

Sustainability Matters

9th November 2017

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.**

Climate Change and the Human Mind: A Noted A Win for Clean, Green, GE-free New Zealand

Psychiatrist and historian Robert Jay Lifton has delved deep into the some of the darkest issues and most traumatic events of the 20th century with his research into the mindset of Nazi doctors, terrorism, the experiences of prisoners of war, and the aftermath of nuclear attack, which he chronicled in *Death in Life: Survivors of Hiroshima*, winner of a National Book Award.

"Now, at the age of 91, Lifton has turned his attention to climate change. In his new book, *The Climate Swerve: Reflections on Mind, Hope, and Survival*, Lifton argues we are living through a time of increasing recognition of the reality of climate change, a psychological shift he refers to as a 'swerve', driven by evidence, economics, and ethics.

"In an interview with *Yale Environment 360*, Lifton talks about how far into this swerve we are, how natural disasters are critical in changing people's minds about climate change, and the losing battle the Trump administration is fighting by continuing to deny the science behind global warming. 'It's becoming more and more difficult to take the stand of climate rejection', he says, 'because there is so much evidence of climate change and so much appropriate fear about its consequences.'

More: <http://e360.yale.edu/features/climate-change-and-the-human-mind-a-noted-psychiatrist-weighs-in> plus <http://thenewpress.com/books/climate-swerve> 192 pages, September 2017

Source: *Yale Environment 360*, 27th October 2017. ❖

ISO14004 – Review

Standard 'ISO 14004:2016, Environmental management systems – General guidelines on implementation' is intended to supersede 'AS/NZS ISO 14004:2004, Environmental management systems – General guidelines on principles, systems and support techniques'. The objective of this Standard is to provide guidance for an organisation on the establishment, implementation, maintenance and improvement of a robust, credible and reliable environmental management system.

The guidance provided is intended for an organisation seeking to manage its environmental responsibilities in a systematic manner that contributes to the environmental pillar of sustainability.

Comments close: 11th December 2017

More:

https://shop.standards.govt.nz/docserv/drafts/DR_AS_NZS_ISO_14004_2017-NOITA.PDF

Source: Standards NZ, 3rd November 2017. ❖

New Water Footprint Guide

A new handbook to help using ISO 14046 for assessments.

More: www.environmentalleader.com/2017/08/stymied-water-footprint-assessment-new-guide-can-help/ plus www.iso.org/files/live/sites/isoorg/files/store/en/PUB100419_preview.pdf 10pages, 329kb

Source: *Environmental Leader*, 15th August 2017. ❖

SUSTAINABILITY GROUP EVENTS

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



Announcements in 'due course'. ❖

Zealand

"The Soil & Health Association is celebrating the decision by Federated Farmers to abandon its appeal against the right of councils to control the use of genetically modified organisms (GMOs) in their territories. Federated Farmers filed its latest appeal earlier this year in the Court of Appeal, after its appeals to the Environment Court and High Court had been dismissed.

"We congratulate Federated Farmers on this pragmatic and sensible decision", said Soil & Health Chair Graham Clarke.

"Both the High Court and Environment Court have ruled that regional councils have jurisdiction under the Resource Management Act (RMA) to regulate the use of GMOs through regional policy statements or plans. The recent RMA amendments further entrench the legal rights of councils to do so. Challenging these decisions would only have cost both us, the other parties involved and Federated Farmers themselves a lot of unnecessary time and money.'

"Federated Farmers had argued the Environmental Protection Authority had sole responsibility for the regulation of GMOs under the Hazardous Substances and New Organisms Act (HSNO).

"The decision to withdraw its appeal comes after recent amendments were made to the RMA, which confirmed the High Court ruling, leading Federated Farmers to believe they 'are likely to have materially reduced the prospects of the appeal being prosecuted successfully.'....

More: <https://organicnz.org.nz/uncategorized/win-clean-green-ge-free-new-zealand/>

Source: *Tieke: ECO Alerts & Events*, 1st November 2017. ❖

New Zealand: Polluted Paradise

"New Zealand's pristine and abundant rivers and lakes have long been central to its proud reputation as a land of breathtaking natural beauty - and fundamental to a clean, green, outdoorsy brand that's used to attract millions of foreign visitors every year.

"But are its waterways really as sparkling and bountiful as the tourist ads suggest? It seems not.

"Although the issue hasn't attracted huge global attention, for some years now campaign groups such as Greenpeace have been ringing alarm bells about the deteriorating quality – and curiously diminishing volume – of New Zealand's fresh water. They say these problems are both directly attributable to the country's most profitable industry and in danger of being exacerbated by government-backed projects in support of that industry. ...

"His two-part investigation raises troubling questions about what can happen when a nation's desire for economic growth, however understandable and justifiable it may be, takes

undue precedence over the environment.

More:

www.aljazeera.com/programmes/peopleandpower/2017/08/polluted-paradise-170831042123144.html from which there are links to two related articles and first video 25 min. The second is at www.youtube.com/watch?v=OEO60_8_kME 25min.

Source: Green Party, 8th September 2017. ❖

A Lesson from Hurricane Irma: Capitalism Can't Save the Planet – It Can Only Destroy It

"There was 'a flaw' in the theory: this is the famous admission by Alan Greenspan, the former chair of the Federal Reserve, to a congressional inquiry into the 2008 financial crisis. His belief that the self-interest of the lending institutions would lead automatically to the correction of financial markets had proved wrong. Now, in the midst of the environmental crisis, we await a similar admission. We may be waiting some time.

"For, as in Greenspan's theory of the financial system, there cannot be a problem. The market is meant to be self-correcting: that's what the theory says. As Milton Friedman, one of the architects of neoliberal ideology, put it: 'Ecological values can find their natural space in the market, like any other consumer demand.' As long as environmental goods are correctly priced, neither planning nor regulation is required. Any attempt by governments or citizens to change the likely course of events is unwarranted and misguided.

"But there's a flaw. Hurricanes do not respond to market signals. The plastic fibres in our oceans, food and drinking water do not respond to market signals. Nor does the collapse of insect populations, or coral reefs, or the extirpation of orangutans from Borneo.

"The unregulated market is as powerless in the face of these forces as the people in Florida who resolved to fight Hurricane Irma by shooting it. It is the wrong tool, the wrong approach, the wrong system.

"There are two inherent problems with the pricing of the living world and its destruction. The first is that it depends on attaching a financial value to items – such as human life, species and ecosystems – that cannot be redeemed for money. The second is that it seeks to quantify events and processes that cannot be reliably predicted.

More: www.theguardian.com/commentisfree/2017/sep/13/hurricane-irma-capitalism-growth-economics-environment-financial-crisis

Source: CSEAR, 27th September 2017. ❖

Internal Controls and Sustainability Data: Closing the Confidence Gap

"In this insightful presentation, the esteemed authors of '*Leveraging the COSO Internal Control – Integrated Framework to Improve Confidence in Sustainability Performance Data*' bridge sustainability reporting to the COSO Framework. Don't miss this thought-provoking webinar presented by Robert Herz, Brad Monterio, and Jeff Thomson.

"Learning Objectives. After this webinar, you will be able to:

1. Define sustainability and its impact on business
2. Discuss the role sustainability data plays in internal and external reporting
3. Describe how the COSO Internal Control – Integrated Framework components and principles can be used to manage a firm's sustainability goals
4. Identify recommendations for effective deployment, maintenance, and monitoring of sustainability reporting.

When/Where: Monday, 20th November 2017 at 1:00pm EST (USA), on the web. Duration: 90 minutes

More: <https://www.sasb.org/> [look here as the URL for the page is VERY long]. The bios of the three authors are impressive. Plus <https://library.sasb.org/leveraging-coso-internal-control-integrated-framework-improve-confidence-sustainability-performance-data/> and the paper at: www.imanet.org/insights-and-trends/external-reporting-and-disclosure-management/coso-framework-and-sustainability, 55 pages, 3.91Mb.

Source: SASB, 3rd November 2017.

Editor: In the context of 'sustainability' reporting internal controls is an aspect of risk management which almost never gets exposure. It is of relevance to report preparers and auditors alike. COSO, founded in 1985, also flies under the radar of most report preparers and auditors. www.coso.org. ❖

WBCSD and COSO Sign Memorandum of Understanding

"LAKE MARY, Fla. April 7. 2017– Recognising the benefits of mutual cooperation to their respective Members and for business in general, The Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the World Business Council for Sustainable Development (WBCSD) recently completed a Memorandum of Understanding aimed at working together to help businesses identify and prioritise issues related to sustainability and enterprise risk management.

"COSO will work with WBCSD to develop interpretive guidance on how to embed sustainable development issues into COSO's Enterprise Risk Management Framework as a foundation to bridge the gap between the way companies consider sustainability issues in their risk management processes and how they disclose these risks to investors, facilitating effective decision making within and out with the company.

"A recent WBCSD study, launched at the World Economic Forum meeting in Davos 2017, *Sustainability and Enterprise Risk Management* found a clear disconnect between enterprise risk management and sustainability practices in most of the businesses studied. This provides a critical starting point for COSO and WBCSD to collaborate in helping businesses navigate and prioritize sustainability risks.

"Risk management – if executed properly – can be an essential management tool in driving innovation and value creation and support meaningful disclosure. WBCSD is committed to helping companies move toward using, understanding and disclosing their sustainability risks and mitigation plans and seizing opportunities', said Peter Bakker, President and CEO of WBCSD. 'A robust and holistic risk management program is necessary to identify and plan for unforeseen events that can cause disruptions in even the most resilient operations.' ...

More: www.coso.org/Documents/2017-News-COSO-WBCSD-Memorandum-of-Understanding.pdf

Source: Editor, 3rd November 2017. ❖

Pull Together: Activate Help From the Crowd

"Your organisation can help serve the community more effectively whilst saving time, money and frustration. ARA is a new social enterprise which connects organisations with [N.Z.] local community groups already working on the problems you want to help solve.

"People often talk about not wanting to 're-invent the wheel', but when it comes to addressing environmental challenges at a community scale it can be hard to know who is already working on the same problem in one way or another. The result? Efforts can end up being duplicated, time and money can be wasted, and – instead of harnessing and leveraging what's happening already – initiatives can fail to reach their full potential.

"In most communities, small groups of passionate and concerned people roll up their sleeves to work on small projects. They often don't have websites or newsletters, they just get on with the job. In many cases a lack of administrative bureaucracy is an advantage; their strength is the intimate wisdom of how things work locally, and a deep knowledge of the problem, and what will work best to fix it.

"Tapping into the power of these small groups can help companies and councils achieve their community investment goals more effectively. The challenge is finding them, understanding what they're doing, and connecting with them in the right way.

"Proxima has been providing some *pro bono* help to a start-up social enterprise, Action Research Aotearoa – or ARA – which has a solution to this challenge....

More: www.proxima.global/news/activating-help-from-the-crowd/ plus www.aranz.org/

Source: Proxima, 18th October 2017

Editor: See the very useful ideas and tools at the 25th October 2017 blog post. ❖

Could Disclosing Climate-related Financial Information Become the New Normal?

"Climate change disclosures in corporate reports are common, including disclosure of greenhouse gas (GHG) emissions and other metrics measuring the impact of an organisation on the environment. But what is often missing is the link to the financial implications of climate change, both current and in the future. GHG disclosures in themselves are not adequate enough for investors to fully understand a company's exposure to climate-related risks and opportunities as well as its strategies for managing them.

"A recent global survey found that 56% of investors surveyed considered disclosures on climate-related risk 'highly inadequate'. More than 475 institutional investors participated in the survey, *Surveying Corporate Issuer and Investor Attitudes to Sustainable Finance*, commissioned by HSBC, one of the world's largest banking and financial services organisations, and conducted by market research firm East & Partners.

"Climate-related risks are categorised into 2 types:

- Transition risks: risks associated with the transition to a lower-carbon economy, e.g. investment in new technologies, regulatory, and legal risks.
- Physical risks: risk of extreme weather events or longer term shifts in climate patterns associated with climate change.

"The report also identifies different areas of opportunity, including resource efficiency, cost savings, new products and services, and access to new markets.

More: www.ifac.org/global-knowledge-gateway/business-reporting/discussion/could-disclosing-climate-related-financial

Source: Editor, 3rd November 2017. ❖

2nd Pacific Climate Change Conference

"Conference themes include:

- Physical climate changes: atmosphere and ocean, including sea level rise
- Adaptation to climate change
- Mitigation of climate change
- Activism and grassroots responses
- Law: policy and political responses
- The economics of climate change
- Social sciences and art: artistic responses to climate change
- Climate change and security issues, including migration
- Climate change and the media
- Materials for Climate Change Remediation: Materials science solutions for climate change, including CO2 sequestering, green fuels and new types of plastic solar cells.

"Speakers include:

- Opening Keynote Speaker, Honourable Tuila'epa Dr Sa'ilele Malielegaoi, Prime Minister of Samoa
- Dr Will Steffen, Emeritus Professor, Australian National University
- Dr Michael Mann, Distinguished Professor of Atmospheric Science, Pennsylvania State University
- Dr Daniel Nocera, Patterson Rockwood Professor of Energy in the Department of Chemistry and Chemical Biology, Harvard University
- Dr Patila Malua-Amosa, Dean, Faculty of Science, National University of Samoa
- Sir Geoffrey Palmer, Distinguished Fellow, Faculty of Law, Victoria University of Wellington
- Dr Elisabeth Holland, Professor of Climate Change, Pacific Center for Environment and Sustainable Development, University of the South Pacific
- Aroha Te Pareake Mead, Independent researcher

When/Where: Wed. 21st to Fri. 23rd Feb 2018. Wellington

More: <http://www.confer.co.nz/pcc2018/>

Source: *Tieke: ECO Alerts & Events*, 1st November 2017. ❖

Net-Zero Homes Built in Seattle

"Dwell Development, a green home builder based in Seattle, advanced its mission of building sustainable homes with the goal of building exclusively net-zero energy ready homes. It's newest home, in Seattle's historic Capitol Hill neighbourhood, aligns with that mission: the home is equipped with both solar and a green roof to harness natural energy from the sun and reduce carbon emissions, along with other sustainable features. High-performing building features such as these are increasingly entering into buyers' decisions about purchasing properties and homes, LEED suggests in its Business Case for Green Building.

"The home features a 9Kw solar package, green roof, and more than a thousand square-foot reclaimed wood deck.

"Dwell says the home will achieve 5-Star Built Green certification through Washington State's Built Green home building program. A 5-Star Built Green rating is the highest rating a home can achieve, meaning the builder has gone 'above and beyond to design an exceptionally green home', incorporating features such as solar power, energy efficient and water-saving appliances, an airtight building envelope, super insulation, triple-pane windows, reclaimed and recycled materials, and limited disruption to native landscaping.....

Using LED lights during construction is noted as bringing worthwhile savings.

More: www.environmentalleader.com/2017/10/dwell-development-builds-net-zero-homes-including-this-doozy-in-seattle/

Source: *Environmental Leader*, 26th October 2017. ❖

Denver Building Owners Could Be Required to Install Green Roofs

"Should a positive vote on the green roof ballot occur in Denver next month [November], owners of new and existing large buildings may be required to install green roofs. A citizen's initiative has gathered thousands of signatures to put a mandatory requirement for green roofs on large buildings to a vote in Denver by 7th November, 2017.

"The Green Infrastructure Foundation and Green Roofs for Healthy Cities released a study which it said highlights the cumulative costs and benefits of the initiative over a 15-year period. According to the study, cumulative costs and benefits of the requirement, over a 15-year period, include:

- 57.5 million square feet of green roofs on new and existing buildings constructed by 2033
- \$1.06 billion in capital investment and \$336 million in maintenance costs
- \$445 million in rooftop food production
- \$573 million in savings due to increased membrane durability
- \$171 million in savings due to reduced urban heat island effect (Denver is the 3rd worst city in the US for the urban heat island)
- \$59 million in direct energy savings
- \$37 million in benefits associated with improved productivity and reduced absenteeism
- \$95 million in real estate benefits associated with lower vacancy rates and turnover
- \$38 million in community economic benefits from increased tax revenues associated with employment.

"By the year 2058, the cumulative benefits of the 57.5 million square feet of green roofs exceed the costs by \$1.85 billion, net present value, according to the study.

"Even with the conservative assumptions, we found a strong business case for the ballot initiative which could be truly transformational for the citizens of Denver in terms of jobs and quality of life', said Steven W. Peck, founder and president of Green Roofs for Healthy Cities and a major author of the study.

More: www.environmentalleader.com/2017/10/174624/

Source: *Environmental Leader*, 20th October 2017. ❖

New Zealand's Water Systems Particularly Vulnerable to Climate Change

"The recent Edgcumbe floods saw raw sewage floating through the streets, making the clean-up extremely challenging. Six months later, 500 houses are still unliveable and flood-proofing the town remains a distant goal.

"The asset value of stormwater and wastewater assets in New Zealand is well over \$20 billion. This includes 24,000 kilometres of public wastewater networks with more than 3,000 pumping stations, and over 17,000 kilometres of stormwater networks. Much of it, however, was not designed for the challenges climate change will bring, from sea level rise to the predicted changes in precipitation frequency and intensity.

"The way climate change is predicted to affect our stormwater and wastewater will have a considerable impact on many aspects of NZ life, including health, disaster resilience, drinking water, ecology, and transport, not to mention how flooding or infrastructure failure will impact on communities", said Professor Iain White, Professor at Waikato University and a co-author of the Deep South National Science Challenge report Climate Change and Stormwater and Wastewater Systems ...

"The increase in extreme rainfall events will also add stress to the system by overwhelming the networks, restricting opportunities for maintenance, and increasing the occurrence of infiltration of wastewater into stormwater.

"We already know that sea level rise will affect all coastal infrastructure, and as many of our water networks use gravity to discharge to water bodies, the most costly areas of the network are often located in low-lying areas or on the coast. From this, increasing sewage overflows, pipes corroded by salt water, and exposure to liquefaction are all more likely", said Professor White.

"An increase in the number and frequency of coastal storms will also affect coastal infrastructure in particular, causing increasing inundation, physical damage, and electrical failure at treatment plants.

"It's not just too much water, though", said Professor White. "Drought brings its own problems, disrupting gravity systems by slowing flow and leading to blocked pipes. Particularly lengthy droughts can also affect wastewater treatment processes, creating functional and safety concerns."

More: www.deepsouthchallenge.co.nz/news-updates/new-zealands-water-systems-particularly-vulnerable-climate-change plus www.deepsouthchallenge.co.nz/sites/default/files/2017-10/Climate%20Change%20Stormwater%20Wastewater%20Systems_0.pdf, 15 pages, 1.5Mb

Source: *NZ Herald*, page A21, 27th October 2017. ❖

KPMG's Survey of Corporate Responsibility Reporting 2017

"KPMG has released its 10th survey of corporate reporting, analysing the practices of 4,900 companies in 49 countries and regions. According to the results, 75% of G250 reports apply the GRI framework. Further, the SDGs have resonated strongly with business and 43% of G250 reports connect companies' corporate responsibility activities to the global goals.

The NZ supplement includes reporting on the landscape of the top 10 Maori companies. Although they do not feature in the N100 by revenue the Maori sector plays a significant part in in NZ's cultural and business landscape.

More: <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/10/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf> 58 pages, 2.96Mb
Plus NZ supplement https://home.kpmg.com/content/dam/kpmg/nz/pdf/November/KPMG_NZ_Survey_of_Corporate_Responsibility_Reporting_2017.pdf 17 pages, 2.61Mb and <https://home.kpmg.com/nz/en/home/insights/2017/11/corporate-responsibility-reporting-survey-2017.html>

Source: GRI, 1st November 2017, plus Auckland KPMG presentation 2nd November. ❖

Small is Resilient | Big is Brittle

"Want to do something really easy to build resilience in your community any time?

"Support local businesses.

"Why? As Richard Heinberg explains in *Economics of Relocalization*, while big businesses reap extensive benefits for themselves, they do little to truly support the communities in which they operate. Locally owned business, on the other hand, build community resilience by nurturing the multiplier effect – when money is spent within the regional economy, local wealth, taxes, jobs, charitable contributions, tourism, and entrepreneurship are supported.

More: <https://education.resilience.org/>

Source: Post Carbon Institute 30th October 2017.

Editor: Fee for self-directed course is US\$20; course duration approx. 4 hours in total. ❖

Game-changing Lamp Powered by Gravity Could Provide Light to Billions

"Solar-powered electricity systems have often been touted as a solution for those living without reliable access to electricity, but another Earthly force is also readily available (and doesn't surrender to inclement weather or nightfall): Gravity.

"That's the idea behind the GravityLight – a lamp that only requires the weight of a bag of sand or rocks to provide light. And for the 1.3 billion people in the world who live in 'energy poverty', this simple yet genius idea could be a game changer.

"For the majority of people without reliable access to electricity, dangerous and polluting kerosene is the primary source for light. But as designers Martin Riddiford and Jim Reeves said in their Indiegogo campaign, the GravityLight is 'a low-cost [less than \$10], safe and reliable alternative to the kerosene lamp, one that costs nothing to run, doesn't need batteries and pays for itself within weeks switching from kerosene.'

"It basically works like a hand-cranked lantern. To activate the GravityLight's bright LED, the user attaches a weighted bag that's at least a 12 kg (about 26 lbs) to a beaded chain. The user then lifts the bag up by pulling on the chain.

"When user releases the bag, the bag's slow descent to the floor (at about 1mm a second) helps power an internal DC generator that runs at thousands of rotations per minute. With these easy steps, the lamp can provide enough light for up to 30 minutes and can be repeated over and over as needed. ... [With video]

More: www.ecowatch.com/game-changing-lamp-powered-by-gravity-could-provide-light-to-billions-1882045814.html plus www.facebook.com/storyofstuff/posts/10156795017820884

Source: The Story of Stuff, 23rd October 2017. ❖

Why Roman Concrete Still Stands Strong While Modern Version Decays

"Scientists have cracked the secret to Roman water-based structures' strength – and findings could help today's builders

"Their structures are still standing more than 1,500 years after the last centurion snuffed it: now the Romans' secret of durable marine concrete has finally been cracked.

"The Roman recipe – a mix of volcanic ash, lime (calcium oxide), seawater and lumps of volcanic rock – held together piers, breakwaters and harbours. Moreover, in contrast to modern materials, the ancient water-based structures became stronger over time. Scientists say this is the result of seawater reacting with the volcanic material in the cement and creating new minerals that reinforced the concrete. ...

More: <http://snippets.energyts.com/snippets/20171004/story7.html>

Source: *Snippets*, 4th October 2017. ❖

'This is Very Alarming!': Flying Insects Vanish From Nature Preserves

"Not long ago, a lengthy drive on a hot day wouldn't be complete without scraping bug guts off a windshield. But splattered insects have gone the way of the Ford Escort – you just don't see them on the road like you used to.

"Biologists call this the windshield phenomenon. It's a symptom, they say, of a vanishing population.

"For those of us who look, I think all of us are disturbed and all of us are seeing fewer insects', said Scott Black, executive director of the Portland, Oregon-based Xerces Society, a non-profit environmental group that promotes insect conservation. 'On warm summer nights you used to see them around streetlights.'

"The windshield phenomenon is not just a trick of road-trip nostalgia. A small but growing number of scientific studies support the notion of insects on the wane.

"The windscreen phenomenon is probably one of the best illustrative ways to realise we are dealing with a decline in flying insects', said Caspar Hallmann, an ecologist at Radboud University in the Netherlands. Hallmann is part of a research team that recently waded through 27 years' worth of insects collected in German nature preserves.

"Between 1989 and 2016, according to a report published Wednesday in the journal PLOS One, the biomass of flying insects captured in these regions decreased by a seasonal average of 76%. ...

More:

www.nzherald.co.nz/environment/news/article.cfm?c_id=39&objectid=11934673 plus www.theguardian.com/environment/2017/oct/18/warning-of-ecological-armageddon-after-dramatic-plunge-in-insect-numbers

Source: *NZ Herald*, page A34, 20th October 2017.

Editor: During car trips totalling about 1,000 miles mostly in rural areas during a recent visit to MA, CT and Maine the author's attention was drawn to the 99% absence of windscreen insect kill. This included daytime and early evening driving. The same occurred in East, inland and West Scotland also with day, dusk and night driving in rural areas. ❖

Insurance: The Canary in the Coalmine of Climate Change?

"The Deep South Challenge announces new research into who should bear the cost of our changing climate, and when.

"All over New Zealand, from Haumoana to Westport, from Edgecumbe to the Kāpiti Coast, from Dunedin to Wellington City, homeowners and businesses are starting to feel the financial effects of climate change.

"After the recent Edgecumbe flood, for example, Tower Insurance stated while there had been no blanket increase for insurance costs in Edgecumbe, some prices were going up: 'On average, due to higher reinsurance costs and the increased risk, customers in the region could expect prices to increase by around 15 to 30%, with customers in areas of significant risk sometimes experiencing larger increases', a spokesperson said in this Radio New Zealand report.

"So are insurance companies taking more notice of climate change risk than homeowners themselves, or than local or central government? And who should pay for the damage caused by climate-related disasters, or for the incremental costs our changing climate is starting to rack up?

"Three new projects in the Deep South National Science Challenge address this question and others raised by insurance experts, social and economic policy researchers and climate scientists – who came together earlier this year in a dialogue process facilitated by Motu Economic and Public Policy Research Trust and supported by the Deep South Challenge. Together, these projects investigate the legal, economic and ethical dimensions of who should pay for damage caused by climate change events.

More: www.deepsouthchallenge.co.nz/news-updates/insurance-canary-coalmine-climate-change

Source: Editor, 27th October 2017. ❖

Student Welcome's Decision in Landmark Climate Lawsuit

"The Hamilton law student who took the Government to court over its climate emissions targets has welcomed a judgment released today, which puts the onus on the new Minister for Climate Change to go back to the drawing board.

"In June, Sarah Thomson, then a 26 year-old law student, took the National-led Government's Climate Minister to court over the targets, which she said were unambitious and failed to reflect scientific consensus on climate change. The case was the first of its kind in New Zealand.

"The Court has found that the prior Minister for Climate Change, Tim Grosser, acted unlawfully by failing to review New Zealand's climate change targets under the Climate Change Response Act, after publication of an updated UN report on climate change (AR5).

"The Court has not however made a formal order requiring the target to be reviewed by the new Minister of Climate Change, James Shaw, because of his indications that a new target is going to be set.

"But Thomson says the 2030 target she was challenging still needs to be urgently amended.

"She's now asking Shaw whether he's prepared to defend his predecessor's approach when she appeals.

"The new Government's net zero carbon ambitions for 2050 are great, but time is not on our side. What we really need now is rapid action – we need to know when we're going to change the 2030 target and how we're going to get there', she says.

"Now is the time for the Government to act. We will be appealing this High Court decision, and I'd like to know whether or not Climate Minister James Shaw is prepared to go in front of a judge and defend the emissions targets and faulty reasoning of his predecessor.

"We need to put tangible steps in place, including a far more ambitious 2030 target, to transform into an emissions-free country in the next 30 years.

"This means aligning our target with the best climate science, so we become a world leader on climate action.

"The ball is in the new Minister's court.'

More: www.scoop.co.nz/stories/PO1711/S00035/student-welcomes-decision-in-landmark-climate-lawsuit.htm plus www.stuff.co.nz/environment/98492828/high-court-says-previous-national-government-should-have-done-more-on-climate-change-targets and www.radionz.co.nz/news/national/342953/law-student-loses-case-against-govt-s-climate-policy

Source: *Carbon News*, 3rd November 2017. ❖

A Circular Economy for Auckland?

An interesting lengthy article by John Mauro, Chief Sustainability Officer of Auckland Council and which explores the circular economy and address why it matters to Auckland.

"I also propose – to Auckland and Auckland Council, to NZ businesses, and to whatever configuration of NZ central government that may shortly emerge – a set of guiding principles that can help accelerate the transition.'

The article outlines five guiding principles – 5 I's – to circular economy transition; Innovation, Incentives, Integration, Interrogation and Investment, each with an Upshot, How and Right Now.

Also links to initiatives in Finland.

More:

<http://temp.aucklandcouncil.govt.nz/EN/newsevents/culture/OurAuckland/Documents/aucklandsustainabilityquarterly.pdf> plus <https://media.sitra.fi/2017/02/24032659/Selvityksia121.pdf>, 'Leading the cycle – Finnish road map to a circular economy 2016–2025', 56 pages, 3.01Mb

Source: John Mauro, 13th October 2017. ❖

Integrated Reporting – The Future of Accounting

"A new wave of global non-financial reporting is changing the way accountants tell the story of their companies.

"In a move being led by international investors and company boards, the way that accountants carry out reporting is changing worldwide. A trend towards non-financial reporting is the way of the future, and is set to become the global norm, a CA ANZ breakfast forum was told in October.

"With about 1,600 companies worldwide already adopting the principles of Integrated Reporting, in Australia these include corporate heavyweights such as Lend Lease, National Australia Bank, Stockland, Australia Post and superannuation funds Cbus and Vic Super....

"A strong desire for good corporate governance in the wake of the Global Financial Crisis has been a key driver. 'Boards want a holistic approach. They want to know what's going on before bad things happen, so they know about them early and they have been dealt with. That's what good corporate governance is about, in a very simplistic way.'

"South Africa is the only country in the world with legislation requiring integrated reporting for listed firms, but a growing number of companies in Australia and overseas are voluntarily adopting the International Integrated Reporting Framework, speakers told a panel session at the breakfast.

"In Europe, the EU Non-Financial Reporting Directive this year will see 8,000 companies integrate financial and non-financial reporting for the first time', says Howitt. ...

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"We are seeing the best examples (of integrated reporting) in investor presentation packs. What they are doing is learning how to tell stories', says Vamos, adding accountants need to be more like investigative journalists to drill down into the non-financials.

More: www.acuitymag.com/finance/integrated-reporting--the-future-of-accounting

Source: *Acuity Newsletter* (CA ANZ), 3rd November 2017. ❖

Do You Need Expert In-depth to Help Make Your Business More Sustainable?

"SBN members have access to a host of sustainable business tools, exclusive events and expert advice. But there are times when businesses need additional in-depth and bespoke help. That's why we have created the SBN Advisory.

"The new SBN Advisory is a unique sustainable business advisory service.

"SBN staff have extensive and varied experience in sustainable business in New Zealand. They also work as trusted partners and collaborators across the SBN network. This gives them access to an unrivalled range and depth of expertise.

"Rachel Brown CEO of SBN says: 'For years people have been asking for more exclusive time with our experts. So we have created a range of packages to meet this need. We are using reality-hardened tools and processes to assist with sustainability strategy, issues identification and implementation.'

"The packages on offer can:

- Assess your current sustainability performance
- Provide a clear pathway towards realising your goals
- Identify your business' environmental and social impact
- Detail what you can control and improve,
- Align and integrate sustainability into your business strategy.

More: <https://sustainable.org.nz/sustainable-business-news/need-expert-depth-help-making-business-sustainable/> plus <https://sustainable.org.nz/sbn-advisory-service/>

Source: SBN, 24th October 2017. ❖

Climate Change Puts Cambodians at Risk of Mental Health Disorders

"Cambodia has been ranked among the most vulnerable countries in the [SE Asian] region to climate change. In recent years, the Kingdom has been hit by prolonged droughts, floods and heat waves.

"With more than half of Cambodians working as farmers in poor, rural settings, the threat to their livelihoods from hotter and more extreme weather is very high.

"Thirty-nine-year-old Chouerng Neth, a rice farmer who lives in the Krang Chek commune, says over the last few years, production has dropped dramatically following long dry spells.

"Every year, I could produce up to 1.9 tonnes of rice, but the yield as dropped by almost a half', Neth says.

"I am deeply concerned about rice production; rice has helped feed my entire family for generations. I am afraid this problem [drought] will continue in the coming years. I have no idea what I can do to solve this problem.'

"The impact of climate change on the environment and people has been increasingly well reported, but the effect on human mental health less so.

"High levels of stress and anxiety are also linked to physical health effects, such as a weakened immune system', the report explains. 'Worrying about actual or potential impacts of climate change can lead to stress that can build over time and eventually lead to stress-related problems, such as substance abuse, anxiety disorders and depression.'

"While tackling climate change will require a huge effort and is a long-term process, experts suggest it is important to raise awareness of the mental health issues at play. This will help people build personal and psychological resistance to climate change.

"Mental health problems often go unnoticed in Cambodia. Most Cambodians don't think they have mental health issues, because they don't know how to recognise them.'

"The most important thing we can do is help people be mentally prepared for the impacts of climate change', Sovandara said.

More: www.eco-business.com/news/climate-change-puts-cambodians-at-risk-of-mental-health-disorders/

Source: *eco-business.com*, 1st November 2017.

Editor: Consider also the high suicide rates among Australian and Indian farmers related to changing climate. ❖

Fewer Poor Means More Climate Work for the Rich

"Abstract: The UN Framework Convention on Climate Change aims to keep warming below 2 °C while recognising developing countries' right to eradicate extreme poverty. Poverty eradication is also the first of the Sustainable Development Goals. This paper investigates potential consequences for climate targets of achieving poverty eradication. We find that eradicating extreme poverty, i.e., moving people to an income above \$1.9 purchasing power parity (PPP) a day, does not jeopardise the climate target even in the absence of climate policies and with current technologies.

"On the other hand, bringing everybody to a still modest expenditure level of at least \$2.97 PPP would have long-term consequences on achieving emission targets. Compared to the reference mitigation pathway, eradicating extreme poverty increases the effort by 2.8% whereas bringing everybody to at least \$2.97 PPP would increase the required mitigation rate by 27%. Given the top 10% global income earners are responsible for 36% of the current carbon footprint of households; the discourse should address income distribution and the carbon intensity of lifestyles.

More: www.nature.com/articles/s41467-017-00919-4 plus www.carbonnews.co.nz/story.asp?storyID=13472

Source: *Carbon News*, 26th October 2017. ❖

European Social Innovation Tournament Winner

"The [Irish] Freebird Club has won a number of major international awards. Last month [September] it beat tough competition, involving 308 start-ups from 31 countries, to win the finals of the 2017 European Social Innovation Tournament in Riga, Latvia. The awards, which recognise innovative projects creating social value and combating social exclusion, are organised annually by the European Investment Bank.

"New Irish start-up The Freebird Club is a travel-based social club for older adults, enabling positive 'connected ageing' through social travel and homestays among members. Operating as a 'peer-to-peer' members' club for the over 50's, it enables mature adults to travel and stay with each other in the context of a trusted community of socially minded peers.

"Founder Peter Mangan came up with the idea for the business when he saw how much enjoyment his father Owen, a widower and retired vet in Killorglin, Co Kerry, was getting out of interacting with older guests while managing his son's holiday home. The Freebird Club offers a whole new way of travelling for older adults, a means to unlock value in their homes and earn extra income from spare rooms, and a fun, accessible way to meet new people and enjoy social and cultural interaction in later life.

More: www.irelandxo.com/ireland-xo/news/award-winning-irish-start-freebird-club plus www.irishtimes.com/life-and-style/abroad/free-as-a-bird-and-looking-for-a-room-1.3221351

Source: *Ireland Reaching Out*, 29th October 2017. ❖

A Thank You to Jan Wright, Out Going Parliamentary Commissioner for the Environment

"We owe a debt of gratitude to Dr Jan Wright, who has just finished her term as [N.Z.] P.C.E.

"As a writer in the *New Zealand Listener* has noted, her reports over ten years have been very well researched and amount to 'an encyclopedia of the country's inconvenient truths'. ECO thanks Dr Wright for her tireless advocacy for the environment and her intellectually robust research, underpinned by solid science. And yes, Dr Wright is buying an electric car – perhaps there is message there for us all. Read the interesting *Listener* article.

More: www.noted.co.nz/currently/environment/the-legacy-of-nz-s-departing-environmental-watchdog-jan-wright/

Source: *Tieke: ECO Alerts & Events*, 25th October 2017

Editor: A remarkable story. ❖

NZGBC Announces New Chair

"The head of New Zealand's second biggest construction company was elected [19th October] as the new Chair of the New Zealand Green Building Council (NZGBC), one of the most influential positions in the country's building industry.

"Gary Walker, the executive general manager of Hawkins.

"Known throughout the sector for his approachable, informal style, Gary has worked on major international construction projects in New Zealand, Australia, the UK, Europe and Africa. Hailing originally from Scotland, he has over 30 years' experience in the industry and is passionate about the sustainability of people and places.'....

More: www.nzgbc.org.nz/Story?Action=View&Story_id=257

Source: NZGBC, 20th October 2017. ❖

Around the World in an Electric Car

"Wiebe Wakker, a 30 year-old Dutchman, has travelled 51,000 km through 28 countries on a journey from the Netherlands to Australia in an electric car – relying on donations of food, a bed and electricity to get him there.

"With a mission to dispel the myth that electric vehicles (EVs) cannot match their fossil fuel-powered cousins when it comes to endurance, Wakker has so far travelled 51,000 kilometres in a...

More: www.eco-business.com/news/around-the-world-in-an-electric-car

Source: *eco-Business.com*, 4th Oct 2017. ❖

Disclosure of Environmental and Social Information – New EU Guidelines

"The Commission has today [26th June] adopted guidelines on the disclosure of environmental and social information.

These guidelines will help companies to disclose relevant non-financial information in a consistent and more comparable manner. The aim is to boost corporate transparency and performance, as well as encourage companies to embrace a more sustainable approach.

"The new guidelines will support companies in fulfilling their reporting obligations under current non-financial disclosure requirements and will promote smart company reporting. Transparent companies perform better over time, enjoy lower financing costs, attract and retain talented employees and are ultimately more successful. Well-informed business and investment decisions have much better chances to succeed.

"Appropriate non-financial disclosure is also an essential element to enable sustainable finance. This builds on the Commission's goal to develop an overarching and comprehensive EU strategy on sustainable finance as part of the Capital Markets Union.

More: http://europa.eu/rapid/press-release_IP-17-1702_en.htm plus http://europa.eu/rapid/press-release_MEMO-17-1703_en.htm and [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705\(01\),20](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705(01),20) pages, 871kb

Source: CSEAR, Page 8, 27th September 2017

Editor: The requirements apply to companies with more than 500 employees. ❖

New PCE Sworn In

"Simon Upton was sworn in [by the Governor General] as Parliamentary Commissioner for the Environment for a five-year term on 16th of October 2017.

"Mr Upton is a Fellow of the Royal Society of New Zealand and a Rhodes Scholar, with degrees in English literature, music and law from the University of Auckland, and an MLitt in political philosophy from Oxford University. He was sworn in as a member of the Privy Council in 1999.

"A Member of Parliament between 1981 and 2000, Mr Upton held a variety of Ministerial portfolios including Environment, Research, Biosecurity, Health and State Services between 1990 and 1999.

"After leaving Parliament, Mr Upton moved to Paris to chair the Round Table on Sustainable Development at the Organisation for Economic Co-operation and Development (OECD). In 2005, he returned to New Zealand to pursue a number of private sector roles while continuing to chair the Round Table.

"In April 2010 he returned to the OECD full-time as Environment Director, a post he held for seven years until returning to take up the role of Parliamentary Commissioner for the Environment.

More: www.pce.parliament.nz/about-us/the-commissioner

Source: Editor, 25th October 2016. ❖

Trump Nixes Environmental Regulations

"The *New York Times* has documented 52 rollbacks in environmental protections in the US since Trump took office in January. Trump and the Republicans in Congress have freed up lands for new coal mines and scrapped Obama's three year freeze on new coal leases on public lands. It is now legal to dump debris from coal mines directly into streams. The list makes for very depressing, and enraging, reading. The rollbacks are a monumental statement of ignorance and a rejection of a liveable future for all of us.

More: www.nytimes.com/interactive/2017/10/05/climate/trump-p-environment-rules-reversed.html

Source: *Tieke: ECO Alerts & Events*, 11th October 2017. ❖

Is Uber Stopping Us from Walking?

"The answer appears to be Yes, based on research conducted by the UC Davis Institute of Transportation Studies in the US. They interviewed 2,000 people in major metro areas and found that ride-hailing drew people away from mass transit or from walking or cycling.

"The implication is that Uber may actually be making traffic congestion worse. Uber drivers circle around waiting for rides or head back to the airport after dropping off their customer. Some users report using a train or bus more, and then taking Uber the last kilometre home (when otherwise they could have walked the distance).

"Others bought a car after being transit users and then using Uber, and discovering the 'advantages' of commuting by car.

"Some transit companies in the US are beginning to work with ride-sharing apps to get people around on late night trips and so on.

More: www.nytimes.com/2017/10/16/upshot/is-uber-helping-or-hurting-mass-transit.html

Source: Tieke: *ECO Alerts & Events*, 25 October 2017. ❖

It Must be Important

CNET 'tracks all the latest consumer technology breakthroughs and shows you what's new, what matters and how technology can enrich your life. We give you the information, tools and advice that will help you decide what to buy and how to get the most out of the tech in your life. Each month, millions of people come to CNET' is running a series of articles about the Great Barrier Reef and other coral reefs around the world.'

Headlined 'There's still time to save the Great Barrier Reef from dying: We're killing one of the world's most spectacular natural wonders. It's not too late to change', then adding 'This is part of our series, 'Rebooting the Reef', on efforts to save one of the world's greatest natural wonders', followed with 'No one would challenge the majesty of Australia's Great Barrier Reef.

"Nearly 1,500 miles long, the reef is alight with a kaleidoscope of vivid colours. Its home to roughly 9,000 species of fish, molluscs, whales and other creatures. In 1981, the reef was designated a UNESCO World Heritage Site, a status that helps it draw 2 million visitors a year. It's also dying. At our own hands.....' provides reach to millions of tech savvy folks around the world. One would like to think this could engender massive upwelling of actions to influence causation of climate change.

More: www.cnet.com/features/the-great-barrier-reef-a-tragedy-of-our-own-making/

Source: CNET, 19th October 2017.

Editor: When a company which focuses on tech devices writes like this perhaps it indicates 'the message' is getting through that Gt Barrier Reef issues are important. ❖

The Science, Business and Education of Sustainable Infrastructure: Building Resilience in a Changing World

"The recent hurricanes are a stark reminder of the importance of building communities and infrastructure that are resilient in a rapidly changing world. Please join the National Council for Science and the Environment (NCSE) to learn and discuss the science, business, and education of sustainable infrastructure at the National Conference and Global Forum on Science, Policy and the Environment.

"NCSE 2018 takes a systems perspective that integrates natural, built, cyber, and social infrastructure to advance solutions that can enable well-being for all over multiple generations.

Context: Over the next few decades, USA needing to undertake the largest rebuilding of infrastructure in its history

Where/When: Washington, DC 23rd -25th January 2018

More: <https://ncseconference.org/>

Source: NCES, 6th October 2017. ❖

For The Love of Earth, Stop Traveling

"According to former U.N. climate chief Christiana Figueres, we have only three years left in which to 'bend the emissions curve downward' and forestall a terrifying cascade of climate-related catastrophes, much worse than what we're already experiencing. Realistically, is there anything that you or I can do as individuals to make a significant difference in the short time remaining?

"The answer is yes, and the good news is it won't cost us a penny. It will actually save us money, and we won't have to leave home to do it. Staying home, in fact, is the essence of making a big difference in a big hurry. That's because nothing that we do pumps carbon dioxide into the atmosphere faster than air travel. Cancel a couple long flights, and you can halve your carbon footprint. Schedule a couple, and you can double or triple it.

"Atmosfair is a German public interest group that recommends limiting your air travel to about 3,100 miles per year – if you live in Los Angeles, that's one round-trip flight to Mexico City. If you must exceed that limit, Atmosfair invites you to compensate by sending conscience money on a prorated basis to support climate stabilization efforts around the world.

"So for the love of the Earth, our common home, our only home, start conducting more remote work meetings and training sessions virtually. Inform those jet-setting friends that you won't attend their destination wedding in the tropics – you'll send a gift in the mail. Tell that conference organiser that while you're honoured to be invited, you would prefer to participate in live online sessions instead. Start taking vacations by train or car, rather than flying to Paris or beyond. Explain to your ecological public interest group the Galápagos will be much better off without you. And please, all you professionals bouncing between New York City and Washington D.C., take a train, not a plane. ...

More:

www.washingtonpost.com/amhtml/news/theworldpost/wp/2017/11/02/plane-pollution/

Source: *Carbon News*, 7th November 2017. ❖

Scotland Plans Publicly Owned, NFP Renewable Energy Company

"Scotland's First Minister, Nicola Sturgeon, has confirmed that Scotland will set up a publicly owned, not-for-profit energy company, providing locally generated renewable energy.

"The First Minister told the Scottish National Party's conference the new company would be set up by the end of the current parliamentary term in 2021 to increase competition and choice for consumers.

"The idea, at its heart, is simple', she said.

"Energy would be bought wholesale or generated here in Scotland, renewable, of course, and sold to customers as close to cost price as possible."

"No shareholders to worry about. No corporate bonuses to consider.

"It would give people, particularly those on low incomes, more choice and the option of a supplier whose only job is to secure the lowest price for consumers.'

".... he also added: 'Personally my own view is in the future the energy sector will change a lot, we will have a lot more community energy groups, we'll have a lot more local production of energy so it seems that any company with strong roots locally, with a strong reputation is likely to do well.'

More: <http://econews.com.au/55746/scotland-plans-publicly-owned-nfp-renewable-energy-company/>

Source: eco-News, 13th October 2017. ❖

Contributions and feedback are welcomed.

Send your news items, handy hints, case studies, suggestions, comments and questions to Ray Skinner of *Sustainability Matters*.
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