

## Futurewatch

Jennifer Coote  
New Zealand Futures Trust  
New Zealand

An information service of current international perspectives on our futures, prepared by futures scanner, **Jennifer Coote**. Annual dates in last two digits.

### ENERGY & MINERALS

#### The New Energy Economy?

Distinguished energy researcher **V. Smil**, *The American*, Nov/Dec, 08, warns that 'energy transitions' take a long time to bed in. From the introduction of new fuel sources such as coal, and the prime movers which produced or propelled that energy, time frames of several decades up to almost a century elapsed. Some sources, such as coal, have waxed, waned and waxed again. Some parts of the world missed out on some of the sources. Of the many non-conventional fuels being promoted, few have reached penetration of 5% of global supply. The scale of the coming energy transition is so huge that currently replacing half of global fossil fuel use with renewables would require the equivalent of some 4.5 billion tons of oil. The time lapse for significant market penetration of new primary energy supply is a function of financing, developing and perfecting the necessarily massive infrastructures. There are also many, often unforeseen, socio-economic adjustments.

**Modelling Long-Term Scenarios for Low-Carbon Societies**, Eds **N. Strachan et al**, Earthscan, 08, reports from a special Japanese-UK project of international of researchers and stakeholders. It concluded that by 2050, in a context of global carbon dioxide reduction of 50%, low-carbon societies are achievable technologically and economically. A major, internationally co-ordinated effort at all levels is needed. Moves towards low-carbon societies will be less costly than to delay climate change mitigation efforts and experience the eventually more extreme impacts. Top level leadership from governments is essential, while trust needs be built between nations. Taxation should be shifted from employment and incomes towards environmental pollution. Trade regimes need to be adjusted to encourage rapid deployment of the necessary technologies.

A huge text for planners and policy-makers, **Energy for Sustainability: Technology, Planning, Policy**, **J. Randolph, G. Masters**, Island Press 08, uses a multi disciplinary perspective in its six broad-ranging sections:- Energy Patterns and Trade, Energy Fundamentals, Buildings and Energy, Sustainable Electricity, Sustainable Transportation and Land Use, Energy Policy and Planning. See also <http://energyforsustainability.org>

Egypt is to produce 20% of all its electricity by 2020 from renewables with a major role for solar power. This will create jobs and educational opportunities. Wind farms are also included, with help from several European countries. *Middle East, February 08, pp 44-45.*

**T. Featherstone** reports, *Business Review Weekly, 8-14 May 08, pp23-25*, that although Australia has been slow to get into the "green goldrush," it has abundant renewable resources in forests, solar, waves and tides, plus plentiful supplies of technology and skills. Funding is in short supply as international sources are investing elsewhere, though local super funds could leverage more local investment. Many earlier start-ups in clean-tech suffered from lack of funds, but such investment has moved from niche to core focus worldwide.

**The Climate Group**, an international NGO, reports, *New Scientist, 9 Aug 08, p 18*, that China is undertaking a Green Revolution, which started with its 2006 Renewable Energy Law. This aimed to lift renewable sources from 8% to 15% by 2020, and include wind, solar and biomass. Wind has had help from central government, but solar is growing fast and is second to Japan in the photovoltaic cells market. Many small coal-power stations have been closed. The central government is supporting larger new coal-power plants which use supercritical clean-technology, and it is investigating carbon capture plants. Fuel economy standards for cars are higher than those for US and Australia. Electric bicycles are booming ahead of car sales.

**D. Cyranoski**, *Nature, 22 Jan 09*, reports on the rapid growth of wind farms in China, based in the interior provinces on the road to Xinxiang. China is also developing its own wind turbine production capacity though there are considerable teething problems.

**J. Warren**, *Far Eastern Economic Review, Dec 08*, examines the prospects for a complementary relationship between China and USA in moving towards sustainable cleaner energy. China had begun to reduce its energy consumption in the pre 2000 decade but the later spurt came from increasing urbanisation, increased trade and coal dependence, and market reforms. The current economic crisis may allow a breathing space for further policy development. Fast-tracking China's energy goals could be better achieved with the help of US companies which will in turn enhance the mutual green trade between the two nations. One company, a joint US-Chinese venture, is providing a role model. Both governments need to co-operate with the private sectors to ensure that policies do no harm.

### On Renewables

Engineer **D, Painter**, *NZ Journal of Forestry, Feb, 09, reprinted from AgScience, Feb 09*, summarises the state of play about biofuels in New Zealand, caught between old and new generation biofuels.

The old generation often have low energy ratios out, compared with amount of intake, and unwanted side effects such as use of land which is valuable for other purposes. Second generation biofuels are more promising, but very few are market ready.

Currently in NZ, bioethanol from whey is the only sustainable, energy-efficient commercially attractive and sourced-locally option. Tallow has other valuable uses, and use of rapeseed is criticised by growers and scientists. Further developments

hinge on the policies eventually adopted to comply with the Kyoto protocol, in energy supply, energy efficiency and conservation, and in transport.

Research into second generation biofuels is underway, with government funding, while near-market research and development is utilising funds from local and overseas commercial enterprises.

The problems faced by the aviation industry are greater than those faced by land transport, since a biofuel is needed which can also operate well at high altitude. Air New Zealand and two major overseas aviation firms have conducted a demonstration flight using second-generation biofuel.

For more on development of aviation biofuels see *New Scientist*, 16 August, 08, pp.34-37.

**C. Le Couteur**, *e.nz*, Jan/Feb 09, examines details of the various NZ innovations in biofuels, many of them still in the experimental stage. They are also extremely difficult to ramp up to viable commercial scales. One engineer comments "that the rest of the world does not understand basic chemical engineering mass and heat balance." Production of a type of liquor which resembles crude oil, from algae, looks promising. Such a product is the "Holy Grail" of manufacture because it is a basic feedstock for many types of other products. But upscale calculations do not appear to be commercially attractive.

*Pacific Ecologist*, Summer 09, provides a wide range of articles examining in detail the highly negative effects of the growth of agro-energy in Latin American countries, Africa and S.E. Asia, as environmentally important lands, and productive food producing communities are displaced by plantations growing sugar cane and other biofuel crops.

**J. Fragione et al**, *Science*, 29 Feb 09, analyse the "biofuel carbon debt" created by the conversion of rainforests, peatlands, grassland etc to biofuel crops, releasing more carbon in the process. Biofuel crops grown on degraded or abandoned land and abandoned agricultural land planted with perennials incur little debt.

### Going Solar, Hope for Hydrogen

**Solar Revolution: The Economic Transformation of the Global Energy Industry**, **T. Bradford**, MIT Press, 06. This comprehensively surveys the history of energy use, the present situation and the drivers of significant change. By 2050 nearly all installed electrical generation capacity could be solar and wind, with biomass utilised for liquid fuels. Problems of storage of power could be resolved by production of hydrogen gas from water for batteries of fuel cells. Interconnected infrastructures could transmit power through all the global distribution grids for local needs. Governmental aid programmes will be needed to ease the transition.

Thin-film cells, now entering full commercial production, *TIME (NZ)*, 7 July 08, pp.42-43, could replace silicon solar panels, more cheaply. Nanotechnology is used to apply the photo-active chemicals to giant sheets.

*Science*, 1 August, 08, p.620, reports on several significant breakthroughs with laboratory efforts to develop effective, environmentally friendly catalysts for hydrogen production.

**D. Strahan**, *New Scientist*, 29 Nov 09, describes the efforts to replace expensive platinum as a catalyst with proton exchange membranes using cheap and abundant nickel. This and other efforts to speed the introduction of hydrogen as a transport fuel falls short of the overall huge savings in directly applying electricity to transport vehicles.

### Going Nuclear?

United Arab Emirates is planning to establish a nuclear reactor programme. UAE is also part of the Gulf Co-operation Council whose other members have indicated their intentions to pursue peaceful development of nuclear power for electricity and for desalination. Help from France is being arranged. Turkey has also decided to build a nuclear reactor and plans to establish a uranium enrichment plant to meet the needs of the other Middle Eastern states. *Middle East*, April 08, pp.22-23.

**J. M. Acton, W. G. Bowen**, *Bulletin of the Atomic Scientists*, Sept/Oct. 08, analyse the huge problems faced by would be nuclear power states in the Middle East. Such ambitions have failed before. Financial needs are huge, and plans must be long term. With outside technical and material help plants may be established, but there are huge ongoing needs for competent, experienced staff- ranging from nuclear physicists to plant and safety officers. Both Egypt and Turkey appear to be reasonably provided for, and have a range of tertiary training and research centres for further staff. Saudi Arabia, the backer of the Gulf States plan, has limited experienced research staff. Regulatory capacity for nuclear systems requires more skilled personnel and suitable legislation. Again Turkey and Egypt have suitable people and help the I.A.E.A., but Saudi Arabia lacks such experience.

### Fossil Fuels

**The International Energy Agency** has admitted that it considers that the era of cheap oil is over. Their analysts consider that there is enough supply in the ground to meet demand for decades, but they doubt that the major Middle-Eastern-owned oil companies with the greater part of the remaining oil will pump it fast enough in a few decades hence to meet demand. If oil demand continues to rise, by 2030 a permanent global oil squeeze could develop, which would dwarf present supply problems. *Science* 21 Nov 08, pp.1178-1179.

Australian International Studies academic **S. Wood**, *Current History*, March 08, examines the dilemma facing the EU. Even as it attempts to reduce carbon emissions and intensify efforts to develop renewable energy technologies, it is increasingly dependent on oil and gas supplies from suppliers in Russia, Kazakhstan, Turkmenistan and Azerbaijan, with a lesser supply from Nigeria. Many of these suppliers have national interests which for reasons of politics, culture and history, aggravated by technological deficiencies, could prove unreliable. While the EU promotes, as part of its self-understanding, commitment to democracy and civil freedoms, these norms are absent and mostly ignored in most of the supplying states

**N. Partow**, *Policy Quarterly*, Sept 08, analyses players, challenges and opportunities in the international oil market as New Zealand considers options for its underdeveloped oil reserves. While NZ needs foreign investment to develop this resource, the

example of some countries offers warnings about the risks of becoming a largely rentier supplier. Norway offers a positive example of a nation which managed its resources by combining national and capitalisation policies to the advantage of its society, economy and its overseas partners.

**D. Sheppard**, *e.nz*, *Sept/Oct 08*, examines the details of the Otway Project, an Australian scheme which successfully injected 10,000 tons of greenhouse gas from a carbon dioxide rich natural gas well near Melbourne into a selected geological site on the coast. This experiment demonstrated the feasibility of carbon capture and sequestration from a power plant, on an industrial scale.

*Middle East*, *July 08*, pp.42-43, reports that Abu Dhabi is planning a world class, industrial scale, hydrogen-powered generating plant, using carbon capture and sequestration process. Construction is starting this year. Local natural gas will generate the hydrogen and carbon dioxide. The hydrogen will be used to generate low-carbon electricity, while the carbon dioxide will be piped to the local oil fields and injected to improve oil production.

## ECONOMICS/BUSINESS

### Big Change?

**J. L. Petersen**, the Arlington Institute, [www.arlingtoninstitute.org/tai/taialerts](http://www.arlingtoninstitute.org/tai/taialerts) no18, 3/3/09, has for almost a decade seen big change converging on the horizon, and now it is arriving. The problems are structural, much larger than governments, and leaders who think that the old system can be "rebooted" are mistaken. Three specifics are suggested:-plan for the Transition and rethink what you have always done; make your motto, Co-operation, you cannot do this alone; start thinking about a new world for, individuals companies, and governments.

### – Some Thinking

M.Wolff, economics analyst, *Financial Times*, 9 Oct 08, p9, argues that the major issue for governments and financiers is to create a system of global finance that allows more balance in the global economy, with excess savings being converted to either high-return investment, or consumption by the world's poor, including capital exporting countries such as China. Local-currency finance in the emerging economies should be encouraged, to stimulate domestic demand. Even more important is to find ways to combine liberalised capital markets with a reasonable degree of financial stability, to support the global economy rather than destabilising it.

See also **M. Wolff**, *Fixing Global Finance*, Yale Univ. Press, 08.

*The Economist*, 24 Jan 09, **Special Report on the Future of Finance**, urges trading carefully between the pros and cons of lighter or tighter regulation of the finance industry.

**D. Roth**, *Wired*, Mar 09, reports from several experts who argue that data, not regulation, is the key to reform. Data should be unshackled from the pages of regulatory filings and made more flexible and useful, in real time, uniformly tagged and exportable to any spreadsheet or webpage. There are existing systems to do this. Investors can than become citizen-regulators.

– **Some Rethinking**

**The Bridge at the End of the World, Capitalism, the Environment, and Crossing from Crisis to Sustainability, J. G. Speth**, Yale Univ. Press 08. Globally environmental deterioration continues in the face of economic activity. The fundamental issue is now how to transform conventional capitalism. Necessary measures to avoid the abyss ahead include:- making the market work for the environment; moving to a post-growth society; real growth which promotes the wellbeing of people and nature; changing the fundamental dynamics of the corporation; and promoting a new consciousness.

A distinguished commission, launched by the French President, which includes Nobel Economists **A. Sen and J. Stiglitz**, has been reviewing the issues around use of GDP as the major indicator of economic progress, *Financial Times*, 28 Jan 09, p7. Long criticised because of its limitations for social wellbeing, and its limited focus on the worth of an activity, GDP is still hard to replace. The big task for the commission will be to narrow the gap between objective measures of economic production and subjective perceptions of well-being. Details of economic well-being will focus more on median income and on non-market activities, such as raising children, and the social problems which offset growth. Most controversially, the commission is looking into how to create a "happiness index" assessing people's attitudes.

**Handbook of Composite Indicators: Methodology and User Guide, OECD Statistics Directorate and EU Joint Research Centre**, 08. This highly detailed analysis of a variety of indicators, shows their advantages, their complexities, strengths and weaknesses.

Economist **H. Daly**, *Resurgence*, Mar/April 09 explores the need for a new paradigm in which the whole earth will have to conform to the physical behaviour mode of the planet, a system which is steady state. This permits qualitative development, but not aggregate or quantitative growth. Some key aspects would include:- an emphasis on redistribution to alleviate poverty; greater emphasis on durability in products; a shift of taxation from labour to the through-flow of resources; a major rethink of employment; a reform of the financial system whereby banks become financial intermediation services (charging for services) rather than lending money for interest; and freeing more "goods" from the artificial enclosure of markets, eg knowledge. Full text, **Steady State Economy**, written for the UK Sustainable Development Commission-[www.theoil drum.com](http://www.theoil drum.com)

Belgian economist **B Lietaer**, an expert on alternative money systems, *Resurgence* Mar/April 09, outlines some of the possibilities which have been tried and which are still operating, notably the WIR system in Switzerland. In particular, the business-to business(B2B) approach enables business to obtain necessary credit, especially in times when the conventional system is in turmoil. B2B is not an extra charge on governments; in fact it can increase the tax take. See **Options for Managing Systemic Bank Crises, B. Lietaer et al**, [www.goal-qpc.com.imges/White\\_paper\\_on\\_Systemic\\_Bank\\_Crises\\_November](http://www.goal-qpc.com.imges/White_paper_on_Systemic_Bank_Crises_November).

*USA Today*, 5 April 09, [www.usatoday.com/money/economy/2009-04-05-scrip\\_N.htm](http://www.usatoday.com/money/economy/2009-04-05-scrip_N.htm)report on a revival and spread of the Depression era system whereby cash-strapped communities printed their own money. NZ readers should check out

**Healthy Money, Healthy Planet, D.Kent**, Graig Potton 05, a lucid overview of the range of possible alternative community trading and banking systems, applicable in New Zealand. Refer **Living Economies, Carterton**.

## **On Trade**

### **The "Southern" Leaders**

Eminent business analyst and editor **M.Walker**, *World Policy Journal*, Winter 08/09, considers that the patterns of world trade in finished goods are changing. The emerging economies of the "South," including China and India, are trading with each other and newer emerging economies of the South. This trend may modify as economic turmoil continues, but it will be permanent. Deep underlying forces to this trend are demographic and technological, the spread of giant consumer markets and capital accumulation. The recent (November) G- 20 meeting symbolised this as China, India, S. Africa, S. Korea, Argentina, Brazil, Turkey. Saudi Arabia, Indonesia and Mexico joined the G-7. The shifts in power, wealth, trade are fuelling new local and regional growth, and eventually will form major new factors in global politics. China's foreign exchange is utilising a basket of currencies, while S.E. and E. Asian countries are becoming its biggest trading partners, followed. by Brazil, The Philippines, and Australia. Africa, which by 2099, could out number Asia is becoming a principal supplier of raw materials. New transnational corporations, mostly Chinese, have subsidiaries across the world, including the Middle East.

Over the next quarter century, the Middle Eastern and Latin American states could enjoy a demographic advantage from declining birthrates, an expanding workforce and low ratios of elderly, providing opportunities to improve education. The global middle class by 2020 will be predominantly Asian, Middle Eastern, Latin American, and African, with money to invest in education and lifestyle "wants."

The emerging economies of the South currently command a quarter of global GDP, but they account for half the global economic growth, more than half of the savings and holdings of foreign exchange. The 2007 agreement between China and the ASEAN nations is promoting the world's largest free trade area and stimulates the repositioning of ASEAN ahead of Japan as major traders with China.

Disruptions from war, epidemics, famines and large scale natural disasters could affect this trend. There is huge potential for tensions among the major players, who are also building their defence arsenals, while the Western nations, especially USA, have no intention of leaving, economically and militarily.

**G. Singh**, India's Ambassador to Ethiopia, *India Quarterly*, Jan-Mar 09, analyses in depth India's push to develop economic partnerships with African nations.

**A. Chhibber**, UNDP Regional, *Asia, Far Eastern Economic Review*, Dec 08, surveys the current impacts of the global financial crisis on Asian nations. There is urgent need to strengthen an Asian monetary facility; trade and financial policies need better co-ordination; and domestic demand needs to be boosted to provide targeted programmes to help the poor. Falling fuel and food prices will help, but rural areas need special attention and the minimal social security assistance overall means that governments are especially vulnerable if their social contract to provide high growth more jobs and rising incomes fails.

**J. K. Sundaram, R. von Arnim**, *Science*, 9 Jan 09, pp.211-212, question trade liberalisation generally and especially the possible outcomes of a Doha Trade Agreement, to promote development in poor countries. It depends on the kinds of models which are used to promote the theories. Overall, the Doha agreement is likely to allow developed nations to make bigger gains. There are now arguments that poor countries should be offered aid in compensation, for loss of government tariff revenue, loss to workers and local producers of uncompetitive production, and that funds need to be provided to poor countries to develop new internationally competitive capabilities. Additionally, domestic food security is threatened if local subsistence farmers are forced out of operation.

**Making Waves: Opportunities for Reclaiming Development in the Pacific. A report prepared by Pacific Network on Globalisation, for Pacific Civil Society Organisations Forum**, Aug 08. Pacific Island states are being heavily pressured by donor countries to intensify integration into the global economy via a Free Trade Agreement (PICTA) principally with Australia and New Zealand, and by a renegotiated agreement for further Economic Partnership with EU (PACER). The P.I. states should thereby gain cheaper imports, increased investment and improved efficiency in business and supplies. However P.I. governments will lose income from tariffs, on which they largely rely for provision of essential social services. Currently the P.I. governments are dragging the chain in negotiations.

## FUTURES THINKING

### The Future According to Jesus

**J. E. Gary**, *Futures*, Sept 08, an academic teaching global leadership and entrepreneurship uses this approach in teaching strategic thinking to Evangelical Americans. He analyses the future frameworks faced by Jesus:- Conventional, based on the Mosaic law; Counter used by both the Pharisees and the resisters to Rome, Essenes and Zealots, all of whom claimed to better represent Moses. Jesus himself preached a Creative future which he saw could survive the collapse after Rome crushed the Temple. The Creative way led to the Kingdom of God, and a many nationed covenant. Gary situates his approach with several strands of futures studies. The three models become the probable, possible and preferred futures. It can also be connected to transformational change, to macrohistory, world futures and causal layered analysis.

### End of Science Fiction?

SF writer **M. Chown**, *New Scientist*, 15 Nov, 08 considers that. science today is providing more strange possibilities than SF itself, technologically. At the basic level SF is simply a method used to tell stories. It can also reflect our current anxieties and desires, in face of new technologies, for it is above all the literature of change, and as long we have change, such storytelling will survive. Six noted SF writers:- **U. Le Guin, W. Gibson, M. Attwood, K. S. Robinson, S. Baxter** and *N. Sagan*, provide short opinion pieces.

**Physics of the Impossible: A Scientific Exploration of the World of Phasers, Forcefields, Teleportation and Time Travel, M. Kaku**, Allen Lane, 08. A distinguished theoretical physicist examines a variety of marvellous ideas by dividing them into three categories. Some may be realised within this century, such as telekinesis. Some are not well understood, but they do not violate the laws of physics such as hyperspace travel and may eventually be realised some centuries ahead. Some which violate the laws of physics, such as perpetual motion machines and clairvoyance, are beyond the realm of the possible.

### **European Long, Long- term Sustainability**

**T. O'Riordan** summarises, *Environment*, Mar/April 09, a recent report to the Network of European Environmental and Sustainable Development Advisory Councils, Oct 08, which outlines how to shape such policies for the far future towards the end of this century. Integrating such thinking into today's decision structures is essential but extremely challenging. Social justice thinking or "justice proofing" all policies and actions, is proposed. Better measures need to be devised for budgets, and markets need reassessing to fit with a more "virtuous" society. Three outcomes are proposed:- visioning exercises at EU, national and local level; a debate about the consequences of migration, and another around styles of infrastructure for water, transport, energy etc. As a society, Europe is beginning to analyse and mobilise for long-term sustainability.

## **WORLD AFFAIRS/PEACE/WAR**

### **Policies for a Changing Order**

**B. R. Rubin, A.Rashid** pool their expertise to prescribe for the widening chaos in Afghanistan-Pakistan-Central Asia, *Foreign Affairs*, Nov/Dec 08. USA must overcome its fixation with "the war on terror" and develop a political and diplomatic initiative which distinguishes political opponents, including violent ones, from global terrorists.

A political solution would include as many of the insurgencies as may be willing, to formulate a political solution with the integration of Pakistan's Federally Administered Tribal Areas into mainstream Pakistan and an end to hostile action by international troops, in return for co-operation against al Qaeda. This would be accompanied by a major diplomatic and developmental initiative addressing the vast array of regional and global issues now intertwined with the crisis. This new Grand Bargain requires an international presence of troops and financial and development assistance, but only if there is a consensus on stabilising Afghanistan .

The perceptions and behaviours in the region need to change. Perceptions of US intentions runs counter to the US aims, though those have been confused since 11/9/01. Pakistan was assumed an ally, Iran an enemy and Iraq the main threat.

Pakistan perceives a US-Indian-Afghan alliance and another Iranian-Russian alliance, each aimed at undermining Pakistan in Afghanistan and dismembering Pakistan itself. The Pakistan military consider the militants a lesser threat.

Rethinking US strategy to correct these perceptions requires a shorter term continuation of the war to suppress al Qaeda, a medium and longer term reduction of the level of armed conflict, and a consensual political settlement implemented. The Taliban know that Afghan society incomparably stronger and less isolated than seven years ago. A high level international initiative aimed to address the legitimate sources of Pakistani insecurity should include China, the largest investor in Pakistan.

See also **A. Rashid, *Descent into Chaos: How the War Against Islamic Extremism is Being Lost in Pakistan, Afghanistan and Central Asia***, Penguin, 09.

**E. Blanche**, *Middle East, March 08*, reports that Iranian expansionist influence is arousing differing responses around the Arab Middle East. Egypt and other N. African Arab states fear its Shiite infiltration which could destabilise the region further. States closer to Iran favour diplomacy and conciliation and are considering forming a security alliance with Iran as they see US influence declining and Iran moving to acquire nuclear weapons and assert its influence in Iraq.

**S. Power**, *Wall St Journal, 8 Jan 09*, reports that the final days of the Bush era included a US directive to prepare for assertion of greater US sovereignty in the Arctic by closely defining the area of the Arctic and its seabed over which the US can lay claims. Climate changes, growing geopolitical interest in the area and homeland security concerns combine to raise the stakes for US interests in this final frontier for energy exploration. Meanwhile, Canada has taken steps to increase its military presence in its Arctic frontiers.

**D. Trenin**, Carnegie Endowment for International Peace, *Current History, May 08*, argues that US and Russia have common interests on which a more constructive US foreign policy can be based. Russia is certainly authoritarian and its values system questionable, but its rapidly growing capitalist economy is fundamentally transforming its society. It resembles Tsarist Russia a century earlier when revolutionaries were suppressed even as the national was starting to modernize. Failure could recur as Russia seeks to become a diversified and globally integrated economy. USA cannot base the relationship on assumptions that it leads and Russia follows because Russia wishes to be accepted as a legitimate partner on the Board of Directors of International Order. Both are concerned about nuclear weapons proliferation, especially over Iran and N. Korea; tensions in and around Central Asia and Afghanistan, and a settlement of the Israeli Palestinian conflict. It would be smart to open the Group of Eight to Asian powers, and have China a member of the UN Security System. Growing business interests should be used to encourage Russia's international economic integration and its development as a truly law-governed state.

**T. Gomart, EU-Russia Relations: Towards a Way Out of Depression**, Centre for Strategic and International Studies, July 08, analyses the nuances in the present uncertain stance of the EU towards a more assertive Russia. They could jointly work towards establishing new partnership and co-operation agreement, recognising that even as there are strong differences politically, economically there is much greater integration. Russia does not share the Western values system, but it sees itself as part of European civilisation and wishes to be respected as a full partner. Over the medium term, mindsets need to change. Russia may be a difficult partner but is not a threat. Attention needs to be paid to the profound changes in Russian society, and the

Europeans need to take responsibility for their security. Russia also needs to move beyond its "Post-Versailles" mindset, where it feels victimised for the failures of the past two decades and isolated.

**Climate Change as a Security Risk, German Advisory Council on Global Change**, Earthscan 08, English version, [www.wbgu.de](http://www.wbgu.de) Four conflict constellations are identified where critical developments induced by climate change can be anticipated: - degradation of freshwater resources; decline in food production; increase in storm and flood disasters; environmentally induced migration. Policy recommendations include: - a role for Europe in climate and energy policy; a stronger UN Environmental Programme and a new high level Council on Global Development and Environment; establishing temperature rise of two degrees a "guard rail" internationally (and thus hold Greenhouse gas emissions to 50% by 2050; transform energy systems in both efficiency and renewables; support adaptations for developing countries; develop international strategies for migration; and expand global information and early warning systems.

*Environment, Nov-Dec 08*, **F. Biermann, I. Boas** propose international Protocol for Recognition, Protection, and Resettlement of Climate Refugees, to add to the existing UN Framework Convention on Climate Change. Its implementation could be done through existing UN agencies. **M. Hulme** critiques the proposal.

**The Responsibility to Protect: Ending Mass Atrocity Crimes Once and For All**, **G. Evans**, Brookings, 08. An elaboration of this concept, initiated in 2001. States have the primary responsibility to protect their peoples from such crimes, but if the state is unable or unwilling, then the wider international community should take up the task. There are major challenges in this and many misunderstandings, which are explored.

**S. Metz**, US Army War College professor, *Parameters, Winter 07-08*, examines new challenges and old concepts in 21<sup>st</sup> century insurgency. Old models based on the Vietnam experience, where insurgents challenged an existing regime, no longer apply. These new conflicts are multi-dimensional, with economic, political, social and cultural implications, flowing from systemic failures in political, social and economic realms. Economic opportunities may be significant incentives for some participants, and rebels will prolong conflicts because of the economic gains. The characteristics of such violence resemble the dynamics of hypercompetitive markets with rapid shift in operations focus.

Terrorism does not lead to outright victory, but it can sustain domination or survival in specific markets. A society brutalised and damaged by prolonged insurgency is prone to a greater variety of other evils.

US policy needs to refocus not on insurgency as war, and therefore politically motivated, but rather as means whereby the insurgents meet other needs, for economic gains, psychological empowerment and identity. A policy similar to that used to deal with gangs can be applied, such as early, firm enforcement of the rule of law, establishment of security, gaining intelligence, business and economic diversification, and fostering empowerment of women. Such social reengineering can be threatening to the national elites.

### Working For and Envisioning Peace

**Islamic Peacemaking Since 9/11, D. Smock, Q-ul Huda**, United States Institute for Peace, survey a range of peace activities. These include:- the reactions of Muslim leadership not only in western countries, to religiously related violence; interfaith dialogues to promote peace, particularly in USA, but also in Europe, with further initiatives from Jordan and Saudi Arabia; Islamic interpretations of peace, which emphasise that the tools to counter extremism lie within the Muslim tradition are being promoted by many local-level religious teachers; teaching materials are being developed and distributed to meet a hunger for such resources in madrassas in Indonesia, Afghanistan, Pakistan and Turkey. The Islamic emphasis on doing good and pursuing justice is being asserted by many Muslim jurists, scholars and leaders, along with practical courses in peacemaking, conflict transformation and similar approaches.

**Peace First: A New Model to End War, U. Savir**, Berrett-Koehler, 08. An Israeli peace negotiator argues that peacemaking strategies are out-of date, and proposes a new model. It is focused on social, cultural and economic aspects, and builds on four pillars:- participatory peace and glocalisation which develops linkages between the global and the local players, such as through city-to-city interactions; peace ecology, moving towards a culture of peace, based on common values, tolerance and co-existence; peacebuilding which creates joint cross border ventures in different spheres; and creative diplomacy, which applies innovative approaches based on what both sides stand to gain.

**R. Kapoor**, *Futures*, April 08, speculates on the character of an Asian-led global future in this century. Focus for many westerners is on the economics, but Asian leadership could lead into paradigm, more sustainable and humane. Four vital aspects:- Limits to Consumption, since the western model is no longer operable and Asia can draw on traditions of frugality, simplicity and community; Live and Let Live, Asia's multi religious traditions can foster the spirit of coexistence; Freedom from Tyranny, because new ways must be found to involve citizens; and Discovery of Roots, which draws on traditions of attachment to family and community.

### Correspondence

Jennifer Coote  
Futurewatch  
Futures Thinking Aotearoa  
E-mail: info@futurestrust.org.nz