ZAID HASSAN

NOTES ON A STRATEGIC VACUUM

October 19, 2011

Submission to Public Administration Select Committee (PASC), House of Commons, October 23, 2010. The PASC is undertaking a follow-up inquiry into Government policy and the capacity for strategic thinking in Whitehall.

NOTES ON A STRATEGIC VACUUM

SUMMARY

- We are in the midst of a crisis, one that is little understood and will shape the contours of our societies in the coming decades.
- At the heart of this crisis is the question of how societies meet their energy requirements.
- Societies everywhere seek to enter into cycles of growth. Such
 cycles are currently reliant on cheap fossil fuels and the availability
 of cheap finance, both of which cannot be assured.
- The un-sustainable nature of such growth cycles risks a "maintenance crisis," a decline in capacity, which if unchecked results in permanent losses across all sectors of society.
- The UK is currently suffering a maintenance crisis with attendant losses in capacity.
- This crisis is part of the strategic backdrop for institutions today.
- Decisions are made with little cognizance of the wider strategic backdrop.
- It is difficult to discern strategies for the transformation of such growth cycles from a reliance on cheap fossil fuels. It is also difficult to identify serious strategies to cope with the implications of continuing to fuel such cycles, which will probably result in dangerous climate change.
- Public institutions are ill suited to responding strategically to this crisis.
- Business-as-usual responses to this crisis are purely tactical in nature.
 They are piecemeal at best and will be almost certainly be overwhelmed by trends.
- If governments fail to respond strategically to this crisis, "developed"

countries risk losing that status by going through a "long descent" to predeveloped states.

- We are experiencing a strategic vacuum that must be urgently addressed by our institutions.
- There needs to be widespread recognition that our institutions are not currently up to the task of responding strategically to our current crisis.
- Efforts to address complex challenges at a causal and strategic level must be valourized and resources diverted to address the vacuum of strategic thought in public institutions.
- We must re-negotiate the contract for services between public institutions and society to take into account strategic responses to the current crisis.

NOTES

Energy is a core strategic driver

- What key drivers will shape our societies in this coming century?
 A decade into the 21st Century we are in the midst of a little understood crisis.
- Our contemporary crisis is a function of the ability to generate enough energy to serve current and growing requirements of a society.
- 3. Energy, when usefully harnessed, is incorporated via energy flows into the idea of "capital" defined as including "...physical capital such as food, fields, tools, and buildings; human capital such as laborers and scientists; social capital such as social hierarchies and economic systems; and information capital such as technical knowledge." ¹
- 4. Modern societies are dependent on energy. Our ability to produce new capital, for example, to feed ourselves, our ability to build infrastructure, our ability to create new products and services, our

1. "How Civilizations Fall: A Theory of Catabolic Collapse" by John Michael Greer (2005) [www.dylan.org.uk/greer_on_collapse.pdf]

ability to respond to the challenges we face, are all a function of energy.

- 5. Societies can be categorized into three classes. Firstly, high consumers of energy, for example the US or the EU, secondly growing consumers of energy, such as Brazil, India and China (the BRICS) and thirdly low consumers of energy such as for example sub-Saharan nations.
- 6. All three classes of society aspire to high-quanta of energy consumption and seek developmental pathways towards ever increasing energy requirements while becoming increasingly cognizant of limitations imposed on these pathways by climate science.
- 7. In the coming century, societies everywhere will be shaped by their strategic responses to the question of how they will meet their energy requirements. ²

2. See "The Quest: Energy, Security and the Remaking of the Modern World" by Daniel Yergin, (2011) for an account of energy in the 21st century

From growth to collapse

- 8. Nation-states seek to enter (or in some cases maintain) a cycle of surplus production. Capital is used to produce surplus capital, which in turn helps generate yet more capital (with waste as a byproduct of production). This process is a cycle of growth. In recent history such cycles have been fed by fossil fuels, with a combination of public policy, private finance and technology providing the means of growth. On civilizational scales such cycles are known as anabolic cycles.³
- 9. Growth cycles require capital surpluses of many different types in order to feed growth. China is in a classic cycle of growth, with a surplus of USD \$3.5 Trillion⁴ looking for investments coupled with the largest labour pool in the world. China's capital surplus will thus be used strategically to maintain and accelerate China's growth.
- 10. Countries that do not have such capital surpluses increasingly rely on either sovereign debt or taxes to feed cycles of growth. In other words, where they cannot simply raise taxes, they borrow money as a means of generating other forms of capital, or energy flows, to

- **3.** Greer (2005)
- **4.** "China's May 2011 Budget Surplus 234.4 Billion Yuan" [http://thecognitivedissonance.com/?p=1946]

feed growth.

- 11. Societies increase in complexity during periods of growth. Some examples of complexity in this instance are new infrastructure, new types of consumer goods or the growth of new service industries.
- 12. Increasing complexity in society, also known as "development", requires increasing amounts of capital (physical, social, informational etc) in order maintain systems.
- 13. The energy required to maintain complex societies, so called "maintenance energy," is higher than that of less complex societies. Societies can be ranked according to their energy intensity, the higher the energy intensity, the greater the maintenance energy required.
- 14. A change in society's ability to meet its maintenance energy requirements, for example from a drying up of liquidity, the decline of natural resources, or an increase in the per-unit cost of energy, leads to a "maintenance crisis".

5. Greer (2005)

- 15. In a maintenance crisis, a society struggles to ensure that capital, in the form of physical capital, social capital and informational capital is not lost.
- 16. A number of societies that are high-consumers of energy, as well as a number of low-consumers, are currently experiencing such a maintenance crisis, which puts them into a cycle of decline. On civilizational scales such cycles are known as catabolic cycles⁶.

6. Greer (2005)

- 17. The timeframe for such declines are measured in decades and centuries. Demographic trends currently in motion or prevalent behaviours provide some of the driving forces for such declines. Such timeframes are not easily amenable to policy-responses.
- 18. Arguably, the United States went into such a decline sometime in the 1970s⁷. Its loss of manufacturing capacity over the 1980s–1990s one sign of entering a cycle of decline.
- John Michael Greer (2011) [http://www.energybulletin.net/stories/2011-01-20/onsetcatabolic-collapse]

7. "The onset of catabolic collapse" by

19. As such a crisis continues, high-energy societies risk a loss of complexity. These losses are initially temporary, for example,

- new hospital wards being unstaffed for a year, but then lead to permanent losses with unused hospital wards becoming permanently unusable⁸.
- 20. If growing consumers of energy are unable to continue to find capital to grow, they will face the eventual prospect of decline and potential collapse. Collapse represents a permanent loss of complexity. Russia after the collapse of the Soviet Union provides a modern instance of such a loss of complexity.

Complex societies are subject to limits

- 21. Strategies are actionable pathways that lead to a success scenario. In considering the energy requirements of societies, success scenarios would need to address shift to a cycle of growth fuelled in a sustainable manner, and the arrest of decline, and the prevention of widespread collapse.
- 22. The combination of maintenance requirements for high-energy society and increasing requirements for growth-societies means that the planet as a whole is in a cycle of growth, with energy consumption and hence emissions increasing every year.
- 23. Global emissions from energy alone hit 32 GT per year of CO₂ in 2010. The International Energy Agency had originally predicted the world would reach this level of emissions in 2020. Current pledges see emissions increasing. ¹¹
- 24. The particular combination of growth at a planetary level and decline at the level of the Western nation-states has resulted in a peculiar set of crises in almost every system that can be named, from finance to food to healthcare. All of these crises are struggles of trying to meet maintenance requirements.
- 25. Against this backdrop of growth and decline is the science of planetary limits. Current climate science demands that prevention of dangerous anthropogenic climate changes requires that global emissions peak by 2015-20 and decline by 90% (or more) by 2050¹².
- 26. There is virtually no prospect of the global growth cycle either

- 8. "Hospitals 'struggling with NHS mortgage repayments" [http://www.bbc.co.uk/news/health-15010279], 22 September 2011
- 9. "Far-reaching changes in the system of care and the biggest-ever squeeze on health budgets could lead to record numbers of beds and hospitals closing." London's NHS "On the Brink" BMA, 06 January 2010, http://www.bma.org.uk/representation/local_representation/regional_councils/lrceportlondonsnhsonthebrink.jsp
- "Reinventing Collapse: The Soviet Example and American Prospects" - Dmitry Orlov, New Society Publishers (2008)

- 11. "To limit warming to these goals, total global emissions need to drop below 44 billion tonnes CO₂eq per year by 2020. In 2010 emissions were about 50 billion tonnes CO₂eq per year and rising. Under the Cancun pledges we project that global emissions could reach 54 billion tonnes CO₂eq per year by 2020..." Source: http://www.climateactiontracker.org/
- 12. "Copenhagen Accord pledges are paltry", Joeri Rogelj, Julia Nabel, Claudine Chen, William Hare, Kathleen Markmann, Malte Meinshausen, Michiel Schaeffer, Kirsten Macey & Niklas Höhne in Nature 464, 1126–1128 (22 April 2010)

- being arrested or fed by renewable energy within the next 5-10 years as the science demands¹³.
- 27. Developed societies have dramatically overspent their carbon budgets in order to feed growth. The complexity that results from these investments risks being largely unsustainable, either due to a lack of sustainable nondebt based capital to purchase cheap energy, or a lack of cheap energy ("energy famines"), or due to the reality of planetary limits.
- 28. The un-sustainability of investments, that is, highly complex societies without the capital to maintain their systems, leads to decline, then risks collapse and thus to the widespread loss of complexity (capacity).
- 29. High-energy societies are trapped in an energy bubble, one that risks collapse under current "business-as-usual" (BAU) responses.

 The only route out of this bubble would be the discovery of endless supplies of cheap energy (with accompanying climate impacts).
- 30. The costs of feeding this energy bubble will be borne by the poorest members of our society. The poorest members of our society are defined by their lack of ability to be mobile in the face of crisis. In the coming century the poor will be those unable to move in the face of oncoming crises, be that financial or climatic.
- Strategies do not exist
- 31. At the level the global or specific nation-states, virtually no strategies exist for achieving sustainable growth in the short term, or for addressing decline nor for coping with collapse.
- 32. No strategies exist for addressing peaking of global emissions by 2015.
- 33. No strategies exist for bringing global emissions down to a safe limit by 2050. Policy orientated responses such as the UNFCCC largely leave the challenge of implementation to a post-treaty phase, by which time planetary thresholds will likely have been crossed.

- 13. "On Development, Demography and Climate Change: The End of the World as We Know it?" by Tim Dyson London School of Economics, Population and Environment, Vol. 27, No. 2, November 2005
- **14.** "North Sea gas production falls 25%" http://www.guardian.co.uk/business/2011/ sep/29/north-sea-gas-production-falls-by-aquarter
- 15. "5% health: The risk of catabolic collapse and peak fat in modern health systems" by John Thackara, (2011) http://energybulletin.net/stories/2011-10-01/5-health-risk-catabolic-collapse-and-peak-fat-modern-health-systems

- 34. This lack of strategy increases the probability of dangerous climate change dramatically. A world characterized by dangerous climate change is a situation that remains almost entirely un-confronted from a strategic point of view¹⁶. Such a situation will put increased pressure on development, humanitarian and security responses and will largely shape relationships between nation-states.
- 16. See Dyson 2005 for more
- 35. Some success scenarios for shifting growth cycles from fossil fuels to renewable sources exist. These are however technical models¹⁷ designed to support decision-making. While it is therefore possible to imagine scenarios, practical strategies for manifesting these scenarios are nonexistent.
- 17. http://www.iiasa.ac.at/Research/ENE/ model/message.html and http://gains.iiasa.ac.at/ index.php/home-page/241-on-line-accessto-gains
- 36. The market currently provides no incentives to undertake steps towards shifting growth cycles to minimize carbon dioxide emissions, nor to decarbonize the growth cycle to be fueled by renewable sources.
- 18. "George Osborne vows UK carbon emissions cuts will not lead Europe" [http://www.guardian.co.uk/environment/2011/oct/03/osborne-uk-carbon-emissions-europe]
- 37. Piecemeal strategies currently exist for reducing the energy intensity of societies, that is, the lowering of the maintenance requirements of society. All such strategies are, however, largely out of step with what the science demands and are contingent on the shifting winds of political reality ¹⁸.
- 38. Strategies for how such maintenance requirements are going to be met on a planet with an extra three billion people are difficult to discern.
- 39. Current responses are predicated on ignoring the interconnections between systems. For example, an international liquidity crisis, a food crisis or global emissions limits do not recognize the distinction between domestic and foreign, nor the distinctions between ministerial portfolios.
- 40. A lack of global or national strategies means that nation-states will be locked into increasingly difficult struggles to meet their energy requirements. These struggles will shape the contours of our societies in the coming decades.
- 41. Public institutions are perhaps least suited to respond strategically to the coming struggles responding largely to short-term political

drivers as opposed to medium or long-term geo-strategic.

42. There exists a strategic vacuum as to how we should respond to the crisis we find ourselves in.

Business-as-usual responses will be overwhelmed

- 43. This is a key part of the strategic backdrop for decision-making today, of which there is a profound lack of cognizance.
- 44. The nature of the crisis means that current, that is, business-as-usual (BAU) strategies generally consist of piecemeal responses. They focus on the optimization of just one part of a sub-system, such as the "Greek debt-crisis" or "food" or "education," while ignoring the wider systems that such sub-systems are a part of and intimately connected to via energy flows.
- 45. BAU strategies focus on what could be thought of as the "downstream" component of challenges, that is, the alleviation of symptoms. Such a focus is blind to causal events "upstream," and unable to address the root causes, the underlying origins that create the symptoms in the first place.
- 46. BAU responses are rooted in a planning and technical mindset, that is, they are largely technocratic in nature. The nature of the crisis we face is much more than a technical problem, for example, the climate crisis has been called "the perfect moral storm." As such BAU strategies place a limit on policy responses. Responses outside of BAU are largely invisible or disregarded by policy-makers.
- 47. A BAU response can be thought of as a response that is essentially tactical, as opposed to strategic, in nature. This means that a decision is made on the basis of "greatest immediate value" to the actor making the decision as opposed to a strategic decision made "to achieve the greatest overall value irrespective of immediate return."
- 48. The tactical nature of BAU responses ignores the relationship between the production of symptoms and shifts in our capacity to treat symptoms. If our capacity to address symptoms declines (as happens during a maintenance crisis), while the rate at which

19. "A Perfect Moral Storm: The Ethical Tragedy of Climate Change", Stephen M. Gardiner, Oxford University Press, 2011

- symptoms increase dramatically, then we can be mathematically certain that current strategies will be overwhelmed.
- 49. This strategic vacuum can be filled. Doing so requires just one internal shift, a genuine willingness to depart from "business-as-usual" strategies.
- 50. The opportunity represented by this strategic vacuum is enormous. Within it lie new models of governance, new business models, and new approaches to civic participation. Nations and organizations that wake up to the nature of the crisis will find themselves in positions of leadership in the coming decades. Those that do not, will struggle with decline and collapse or simply fade away.
- 51. If however, conscious and deliberate strategies are not articulated and put into action, then human society as a whole risks collapse, with an attendant loss of complexity.
- 52. The UK is an example of a high-energy society. This means that it requires large amounts of capital and access to cheap fossil fuels in order to maintain its energy-intensity.
- 53. There are signs that the UK is suffering a maintenance crisis.
- 54. The most obvious manifestation of a maintenance crisis being cuts in public services even as absolute levels of public borrowing increase. Cuts in services represent a loss of capacity. In other words, the UK as a whole is currently unable to maintain levels of provision in public services.
- 55. Increasing energy costs for consumers, a repudiation of climate related pledges, the decline of existing fossil fuel assets and a search for new sources of energy are also indications of a maintenance crisis.
- sacrificing parts of society that seem unviable to maintain, for example, the coalmining industry or a manufacturing base.

 Such sacrifices and the loss of capacity they represent signal a maintenance crisis. We are currently experiencing a new round of such losses

- 57. It is unclear if the current cuts to public services are temporary or a prelude to permanent losses.
- 58. If governments fail to respond strategically to this crisis, "developed" countries will lose that status and revert to pre-developed states.
- 59. A key difficulty in addressing these issues involves transcending denial, reactionary positions, tactical responses, and depression in accepting our situation coupled with an unwillingness to act. Urgent actions are required
- 60. We must understand that this crisis is of concern not simply to energy experts or climate change specialists but is of wider strategic concern across public institutions.
- 61. We must accept that institutional change is urgent and the consequences of not acting are a "long descent" from "developed" to "less developed".
- 62. We must assess the state of the "contract for services" between public institutions and society. What is the purpose of various government departments? What services are they contracted to deliver? Are they actually delivering on these services? Are they failing strategically while succeeding tactically? Are they addressing decline and collapse scenarios?
- 63. We must articulate the distinction between activities that seek to shift the underlying causality of complex challenges hence disrupting the production of problems and those that just seek to alleviate symptoms.
- 64. We should consider diverting a percentage of public effort to shifting the causality of complex challenges, that is, address issues at the level of their causes.
- 65. We must valourize efforts to address issues at the level of causes by diverting at least 1% of all public spending per department to addressing causal challenges.
- 66. We must recognise that new capacities and skills are required for example, the capacity for strategic thinking, facilitation (rather than

- management), entrepreneurial activity, cross-boundary leadership and so on. Such capacities and skills cannot be built in the classroom but only through action learning.
- 67. We must re-negotiate the contract for services between public institutions and society to take into account strategic responses to the current crisis.
- 68. We can act as a convener for a "third space" of response beyond what is already being done with government services (the first response space for social challenges) and civil society responses (the second response space for social challenges).
- 69. As part of a "third space" response, we can convene actionorientated multi-stakeholder agencies to address systemic challenges.
 Such agencies would bring together key government, business and
 civil society actors to work together in order to address "upstream"
 causal challenges in a number of vital areas, for example national
 energy efficiency. Use 1% of all public spending to resource such
 agencies.