

Chapter 1 : ICE Energy Futures & Options: Environmental

ecological foundation of Africa's growth could be chipped away or destroyed altogether by this development. This report is based on this premise that African ecological futures can be.

Posted on August 10, 2 comments It is a sad time in Canada: Canada has a long and predatory history of building dams on rivers against the wishes of Indigenous and local peoples at home and around the world. But dams are an old-fashioned technology that belongs the past – not the future. This attitude, too, belongs in the past – not the future. Most images of the future, whether in film, television, advertising, books, government programs from the local to the global depict the future as a singular thing: And wild nature spaces are almost never shown. Agriculture is never shown. This singular notion of future as urban is what politicians are responding to when they consistently make decisions to destroy nature and rural landscapes to make way for the built environment. They see the singular future and present as led by white men and women who are part of the hegemonic systems of power, lady patriarchs, as coined by Ursula Franklin so they do not respect First Nations leaders. This idea of a singular urban, white, masculinised future is old-fashioned, too. It began with the film Metropolis. And has continued unchallenged since then. The Canada government recently signed on to the United Nations Declaration on the Rights of Indigenous Peoples that outlines cultural, political, decision making, education and land-based rights for Indigenous Peoples, including Article And yet, the federal and provincial governments have made the decision to dam this section of the Peace River directly against the strongly expressed views of First Nations that they do not want the dam. Site C dam on the Peace River will be stopped. But it will be expensive, and exhausting for the First Nations and local rural people. Sustainability demands that the world wake up and make decisions differently, and different decisions, with respect for ecological and Indigenous values. Some people in these diverse futures will live in cities – and some will live in rural communities, farms and forests. It is time for a shift in what our futures will be – to see futures with great diversity of landscapes and peoples. Futures with some people living happily in cities, as they do now, but some people living happily in rural areas and amongst wild spaces, as they do now. Futures where non-human species are valued and their habitats are protected, and where humans learn to live respectfully with other species in their habitats. Futures where humans conduct rural practices mindfully within the web of life, which is alive in the soil and waters. Futures where women and children are actively involved in decision-making that affects the public domain. Futures where electrical power is gained without destruction of the life in rivers and agricultural areas, without the destruction of rural and Indigenous communities way of life.

Chapter 2 : Ecological Futures: What History Can Teach Us: Sing C Chew | NHBS Book Shop

AfDB/WWF African Ecological Futures Report Decision makers across Africa (and those outside it who have a stake in the continent's future) share the recognition that today Africa is at a critical juncture.

Avarice and usury and precaution must be our gods for a little longer still. For only they can lead us out of the tunnel of economic necessity into daylight. For this reason politicians and the media – in expressing the central theme of our political-economic discourse in the world today, economic growth – hang upon every prognostication of economic performance as if it were some spiritual mantra. The public too are dragged into this social obsession, the exemplar being the daily benediction which concludes major news broadcasts – "today the DOW rose one hundred points, the FTSE rose forty points" – "Why are we growth-addicted? The hard way towards degrowth in the involutory western development path, Pascal van Griethuysen, *Journal of Cleaner Production*, But what if the core value of this discourse – economic growth – were invalid? Just over sixty years ago, in the post-Second World War environment, economists sold an idea to politicians that would come to dominate the latter-half of the Twentieth Century: If we can make the economy grow every year then everyone will have a little bit more each year; and if everyone knows they will have a little bit more each year, then fewer people will question the overall allocation of economic wealth. In order to keep the economy growing it has been necessary to swell the supply of natural resources, and especially energy, in order to generate growth – physical universal laws do not allow growth to take place in a material vacuum! In turn, the effect of materials production upon planetary life-systems, and especially the use of fossil fuels, has had an immense cost to the well-being of the ecosystems which support human life. The Second Law of Economics: At the heart of the current growth-led economic process lies a myth – the proposition that the global economy can continue growing indefinitely. Where economic growth entered the realm of delusion has been the post World War II emphasis that growth, especially debt-led growth, be at the core of all economic policy. At its simplest, debt-led growth is a promise that energy and resources will be available, or the environment will have sufficient absorptive capacity, to enable economic activity in perpetuity to repay that debt – but what if that were not the case? In the Renaissance, as mathematicians modelled the natural world, growth took on various numeric forms, but they still had a reliance upon nature because the analyses were based upon observation. *Resilient People, Resilient Planet: A Future Worth Choosing*, United Nations, In the modern world, whilst retaining its earlier meanings, growth has taken-on a new conceptual meaning, wholly separate from the natural world. Today "growth" represents abstract financial values attached to the modern, globalised economic system, endogenously created out of its own existence. It is arguable that this separation of growth from a concept based in the natural world, to a concept based in an abstract human system, is at the root of many of the ecological problems we are faced with today. *Energetic Limits to Economic Growth*, Brown et. *Understanding the Biophysical Economy*, Charles A. Hall and Kent A. For most economists and politicians, the global economy has become the centre of reality, the overarching system within which all else is subsumed. Human societies, communities, eco-systems, and habitats are all seen as subsystems of that overarching system. *Perspectives on Limits to Growth*, Smithsonian Institute, Unfortunately, it ignores both the basic laws of thermodynamics, and the natural laws upon which our human life support systems depend. However dynamic it may be, the global economy is in the first instance a sub-system of human society; which is itself a sub-system of the totality of life on earth – and that interdependent network of living organisms in turn has a symbiotic relationship with the non-biological geophysical processes of the planet. In the long run, the human economy cannot grow beyond the capacity of the surrounding ecosystem to sustain that growth – specifically its ability to provide the high grade resources and waste absorptive capacity necessary to support a certain level of human development. Following on from this consultation, their report, *Prosperity Without Growth*, described the political realities of our pursuit of growth – Modern economies are built explicitly around consumption growth. Politicians and economists may differ in their prescriptions for kick-starting growth in the event of a recession. Apart from anything else, in the conventional view, structural stability relies on it. Five years on, that commission now abolished, we are obviously no further forward!

When we separate the development of the human system from the natural environment of which it forms a part, we cease to value important aspects of the natural world that are essential for our well-being; and by extension, through the commodification of all life rather than attaching innate value to it, to some extent we inevitably under-value human life too. Tracking the ecological overshoot of the human economy , Wackernagel et. To the average person life is a linear process; we live out our lives at the same rate, often with the same patterns of activity year after year, whilst our hearts regularly beat-away each moment away like the ticking seconds of our clocks. In reality, whilst we consciously live in a linear world, the human system that we are a part of is growing around us at an exponential rate. Causes and Consequences of the Oil Shock of , James Hamilton, Right now the world is trying to climb out of a deep recession, and the political-economic agenda is concentrating on the various measures needed to restore economic growth. Since the work of Simon Kuznets and Joseph Schumpeter on business cycles in the s and s, the assumption has always been that growth would always pick up after a few year of any downturn make up for the losses accrued during recessions. Government policy from the s onwards has been to intervene in the market by taking on more national debt and stimulating the economy back into growth. If, from now on, energy of all types becomes ever more expensive, and after peak gas the total amount of energy available begins to significantly shrink arguably peak gas will represent the point of "peak energy" , then economic growth in the future is no longer guaranteed. King Hubbert, who developed the idea of the peaking of fossil fuel and mineral resources in the s and s, made the consequences of this clear in the conclusion to evidence he gave to a US Congressional Committee in "Economic vulnerability to Peak Oil" , Kerschner et. Since the tenets of our exponential-growth culture such as a non-zero interest rate are incompatible with a state of non-growth, it is understandable that extraordinary efforts will be made to avoid a cessation of growth. Inexorably, however, physical and biological constraints must eventually prevail and appropriate cultural adjustments will have to be made. Ecological Economics Comes of Age , Brian Czech, May To say that thermodynamics over-rides economic growth is a far too simplistic statement. The limitations of depleting resources upon economic growth are already foreseeable within the logic of economics: Therefore, within its own logic, resource depletion must send the economic system into a long-term decline " and, as I argue in my various presentations on this issue, this is a demonstrable trend since the energy price rises of the s. Social complexity and sustainability , Joseph A. Tainter, Ecological Complexity, We can put the nature of the future restrictions on economic activity into an extremely simple statement " when we pass the peak of resource production, for one person to have the same amount as before another person must have less. For this reason the economic forces that have created growth over the last two hundred years will cease to operate as we understand them today. Boulding, We need a new economic model, and that model must be based upon the assumption that, following the global peak of oil production, and certainly after the global peak in gas production, we must run our economy with "less". Note that this is not a "steady state" economy , which has been discussed recently as a more ecological alternative to the present growth-led model. Complexity, History, Sustainability , Joseph A. However such problems are further exacerbated as this changes the dynamics of the economic process across society: So remember these two points: The Prospects for Humanity, R. Buckminster Fuller, ; latest reprint edition, Lars Muller Publications, Losing our seemingly rightful access to our material possessions is not the end of the world. This has happened before in Britain: Throughout history many people, in the immediacy of that personally cataclysmic moment, probably felt that their life as they knew it was coming to an end. What in fact happened was that society, collectively, changed and adjusted to the new circumstances. The greatest human attribute, enabled by our intelligence and sociability, is the ability to adapt. This is the task that we must put out minds to today as we approach yet another, unknowable, disruptive turning point in our history. We must adapt to living with less energy and resources, and hence, from our current conception, less wealth. Energy Return On Investment , Charles Hall, Post Carbon Institute, In these circumstances, the most simplistic mistake that any commentator can make is to assume that we can make this transition to a new material reality whilst preserving the relative affluence of the Western lifestyle. The available evidence indicates otherwise! This is increasingly the deduction of scientific analyses of the available data. At the most basic level, my interest is in how we resolve the present and rather delusional expectations of what constitutes "normality"

with the reality of what present trends describe Unless otherwise stated the content of these pages are released under open copyright licences.

Chapter 3 : Environmental Futures | Your Green Drinking Water Service

Ecology, 83(8), , pp. q by the Ecological Society of America ECOLOGICAL FUTURES: BUILDING AN ECOLOGY OF THE LONG NOW¹ STEPHEN R. CARPENTER Center for Limnology, North Park Street, University of Wisconsin, Madison, Wisconsin USA.

Chapter 4 : Resilient Futures International | Empowering Communities, Developing Resilience

Ecological Futures: Contemporary Art and Anthropocene Studies This seminar will take as its focus attempts within both environmental thought and contemporary art to imagine the ecological future.

Chapter 5 : Ecological Futures (ebook) by Sing C. Chew |

Ecological Futures, the final book in Sing C. Chew's trilogy on world ecological degradation, proposes that our own era exhibits ecological conditions similar to those of the past. The climate changes, environmental crises, mass population migrations, and socioeconomic disorganization we find in our.

Chapter 6 : Environmental Products

Ecological Futures, the final book in Sing C. Chew's trilogy on world ecological degradation, proposes that our own era exhibits ecological conditions similar to those of the past.

Chapter 7 : About my work: 'Ecological Futures' Â» Paul Mobbs/MEI

Ecosystem dynamics unfold into the future but are understood by examining the past. A forwardâ€•looking ecology, which assesses a broad range of possible future ecosystem states, is the complement of longâ€•term, historical approaches to ecology.

Chapter 8 : What is the Future of Africa's Ecology | WWF

Ecological futures: Systems theory, postmodernism, and participative learning in an age of uncertainty. Alfonso Montuori and Ron Purser A. Montuori & R. Purser, ().

Chapter 9 : eco and just futures | the home of karen hurley: unconventional futurist

Footprint Futures is a college-level teaching module for exploring the sustainability challenge facing human economies. This challenge is described as "improving the quality of human life while living within the carrying capacity of supporting eco-systems" by the World Wildlife Fund.