



# Book Review of *Come On!*: A Report to the Club of Rome: New Frontiers

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Come On! Capitalism, Short-termism, Population and the Destruction of the Planet. A Report to the Club of Rome. Ernst Ulrich von Weizsäcker and Anders Wijkman (CoR Co-Presidents), with 34 more CoR Members. New York: Springer Science, Jan 2018, 220 pp, \$29.99.

The Club of Rome is an unusual organization with an unusual history. The initial 1972 report to CoR on the predicament of mankind warned of "exponential" population growth, and potential collapse around 2100, due to overshoot. **The Limits to Growth** went viral, to use a contemporary term, receiving a huge amount of worldwide publicity and pushback by economists. Arguably, success was due to an early use of a computer model, sponsorship by a mysterious club, and the OPEC oil crisis in early 1973 that dramatically highlighted resource scarcity, albeit only oil and temporary at that.

But there were many other books on population/resource issues in the early 1970s<sup>1</sup>, and there were even books in the early 1950s explicitly noting "limits to growth." The 1974 second report to the CoR,<sup>3</sup> arguing for a nuanced distinction between undifferentiated and organic growth, has scarcely been noticed.

Since its extraordinary lift-off in the early 1970s, the CoR has sponsored more than 40 reports, distributed by a wide variety of publishers, many of them obscure (see the CoR website for a colorful array of book covers and brief descriptions). **Come On!**, prepared for the CoR's 50th anniversary in 2018, attempts to synthesize some of these reports. Rather than an anthology of several dozen essays, von Weizsäcker and Wijkman have melded together a wide variety of contributions received in draft form by 34 CoR members and a few non-members. The result is somewhat encyclopedic, with lots of ideas to chew on, arranged in three long chapters, each with numbered parts and sub-parts.

But first an explanation for the unusual title. In casual language, it is often spelled "C'mon," meaning "don't try to fool me." Chapter 1 is thus titled "C'mon! Don't Tell Me the Current Trends Are Sustainable!", while Chapter 2 is "C'mon! Don't Stick to Outdated Philosophies." Chapter 3, "Come On! Join Us on an Exciting Journey Towards a Sustainable World" employs the other usage of "Come On" as an invitation to join the authors. Despite the casual style, the authors admit that "this book *Come On!* is hard stuff. It will not be easy to digest." (p.11) More on this later. First, a glimpse of the contents.

### 1. Don't Call Current Trends Sustainable

The first chapter surveys 18 trends, listed below in the order that they appear. It could have been organized better, in my opinion; moreover, most people are unaware of these important trends or ignore them, rather than calling them sustainable.

- A crisis of *global capitalism*, moving from economic development of countries and regions toward maximizing corporate profits, largely from speculation;
- The phenomenon of *right-wing populism* due to weakening of developed-world middle classes over the past 20 years and a booming global elite (not mentioned are growing migration pressures stoking nativist/nationalist positions);
- A massive increase in the world's *financial sector* (banking, finance, insurance, real estate) with declining levels of equity, extensive borrowing, opaque tax havens, and lack of action by most regulators;
- Transition from an "Empty World" of small populations and abundant natural resources to a "Full World" of large populations and increasingly scarce resources;
- The relevance of **The Limits to Growth** report despite some shortcomings of its World3 computer model and underestimation of innovation; "the core of the message remained valid" (p.13);
- The synthesizing idea of nine *Planetary Boundaries* as "a very effective means of gauging the state of the planet";
- The "Anthropocene" as an effective way to describe the current, human-dominated era (reproducing the striking dashboard by Will Steffen *et al.* of 24 sharply upward socioeconomic and environmental trends);
- The *climate challenge* and the need for a crash plan to meet the 2015 Paris commitments;
- *Technological wildcards* with their uncertain consequences, such as geoengineering, artificial intelligence, and synthetic biology creating deadly viruses and bacteria;
- *Nuclear weapons* as "a nearly forgotten threat" (not so, especially as the US plays dangerous games of "chicken" with North Korea);
- Unsustainable *world population growth*, with two 2050 scenarios of "high education" resulting in 8.5 billion and "low education" with 10 billion people (see comment #4 at end);
- Seemingly unstoppable global *urbanization* and transport infrastructure swallowing space for agriculture and wildlife (also, rising sea levels threaten many big cities<sup>4</sup>)
- Unsustainable *agriculture and food systems*, with some 2 billion people overweight or obese, and some 800 million still suffering from chronic hunger;
- The *trade agenda* that seeks to expand production and consumption; a level playing field is needed between commercial and environmental objectives;

- The 17 Sustainable Development Goals of the UN's 2030 Agenda (CoR supports this
  "supremely ambitious and transformational vision," but expresses concern about tradeoffs between socio-economic and environmental SDGs);
- *Disruptive and hyped technologies* such as digitization, 3D printing, and AI, as well as Ray Kurzweil's "scary" and over-hyped vision of The Singularity;
- The GDP Fallacy of ignoring physical impacts and treating growing costs as benefits;
- The need for a *serious transformational agenda* of sustainable development enabled by a new mind-set and a new philosophy; "the Club of Rome is not alone in aiming at a profound transition." (p.57)

# 2. Don't Stick to Outdated Philosophies

The second part begins by discussing updated religious views on environmental ethics, notably the outstanding 2015 encyclical letter of Pope Francis, *Laudato Si'* (see review in *Cadmus*, 2:5, Oct 2015), and the little-known Islamic Declaration on Global Climate Change.

It also briefly notes **The First Global Revolution:** A **Report by the Council of the Club of Rome** (1991), which saw the end of the Cold War as "an enormous opportunity for humanity to change course and unify" in addressing the new "common enemy" of environmental degradation, global warming, poverty, military overspending, and scarcity of energy and water. But this visionary program never materialized: "capitalism got arrogant," civil society stayed complacent, and a purist pro-market ideology got the upper hand. "Extreme free-market thinking is at the root of the damage humanity is inflicting on the planet." (p.72)

The chapter goes on to describe people who promoted the extreme market model (Milton Friedman, Ronald Reagan, Margaret Thatcher), philosophical errors of the market doctrine, the distorted ideas of Adam Smith and Charles Darwin, the limits of reductionism to understand human reality, the need to anchor science and technology within ethical boundaries, the fragmentation of knowledge that shapes organization of universities and government, and the "massive effects" of the philosophical crisis on the way the world is governed.

It is then timidly concluded that "We May Need a New Enlightenment" (my italics) when the text goes on to firmly state that an Enlightenment 2.0 is needed, based on the great traditions of other civilizations, notably the Asian sense of Yin and Yang balance between humans and nature, short term and long term, speed and stability, public and private, women and men, equity and awards for achievement, and state and religion. Many trends are seen as moving in this "right direction," but most of the good news is not environmental (or related to security matters).

# 3. An "Exciting Journey" Towards a Sustainable World

Following from the above chapters, "Humanity is racing with catastrophe. Total system collapse is a real possibility. The evidence of human impact on the planet is undeniable... So

let's not kid ourselves." (p.101) For the Club of Rome and many others, crafting "basic principles of a new narrative is a first priority." They include 18 categories:

- A Regenerative Economy that pursues Natural Capitalism, a circular economy, biomimicry, cutting wastes through efficiency, redesign of everything, regenerative management, restoring some 12 billion acres worldwide mostly ruined by human misuse, etc.;
- Alternative Development Strategies that are cheaper, deeper and longer-lasting, using human-scale technologies less wasteful of resources and responsive to human needs (citing the Development Alternatives organization in India, which has implemented some 700 projects enabling large-scale changes in lives of people);
- "The Blue Economy" proposed by Gunter Pauli in his 2009 report to the Club of Rome, promising "100 innovations, 10 years, 100 million jobs"; the book "became a huge success and so far has been translated into 41 languages." (p.114) A box lists 21 principles of the Blue Economy from the 2016 edition, including resilience, optimized systems, value in everything, strengthening the commons, health and happiness, etc.;
- **Decentralized Energy** that is abundant, benign and affordable for all (a problem for transition to renewable energy is stranded carbon assets in energy corporations, estimated at some \$6 trillion; a carbon tax and an end to fossil fuel subsidies can accelerate positive change);
- **Sustainable Agriculture** or agro-ecology that preserves soil and water, avoids chemicals, sequesters carbon, encourages biodiversity and efficient use of all resources, practices holistic management, and protects decent jobs in rural areas;
- Regenerative Cities or "Ecopolis," with circular resource flows, zero pollution, urban agriculture, building to avoid floods and sea level rise, recycling all organic waste; examples are provided from Adelaide and Copenhagen (two examples of low-hanging fruit; see comment #5 at end);
- *Climate Action* such as the worldwide divestment campaign, accelerating discussion of stranded assets, more electric vehicles, tree planting to absorb CO<sub>2</sub>, emissions trading systems, the potential of algae as food and fuel, carbon-neutral or carbon-negative building construction, a price on carbon (a stress on cost-effective priorities is needed; see recent book by Paul Hawken<sup>5</sup>);
- New Economic Logic: recycling and reuse of materials to save energy and reduce
  pollution; circular business models to replace linear ones; measuring well-being by
  stock instead of flow; use of products and property by leasing and sharing, making
  market prices bear full costs;
- *Fivefold Resource Productivity* with more efficient transport modes, reducing auto dependence, shifting freight from truck to rail, green buildings, geo-polymer concrete, efficient farms and industry (see **Factor Five** report to CoR, 2010);

- *Healthy Disruption:* infotech applications for food production, housing, availability of information, simulating complex living systems, a bit tax of perhaps a millionth of a dollar per bit, and prospects of IT-based democracy (but IT may be so hackable that democracy will clearly regress);
- *Financial Sector Reform:* arresting expansion of debt (the main driver of growth and instability), separation of commercial and investment banking, sufficient loss absorption capacity in banks, control of money creation, a small "Tobin tax" on financial transactions worldwide, curtailing the shadow banking system, independent regulators, taxing evasion of the rich in secret tax havens (as of 2012, one estimate was \$21-32 trillion in these offshore locations); curbing the big four accounting firms that assist large corporations in tax avoidance;
- Reform of the Economic Set-Up: Kate Raworth's "Doughnut Economics" to meet needs of all with inner and outer rings respecting planetary boundaries; Riane Eisler's "Caring Revolution" involving a major upgrade of caring work; Christian Felber's "economy for the common good"; changing financial frame conditions for business; reducing unemployment by redistributing work; making the green transition more profitable;
- Benign Investment: more philanthropy addressing global environmental issues, following the UN's Principles of Responsible Investing, Principles of Sustainable Banking (from the Global Alliance for Banking on Values), green bonds and impact investing based on Environmental/Social/Governance (ESG) concerns;
- *Measuring Well-Being vs. GDP:* alternative indicators such as the Genuine Progress Indicator (a version of the Index of Sustainable Economic Welfare proposed by CoR member Herman Daly and John Cobb in 1989), Ecological Footprint analysis pioneered by CoR member Mathis Wackernagel, measuring life satisfaction, publicizing differences between GDP (which dates from the 1930s) and GPI, the Sustainable Well-Being Index as a potential hybrid and highlighting positive contributions of natural capital and ecosystem services that it provides; includes two illuminating charts by Ida Kubiszewski *et al.* 2013 on GPI Additions (household capital, value of volunteer work, etc.) and Subtractions (cost of commuting, crime, underemployment, air and water pollution, forest loss, etc.); a second chart compares global GDP/capita vs. GPI/capita from 1950 to 2005;
- Civil Society, Social Capital, and Collective Leadership: on the important role of civil society in promoting sustainability transformation; but "trust, solidarity (and) collaboration are not dominant in the wide spectrum of CSOs; good-tempered conversation to engage citizens in public debate is a first and essential step towards a new understanding... (but) modern democracies have developed into elitist systems" (p.182), i.e. plutocracies. Also discusses building social capital by conscious multistakeholder collaboration, and collective leadership as encouraged by CoR member Petra Kuenkel (see review in Eruditio, 2:2, July-Aug 2016);

- Global Governance: top-down reform of the UN is unlikely; but help can come from the World Future Council's Global Policy Action Plan, Paul Raskin's Great Transition away from "Zombie ideologies", Gerhard Knies' Cohabitation Model for a Viable World, where nations and/or regions organize ways of living together, and focus on the need to reduce the role of tax havens, for technology assessment, and some mechanisms to rebalance public and private goods (all well and good, but likely more difficult with the erosion of democracy at the national level, e.g.: Freedom House reports marked decline in various aspects of freedom for the past 12 straight years);
- *National-Level Action*. Two countries stand as examples: giant China and little Bhutan, which has pioneered a Gross National Happiness Index as more important than GNP.<sup>6</sup> In its 13<sup>th</sup> Five-Year Plan, China has set ambitious targets for renewable energy and energy efficiency, green manufacturing, green design with high resource efficiency, "Eco-Civilization," experiments with Natural Capital Balance Sheets, creating "stone paper" from sand and plastic waste, and new opportunities for municipal farming such as vertical farming, hydroponics, aeroponics, and community-supported agriculture (all well and good, but driven by stark necessity and enabled by a top-down non-democratic government);
- Education for a Sustainable Civilization. Creating conditions to enable futures literacy, active and collaborative education, pluralism in content, education based on connectivity, and value-based education focused on sustainability and an integrated way of thinking; three universities (McGill, York, and Vermont) are cited for fostering Education for the Anthropocene programs.

## 4. COMMENTS AND NEW FRONTIERS FOR COR

This book is certainly provocative. And the Chapter 3 agenda is potentially exciting, as well as challenging and exhausting. As the Club of Rome celebrates its 50<sup>th</sup> anniversary in October, I hope that they will continue to look ahead at new frontiers for the next decade, suggested below as five questions that might stimulate new reports to CoR and/or the next edition of **Come On!** 

# 4.1. Who is Coming On?

The report ends with a brief conclusion inviting readers to "Come On": academics, business people, the financial community, policymakers, and "critics to spell out what they find wrong in terms of the facts and intentions of this Report." (p.206) I have little quarrel with the facts, and I support the intentions. My complaints are with the presentation, and overemphasis of some elements, along with under-emphasis or omission of other important elements.

Moreover, I wonder who will *read* this book, skim it, or even know about it. Other than mandatory classroom reading, most if not all users of this book will be voluntary. How will they know about the book, and want to read or even skim it? The report is consciously inward *to* the Club of Rome, as are all other CoR reports, rather than outward *from* the CoR to a broader audience.

I doubt that publicity plans for **Come On!** amount to much. It is issued by a large natural science publisher (Springer), with hard-to-read footnotes in the gender-free hard science style, all citations in lower case, and journal titles abbreviated—hardly inviting to readers in social sciences, humanities, policy studies, journalism, and policy-making! Many of the charts are difficult to follow. And there are numerous typos.\*

"Come On! is clearly a bold adventure in integration."

The authors are quite right that "Come On! is hard stuff. It will not be easy to digest." But it can and should be made more reader-friendly without compromising on the message, perhaps with a more popularized version.

# 4.2. What About Capitalism? An Alternative View

The Preface by the CoR Executive Committee repeats the **Limits to Growth** message that the suite of problems facing the world "could all be tied to the consequences of humankind's desire for endless growth on a finite planet" (p.v) "The world is again in a critical situation" and it is especially important to look at the philosophical roots. "We must question the legitimacy of the ethos of materialist selfishness that is currently the most powerful force in the world" (p.vi) (Not all or perhaps even most of humankind seeks "endless growth" or holds an "ethos of materialist selfishness." Greater specificity is needed, as well as considering other powerful drivers such as technology and real and fabricated human security needs.)

Even capitalism needs reconsidering. Late in the book, there is a too-brief discussion of businesses seeking the triple bottom line (people, planet, profit), corporate social responsibility (CSR), or—quite common at present—considering ESG factors (environmental, social, governmental). "Greening Capitalism, Quietly" (Cadmus, 3:2, May 2017), a preliminary report derived from The Security & Sustainability Guide, appeared after Come On! went to press, but deserves attention in the next edition. The report mentions some 150 organizations in seven categories: Business-Led Groups such as the World Business Council for Sustainable Development, Ethics-Driven Groups such as the UN Global Compact and the Global Initiative for Sustainability Ratings, Broadened Accounting Groups such as Ceres and Measure What Matters, Certifying Organizations such as Social Accountability International and the Extractive Industries Transparency Initiative, Green Investing Groups such as the Sustainable Stock Exchanges Initiative and Hazel Henderson's Ethical Markets Media which produces an annual "Green Transition Scoreboard" of rising green investments, Green Consultants such as the Carbon Disclosure Project and Natural Capital Solutions headed by CoR Member Hunter Lovins, and *Green Business Publishers* such as the Cleantech Group and the GreenBiz Group which holds a large annual conference and publishes an annual State of GreenBiz Report on the circular economy, green infrastructure, etc.

Yes, there are still greedy capitalists who look only at the bottom line of profit, especially in the extractive industries (oil, gas, mining). And yes, some of the greening activity is

<sup>\*</sup> The worst goof-up is at the end of Chapter 1, where, following "Zacharia F" (which should be Zakaria F), 19 additional and non-alphabetized items are added as a seeming afterthought (p.61). Equally strange is the lack of a publication date on the inside title page (I have never seen this in any book), and a poor summation of the book on the back cover that seems written by a first-day intern. (I am told that the German edition published by Bertelsmann does not have these distracting flaws.)

superficial "greenwash." But "The Necessary Revolution" for business described by Peter Senge<sup>7</sup> is clearly under way, and the only question is to what degree.

### 4.3. What About Short-termism vs. Breadth?

Put capitalism aside for the moment and consider an alternative view of why the world is in a critical situation: ever-growing infoglut, and the lack of any structure to deal with it, due to the slow pace of change in academia and failure to think about a necessary knowledge system for the 21<sup>st</sup> century.<sup>8</sup> Most environmentalists are familiar with the simple I=PAT equation introduced by Paul Ehrlich and John Holdren in 1971, and briefly mentioned in **Come On!** (p.30). But change it slightly to I=POT (where I=impacts, P=population, O=organizations, and T=technology)<sup>9</sup> to open a major window of understanding. There is no question that information has proliferated in many forms over recent decades, with more people (P) in more information-producing organizations (O), enabled by far better information technology (T), which drives us further into specialties and fierce competition for eyeballs. Moreover, in addition to burgeoning knowledge about the human, social, and natural world (albeit much of it trivial), there is an even greater flood of entertainment information in the form of readily available films and TV programs on an abundance of cable channels, televised sports, and ubiquitous photography and videos.

The need for integration and balance is greater than ever, as urged in **Scholarship Reconsidered** (1990) by the Carnegie Foundation for the Advancement of Teaching<sup>10</sup>, which described four kinds of scholarship: the scholarship of discovery (conventional inquiry), the scholarship of teaching, the scholarship of outreach, and the scholarship of integration. **Come On!** is clearly a bold adventure in integration, but needs to consider the scholarship of outreach to various publics. The ratio of conventional scholarship to integrative and outreach scholarship is perhaps more than 100 to 1, and that may be a huge understatement!

"Short-termism" is a problem, of course, although thinking about the next decade or so in uncertain times is more widespread than imagined. On the other hand, lack of breadth in thinking—failure to think of the broader system, to consider context and consequences (e.g. I=POT)—is an equal if not greater problem.

# 4.4. What About Population?

Treatment of this important concern is all too casual in **Come On!**, which reproduces two projections of world population: a "high education" scenario ending up with 8.5 billion people in 2050, and a "low education" scenario resulting in 10 billion people in 2050 (p.29). The former is unlikely, while the latter is most probable, although many analysts project out to less than that by using less than up-to-date data. Several years ago, I wrote to Carl Haub, head demographer at the Population Reference Bureau in Washington, noting what I saw as "projection creep" over the past decade. He responded "Spot on!" The current projection in the PRB's excellent *World Population Data Sheet* is 9.846 billion in 2050, up from a base of 7.536 billion in 2017—a 30% increase. In the absence of any huge calamity, the 2050 projection is likely to creep up in the next few years to 10 billion or more.

Keep an eye on the San Francisco-based Calico project, begun in 2014, to stop aging, "cure" death, and extend lifespans. It is funded with \$250 million each by Google and pharmaceutical giant AbbVie, with the possibility of \$1 billion more invested in this potentially disruptive technology to reduce mortality. If new life-extending technologies are cheap and widely available, population will rise. If the remedies for aging are expensive, the rich will benefit and inequality will be further exacerbated. Even without success by Calico (which stands for California Life Company), many other life prolonging advances are being made in health care and drugs.

On the other hand, in these highly uncertain times, huge reductions in population are possible by a pandemic (we are far from prepared), or exchange of nuclear weapons. It might thus be wise to employ several projections: a most likely mid-projection, and two or more speculative projections on possible population loss or extraordinary gain.

Illustrative of the problems of "full world" population blindness is a recent book by conventional economists, **Demographic Change and Long-Run Development** (MIT Press, CESifo Seminar Series, Dec 2017, 354p), which assumes "the demographic transition" to stable population without any statement of current population and projected increase by 30% in the next two decades, and any current or future strain on any resources. This extreme version of a convex population growth curve is the polar opposite of the concave "exponential" growth curve cited by the 1972 **Limits to Growth** report and also suggested in the "Great Acceleration" dashboard by Steffen *et al.* (p.17). The recent growth curve is in fact somewhat convex due to falling birth rates, but not so pronounced as to preclude significant population growth, albeit at the declining rate of recent decades. But a declining death rate could possibly straighten the growth curve, and even return it to a concave pattern.

# 4.5. What About Destruction of the Planet?

I fully believe that planet Earth is being destroyed by humankind, and that much new thinking is needed to abate this destruction, which is why I am writing this review.

However, the case that the planet is now being destroyed—widely assumed by environmentalists but not by others—is not clearly made here. The burden of this important assertion is placed on the "planetary boundaries" concept introduced in 2009 by a group of 28 scientists led by Johan Rockström and Will Steffen. These nine "planetary life support systems" are an excellent way to move beyond obvious climate change to include biosphere integrity, land-system change, freshwater use, phosphorus and nitrogen in oceans, acidification of the oceans, ozone depletion, and more. But it does not easily communicate to non-scientists.

Similarly, on p.17, Will Steffen *et al.*'s compact dashboard of 24 socio-economic and earth-system trends depicts the Anthropocene, with nearly all 24 curves of "The Great Acceleration" sharply up. It is a valuable overview, but overly generalized to clearly make the case for ongoing destruction to the uninformed or skeptical. Moreover, this important chart is reproduced on a third of a page, instead of the full page that it deserves, and is scarcely readable—even with a magnifying glass!

Even blown-up and legible, the dashboard needs a supplement to clearly make the destruction argument—one or more full pages listing many of the specific elements of destruction, e.g. microplastic particles in the oceans, desertification and pollution of land, loss of topsoil, decline of honeybees and other insects, loss of tropical rainforests, depletion of aquifers, many types of unregulated toxic chemicals in food and water, algae blooms, ocean dead zones, accelerated melting of ice sheets, rising sea levels, fish farm disruption of coastal ecosystems, and increasingly erratic weather—unprecedented floods, storms, droughts, and drought-caused wildfires that in turn feed soot into the atmosphere.

"Come On! is an important initial attempt to describe a "world in disarray" and unsustainable trends in broader-than-usual terms, outdated thinking that underlies and exacerbates these trends, and the many elements of a "New Enlightenment" action platform for sustainability."

But wait! In addition to listing specific forms of destruction, it is important to acknowledge remediation efforts that are underway to counter many of them, although perhaps not at all adequate to the task. For example, the Ocean Cleanup Project to push plastic into a network of floating barriers, depicted in **Come On!** (p.174), appears to be a nifty scheme. But what is its potential to make a dent in the growing plastics problem? This may be difficult to estimate, but some attempt should be made.

The many conservation and remediation efforts underway, as well as actions to reduce carbon emissions and make more efficient use of resources, should be applauded and may delay and diminish planet destruction. But, taken together, they may still be inadequate. This more sophisticated approach, however, is better than ignoring remediation and climate action, or assuming that it will be at all sufficient. And it may encourage us to try even harder.

Another more subtle approach is distinguishing between rapid and generalized "total system collapse," implied in the **Limits to Growth** report and herein (p.101), and slow and localized or regional collapse. Yes, one can and should envision one or more tipping points in natural systems where everything goes to hell or thereabouts in a few years. But the model of earlier simple societies should not be equated with the global system, and some cities and regions will be far more resilient than others. Copenhagen (764,000 people) and Adelaide (1.3 million) are cited in **Come On!** as models for "regenerative transformation." But Jakarta (10 million, and 40% below sea level) appears to be hopeless, sinking faster than any other big city in the world due to depletion of aquifers and the rising Java sea, exacerbated by runaway development, concrete and asphalt replacing open fields and mangroves, lack of planning, few if any sewers, waste and chemicals dumped into waterways, limited supplies of drinking water, polluted air, huge traffic jams, distrust of government and conflicts between Islamic extremists and secular Indonesians.<sup>11</sup>

Finally, destruction of the planet, especially climate change, should be seen as a matter of national security and a "threat multiplier," to use a military term. We cannot have sustainability without security, nor, increasingly, security without sustainability.

#### 5. SUMMING UP

**Come On!** is an important initial attempt to describe a "world in disarray" and unsustainable trends in broader-than-usual terms, outdated thinking that underlies and exacerbates these trends, and the many elements of a "New Enlightenment" action platform for sustainability. It is an important frontier for the Club of Rome and a platform for its work in the decades ahead, to be informed by subsequent editions.

The report represents a great amount of work, and refinements will be no easy task. Much thought is needed as to what to include, what to emphasize (and perhaps prioritize), what to shorten or omit, and how to present and publicize so this complex message gets out to various audiences.

The 18 trends that begin the book could be expanded to include sea level rise, water supply, methane release from thawing Arctic ice and tundra, <sup>12</sup> chemical pollution, inequality, consumption, migration, land scarcity, cyber-security, terrorism, corruption and expensive upgrading of nuclear arsenals. The second chapter on outdated philosophies/ideologies in economics and politics could be expanded to consider the radically changing information environment that impedes serious rethinking. Chapter Three on numerous remedies begs consideration of even more. It could include systems thinking, foresight, improved governance capacity at all levels, international law, waste management, the greening of business, promoting human security, many other relevant sustainability groups, other overviews, <sup>13</sup> etc.

The downside of considering these additions is trend and platform overload. To cope with this, both trends and remedies could be arranged in 5 or 6 groups, e.g. Environment, Population, Economy/Finance/Business, Politics/Security, and Technologies. And an introductory "top ten" key messages could sum up the report, as in **Big World, Small Planet**. <sup>14</sup>

The **Come On!** synthesis is a significant beginning. Any integrative project is like preparing a stew and adding proper quantities and varieties of vegetables, meat, and spices. There is no one way to do it, but some stews are far tastier and nutritious than others! Time is short and much work remains to be done in the next decade. C'mon, let's get to it!

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