

Sustainability Matters

27th October 2016

A fortnightly selection of topical **news and views** about economic, social and environmental issues.
Designed especially for accountants and those who use the services of accountants.

Sustainability Matters is;

- Compiled and published by Ray Skinner of *Sustainability Matters*, providers of specialist services relating to sustainability and business support. **Business achieving a tomorrow for tomorrow's children.**

Global Deal Reached to Limit Powerful Greenhouse Gases

"Nearly 200 nations have reached a deal, announced Saturday morning [15th October] after all-night negotiations, to limit the use of greenhouse gases far more powerful than carbon dioxide in a major effort to fight climate change.

"The talks on hydrofluorocarbons, or HFCs, were called the first test of global will since the historic Paris Agreement to cut carbon emissions was reached last year. HFCs are described as the world's fastest-growing climate pollutant and are used in air conditioners and refrigerators. Experts say cutting them is the fastest way to reduce global warming.

"The agreement, unlike the broader Paris one, is legally binding. It caps and reduces the use of HFCs in a gradual process beginning by 2019 with action by developed countries including the United States, the world's second-worst polluter. More than 100 developing countries, including China, the world's top carbon emitter, will start taking action by 2024, when HFC consumption levels should peak.

"A small group of countries including India, Pakistan and some Gulf states pushed for and secured a later start in 2028, saying their economies need more time to grow. That's three years earlier than India, the world's third-worst polluter, had first proposed. ...

"The new agreement is 'equal to stopping the entire world's fossil-fuel CO2 emissions for more than two years', David Doniger, climate and clean air program director with the Natural Resources Defense Council, said in a statement.

"It is estimated that the agreement will cut the global levels of HFCs by 80 to 85% by 2047, the World Resources Institute said in a statement.

"Experts said they hope that market forces will help speed up the limits agreed to in the deal.

More:

www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11729742 plus www.ft.com/content/396a6c0c-92af-11e6-a1dc-bdf38d484582 and www.ictsd.org/bridges-news/bridges/news/countries-agree-to-hfc-amendment-to-montreal-protocol

Source: *NZ Herald*, 17th October 2016

Important!: *Why world leaders are meeting to discuss hydrofluorocarbons* [9th October]

www.economist.com/blogs/economist-explains/2016/10/economist-explains-4

Editor: Developed countries 'lack ambition'. ❖

SUSTAINABILITY GROUP EVENTS

Next event – Date of webcast yet to be 'sorted'.



Announcements in 'due course'. ❖

Higher Living Standards Framework Event

"Is your CEO attending the *Higher Living Standards Framework* event? The *Higher Living Standards Framework* is used by the New Zealand Treasury to make informed decisions that account for environmental, social and economic outcomes. Businesses have a role to play in NZ Lifting Living Standards and Treasury's Secretary Gabriel Makhlouf invites Auckland business leaders to hear the how and why from him directly. Ministry of Business, Innovation and Employment CEO David Smol and Auckland Council's Jim Quinn will present, with a Q&A panel including Auckland Business Leaders.

When/Where: Wed 16th Nov, 7:30-11:00am, AUT, Auckland

For more contact: Calum Revfem calum@proxima.global

For an invitation: Kelly.Shen@treasury.govt.nz before 3rd Nov

More: <https://www.linkedin.com/groups/3418976/3418976-6193946414184222721> Click on the flyer to enlarge

Source: Calum Revfem, LinkedIn, 23rd October 2016. ❖

Remarkable Weather of 1911: The Effect of the Combustion of Coal on the Climate – What Scientists Predict for the Future

New Zealanders were warned about the likely climate-changing impacts of burning coal at least 104 years ago. A news item conveying this was published on page 7 of the *Rodney and Otamatea Times, Waitemata and Kaipara Gazette* on 14th August 1912 and column 3 of page 4 of the *Braidwood Dispatch* NSW on 17th July 1912. The likely source was the fascinating article on pages 339-341 of *Popular Mechanics* of March 2012.

More:

<https://paperspast.natlib.govt.nz/newspapers/ROTWKG19120814.2.56.5> plus

<http://trove.nla.gov.au/newspaper/article/100645214> and

<https://books.google.co.nz/books?id=Tt4DAAAAMBAJ>, as well as an energetic discussion(!) at

<https://www.facebook.com/SustainableBusinessNetworkNZ/photos/a.403513914925.179883.101490454925/10154115514619926/>

Source: SBN, 18th October 2016

Editor: Well worth reading. ❖

Apocalypse H₂O – How Companies are Accounting for the True Value of Water

"Water is more essential to industry and daily life than oil. But fresh water, like many other natural resources once considered abundant, is running low: The World Bank says global demand for water is doubling every 21 years and the UN estimates that by 2025 two-thirds of the world could face water 'stress'

situations.

More:

www.cimaglobal.com/Documents/Thought_leadership_docs/Sustainability%20and%20Climate%20Change/H2O_case_studies_v7.pdf 12 pages, 1.34Mb, 2011

Source: CSEAR Newsletter, page 8, 29th Sept. 2016. ❖

NZ's First Climate Activism Novel

"The founder of SBN member GoodSense marketing, Katherine Dewar, has taken to fiction to spread the climate change message. Thought to be the first novel by a NZ'er to centre around climate change action, *Ruby and the Blue Sky* is a political thriller which looks at the power of individual leadership and collective action to create change in the face of resistant corporations.

"Torn between the demands of the climate campaigners and her bandmates, Ruby has to decide how much and even who she will sacrifice.

Launched in July in Leeds (UK) where it is set, the novel opens in 2021. 352 page paperback and eBook.

More: www.bigbookend.co.uk/leeds-location-and-my-inspiration-by-katherine-dewar/ plus www.KatherineDewar.net

Source: Kath Dewar, 18th October 2016. ❖

The Great Derangement – Climate Change and the Unthinkable

"Are we deranged? The acclaimed Indian novelist Amitav Ghosh argues that future generations may well think so. How else to explain our imaginative failure in the face of global warming? In his first major book of nonfiction since *In an Antique Land*, Ghosh examines our inability – at the level of literature, history, and politics – to grasp the scale and violence of climate change.

"The extreme nature of today's climate events, Ghosh asserts, make them peculiarly resistant to contemporary modes of thinking and imagining. This is particularly true of serious literary fiction: hundred-year storms and freakish tornadoes simply feel too improbable for the novel; they are automatically consigned to other genres. In the writing of history, too, the climate crisis has sometimes led to gross simplifications; Ghosh shows the history of the carbon economy is a tangled global story with many contradictory and counterintuitive elements.

"Ghosh ends by suggesting politics, much like literature, has become a matter of personal moral reckoning rather than an arena of collective action. But to limit fiction and politics to individual moral adventure comes at a great cost. The climate crisis asks us to imagine other forms of human existence – a task to which fiction, Ghosh argues, is the best suited of all cultural forms. His book serves as a great writer's summons to confront the most urgent task of our time.

More: www.amitavghosh.com/bio.html plus <http://freepages.misc.rootsweb.com/~kitwithers/books/2016ghosh.html>, and www.press.uchicago.edu/ucp/books/book/chicago/G/bo22265507.html

Source: Kit Withers, 16th October 2016. ❖

Capital Gains – The Real Returns on Investment in Restoring Our Waters

"Most people would agree that restoring and enhancing the waters of our wetlands, stream banks and shorelines is 'A Good Thing' – places look nicer, bird and fish life come back and so on. But it costs money and takes time – much of it volunteer time. Do we only properly fund this important work when it's obvious that the cost of doing nothing outweighs the cost of doing something? In a competitive funding environment, how can we justify more comprehensive, strategic and proactive investment in environmental restoration?

More: <http://pureadvantage.org/news/2016/10/11/capital-gains-real-returns-investment-restoring-waters/>

Source: Clare Feeney, 18th October 2016

Editor: Lengthy, interesting, thought provoking. Merits consideration by accountants, economists, strategic planners and, well, anyone. ❖

Seaweed Could Hold the Key to Cutting Methane Emissions from Cow Burps

"When Canadian farmer Joe Dorgan noticed about 11 years ago that cattle in a paddock by the sea were more productive than his other cows, he didn't just rediscover an Ancient Greek and Icelandic practice.

"While the Ancient Greeks didn't have to contend with global warming, it turns out that this practice could significantly reduce greenhouse gas emissions from 21st-century livestock farming.

"Cows and sheep produce methane, a greenhouse gas that is 28 times more powerful than carbon dioxide. Despite misconceptions, most cow methane comes from burps (90%) rather than farts (10%). Livestock produce the equivalent of 5% of human-generated greenhouse gases each year, or five times Australia's total emissions.

"Dorgan's cattle were eating storm-tossed seaweed. Canadian researchers Rob Kinley and Alan Fredeen have since found seaweed not only helped improve the cows' health and growth, but also reduced methane production by about 20%.

"This and other lines of evidence led Kinley, who by then had moved to CSIRO, to team up with other CSIRO scientists and marine algae specialists at James Cook University to test a wide range of seaweeds.

"They tested 20 seaweed species and found they reduce methane production in test-tube samples from cow stomachs by anything from zero to 50%. But to do this required high amounts of seaweed (20% by weight of the sample) which was likely to present digestion issues for animals.

"But when the researchers tested a particular type of seaweed collected from Queensland's coastal waters, they thought their instruments were broken and ran the tests again. It turns out that *Asparagopsis taxiformis* reduces methane production by more than 99% in the lab. And unlike other seaweeds where the effect diminishes at low doses, this species works at doses of less than 2%.

"*Asparagopsis* produces a compound called bromoform (CHBr₃), which prevents methane production by reacting with vitamin B12 at the last step. This disrupts the enzymes used by gut microbes that produce methane gas as waste during digestion.

"Seaweed production globally is booming, with more than 25 million tonnes (measured when wet) farmed each year, which is about double the global commercial production of lemons.

"Producing enough *Asparagopsis* to feed 10% of the almost 1 million feedlot and 1.5 million dairy cattle in Australia would require about 300,000 tonnes a year, and millions of tonnes if it were to be scaled up globally.

"With selection and breeding of seaweed varieties for higher bioactivity, this figure could come down, but perhaps only by half, and it would still require large areas of land and water. With typical seaweed production rates at 30-50 tonnes of dry matter per hectare, this suggests to supply 10% of Australian livestock industry will require at least 6,000 hectares of seaweed farms.

"The booming seaweed industry is already aware of the pitfalls experienced in fish farming. There are likely to be many indirect benefits,

"The booming seaweed industry is already aware of the pitfalls experienced in fish farming ...

More: <https://theconversation.com/seaweed-could-hold-the-key-to-cutting-methane-emissions-from-cow-burps-66498>

Source: *Carbon News*, 14th October 2016. ❖

India Just Hit a Massive Milestone, and the Entire World should Take Note

"... Home to more organic farmers than any other country in the world, India now boasts the first state to receive 100% organic certification. Small but mighty, all 75,000 hectares of farmland in Sikkim and its 66,000 farmers have sworn off GMOs, pesticides, and chemical fertilisers.

"This would be an amazing feat in any U.S. state, where consumers are already willing to pay a premium for organic produce, data from the USDA shows. But in India, the concept of organic certification is still pretty new and has yet to gain strong consumer support.

"Going fully organic was a massive milestone', Food Radio Project's Amrita Gupta reports. 'But now Sikkim has to learn how to market that produce, and as they do, the rest of India is learning right along with them.'

"Growing crops with little to no inputs and using reproductive seeds dates back centuries in India, but the added value of an organic label is proving to be a learning curve for its consumers. Sikkim is a living case study for the Indian government, and its success or failure will prove whether or not state-wide organic production is reproducible in larger states.

"The milestone of going fully organic comes thirteen years after the Sikkim Organic Mission set forth its Action Plan of 2003, through which it has gradually removed subsidies for chemical fertilisers and pesticides, increased the integration of organic farming resources, and purchased organic certification for Sikkim's farmers, saving them 33,000 rupees each (or approximately \$495).

More: <https://food.good.is/articles/india-organic-state>

Source: Malcolm Rands, Facebook Like, 14th October 2016. ❖

Measure What Matters

"*Measure What Matters* is a three year initiative led by the Green Economy Coalition and their [partners](#).

"Together, our mission is to bring greater alignment between corporate, national and global actors as to how to better measure progress, using the health of our planet and the wellbeing of our communities as our yardstick rather than profit alone. Over the next three years we will be:

1. Taking stock and identifying overlaps between different indicator sets at the corporate, national and global level to motivate shared action
2. Mobilizing a global network of experts to contribute to discussions and consultations
3. Convening a High Level Working Group from business and policy to understand how to bring alignment between so many different indicators sets ...

"The Project: A data revolution is now underway. Businesses, governments and international organisations are starting to measure their 'success' beyond profit alone to include people's wellbeing and the health of the planet.

"But many of the sustainability indicators in use at the corporate (corporate sustainability reporting), national (alternative GDP) and global levels (SDGs) have been developed in isolation from each other. As data becomes fragmented, it is increasingly difficult for decision makers to make long term choices with positive results for the bottom line as well as society and the environment.

"Measure What Matters is a global initiative that aims to link local problems with global solutions. To do this, our mission is to bring greater alignment between corporate, national and global sustainability data frameworks.

More: <http://measurewhatmatters.info/> plus www.linkedin.com/pulse/measure-what-matters-karen-mcwilliams

Source: Karen McWilliams, CA ANZ, LinkedIn Pulse, 12th Oct. ❖ **Source:** CSEAR Newsletter, page 8, 29th Sept. 2016. ❖

SDGA16: Australian Sustainable Development Goals Conference

"Australian business, community, civil society, academia and inter-governmental agencies will converge on Sydney in November for SDGA16 – a conference to discuss how Australia will deliver on the agenda of the United Nations Sustainable Development Goals.

"Exactly twelve months ago (26th Sept 2015), UN member countries adopted a new set of global goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. The key question to be discussed at SDGA16 is: 'What is Australia doing about it?'

"SDGA16 aims to raise awareness, foster opportunities for partnerships and catalyse local Australian action around the 17 UN Sustainable Development Goals – which, in a development from the preceding Millennium Development Goals, have a clear focus on domestic action in developed countries, as well as developing countries. ...

When/Where: 29th – 30th November University of Sydney Business School

More: www.ecovoice.com.au/sdga16-date-set-for-australian-sustainable-development-goals-conference/

Source: *eco-Voice*, 20th October 2016. ❖

Tackling Poverty in New Zealand

The aim of this McGuinness Institute project is to build and share ideas on how to tackle poverty. The project has been a major focus for the Institute in 2016. There have been 5 workshops throughout the country and the report on the first of these – held in Queenstown in March – was published in June with others due soon.

"... What is clear from the Queenstown workshop and its aftermath is that better communication between national and local government will be a key part of the solution for reducing poverty. ...

"This workshop brought locals together to paint a clearer picture of poverty in the Queenstown area. The insights from communities at the next TacklingPovertyNZ tour workshops will contribute further clarity to the discussion However, talk is only valuable if it can be translated into action. Taking into account different regional perspectives will aid the development of robust and nuanced local and national policies to tackle poverty in New Zealand....

More: <http://tacklingpovertynz.org/2016-workshops/> for *A Queenstown perspective on tackling poverty*, 24 page 6.6Mb discussion paper and more, plus newsletter at www.mcquinnessinstitute.cmail20.com/t/ViewEmail/y/F7496D405A5AE033/5DE822241EB7AE0444D0DD5392A9C75A

Source: McGuinness Institute Newsletter, 29th September. ❖

Accounting for Climate Change – How Management Accountants Can Help Organisations Mitigate and Adapt to Climate Change

"Management accountants have a key role to play in driving sustainable strategic and operational decisions. But CIMA research shows that even where finance teams are engaged in climate change related activities that has often been on an *ad hoc* basis.

"Our survey has shown that sustainability specialists want and expect to get help from finance. But can management accountants afford to wait until their sustainability colleagues think it's time to start engaging? [Page 17]

More: www.cimaglobal.com/Documents/Thought_leadership_docs/cid_accounting_for_climate_change_feb10.pdf, May 2010, 715kb

Joseph Stiglitz Compares US Conditions with USSR's Final Days

"Economist Joseph Stiglitz, a Nobel laureate and adviser to Hillary Clinton, has compared the social and economic conditions facing millions of Americans with those of the Soviet Union during its dying days.

"Stiglitz backed up this extreme conclusion this week with a battery of long-run data that had the enthralled audience snapping his slides with their smartphone cameras.

"One of those who snapped was Andy Crane, chief executive of the \$4 billion grain exporter CBH Group, who like many was gobsmacked by a graph that showed the decoupling of wages and productivity growth over the past 40 years.

"Up until the mid-1970s, the two had grown together, but rising inequality has since seen wage growth flatline, with the benefits of productivity growth having gone to the very top end.

"Stiglitz's dire outlook for the US economy, outlined at the biennial summit of the International Co-operative Alliance, was endorsed by former US labour secretary Robert Reich and economist Jeremy Rifkin. Reich said wage stagnation and the shrinking middle class had given rise to 'demagogues', a veiled reference to Donald Trump.

"This trend has serious implications for overall prosperity because stagnant wages growth is a drag on consumer spending, and Stiglitz says it explains why the recovery in the US since 2009 has been the weakest on record.

"The factors identified by Stiglitz are not limited to the US, as some of his data showed Australia had experienced a concentration of incomes over the same period.

"His data showed the wealth of the top 1% had increased from 8 to 18% in the US during the 40 years to 2012, while in Australia it had increased by about a third to 8%. Aust's inequality may have accelerated since then as a result of the housing boom.

"The trend he identified for male workers in the US can also be found here. 'Men have not done very well because the jobs held by men have become fewer and fewer, and so has the pay', he said. The growing number of angry white men was also linked to rising death rates among white males because of suicide, drug abuse and alcoholism, he said. And this is where Stiglitz drew his comparison with the Soviet Union, which was beset by income stagnation and rising death rates during its twilight years.

"The same thing is happening in America', he said, adding that many of these low-paid, underemployed and unemployed white males were the strongest supporters of Donald Trump.

"Stiglitz concluded: 'An economy that does not serve most citizens is a failed economy. In those harsh terms, the US economy is a failed economy.'....

More: www.theaustralian.com.au/business/economics/joseph-stiglitz-compares-us-conditions-with-ussrs-final-days/news-story/0ec7159768e30b5d870239268bfbd21e

Source: Stig Ehnbohm, 15th October 2016

Editor: Includes discussion about the importance of co-ops. ❖

Evaluative Thinking and Reasoning: The Evaluative Attitude

Provides a description of the science of evaluation – 21 easy to read pages, 2014.

More: www.anzea.org.nz/wp-content/uploads/2014/09/140925-ANZEA-what-is-evaluation-vxxx-.pdf, plus more Aotearoa New Zealand Evaluation Association (ANZEA) at www.anzea.org.nz/

Source: Tim Marshall, 15th Oct 2016. ❖

Yes, it is Cooler on the weekend

"Researchers in Australia have shown that in their bigger cities, the temperature on average is 0.3C cooler on a Sunday than on Thursdays and Fridays. This shows how human activity, releasing waste heat and pollution into the atmosphere, is creating what are known as 'urban heat islands'. As the world's population is becoming more urbanised, this effect is only set to accelerate.

More: <https://theconversation.com/no-its-not-your-imagination-it-actually-is-colder-on-the-weekend-if-you-live-in-a-city-67223>

Source: Tieke: ECO Alerts & Events, 26th October 2016. ❖

Report Evaluates Urban Challenges Facing Aotearoa NZ

"Managing urbanisation by looking after smaller as well as larger centres, clarifying the political power of local government, and clearly identifying greenhouse gas emission implications of city-based development, are among crucial issues identified in a report on New Zealand produced in time for a United Nations conference this month.

"Also identified are critical demographic changes, the importance of Māori, the continuing uncertainty of the role of the Resource Management Act, and the need to better account for social complexities in addressing housing and transport challenges.

"The United Nations (UN) Habitat III country report, *A State of New Zealand Report – Habitat III* has been published ahead of the United Nations (UN) Habitat III Conference, taking place in Ecuador from 17th – 20th October....

"The first UN Habitat Conference was held in Vancouver in 1976. At this time the population of New Zealand was 3.1 million, of whom over 2.5 million were living in urban areas. Today New Zealand's population is 4.4 million with 85% urbanised, and due to increase to 5.5 million by 2038 if current projections are correct.

"In the lead up to Habitat III, all UN Member States, including New Zealand, were invited to submit national reports. A group of researchers from the University of Auckland's UN-Habitat Steering Group initiated the idea for a national collaboration across a wide range of disciplines to produce the State of New Zealand Report....

"The aim of the Report, which is based on the three pillars of sustainability, environmental, social and economic, is to stimulate national debate amongst researchers and academics as well as the wider community, on our urban issues and the future direction we need to take. ...

"Among the most important findings are:

- Urban areas are not islands onto themselves
- Urban issues affect everyone
- Urban challenges face both small towns and major urban areas
- Sustainable urbanisation means addressing environmental, social and economic issues
- Researchers and academics have a role to play in taking forward the New Urban Agenda which will be agreed at Habitat III in Quito.

More: www.creative.auckland.ac.nz/en/about/our-faculty/schools-programmes-and-centres/urban-research-network.html, plus <https://cdn.auckland.ac.nz/assets/creative/schools-programmes-centres/URN/documents/A-State-of-NZ-Report.pdf> 118 pages, 1.27Mb

Source: Tim Marshall, 15th October 2016. ❖

Contributions and feedback are welcomed.

Send your news items, handy hints, case studies, suggestions, comments and questions to Ray Skinner of *Sustainability Matters*.
eMail: ray@sustainabilitymatters.co.nz Phone: +64 (09) 443 0773 Web: www.sustainabilitymatters.co.nz