

Section 3

An Assessment of the Most Difficult Challenges of Our Times

[Note: This 18 page pdf is Section 3 of the document titled “The IPCR Workshop Primer”. This particular section, and other sections of “The IPCR Workshop Primer” contain supporting evidence and source references dated Feb. 2010 or before. More recent evidence has not changed this writer’s assessment, so the following lists of “most difficult challenges” continue to be viewed by this writer as the areas which are most in need of remedies, and the focus of The IPCR Initiative is to nurture, support, and sustain such remedies. SP—August, 2010]

Introduction

Included in this section is a short summary list which this writer uses as a more concise “risk assessment”, and a longer “Ten Point Assessment of the Most Difficult Challenges of Our Times”. Some detailed evidence relating to the risk assessment items is included in the 12 page “Notes and Source References” section at the end of this section.]

Special Commentary: Community Visioning Initiatives Can Help Build Consensus

In this particular section of the proposal, some of the evidence which has formed this writers’ views about the challenges of our times will be brought forward. This evidence is associated with issues that require some sifting of very complex information, which by its nature must be considered incomplete at best. Therefore, what is provided here is simply offered as starting points for readers who have not yet explored these issues in depth—and as an indication of the kind of sources this writer regards as trustworthy and service-oriented. (“...words that come from the depth of experience have the ring of sincerity that convinces.”¹) This writer recognizes that a significant degree of consensus may be needed to resolve the most complex challenges. *That is one of the reasons why he is advocating the use of Community Visioning Initiatives.*

The Short Summary List

We live in very complex world. There are very difficult challenges ahead. These challenges include, but are not limited to:

- 1) global warming and reducing carbon emissions²
- 2) peak oil and reducing dependence on petroleum based products³
- 3) global inequities and the tragic cycles of malnutrition, disease, and death⁴

- 4) an increasing world population⁵ requiring more resources when many resources are becoming more scarce⁷ (*with a special emphasis* on the increasing number of people who are consuming resources and ecological services *indiscriminately*⁶)
- 5) the trend towards urbanization⁷ (half the world's population now live in cities, and there are now more than 400 cities with a population of 1 million or more) is creating human settlements which require more and more complex and energy intensive infrastructures just when there is a need to minimize our impact on ecosystems due to global warming and widespread resource depletion⁸
- 6) cultures of greed, corruption, and overindulgence have caused a crises of confidence in financial markets, and are in many ways slowing the restructuring of investment priorities needed to respond to the challenges listed here (and other challenges)⁹
- 7) there still seems to be a majority of people on the planet who do not have a clear understanding, well-grounded in personal experience, of which basic elements of community life and cultural traditions lead to mutually beneficial understandings, which lead to cycles of violence—and why it is so important for people to achieve clarity on this subject.¹⁰

A Ten Point Assessment of the Most Difficult Challenges of Our Times

Note: The IPCR Initiative is aware that there are many very difficult issues which could be defined as “the most difficult challenges of our times”. By even making a list at all, The IPCR Initiative is not suggesting it can offer a definitive assessment.

The purpose of the designations made in the following ten point summary is

- a) to help other people appreciate how becoming involved in a comprehensive assessment of the challenges of our times can be useful for re-framing public discourse
- b) to help other people appreciate that these issues “pervade our globe; ... are complex due to the interdependent nature of all modern nation-states; (and) are all interwoven, making it difficult, if not impossible, to deal with one in isolation from the others...”¹¹
- c) to illustrate how The IPCR Initiative can contribute to the resolution of even the most profound challenges of our times.

The ten point assessment:

- 1.** Community building associated with energy descent (see Challenges #4, 5, and 6) (as a result of either wise decisions, key supply shortages, or lack of other options) may or may not be accompanied by an exponential increase in compassion for our fellow human beings. *Without such an exponential increase*, an increase in the need for emergency assistance to people with basic human needs [as a result of migrations from areas where carrying capacity has been exceeded (areas such as mega-cities), for example (see Challenge #8)] may coincide with a decrease in our capacity to respond to such emergencies
- 2.** “Cultures” of violence, greed, corruption, and overindulgence which have become so common that many of us accept such as inevitable⁹
- 3.** The source of threats—whether perceived or real—to the identities and/or cherished meanings of many communities of people is too often linked to religious, spiritual, and/or moral traditions; and such threats too often result in conflicts which cast a shadow of negative associations onto such traditions. These negative associations have caused many people to disassociate from the religious, spiritual,

and/or moral traditions linked to such threats; and have accumulated to such a degree that the real treasured wisdom of many such traditions now seems as if it is hidden—or remains undiscovered. This is unfortunate—as such treasured wisdom contains teachings which inspire and encourage people to

- a) appreciate truth, virtue, love, and peace—and live disciplined lives for the purpose of adhering to truth, cultivating virtue and love, and maintaining the pathways to enduring peace
- b) sacrifice personal desires for the greater good of the whole
- c) find contentment and quality of life while consuming less material goods and ecological services
- d) prefer peacebuilding which supports and actualizes mutually beneficial understandings, forgiveness, and reconciliation—and *which abstains from violent conflict resolution*—as a way of bringing cycles of violence to an end
- e) use resources carefully, so that there is surplus available for emergency assistance
- f) support community life and cultural traditions which “... bring to the fore what is often hidden: how many good people there are, how many ways there are to do good, and how much happiness comes to those who extend help, as well as to those who receive it.”

[**Very Important:** Footnote #12 has further commentary on this “difficult challenge”.]

4. 5. and 6. Planet-wide climate chaos and global warming, the end of the era of cheap oil (“peak oil”), and widespread resource depletion and extinction (the “Triple Crises”)

Consider the following references (with additional corroborating quotes) to preconference (September, 2007) information for a “Teach In: Confronting the Global Triple Crises—Climate Change, Peak Oil (The End of Cheap Energy), and Global Resource Depletion and Extinction” (September 14-17, 2007 at The George Washington University Lisner Auditorium in Washington D.C.) Sponsored by The International Forum on Globalization (www.ifg.org) and The Institute on Policy Studies

“The planet’s ecological systems are on the verge of catastrophic change for which few societies are prepared. So far, responses by governments to this emergency are inadequate, or counterproductive. We call it the “Triple Crisis,” the convergence of three advancing conditions:

- a) Planet-wide climate chaos and global warming (“World carbon emissions must start to decline in only six years if humanity is to stand a chance of preventing dangerous global warming, a group of 20 Nobel prize-winning scientists, economists and writers declared today.”²)
- b) The end of the era of cheap energy (“peak oil”) (“The human community’s central task for the coming decades must be the undoing of its dependence on oil, coal, and natural gas in order to deal with the twin crises of resource depletion and climate chaos.”³)
- c) The depletion of many of the world’s key resources: water, timber, fish, fertile soil, coral reefs; and the expected extinction of 50% of the world’s species.⁸

“All are rooted in the same systemic problem—massive overuse of fossil fuels and the Earth’s resources; all driven by an economic ideology of hyper growth and consumption that’s beyond the limits of the planet to sustain.”¹³

7. The increasing world population⁵ and its implications relating to widespread resource depletion⁷ (with special focus on *the increasing number of people* who are consuming material goods and ecological resources *indiscriminately*⁶)

8. Current trends indicate that we are creating more and more “urban agglomerations” (cities with a population of more than 1 million people)⁷, which require more and more complex and energy intensive infrastructures, where it is more and more difficult to trace the consequences of our individuals investments of time, energy, and money—and which are the least appropriate models when it comes to implementing resolutions to many of the other challenges included in this list. (Note: “Response nodes” for emergency assistance, and centers for regional and international exchange of “weak link” materials do not require a mega-city infrastructure base)

9. Any shortages of goodwill in times of unprecedented transition could tilt already precarious systems into further disarray—and thus erode established systems in even the most stable communities and regions

10. Sorting out what are real challenges and what are sound and practical solutions is becoming more and more difficult, as there is now, in many parts of the world, a multitude of ideas of all kinds coming to the fore in personal, family, community, and cultural life—all at the same time.

Additional Note: Section 5 (“Brief Descriptions of The Eight IPCR Concepts”) and Appendix 2—Part A (“The Twilight of One Era, and the Dawning of Another”) are “stand by themselves” documents which include the most recent evidence (also cited here) relating to what the IPCR Initiative identifies as the most difficult challenges of our times. Another IPCR document, not included in this 2010 version of the “IPCR Workshop Primer” because it was last updated in 2007, does include some commentary worth exploring. That document is titled “An Assessment of the Most Difficult Challenges of Our Times”, and is accessible on the IPCR website homepage (at www.ipcri.net).

Follow-up Points, and Commentary

Two of the questions included in Section 10 “39 Suggestions for Preliminary Survey Questions (in Preparing for Community Visioning Initiatives)” are

6. Most Difficult Challenges, Most Valuable Resources

(Included on pages 5-7 of this “IPCR Workshop Primer) is a “Ten Point Assessment of the Most Difficult Challenges of Our Times”. Consider that “Ten Point...” list provided as one example of a response to part a) of this question. Then, following your own independent thinking on this important subject, please respond as best you can to the following questions.

a) From your point of view, what are the most difficult challenges of our times?

b) Do you believe that we—collectively—have the resources necessary to overcome the challenges you have identified as the most difficult challenges of our times?

c) If your answer to Question #2 is yes, please describe the resources you believe will contribute the most to helping us—collectively—overcome the challenges you identified.

d) If your answer to Question #2 is no, please offer any and all sincere, constructive, relevant, and practical suggestions for what we— collectively—can do to inspire, encourage, and/or create the resources you believe *would be necessary* to overcome the challenges you identified.

9. Identifying Experienced Practitioners, Stakeholders, and People Needing Assistance

Consider the assessment of the most difficult challenges of our times which you created as a response to question #6 part a).

a) Who are the Experienced Practitioners, who are most qualified to be educating people on how to successfully overcome each of the ten challenges you identified?

(Special Notes: Please be specific, as in times of emergency, it will be most important for leaders to understand which people are perceived as most qualified by the majority of the residents in a particular community. Also, please be straightforward and honest: if you do not know who would be most qualified to respond, please respond accordingly.)

b) Who are the Stakeholders (the people who will be affected by the education provided and guidance given by the Experienced Practitioners)?

c) Who are the People Needing Assistance (the people who do not know how to respond to the challenges you identified)?

This writer's response to the first question (Question #6) is that One of the most significant consequences of carrying out any kind of Community Visioning Initiative which requires participants to become involved in a comprehensive assessment of the challenges of our times, is its potential to re-frame public discourse. The "Notes and Source References" part of this section, in Section 5, and in Appendix 2—Part A ("The Twilight of One Era...")—and additional references in the "1000Communities²" document (at <http://ipcri.net/images/1000Communities2.pdf>), and the document "An Assessment of the Most Difficult Challenges of Our Times" (last revised August-September, 2007)(at <http://ipcri.net/images/3-Assessment-of-Most-Difficult-Challenges.pdf>), will provide the reader with examples of the sources which this writer considers trustworthy and reliable.¹

[Very Important: Note #1 in the "Notes and Source References" part of this Section 3 (at the end of the section, includes commentary on how this writer assesses sources, and decides that a source has a high probability of being trustworthy and reliable.)]

This writer's brief commentary on the second question above (Question #9) is that he believes the relatively small number of "Experienced Practitioners" who see the "big picture" of difficult challenges described below, and have experience successfully responding to those challenges needs to be increased very quickly, and the vast multitudes of people who do not know how to respond to the challenges listed below needs to be decreased very quickly.

[Additional Note: Section 5 (“Brief Descriptions of The Eight IPCR Concepts”) and Appendix 2—Part A (“The Twilight of One Era, and the Dawning of Another”) are “stand by themselves” documents which include the most recent evidence (also cited here) relating to what the IPCR Initiative identifies as the most difficult challenges of our times. Another IPCR document, not included in this 2010 version of the “IPCR Workshop Primer” because it was last updated in 2007, does include some commentary worth exploring. That document is titled “An Assessment of the Most Difficult Challenges of Our Times”, and is accessible on the IPCR website homepage (at www.ipcri.net).]

Concluding Comments (Section 3 “Assessment”)

One approach this writer uses (see IPCR website homepage) to summarize the kind of comprehensive response needed to the above mentioned challenges is as follows:

There is a profound and critical need for human beings—collectively—to be

- 1) much more organized and deliberate about “... bringing to the fore what is often hidden: how many good people there are, how many ways there are to do good, and how much happiness comes to those who extend help, as well as to those who receive it.”
- 2) much more multifaceted and participation-friendly in our approaches to peacebuilding, community revitalization, and ecological sustainability
- 3) much more resourceful in the use of the storehouses of accumulated wisdom and “embodied energy” which are now accessible to us.

Fortunately, there is much potential which could be translated into a positive outcome. Another way of saying this is: *at no other time in the course of history have so many people had access to so much along the lines of resources necessary to overcoming the challenges of their times.*

We have the resources necessary to overcome the challenges of our times.

The IPCR Initiative is dedicated to assisting fellow human beings, wherever they may be, who are also trying to fill in the blank in the statement below:

In the best of times, even the most profound challenges can be overcome; for in the best of times, _____ is/are nurtured, supported, and sustained by family, friends, teachers, mentors, elders, and the everyday influences of community life and cultural traditions.

Notes and Source References (for Section 3 “Assessment”)

1. Special Note on Sources of Information:

In this “Assessment” section, some of the evidence which has formed this writers’ views about the challenges of our times will be brought forward. This evidence is associated with issues that require some sifting of very complex information, which by its nature must be considered incomplete at best. Therefore, what is provided as evidence is simply offered as starting points for readers who have not yet explored these issues in depth—and as an indication of the kind of sources this writer regards as trustworthy and reliable.

One important question, considered very carefully by this writer when evaluating information on the Internet, is: “Why is this source providing this information?” This writer is inclined to regard information as trustworthy and reliable a) if the source of the information has been working for a long time in their field of activity b) if the source of the information is highly regarded in their field of activity and c) if the source of the information is clearly trying to respectfully provide good service to their fellow human beings, and contribute to the greater good of the whole.

There are sources of information which are clearly trying to persuade people to support a particular agenda, without encouraging them to arrive at an independent assessment, without suggesting that the issue is complex and may require some time arrive at an independent assessment. And there are people who use irresponsible and disrespectful language in ways which do not suggest that their motive is to respectfully provide good service to their fellow human beings, and contribute to the greater good of the whole. This writer recognizes that a significant degree of consensus may be needed to resolve the complex challenges ahead. (Somehow or other, we need to sort through all this, and we need to do so in a way that helps us to realize how much we need to be learning so that we can be part of the solutions... and how much we really need to be on the same side, helping each other.) The need to be one the same side helping each other is one of the reasons why he is advocating the use of Community Visioning Initiatives. In all IPCC documents relating to Community Visioning Initiatives, residents are being encouraged to participate in as many ways as possible—and to help and support others who are making sincere efforts to contribute to the process. Are we up to the challenge? (For more on this discussion, see Footnote #4).

2. Here are four references to the urgency of mitigating global warming, with the footnoted quote coming from a):

a) From TimesOnline article “Global warming must stay below 2C or world faces ruin, scientists declare” on May 28, 2009 (see <http://www.timesonline.co.uk/tol/news/environment/article6380709.ece>) (confirmed October 21, 2009) [references document “The St James Palace Memorandum” from Symposium “Action for a Low Carbon and Equitable Future” London, UK, 26 – 28 May 2009) (for that document, see http://extras.timesonline.co.uk/pdfs/sjp_memorandum_290509.pdf) (confirmed October 21, 2009)]

(Excerpts from the news article at TimesOnline) (see paragraphs 1-4)

“World carbon emissions must start to decline in only six years if humanity is to stand a chance of preventing dangerous global warming, a group of 20 Nobel prize-winning scientists, economists and writers declared today.

“The United Nations climate summit in Copenhagen in December must agree to halve greenhouse-gas emissions by 2050 to stop temperatures from increasing by more than 2C (3.6F), the St James’s Palace Nobel Laureate Symposium concluded.

“While even a 2C temperature rise will have adverse consequences, a bigger increase would create ‘unmanageable climate risks’, according to the St James’s Palace memorandum, signed today by 20 Nobel laureates in physics, chemistry, economics, peace and literature.

“The temperature target “can only be achieved with a peak of global emissions of all greenhouse gases by 2015”, the document said. If emissions continue to rise after that date, the required cuts would become unachievable.”

(Excerpts from the actual “St. James Palace Memorandum”) (see paragraphs 1, 4—and last paragraph)

“The robust scientific process, by which this evidence has been gathered, should be used as a clear mandate to accelerate the actions that need to be taken. Political leaders cannot possibly ask for a more robust, evidence-based call for action.”

“Leadership is primarily required from developed countries, acknowledging their historical responsibility as well as their financial and technological capacity. However, all countries will need to implement low carbon development strategies. *In this spirit of trust, every country must act on the firm assumption that all others will also act.*”

“All scientists should be urged to contribute to raising levels of public knowledge on these threats to civilization and engage in a massive education effort to popularize the principles in this Memorandum.”

b) From the “UN Human Development Report 2007/2008 Fighting Climate Change: Human Solidarity in a Divided World” Director and Lead Author: Kevin Watkins Published for the United Nations Development Program Released November 27, 2007 In “Summary” of Complete Report (see http://hdr.undp.org/en/media/hdr_20072008_summary_english.pdf for free download) On p. 19, in section “Avoiding Dangerous Climate Change: Strategies for Mitigation” paragraph 1 (Confirmed October 20, 2009)

“Avoiding the unprecedented threats posed by dangerous climate change will require an unparalleled collective exercise in international cooperation.”

c) From Lester Brown’s “Plan B 3.0: Mobilizing to Save Civilization” Published by Earth Policy Institute 2008 (See <http://www.earth-policy.org/Books/PB3/Contents.htm> for free download) From “Introduction”, in section “Plan B—A Plan of Hope” p. 20, paragraphs 1, 2, and 3 (confirmed October 20, 2009)

“Plan B is shaped by what is needed to save civilization, not by what may currently be considered politically feasible. Plan B does not fit within a particular discipline, sector, or set of assumptions. Implementing Plan B means undertaking several actions simultaneously, including eradicating poverty, stabilizing population, and restoring the earth’s natural systems. It also involves cutting carbon dioxide emissions 80% by 2020, largely through a mobilization to raise energy efficiency and harness renewable sources of energy. Not only is the scale of this save our-civilization plan ambitious, so is the speed with which it must be implemented. We must move at wartime speed, restructuring the world energy economy at a pace reminiscent of the restructuring of the U.S. industrial economy in 1942 following the Japanese attack on Pear Harbor. The shift from producing cars to planes, tanks, and guns was accomplished within a matter of months.”

d) From the “About Focus the Nation” section of the “Focus the Nation” website (see <http://www.focusthenation.org/about>) (confirmed October 20, 2009)

“Our 2008 Civic Engagement campaign organized 1900 climate change teach-ins on college campuses on Jan. 31, 2008, engaging 64 members of Congress in direct dialogue with youth activists during the height of the early presidential primaries. Between teach-ins and web-casts, we directly engaged more than 240,000 people in climate change educational forums. The teach-ins generated more than 900 press hits, including articles in TIME, Grist, New York Times, Newsweek, NPR, USA Today, MSNBC, Los Angeles Times and nearly every major daily from the Houston Chronicle to the Boston Globe.”

3. From Richard Heinberg’s Museletter #184 titled “A View from Oil’s Peak” (at <http://www.richardheinberg.com/museletter/184>) (from Richard Heinberg’s website at <http://www.richardheinberg.com/> [Note: Richard Heinberg is widely acknowledged as one of the world's foremost Peak Oil educators. He is a journalist, educator, editor, lecturer, and a Core Faculty member of New College of California, where collaborative efforts between faculty, students, and a variety of other “stakeholders” are creating models for “Powerdown” efforts at the regional and community level. Some of the books he has written: *The Party’s Over: Oil, War, and the Fate of Industrial Societies*; *Powerdown*; *The Oil Depletion Protocol: A Plan to Avert Wars, Terrorism, and Economic Collapse*; and *Peak Everything: Waking Up to a Century of Declines*”]

Here also are some additional references and commentary regarding the subject of peak oil, and adaptations :

a) From the “Hirsch Report” [“The Peaking of World Oil Production: Impacts, Mitigation and Risk Management”—Project Leader: Robert L. Hirsch (SAIC) Commissioned by the Department of Energy, and dated February, 2005] [Accessible at the website of Roscoe Bartlett (R-MD)(USA) at www.bartlett.house.gov/EnergyUpdates/] (see <http://www.bartlett.house.gov/uploadedfiles/hirschreport.pdf>) (Confirmed October 20, 2009)

(in “Summary and Concluding Remarks”)

“Over the past century the development of the U.S. economy and lifestyle has been fundamentally shaped by the availability of abundant, low-cost oil. Oil scarcity and several-fold oil price increases due to world oil production peaking could have dramatic impacts.” (see Point #2: “Oil Peaking Could Cost the U.S. Economy Dearly”, p. 64)

“The world has never faced a problem like this. Without massive mitigation more than a decade before the fact, the problem will be pervasive and will not be temporary.” (see Point #3: “Oil Peaking Presents a Unique Challenge”, p. 64)

(in “Executive Summary”)

“The peaking of world oil production presents the U.S. and the world with an unprecedented risk management problem. As peaking is approached, liquid fuel prices and price volatility will increase dramatically, and, without timely mitigation, the economic, social, and political costs will be unprecedented.” (see paragraph 1, p. 4)

“The challenge of oil peaking deserves immediate, serious attention, if risks are to be fully understood and mitigation begun on a timely basis.” (see point #2, p. 5)

b) From Dr. Fatih Birol (Chief Economist, International Energy Agency) Interview with Astrid Schneider (Internationale Politik) Posted at www.relocalize.net “News Postings” section on May 3, 2008 (accessible at http://www.relocalize.net/fatih_birol_interview_leave_oil_before_it_leaves_us) (confirmed December 25, 2009)

(Excerpt)

Schneider: If I understand you correctly, you say that the demand for oil could rise 3 % globally every year, while we have to expect a decrease of 4 % in oil production in the time from now until 2015. That would be 7 % each year which are missing.

Birol: The demand might increase a little slower. But there could be a large gap between what should be there and what actually will be there, especially if we do not put massive efforts into improving the efficiency of cars or change to other transportation systems. If we don't take measures on the consumer side, the consumption will continue to grow. And if we have not invested enough into oil production, we will flounder.

Schneider: But when you think of the life cycle of goods, of the long investment cycles of machines, power stations or air conditioning systems: do you think an adjustment of the consumer side to a lower supply path could be done that fast?

Birol: No, but I don't think that prices will go up that rapidly. We can see a gradual incline and that will give the people some time to adapt. But on the long run it has to be clear: if oil will be gone by 2030, or in 2040 or 2050 does not change much.

Schneider: You really say that?

Birol: Yes, one day it will definitely end. And I think we should leave oil before it leaves us. That should be our motto. So we should prepare for that day - through research and development on alternatives to oil, on which living standards we want to keep and what alternative ways we can find.”

c) From Interview with Sadad al Hussein—“The Facts Are There” by Dave Bowden and Steve Andrews (Note: Sadad al-Huseini was the former head of exploration and production at Saudi Aramco) (Archived at the Energy Bulletin website September 28, 2009; see <http://energybulletin.net/node/50234>) (Confirmed December 25, 2009)

(Excerpt)

“Question: Assume for the moment that declines in demand have flattened and that we resume modest growth in demand in a year or so. Are there adequate new oil projects in the pipeline to meet rising demand for a few more years?

Sadad: I’ve been tracking the number of projects, globally, for a long time both in the Middle East and elsewhere—Russia, Brazil, west coast of Africa, and others. A lot of this information is in the public domain, so there is no mystery there. The International Energy Agency recently reported on the same numbers. The bottom line is that there are not enough projects. There is not enough new capacity coming on line, within say the next five to six years, to make up for global declines. And that’s assuming a very moderate level of declines—6% to 6.5% for non-OPEC, perhaps a 3.5% to 4% decline rate for OPEC.

Even at these modest decline rates, we are basically going to see a shortage of capacity within two to three years. We’re being lulled by this current excess capacity, which has more to do with lower demand than anything to do with supply. So we do have a problem in the near term. In the longer term it’s even worse because in the longer term the lead time to discover, develop and put on line production runs into 10 years. And there isn’t enough being done in the long term as well. So it’s both a short and a long-term problem....

Question: Why do you think there is so much denial that world oil production is approaching or has reached a plateau?

Sadad: There is a push-back to the notion that there is a plateau in world oil supplies which is largely based on lack of information or lack of research. In fact, if you look at published information—for example, British Petroleum’s annual statistical report—it very clearly shows that from 2003 forward, oil production has hardly increased. So the information is there. If you look at some of the advertising that Chevron has been putting out for years now, they clearly say we’re half-way through the world’s reserves. The information is there. The facts are there. Oil prices did not jump four-fold over a three- or four-year period for any reason other than a shortage of supply. Yes, there may have been some recent volatility in 2008, but the price trend started climbing way back in 2002-2003. So, these are realities and the push-back is a sense that somehow the market is not able to deal with these realities, that somehow people can’t cope with these realities.

On the other hand, if you don’t talk about them, you never will fix the situation. This is not going to get any better. This is going to get worse because you have population growth all over the world, you have a standard of living that is improving all over the world, you have aspirations across the globe for a better quality of life, and people want energy, so it’s actually important to talk about the facts and come up with solutions rather than act as if these issues don’t exist and then wait for some solution to materialize out of nowhere. That’s a role of government—to highlight these issues and to fix them, or at least take a stand and try to fix them. So I think the push-back is probably ill-advised.”

d) From “Reflections from Colin Campbell on Peak Oil and ASPO” by Dave Bowden (On September 23, Dave Bowden video-taped Colin Campbell at his home on the southwestern coast of Ireland. Excerpts of that interview are attached below) (Note: Above referenced excerpts were archived at the Energy Bulletin website on October 19, 2009; see <http://www.energybulletin.net/node/50427>) [Note: “**Colin J. Campbell**, Ph.D. Oxford, (born in Berlin, Germany in 1931) is a retired British petroleum geologist who predicted that oil production would peak by 2007. The consequences of this are uncertain but drastic, due to the world's dependence on fossil fuels for the vast majority of its energy. His theories have received wide attention but are disputed by some in the oil industry and have not significantly changed

governmental energy policies at this time.... Influential papers by Campbell include *The Coming Oil Crisis*, written with Jean Laherrère in 1998 and credited with convincing the International Energy Agency of the coming peak; and *The End of Cheap Oil*, published the same year in *Scientific American*.... The Association for the Study of Peak Oil and Gas, founded by Campbell in 2000, has been gaining recognition in the recent years. The Association has organized yearly international conferences since 2002. The most recent was in Denver, Colorado on 11-13 October 2009.” (From Wikipedia entry for Colin J. Campbell; at [http://en.wikipedia.org/wiki/Colin_Campbell_\(geologist\)](http://en.wikipedia.org/wiki/Colin_Campbell_(geologist))) (Confirmed December 25, 2009)

(Excerpt)

“Question: What about the notion of making America energy independent?

Campbell: It can’t be done voluntarily. To make America energy-independent is not something I think any government can achieve. But within 50 years that’s what nature will deliver. Countries will have to be energy independent. They have no alternative. Some may get there quicker than others, but it’s not something some government will say, well this is our plan of action. It will delivered to them by the force of nature. So America will indeed be energy independent and probably quite soon if these imports dry out. What that means and how they react to such a situation is another day’s work.”

e) Less and less availability of cheap oil will directly impact much more of the infrastructure of modern industrial society than most of us can easily imagine. (For some examples, see “The Oil Crash and You” by Bruce Thomson at www.oilcrash.com/roe.htm Note: Bruce Thomson is a technical writer in New Zealand, and moderator of the RunningonEmpty2 Internet Discussion Forum, which assisted in creating the document.)

f) As to the adaptations we—collectively—must make to live in much less energy intensive human settlements in the future, here (below) are four summary statements which may be helpful indicators of steps towards sustainable human settlements:

i) From an article titled “The Green New Deal” by Richard Heinberg, published on the website of Energy Bulletin on October 20, 2008 (at <http://energybulletin.net/node/46934>) (see paragraph 3) (Confirmed October 20, 2009) (Initially published on October 20, 2008 by Post Carbon Institute).

“Peak Oil and Climate Change present threats and imperatives of a scale unprecedented in human history. By taking up these imperatives through a de-carbonized retrofit of the nation’s (and ultimately the world’s) transport, food, and manufacturing systems, policy makers can address a number of crises simultaneously—environmental decline, resource depletion, geopolitical competition for control of energy, unemployment, balance of trade deficits, malnutrition and food related health problems, and more.”

ii) From the FAONewsroom section of The Food and Agriculture Organization of the United Nations (FAO) website. In the “Focus on the Issues” subsection, see “High-level conference on world food security...”, and then see “Conference News” (6/6/2008). Specific article “Food Summit Calls for More Investment in Agriculture” (paragraphs 1, and 9) (at <http://www.fao.org/newsroom/en/news/2008/1000856/index.html>) (Confirmed October 20, 2009)

“The Summit on soaring food prices, convened by the UN Food and Agriculture Organization (FAO) (June 3-5, 2008), has concluded with the adoption by acclamation of a declaration calling on the international community to increase assistance for developing countries, in particular the least developed countries and those that are most negatively affected by high food prices.

...“On climate change, the Declaration said: ‘It is essential to address (the) question of how to increase the resilience of present food production systems to challenges posed by climate change... We urge governments to assign appropriate priority to the agriculture, forestry and fisheries sectors, in order to create opportunities to enable the world’s smallholder farmers and fishers, including indigenous people, in particular vulnerable areas, to participate in, and benefit from financial mechanisms and investment flows to support climate change adaptation, mitigation and technology development, transfer and dissemination. We support the establishment of agricultural systems and sustainable management practices that positively contribute to the mitigation of climate change and ecological balance.’”

iii) From pdf version of “The Food and Farming Transition: Toward a Post Carbon Food System” by Richard Heinberg and Michael Bromberg, Ph.D Post Carbon Institute 2009 (Available online at www.postcarbon.org/food) Excerpt from Section “Farm Work” (see p. 28-29) (Confirmed October 20, 2009)

“While the proportion of farmers that would be needed in the U.S. if the country were to become self-sufficient in food grown without fossil fuels is unknown (that would depend upon technologies used and diets adopted), it would undoubtedly be much larger than the current percentage. It is reasonable to expect that several million new farmers would be required—a number that is both unimaginable and unmanageable over the short term. These new farmers would have to include a broad mix of people, reflecting America’s increasing diversity. Already growing numbers of young adults are becoming organic or biodynamic farmers, and farmers’ markets and CSAs are springing up across the country (Figure 11). These tentative trends must be supported and encouraged. In addition to government policies that support sustainable farming systems based on smaller farming units, this will require:

Education: Universities and community colleges must quickly develop programs in smallscale ecological farming methods—programs that also include training in other skills that farmers will need, such as in marketing and formulating business plans. Apprenticeships and other forms of direct knowledge transfer will assist the transition. Gardening programs must be added to the curricula of all primary and secondary schools, especially in summer programs.

Financial Support: Since few if any farms are financially successful in their first few years, loans and grants will be needed to help farmers get started.

Community and Cultural Revitalization: Over the past decades American rural towns have seen too many of their young people flee first to distant colleges and then to cities. Farming communities must be interesting, attractive places if we expect people to inhabit them and children to want to stay there.”

iv) From the IPCC document “Spiritual Peacebuilding: 47 Quotes and Proverbs” by this writer (August, 2007) (see section F, number 9, p. 5 at <http://ipcri.net/images/Spiritual-Peacebuilding--47-Quotations-and-Proverb.pdf>) (confirmed October 20, 2009)

“If many people can learn to find contentment and quality of life while consuming much less, this limiting of desires at the ‘root’ will save much trouble trying to respond to the symptoms as they materialize worldwide. This is part of the ‘spiritual teachings’ element which often gets overlooked...”

v) Further commentary by this writer, on the implications of resolving the “triple crises” of global warming, peak oil, and widespread resource depletion:

This writer understands peak oil in the following sense: the increasing awareness that the era of “cheap oil” is over is one element among many (including global warming, widespread resource depletion, ecological footprint analysis, etc.) which are pointing to the need for much less energy intensive human settlements in the future. As high level investment portfolios shift in response to these indicators, the likelihood that the vast sums of investment necessary to produce “very costly oil” —and the likelihood that there will be customers willing to pay a high price to use it—will very likely diminish, and continue to diminish, *as more and more people discover that it is possible to have high quality of life while using much less resources*. Thus, while there may yet be more oil on this planet than we have used thus far, it is becoming more and more likely that we have arrived at a “peak” in terms of how much oil we—collectively—will use in one year.

4. From “Hunger Facts: International/Facts and Figures on Health” section of the Bread for the World website (see <http://www.bread.org/learn/hunger-basics/hunger-facts-international.html>) (see “Facts and Figures on Health” Bullets #3, #4, and #6) (Confirmed October 20, 2009)

“In 2006, about 9.7 million children died before they reached their fifth birthday. Almost all of these deaths occurred in developing countries...”

Most of these deaths are attributed, not to outright starvation, but to diseases that move in on vulnerable children whose bodies have been weakened by hunger. “

“The four most common childhood illnesses are diarrhea, acute respiratory illness, malaria and measles. Each of these illnesses is both preventable and treatable. Yet, poverty interferes in parents’ ability to access immunizations and medicines. Chronic undernourishment on top of insufficient treatment greatly increases a child’s risk of death.”

5. From www.infoplease.com at www.infoplease.com/ipa/A0883352.html ; and U.S. Bureau of the Census POP Clock estimate at www.census.gov/cgi-bin/ipc/popclockw) (Both confirmed on October 20, 2009)

“In 1804, the world population was 1 billion.

In 1927, the world population was 2 billion (123 years later).

In 1960, the world population was 3 billion (33 years later).

In 1974, the world population was 4 billion (14 years later).

In 1987, the world population was 5 billion (13 years later).

In 1999, the world population was 6 billion (12 years later).”

“As of October, 20, 2009 at 00:43 GMT (EST + 5), the world population was estimated to be 6,791,794,939.”

6. Here are three references which, taken in context with the “Triple Crises” (Points 4, 5, and 6) in the “Ten Point Assessment”, ought to be sufficient to suggest that there is such a thing as “indiscriminate” use of resources and ecological services:

a) From the “Online Features/Consumption/State of Consumption: Trends and Facts” section of the Worldwatch Institute website at <http://www.worldwatch.org/node/810> (see paragraphs 1 and 2) (Confirmed June 8, 2008)

“By virtually any measure—household expenditures, number of consumers, extraction of raw materials—consumption of goods and services has risen steadily in industrial nations for decades, and it is growing rapidly in many developing countries.”

“By one calculation, there are now more than 1.7 billion members of ‘the consumer class’—nearly half of them in the developing world. A lifestyle and culture that became common in Europe, North America, Japan, and a few other pockets of the world in the twentieth century is going global in the twenty-first.”

b) The following passages are excerpts from “International Communications: A Media Literacy Approach” by Art Silverblatt and Nikolai Zlobin (July, 2004) (most content accessible at Google Books)

“The United States is the home of the world’s largest and most influential advertising industry. As of 2001, 43% of the advertising produced in the world originated in the United States. Indeed, half of the top 100 global marketers—and six of the top ten—are U.S. companies.” (p. 228)

“The international market is saturated with American entertainment programming. Hollywood films account for approximately 85% of movie audiences worldwide. Further, American programming makes up approximately 65% of global prime-time TV viewing.” (p. 69)

c) From Press Release (August 13, 2002) “Londoners Running Up Massive Debt on Earth’s Resources” at www.citylimitslondon.com/city_limits_press_release.htm (see paragraphs 2, 6, and 8) (Confirmed June 8, 2008)

“The City Limits Report reveals each Londoner has an ecological footprint of 6.63 global hectares.... The current calculation for a sustainable footprint is 2.18 global hectares.”

“Paper and plastics are the biggest hitters in the material and wastes footprint. Paper’s large contribution is accounted for partly by the large quantities Londoners use, 2,908,000 tonnes (per year).... Londoners consume less plastic than paper—691,000 tonnes (per year)—but because it is derived from fossil fuel and very little is currently re-cycled, plastic makes up a large part of the average Londoner’s footprint.”

“Forty one per cent of the Ecological Footprint (2.80 gha) is accounted for by the food Londoners eat.... In total, London consumes 6.9 million tonnes of food (per year), more than three quarters of which is imported. London throws away 560,000 tonnes of food (per year) as waste.” [“London throws away 560,000 tonnes of food (per year) as waste.”]

7. From website of Population Reference Bureau-- see <http://www.prb.org/Educators/TeachersGuides/HumanPopulation/Urbanization.aspx>) (see paragraphs one and two) (Confirmed October 20, 2009)

"In 1800, only 3 percent of the world's population lived in urban areas."

"By 1900, almost 14 percent were urbanites, although only 12 cities had 1 million or more inhabitants."

"In 1950, 30% of the world's population resided in urban centers. The number of cities with over 1 million people had grown to 83."

"In 2008, for the first time, the world's population was evenly split between urban and rural areas. There were more than 400 cities over 1 million and 19 over 10 million."

8. Here is one source which provides evidence of widespread resource depletion:

The "Millennium Ecosystem Assessment"

a) From Washington Post article "Report on Global Ecosystems Calls for Radical Changes: Earth's sustainability not guaranteed unless action is taken to protect resources" (Shankar Vedantam, March 30, 2005 p. A02 (see <http://www.washingtonpost.com/wp-dyn/articles/A10966-2005Mar29.html>) (paragraphs 1, 2, and 4) (Confirmed October 25, 2009)

"Many of the world's ecosystems are in danger and might not support future generations unless radical measures are implemented to protect and revive them, according to the most comprehensive analysis ever conducted of how the world's oceans, dry lands, forests and species interact and depend on one another."

"The new report collates research from many specific locales to create the first global snapshot of ecosystems. More than 1,300 authors from 95 countries participated in the Millennium Ecosystem Assessment, whose results are being made public today by the United Nations and by several private and public organizations."

"The effort brought together governments, civil society groups, industry and indigenous people over a four-year period to examine the social, economic and environmental aspects of ecosystems."

b) From the "Overview of the Millennium Ecosystem Assessment" at the Millennium Ecosystem Assessment website (see <http://www.millenniumassessment.org/en/article.aspx?id=58>) See section "What are the main findings of the MA?" (see 4 "bullet" summaries)

i) "Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history, largely to meet rapidly growing demands for food, fresh water, timber, fiber and fuel. This has resulted in a substantial and largely irreversible loss in the diversity of life on Earth."

ii) "The changes that have been made to ecosystems have contributed to substantial net gains in human well-being and economic development, but these gains have been achieved at growing costs in the form of the degradation of many ecosystem services, increased risks of nonlinear changes, and the exacerbation of poverty for some groups of people. These problems, unless addressed, will substantially diminish the benefits that future generations obtain from ecosystems. "

iii) “The degradation of ecosystem services could grow significantly worse during the first half of this century and is a barrier to achieving the Millennium Development Goals.”

iv) “The challenge of reversing the degradation of ecosystem while meeting increasing demands for services can be partially met under some scenarios considered by the MA, but will involve significant changes in policies, institutions and practices that are not currently under way....”

9. From the “World Report on Violence and Health” (World Health Organization Geneva 2002) in Chapter 9 “The Way Forward: Recommendations for Action” p. 254 (at <http://whqlibdoc.who.int/hq/2002/9241545615.pdf>) (Confirmed October 20, 2009)

“The global drugs trade and the global arms trade are integral to violence in both developing and industrialized countries. Even modest progress on either front will contribute to reducing the amount and degree of violence suffered by millions of people. To date, however—and despite their high profile in the world arena—no solutions seem to be in sight for these problems.”

10. Some statistics associated with “cultures” of violence

a) From “Table on World and Regional Military Expenditures 1988-2007” in “Sipri Data on Military Expenditure” section of Stockholm International Peace Research Institute website (http://archives.sipri.org/contents/milap/milex/mex_wnr_table.html) (Confirmed October 20, 2009)

“According to an estimate by the Stockholm International Peace Research Institute, world military expenditures for the years 1997-2007 totaled 10.791 trillion dollars (\$10,791,000,000,000) (10,791 billion dollars).

b) From “Crime in the United States” section of the United States Federal Bureau of Investigation website, (using the “Quick Finds” subsection at the bottom of the page, for the question “Where can I find the number of estimated violent and property crimes for the Nation over the past twenty years?”) (at http://www.fbi.gov/ucr/05cius/data/table_01.html) (Confirmed October 20, 2009)

According to FBI (Federal Bureau of Investigation) statistics, in a Table titled “Crime in the United States: by volume and rate per 100,000 inhabitants”-- there were an average of 16,757 deaths by murder or non-negligent manslaughter per year in the United States, during the years 1996-2005.”

c) From the “Publications” section of the Small Arms Survey website, in the subsection “Small Arms Survey 2003”, (in “About the Small Arms Survey 2003, see “Key Findings” box) (at http://www.smallarmssurvey.org/files/sas/publications/year_b_pdf/2003/2003SAS_press-release_yb03_en.pdf) (Confirmed October 20, 2009)

“There are at least 639 million firearms in the world today, of which 59% are legally held by citizens.”

“At least 1,134 companies in 98 countries worldwide are involved in some aspect of the production of small arms and/or ammunition.”

d) From the “Publications” section of the Small Arms Survey website, in the subsection “Small Arms Survey 2007: Guns and the City” (in “About the Small Arms Survey 2007, under “Key Findings”, in “section “Guns and the City”) (at http://www.smallarmssurvey.org/files/sas/publications/year_b_pdf/2007/2007SAS_English_press_kit/2007SAS_cover%20sheet_en.pdf) (confirmed October 20, 2009)

“• Large-scale and uncontrolled urbanization appears to be associated with increased rates of armed violence.

• Rapid urbanization is generally coupled with decreasing levels of public safety, posing serious challenges to the provision of security and justice.”

e) From the “World Report on Violence and Health” (World Health Organization Geneva 2002) in Chapter 9 “The Way Forward: Recommendations for Action” p. 254 (at <http://whqlibdoc.who.int/hq/2002/9241545615.pdf>) (Confirmed October 20, 2009)

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11. From John D. Haas “Future Studies in K-12 Curriculum” Social Science Educational Consortium 1988 (page number not retrieved)

12. Many people may think it is naïve to imagine that people from so many diverse religious, spiritual, moral, and cultural traditions can decide to come together in such a way as to not only encourage, but participate in, a high percentage of constructive thinking and constructive action in response to the difficult challenges ahead. From this writer’s point of view, such skepticism and cynicism depend for their existence on doubts as to whether it is possible for people to achieve highly advanced forms of wisdom and compassion through genuine instruction and sincere effort. Thus it is that there is a great responsibility on those who are in any way representatives of religious, spiritual, and/or moral traditions: “... the responsibility of demonstrating by your calmness, composure, humility, purity, virtue, courage and conviction under all circumstances, that the Sadhana (spiritual discipline or systematic learning process) you practice has made you a better, happier and more useful person.” (quote from “Divine Intervention...” document, p. 27)(“Sathya Sai Speaks” 7.17 p89)

13. From pre-conference (September, 2007) information for a “Teach In: Confronting the Global Triple Crises—Climate Change, Peak Oil (The End of Cheap Energy), and Global Resource Depletion and Extinction” (September 14-17, 2007 at The George Washington University Lisner Auditorium in Washington D.C.) Sponsored by The International Forum on Globalization (www.ifg.org) and The Institute on Policy Studies [From Teach-In Flyer and Draft Program at http://www.ifg.org/events/Triple_Crisis_Speakers.pdf (see p. 2)] (confirmed December, 25, 2009)