*, to improve the *quality of economics*, to be *thought* leaders, to serve on charitable and educational boards, and generally to be good citizens. They have performed these tasks very well indeed.

But they have shown little stomach for hard-nose contest with their critics, and little skill in effective intellectual and philosophical debate *in mainstream venues*.

The environment is "plainly in trouble"; and to date, the response to the wide range of propagandists has been ineffective, and has included appearement; the time has come -- indeed, it is long overdue -- for the wisdom, ingenuity and courage of ecological economists to be marshalled against those who would undermine both the discipline, and the natural environment.

Responsibility of Ecological Economists

What specifically should be done? The first essential -- a prerequisite to any effective action -- is for *ecological economists* to confront this problem as a primary responsibility.

The overriding first need is for *ecological economists* to recognize that the ultimate issue may be survival -- survival of what we call "natural capital" or the *environment*, and all that this means for the strength and prosperity of *North America* and the freedom *and well-being* of our people.

The day is long past when *senior professors* of a major *universities can* discharge their responsibilities by maintaining a satisfactory growth *of studies*, with due regard to *academic integrity*. If our *discipline is to gain influence*, top *ecological economists* must be equally concerned with *promoting our views and publically challenging mainstream economists*. This involves far more than an increased emphasis on "public relations" or "governmental affairs.

A significant first step by individual *ecological economists* could well be the designation of an executive vice president (ranking with other executive VP's) whose responsibility is to counter *misguided mainstream economics* on the broadest front. The public relations department could be one of the foundations assigned to this executive, but their responsibilities should encompass some of the types of activities referred to subsequently in this memorandum. Their budget and *courage* should be adequate to the task.

Possible Role of the Canadian and US Ecological Economics Societies

Independent and uncoordinated activity by individual *ecological economists*, as important as this is, will not be sufficient. Strength lies in organization, in careful long-range planning and implementation, in consistency of action over an indefinite period of years, in the scale of financing available only through joint effort, and in the political power available only through united action and national organizations.

Moreover, there is the quite understandable reluctance on the part of any one *economist* to get too far out in front and to make themself too visible a target.

The role of *USSEE/CANSEE* is therefore vital. Other national organizations (especially those of various *ENGO* and *civil society* groups) should join in the effort, but no other organizations appear to be as well situated as USSEE/*CANSEE*. It enjoys a strategic position, with a fine *academic* reputation and a broad base of *talent*. Also -- and this is of immeasurable merit -- there are *numerous* local *members* which can play a vital supportive role.

It hardly need be said that before embarking upon any program, *USSEE/CANSEE* should study and analyze possible courses of action and activities, weighing risks against probable effectiveness and feasibility of each. Considerations of cost, the assurance of financial and other support from members, adequacy of staffing and similar problems will all require the most thoughtful consideration.

The Campus

The assault on the *environment* was not mounted in a few months. It has gradually evolved over the past two *centuries*, barely perceptible in its origins and benefiting from a gradualism that provoked little awareness much less any real reaction *until* the 1960s.

There is reason to believe that *in terms of concrete first steps*, the campus is the single most dynamic source *of activity that can be tapped*. It is here that engaged and informed debate occurs, and where a healthy scepticism of mainstream economics can be fostered.

As these "bright young men *and women*," from campuses across the country, seek opportunities to change a system which they distrust, they seek employment in the centers of the real power and influence in our country, namely: (i) with the news media, especially *online*; (ii) in government, as "staffers" and consultants at various levels; (iii) in elective politics; (iv) as lecturers, writers, *and bloggers*, and (v) on the faculties at various levels of education.

Many *also* enter the enterprise system -- in business and the professions -- and for the most part they quickly discover the *inapplicability* of what they have been taught *in mainstream economics to secure long term prosperity.*

Few things are more sanctified in life than academic freedom. It *is essential to strengthen* this as a principle. But if academic freedom is to retain the qualities of "openness" and "fairness", there is a great opportunity for constructive action. The thrust of such action must be to restore the qualities just mentioned to the academic communities.

What Can Be Done About the Campus

The ultimate responsibility for intellectual integrity on the campus must remain on the administrations and faculties of our colleges and universities. But organizations such as *USSEE/CANSEE* can assist and activate constructive change in many ways, including the following:

Staff of Scholars

USSEE/CANSEE should consider establishing a staff of highly qualified scholars in the social *and natural* sciences who believe *in ecological economics*. It should include several of national reputation whose authorship would be widely respected -- even when disagreed with.

Staff of Speakers

There also should be *numerous* speakers of the highest competency. These might include the scholars, and certainly those who speak for *USSEE/CANSEE* would have to articulate the product of the scholars.

Speaker's Bureau

In addition to full-time staff personnel, *USSEE/CANSEE* should have a Speaker's

Bureau which should include the ablest and most effective advocates from the top echelons of *ecological economics*.

Evaluation of Textbooks

The staff of scholars (or preferably a panel of independent scholars) should evaluate social science textbooks, especially in economics, political science, *business studies, accounting, and other relevant fields.* This should be a continuing program.

The objective of such evaluation should be oriented toward restoring the balance essential to genuine academic freedom. This would include assurance of fair and factual treatment of our system of government and *of how* our enterprise system functions in bio-physical reality. Most of the existing mainstream economics textbooks pay scant attention to how natural capital interacts with the economy, and the few that do are superficial, biased and unfair.

We have seen the civil rights movement insist on re-writing many of the textbooks in our universities and schools. The labour unions likewise insist that textbooks be fair to the viewpoints of organized labour. Other interested citizens groups have not hesitated to review, analyze and criticize textbooks and teaching materials. In a democratic society, this can be a constructive process and should be regarded as an aid to genuine academic freedom and not as an intrusion upon it.

If the authors, publishers and users of textbooks know that they will be subjected -- honestly, fairly and thoroughly -- to review and critique by eminent scholars who believe in *ecological economics*, a return to a more rational balance can be expected.

Equal Time on the Campus

USSEE/CANSEE should increase its visibility on the university speaking circuit.

Every campus has its formal and informal groups, which invite speakers. *Many* law *and business* schools do the same thing. Many universities and colleges officially sponsor lecture and speaking programs. We all know the inadequacy of the representation of *ecological economics* in the programs, *although "green business" speakers have become more numerous.*

It will be said that few invitations would be extended to *USSEE/CANSEE* speakers. This undoubtedly would be true unless *USSEE/CANSEE* aggressively insisted upon the right to be heard. University administrators and the great majority of student groups and committees would not welcome being put in the position publicly of refusing a forum to diverse views, indeed, this is the classic excuse for allowing *right wing cranks* to speak.

The two essential ingredients are (i) to have attractive, articulate and well-informed speakers; and (ii) to exert whatever degree of pressure -- publicly and privately -- may be necessary to assure opportunities to speak. The objective always must be to inform and enlighten, and *engage in well-informed debate*.

Balancing of Faculties

Perhaps the most fundamental problem is the imbalance of many *economics departments*. Correcting this is indeed a long-range and difficult project. Yet, it should be undertaken as a part of an overall program. This would mean the urging of the need for faculty balance upon university administrators and boards of trustees.

The methods to be employed require careful thought, and the obvious pitfalls must be avoided. Improper pressure would be counterproductive. But the basic concepts of balance, fairness and truth are difficult to resist, if properly presented to boards of trustees, by writing and speaking, and by appeals to alumni associations and groups.

This is a long road and not one for the fainthearted. But if pursued with integrity and conviction it could lead to a strengthening of both academic freedom on the campus and of the values which have made *the USA* and Canada the most productive of all societies, *without undermining our future productive capacity*.

Graduate Schools of Business

While the US and Canadian Ecological Economics Societies may not enjoy a particular rapport with the increasingly influential graduate schools of business, much that has been suggested above applies to such schools.

Should not *USSEE/CANSEE* also request specific courses in such schools dealing with the entire scope of the problem addressed by this memorandum? This is now essential training for the *USSEE/CANSEE* executives of the future.

Secondary Education

While the first priority should be at the college level, the trends mentioned above are increasingly evidenced in the high schools. Action programs, tailored to the high schools and similar to those mentioned, should be considered. The implementation thereof could become a major program for local *USSEE/CANSEE branches*, although the control and direction -- especially the quality control -- should be retained by the *executive*.

What Can Be Done About the Public?

Reaching the campus and the secondary schools is vital for the long-term. Reaching the public generally may be more important for the shorter term. The first essential is to establish the staffs of eminent scholars, writers and speakers, who will do the thinking, the analysis, the writing and the speaking. It will also be essential to have staff personnel who are thoroughly familiar with the media, and how most effectively to communicate with the public. Among the more obvious means are the following:

The Internet, Alternative Media, Social Media and Television

Key websites and national television networks should be monitored in the same way that textbooks should be kept under constant surveillance. This applies not merely to so-called educational programs, but to the daily "news analysis" which so often includes the most insidious type of *economic bias*. Whether this criticism results from hostility or economic ignorance, the result is the gradual erosion of confidence in *communal environmental action*.

Monitoring TV, to be effective, would require constant examination of the texts of adequate samples of programs. Complaints -- to the media and to the *CRTC* (national regulator) -- should be made promptly and strongly when programs are unfair or inaccurate. Equal time should be demanded when appropriate. Effort should be made to see that the forum-type programs afford at least as much opportunity for supporters of the ecological economics to participate as these programs do for those who attack it.

For the internet, alternative and social media, consistent, informed and creative content should be developed to suit each medium (long form, blog sites, video, Facebook, Twitter, etc.). A constant presence should be maintained on all current

and future platforms, to vigorously disseminate key ecological economic insights. Beyond attempting to "go viral", many means can be used, from the Adbusters "spoofing" approach to more traditional responses to news items.

Concise, plain language should serve to disarm the standard neoclassical economic talking points. The goal, by creating awareness of ecological economics principles, is well-informed debate.

Other Media

Radio and the press are also important, and every available means should be employed to challenge and refute unfair attacks, as well as to present the affirmative case through these media.

The Scholarly Journals

It is especially important for *the US and Canadian Ecological Economics Societies*' "faculty of scholars" to publish. One of the keys to the success of the *neoclassical* faculty members has been their passion for "publication" and "lecturing." A similar passion must exist among *USSEE/CANSEE's* scholars.

There should be a fairly steady flow of scholarly articles presented to a broad spectrum of magazines and periodicals -- ranging from the popular magazines (Life, Reader's Digest, etc.) to the more intellectual ones (Atlantic, Harper's, Saturday Review, New Yorker, etc.) and to the various professional journals.

Books, Paperbacks and Pamphlets

The news stands -- at airports, drugstores, and elsewhere -- are filled with paperbacks and pamphlets advocating everything from revolution to erotic free love. One finds almost no attractive, well-written paperbacks or pamphlets on "our side." It will be difficult to compete with a *Dan Brown* or even a *J. K. Rowling* for reader attention, but unless the effort is made -- on a large enough scale and with appropriate imagination to assure some success -- this opportunity for educating the public will be irretrievably lost.

The Neglected Political Arena

In the final analysis, the payoff is what government does. *Environmentalists* have been the favourite whipping-boy of *our current* politicians for many years. But the

measure of how far this has gone is perhaps best found in the anti-*environmental* views now being expressed by *certain political circles*.

Yet, as every *environmentalist* knows, few elements of *North American* society today have as little influence in government as the *environmentalist*, the *ecological economist*, or even the millions of *concerned citizens who care about environmental protection*. If one doubts this, let him undertake the role of "lobbyist" for *the ecological economic* point of view before *Parliamentary or Senate* committees. The same situation obtains in the legislative halls of most *Provinces* and major cities. One does not exaggerate to say that, in terms of political influence with respect to the course of legislation and government action, the *ecological economist* is truly the "forgotten *voice*."

Current examples of the impotency of *ecological economists*, and of the near-contempt with which *our* views are held, are the stampedes by politicians to support almost any legislation related to "consumerism" or to "*increasing competitiveness*."

Politicians reflect what they believe to be majority views of their constituents. It is thus evident that most politicians are making the judgment that the public has little sympathy for the *ecological economist or their* viewpoint.

The educational programs suggested above would be designed to enlighten public thinking about *how the economic* system *actually interacts with the environment,* and which provides the goods, services and jobs on which our country depends.

But one should not postpone more direct political action, while awaiting the gradual change in public opinion to be effected through education and information. *Ecological economists* must learn the lesson, long ago learned by labour and other self-interest groups. This is the lesson that political power is necessary; that such power must be assidously (sic) cultivated; and that when necessary, it must be used aggressively and with determination -- without embarrassment and without the reluctance which has been so characteristic of *academics when it comes to hard politics*.

As unwelcome as it may be to *USSEE/CANSEE*, it should consider assuming a broader and more vigorous role in the political arena.

Neglected Opportunity in the Courts

The environment has been affected as much by the courts as by the executive and legislative branches of government. Under our constitutional system, especially with an activist-minded Supreme Court, the judiciary may be the most important instrument for social, economic and political change.

Environmental law groups are often significantly outspent by business interests in legal matters. This has not been inconsequential.

This is a vast area of opportunity for *environmentalists more generally*, if it is willing to undertake the role, *but it is unclear how* to provide the funds.

Neglected Stockholder Power

The average member of the public thinks of "business" as an impersonal corporate entity, owned by the very rich and managed by over-paid executives. There is an almost total failure to appreciate that "business" actually embraces — in one way or another — most Canadians and Americans. Those for whom business provides jobs, constitute a fairly obvious class. But the millions of stockholders — most of whom are of relative modest means — are the real owners, the real entrepreneurs, the real capitalists under our system. Yet, stockholders have been as ineffectual as ecological economists in promoting a genuine understanding of our system or in exercising political influence.

The question which merits the most thorough examination is how can the weight and influence of stockholders — many tens of millions of voters — be mobilized to support (i) an educational program and (ii) a political action program.

One encouraging development is the rise of socially responsible investing, where investors concern themselves with the environmental and social performance of companies as well as financial returns. Another is the emergence of the divestment movement where large stockholders such as pension funds and universities are urged to exclude stocks in fossil fuel companies from their portfolios. It must also be said that other forms of enterprise and governance, namely cooperatives, are often by design more responsive to community and environmental concerns.

A More Aggressive Attitude

Environmental interests -- especially *ecological economists* and their national organizations -- have maintained low profiles, especially with respect to political action.

It has been fairly characteristic of the average *ecological economist* to be tolerant -- at least in public -- of those who attack *their position*. Very few *ecological economists* respond in kind. *However, much more frequently, the work of ecological economists is not subjected to criticism, but instead met by silence on the part of traditional economists.* There has been a disposition to *ignore us, perhaps based on a view that we are* likely to fade away in due time.

While neither responsible *ecological economists*, nor *USSEE/CANSEE*, would engage in the irresponsible tactics of some pressure groups, it is essential that spokes *people* for *ecological economics* -- at all levels and at every opportunity -- be far more aggressive than in the past.

There should be no hesitation to attack the *Fraser Institute*, the *C.D. Howe Institute*, the National Citizens Coalition (In Canada), the American Enterprise Institute, the CATO Institute, the Heartland Institute (in the US), and others who openly promote a failed economics. There should not be the slightest hesitation to press vigorously in all political arenas for support of ecological economics. Nor should there be reluctance to penalize politically those who oppose it.

Lessons can be learned from organized labour in this respect. The head of *Unifor or CUPE (in Canada) or AFLCIO or SEIU (in the US)* may not appeal *to ecological economists* as the most endearing or public-minded of citizens. Yet, over many years the heads of national labour organizations have done what they were paid to do very effectively. They may not have been beloved, but they have been respected -- where it counts the most -- by politicians, on the campus, and among the media.

It is time for *ecological economics* -- which has demonstrated great capacity to advance understanding of the relationships among ecological, social, and economic systems for the mutual well-being of nature and people -- to apply their great talents vigorously to the *promotion of the discipline's core insights*.

Ecological economics exists because a hundred years of disciplinary specialization in scientific inquiry has left us unable to understand or to manage the interactions between the human and environmental components of our world. Ecological economics also exists because mainstream economics, through ignorance and in some cases, outright deceit, supports and justifies dominant economic power relations. For this reason, ecological economists must pierce the silence into which our insights are most often received, and more aggressively reveal the fallacies of mainstream economics and promote our insights.

The Cost

The type of program described above (which includes a broadly based combination of education and political action), if undertaken long term and adequately staffed, would require far more financial support *than the North American Ecological Economics Societies* have ever received in the past.

Volunteer participation would have to be significantly increased, with the highest quality established and maintained.

It is possible that the organization of *USSEE/CANSEE* itself would benefit from restructuring. For example, as suggested by union experience, the office of President might well be a full-time career position. To assure maximum effectiveness and continuity, the chief executive officer of *USSEE/CANSEE* should not be changed each year. The functions now largely performed by the President could be transferred to a Chairman of the Board, annually elected by the membership. The *Executive*, of course, would continue to exercise policy control.

Quality Control is Essential

Essential ingredients of the entire program must be responsibility and "quality control." The publications, the articles, the speeches, the media programs, the advertising, the briefs filed in courts, and the appearances before legislative committees -- all must meet the most exacting standards of accuracy and professional excellence. They must merit respect for their level of public responsibility and scholarship, whether one agrees with the viewpoints expressed or not.

The challenge is that many of those who attack the environment have a lot of money and very little regard or interest in the truth. We must play towards our advantages, that being our more inclusive ethical frame and an unrelenting commitment to evidence-based scientific inquiry.

Relationship to Freedom

The threat to the *environment* is not merely a matter of economics. It also is a threat to individual freedom.

It is this great truth -- now so submerged by the rhetoric of the New *Right* and of many *conservatives* -- that must be re-affirmed if this program is to be meaningful.

There seems to be little awareness that *if our natural capital becomes severely compromised*, varying degrees of bureaucratic regulation of individual freedom -- ranging from that under moderate socialism to the iron heel of the leftist or rightist dictatorship *could possible emerge*.

In addition to the ideological attack on the *environment* itself (discussed in this memorandum), its essentials also are threatened by inequitable taxation, and -- more recently -- by *our economy's need for resources*, which have seemed uncontrollable. But whatever the causes of diminishing *environment quality* may be, the truth is that freedom as a concept is indivisible *from maintaining natural ecosystems*.

At root, economics is the study of how to manage scarce resources to achieve desired ends. With climate change and an environment pushed beyond its biophysical limits, we need a viable economics that respects planetary boundaries while maintaining quality of life. Freedom to destroy the planet's capacity to support humanity and millions of other species is no freedom at all. It is this message, above all others, that must be carried home to citizens of North America for the sake of our long-term prosperity and well-being.

Conclusion

It hardly need be said that the views expressed above are tentative and suggestive. The first step should be a thorough study. But this would be an exercise in futility unless the *ecological economics community and its allies* accept the fundamental premise of this paper, namely, that *ecological economics* and the *ecological* system are in deep trouble, and the hour is late.

ⁱ Green, Tom. Introductory economics courses and the university's commitments to sustainability. Online: https://circle.ubc.ca/handle/2429/43042

ii http://www.theglobeandmail.com/news/politics/cra-audits-charitable-status-of-tides-canada-amid-tory-attack/article4105719/

iii http://www.thestar.com/opinion/commentary/2013/10/13/harpers war on science continues with a ven geance.html

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