

Sustainability Matters

2nd August 2018

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.**

New Government Indicators – Significant Announcement

"The Minister of Statistics today [31st July] launched the development of a new comprehensive set of environmental, social and economic indicators to better measure New Zealand's overall wellbeing and success by expanding beyond traditional narrow measures of economic success. The intent is to also reflect the wellbeing of New Zealanders, including the environmental wellbeing which sustains us.

This is a milestone not only for NZ, but is a world-leading first Lead by its Green Party partner the government is asking New Zealanders to tell Statistics NZ what indicators they'd like tracked as part of *Indicators Aotearoa New Zealand*.

Statistics NZ will run a public consultation process until the end of September seeking their input into what wellbeing looks like for New Zealanders. The results will be fed into the budget-setting processes for the Government budget for 2019/2020 year and years beyond.

The Statistics NZ website has a number of easily understandable factsheets a video, transcripts of the video and an opportunity for people to say what is most important to them for their wellbeing.

More: www.beehive.govt.nz/release/work-gets-underway-develop-better-measures-new-zealand%E2%80%99s-success plus www.scoop.co.nz/stories/PA1807/S00273/work-gets-underway-to-develop-better-measures-of-success.htm and especially www.stats.govt.nz/consultations/indicators-aotearoa-new-zealand-nga-tutohu-aotearoa-consultation where there's much more including about the consultation process .

Source: Graeme Coleman 31st July 2018. ❖

Reserve Bank Governor – Climate Leaders Coalition Briefing

"12th July 2018. Speaking notes from a panel discussion in Auckland.

"Firstly, congratulations. To see so many companies agree to the following is a moment of rejoice.

"By signing the CEO's Climate Change Statement, business leaders have committed to:

- Measuring and reporting their greenhouse gas emissions;
- Setting a public emissions target; and
- Working with suppliers to reduce greenhouse gas emissions.

Continued next column

Investing for Wellbeing Panel: Balancing Commercial and Social Outcomes: Keynote Speech

Sustainability Matters of 21st June drew attention to a [NZ] Treasury event partnered by CA ANZ. The context was Treasury's 2018 Investment statement: *Investing in Wellbeing*. There was a panel discussion by Jane Diplock, Tim Ng Deputy Secretary, the Treasury and Damon Salesa Assoc Prof of Pacific Studies University of Auckland.

This was preceded by a key note address by Jane Diplock AO, professional director; Chair of the Governance and Nominating Committee of the International Integrated Reporting Council; and former chair of the NZ Securities Commission, Jane discussed the global trend towards holistic thinking, focusing on the work being done by both businesses and the public sector to address holistically the challenges of climate change, inequality and poverty in this interconnected century – including via Integrated Reporting, meeting the UN's Sustainable Development Goals and wellbeing budgeting.

The webcast was recorded and is now available (see below)

Jane speaks from 7:30 minutes into the recording.

Regrettably until that point the sound quality is very poor.

Jane's thought provoking speech is of some importance to chartered accountants in both New Zealand and Australia. It alerts them to significant global and local happenings in the reporting sphere and alerts them to emerging requirements and opportunities. She has kindly made the text available. It merits reading and consideration for action especially by chartered accountants.

More: <https://treasury.govt.nz/publications/investment-statement/2018-investment-statement> plus <https://connect.charteredaccountantsanz.com/pqxy5hesbtp/> for the recording. The text of the speech is via www.sustainabilitymatters.co.nz/resources/books-and-other-media/

Source: CA ANZ 24th July and Jane Diplock 31st July 2018. ❖

Continued from previous column

"These businesses are also supporting the 'Paris Agreement' (COP22) aimed at capping the rise in global temperature over coming decades. In addition, they are supporting the introduction of a climate commission and carbon budgets enshrined in law.

"The best time to start this process is 30 years ago, or today. So I am privileged and proud to be a Kiwi sitting on this stage

with so many New Zealand companies involved....

- Why does climate change matter? What are the business impacts?The economic challenge and why business efforts matters now
- What is New Zealand's role?
- Why do I believe we can lead? ...
- This leadership will continue with other regulators and central banks.

More: www.rbnz.govt.nz/research-and-publications/speeches/2018/speech2018-07-12

Source: SBC, 19th July 2018. ❖

SUSTAINABILITY WORKING GROUP

At the date of the pre-formative meeting held 17th July 2001 at NZICA there was a membership of 78, most of whom had shared insights of their talents and enthusiasm; a website was being set up on a Deloitte file server; early discussion about a possible remit to NZICA 2001 AGM; MP David Cunliffe proposing to introduce a bill to the House during 2001 session about TBL reporting. ❖

NZ Companies, Councils, Not 'Walking Talk' on Climate Risk

"New Zealand hasn't been 'walking the talk' on climate risk, finds a sweeping new analysis of hundreds of annual reports and statements.

"Climate change threatens hundreds of billions of dollars of property and infrastructure, and will require an economy-wide shift toward lower emissions.

"A leading policy analyst was therefore shocked to find scant information about climate-related risk in reporting by companies, councils and government departments.

"Of more than 380 large organisations analysed, just 40 recognised the risks as of serious concern – suggesting boards either opted not to publicly disclose the implications, or didn't discuss them at all.

"Both are horrific - but the latter is particularly more horrific', said Wendy McGuinness, chief executive of Wellington-based think-tank the McGuinness Institute. She was further alarmed to find little reporting from the public sector.

"Even one or more mentions of the words 'emissions', 'carbon' or 'climate' weren't found in nearly 2/3 of annual reports of 11 government departments – and more than 3/4 of statements from other Crown bodies and entities.

"That was quite surprising and disappointing to me – I expected a lot more from government."

"Councils made greater reference - nearly 70% acknowledged the risk - but just 1/3 of the Deloitte Top 200 companies did.

"What detail she could find also didn't cover the three basics - identifying the risk, understanding what it meant, and trying to manage it.

"Unsurprisingly, climate risk was best recognised by companies and groups in the electricity, gas, water and waste service industries, or those that depended on our natural environment.

"McGuinness said the analysis, released today, suggested countless conferences and workshops on climate change hadn't come through in what organisations were telling the public.

"If we are doing it, we're doing it in initiatives – I'd call them green fuzzies – yet we're not seeing real acknowledgement of the risk.' She suspected the area was a difficult one because climate risk was a relatively new consideration, and there were few templates for companies to start from.

"McGuinness hoped that might be about to change with a just-launched coalition of 60 major companies making up nearly half of New Zealand's greenhouse gas emissions.

"Those major players in the Climate Leaders Coalition – among them Fonterra, Air New Zealand and Spark – pledged to work toward the Paris Agreement's aim to limit further warming within 2C, and to measure and report regularly.

"Victoria University climate scientist Professor James Renwick said the longer it took to adapt greener practices and slash emissions, the harder and more costly it would be to respond and ultimately prosper. Climate change can definitely be seen as a business opportunity, by taking leadership on use of renewables and on finding low-carbon solutions', he said.

More:

www.nzherald.co.nz/business/news/article.cfm?c_id=3&objid=12092946 plus www.mcguinnessinstitute.org/wp-content/uploads/2018/07/20180723-Working-Paper-201803-%E2%80%93-5-pm-1.pdf July 2018 Working Paper 2018/03, Analysis of Climate Change Reporting in the Public and Private Sectors, 142 pages, 2.42Mb. Recommended to read especially the conclusion pp 40 to 58 incl.

Source: *NZ Herald*, page A7, 23rd July 2018.

Editor: This is a significant piece of research and should engender considerable discussion among directors, CEO's CFO's, regulators, peak accounting bodies, fund managers, the Press and others within NZ and likely elsewhere. ❖

Submissions – Proposed on Zero Carbon Bill

More than 14,000 submissions were received by [NZ] MfE regarding their discussion paper about the proposed Zero Carbon Act; The purpose of the discussion to engender discussion among NZ'ers and to help inform drafting of a bill which will then go through the usual legislative processes.

Action on climate change has become a top priority of an increasing number of New Zealand entities and NZ'ers as they become increasingly aware of the issues which are now a feature of life in NZ and many other countries. The submissions represent a huge percentage of New Zealanders throughout the country and across all sectors.

Listed below are some of the submissions available online. They vary in length from 2 to more than 45 pages, with those of Wise Response and Carbon Zero likely being the most comprehensive;

- www.beehive.govt.nz/release/zero-carbon-bill-consultation-attracts-thousands-submissions
- <http://wiseresponse.org.nz/2018/07/10/wise-response-inc-submission-to-the-productivity-commission-for-a-low-carbon-future/>
- <http://zerocarbonact.nz/assets/Uploads/Generation-Zero-Zero-Carbon-Bill-consultation-submission-July-2018.pdf> 46 pages
- www.eds.org.nz/keep-in-touch/blog/2018/our-climate-your-say-eds-submission/
- www.lgnz.co.nz/our-work/submissions/lgnz-submission-on-the-zero-carbon-bill/
- www.union.org.nz/wp-content/uploads/2018/07/MfE-Consultation-for-the-Zero-Carbon-Act.pdf
- <https://motu.nz/our-work/environment-and-resources/emission-mitigation/shaping-new-zealands-low-emissions-future/submission-on-zero-carbon-bill/>
- www.anglicansocialjustice.nz/resources/2018/church-leaders-submission-on-the-zero-carbon-act
- www.enviro-mark.com/news-and-events/news/taking-action/our-say-on-the-zero-carbon-bill
- www.fedfarm.org.nz/FFPublic/Policy2/National/2018/Federated_Farmers_NZ_submission_on_Zero_Carbon_Bill.aspx
- www.greenpeace.org/new-zealand/publication/substantive-submission-on-zero-carbon-bill/
- www.nzma.org.nz/_data/assets/pdf_file/0010/83845/NZMA-Submission-on-Zero-Carbon-Bill.pdf
- www.pce.parliament.nz/publications/consultation-on-the-zero-carbon-bill-submission-to-the-ministry-for-the-environment
- www.sbc.org.nz/resources/reports/sbc-reports/sbc-submission-on-the-zero-carbon-bill

Source: Editor. ❖

The Upcoming Zero Carbon Bill: What it Means for NZ Organisations

"With all the buzz around carbon emissions and climate change in the news, you are probably wondering how exactly the upcoming Zero Carbon Bill will affect you and your organisation.

"Well we can't be exactly sure about what will happen until the bill is released in October this year (2018) but after a review of the progress thus far, we can make a few predictions that will help you prepare for it.

"First let's have a quick look at where this Zero Carbon Bill originated from...

More: www.energyts.com/single-post/upcoming-zero-carbon-bill

Source: Energy & Technical Services Ltd, 30th July 2018. ❖

16 of the World's Leading Banks Collaborate to Tackle Physical Risks of Climate Change

"Sixteen leading banks**, UN Environment Finance Initiative (UNEP FI) and Acclimatise, have published new methodologies which help banks understand how the physical risks and opportunities of a changing climate might affect their loan portfolios.

"The methodologies, published in the report *Navigating a New Climate*, were piloted across three climate-sensitive industry sectors: agriculture, energy and real estate. Using the methodologies, banks can begin to assess physical climate risks in their loan portfolios, evaluating the impacts on key credit risk metrics The forward-looking assessments offer longer-term insights that go beyond the usual stress-testing horizon of 2-3 years.

"This report provides a practical way to assess the physical risks of climate change, which we have piloted on our real estate mortgage portfolio to consider how flood risks could impact Barclays' customers now and in the future' ... 'this type of assessment helps us to manage climate change risk and opportunity, both at a transactional and portfolio level.'

"The guidance also aims to inform banks' strategies to support clients in adapting to changing conditions. Clients who face physical risks may need to make investments to become more climate-resilient. What's more, global markets are developing for providers of climate-related products and services, as companies such as engineering and technology providers are identifying opportunities to capitalise on shifting market trends. Banks may have opportunities to support these investments.

"A separate, complementary report focused on the assessment of transition risks and opportunities, was published in April.

** Includes two of Australia/NZ's leading banks

Webinar: Assessing climate-related physical risks in the banking industry: Outputs of a working group of 16 banks piloting the TCFD The Webinar will focus on the physical-related risk and opportunities, which is the risk resulting from climate variability, extreme events and longer-term shifts in climate patterns 14th August, 2018 9:00am and 2018 4:00pm CEST

More: www.acclimatise.uk.com/2018/07/17/16-of-the-worlds-leading-banks-collaborate-to-tackle-physical-risks-of-climate-change/ 78 pages, 5.35Mb Has 6 case studies

Source: Georgina Wade Environmental Consulting Professionals, LinkedIn, 23rd July 2018

Editor: The report considers incremental shifts in climate conditions and changes in extreme events as well as adaptation. Although the report is for banks and specific to several sectors the insights and learnings could be valuable to other sectors including local authorities. ❖

Researchers Use 36 years of Bike Race Footage to Illustrate Belgium's Changing Climate

"In 2015, Pieter De Frenne was watching archived footage of the 1980 Liège-Bastogne-Liège, an annual one-day road cycling race which occurs every April in Belgium, when he noticed something: the weather. It appeared much colder than it is today. The trees were bare. ...

"So he turned to the most regular of the races: the Tour of Flanders, an annual race that takes place in early April which had television coverage going back for decades.

"In a new study De Frenne and his colleagues found, through archived footage, the leaves of trees could be seen coming out earlier each year, which indicated a response to climate change....

"That timing change has a trickle-down effect. For example, studies have shown earlier springs can affect migratory birds. They can arrive at their breeding site after a bloom where their food source – insects – have already hatched. And other plants also feel the effects.

More: www.cbc.ca/news/technology/bike-race-footage-climate-change-1.4736912

Source: Editor, 27th July 2018. ❖

Preparing for Stronger Refrigerant Regulations

"The U.S. Environmental Protection Agency's expanded refrigerant regulations that take effect in 2018 and 2019 will affect virtually every commercial and governmental operation in the United States.

"The new requirements for documentation, record-keeping and reporting will affect facility owners and managers, environmental managers, contractors and certified technicians.

"So how can you adopt a systematic approach toward Refrigerant Compliance? In this e-book, we discuss the changes and what they mean for your operations so you can gauge your organisation's state of preparedness and take action in the coming months and years.

"At no time in history has refrigerant management been so important. Initially, just focusing on ozone depleting substances (ODS) regulations still provided for curbing emissions of non-ODS refrigerants (i.e., hydrofluorocarbons like R-134a in our cars, refrigerators, and chillers) with the prohibition on intentional venting of substitute refrigerants. While a good start, the venting ban was not enough in that it did not mandate repair of leaking systems or limit 'topping off' like the ODS rules.

"Since the initial ODS rules of the 1990s, climate change research has revealed all refrigerants have a global warming potential (GWP) – they trap heat, just as methane and CO2 do, but much more so. Refrigerants have GWPs which are hundreds to thousands of times more than CO2. The international community has recognised this with approvals to amend and expand the Montreal Protocol on Substances That Deplete the Ozone Layer, targeting high GWP refrigerants for phase-out by mid-century.

"Individual countries have amended their own refrigerant regulations to meet the new treaty provisions, with the U.S. EPA including HFC refrigerants in the leak repair requirements of Section 608 of the Clean Air Act and the European Union F-Gas Regulations, which ban HFCs and focus on 'natural refrigerants' like CO2, propane and ammonia. [Which have other risks. Ed.]

"What's Driving this Change? The main drivers for the global refrigerant transition are climate change, energy and economics.....

More: <http://insights.sphasolutions.com//272282/2018-07-20/8ycmq> plus for e-book (sign on required) <https://sphera.com/ty-preparing-stronger-refrigerant-regulations-e-book/> 12 pages, 8.25Mb

Source: Sphera, 25th July 2018.

Editor: Different specifics may apply to New Zealand and elsewhere, however the over-arching issues apply.

Comment in NZ context: Alan Skinner (F.I.R.H.A.C.E.) says; In large systems the existing compressors, pipework, coils cannot be used so require complete replacement. To say it is a big problem with huge costs is an understatement. In the meantime existing systems can still use the refrigerant that is in them, and any stocks of refrigerant already in the country, plus refrigerant in existing systems that are being upgraded can be removed and reused. Makes leak testing of old systems even more important. ❖

Carrots n' beets Strengthen Concrete

Researchers at Britain's Lancaster University are reporting they've achieved better concrete using cellulose-based 'nano platelets' derived from root vegetable fibres. The composites have superior mechanical and microstructure properties and use less cement. This significantly reduces both the energy consumption and CO2 emissions associated with cement manufacturing.

More: <https://newatlas.com/root-vegetables-concrete/55059/> plus www.lancaster.ac.uk/news/vegetables-could-hold-the-key-to-stronger-buildings-and-bridges

Source: Toho, 23rd July 2018. ❖

Bamboo Can Power Sustainable Development

"While bamboo is associated with panda food in the Global North, many developing countries regard it as little more than 'poor man's timber' – a cheap substitute for timber products.

"This may be about to change. At the Global Bamboo and Rattan Congress, referred to as BARC, held in Beijing last month [June], 1,200 participants from almost 70 countries highlighted the uses of bamboo and agreed on a plan for the plant's future.

"Millions of people across the world make a living through bamboo, including eight million in China alone. the sector employs almost 10 million people, and has reduced poverty in China's remote rural areas.

"With an estimated global trade value of US\$60 billion, the bamboo sector clearly has vast potential for poverty alleviation. Innovative uses of bamboo include heavy duty drainage pipes and wind turbines and in post-disaster housing and schools.

"Moreover, a number of bamboo species are potential tools for carbon sequestration and combatting climate change. Bamboo plants store carbon at a fast rate, and bamboo products can effectively 'displace' more emissions-intensive materials such as Recent INBAR research suggests (well-managed) bamboo can store 200 to 400 tonnes of carbon per hectare per year.

"....., there is clearly potential for countries to integrate bamboo into their climate mitigation plans. Says Patricia Espinosa, executive secretary of the UN Framework Convention on Climate Change: 'Bamboo and rattan can make an important difference in the fight against climate change. Nature-based solutions like bamboo do not just contribute to sustainable development, they also help build the kind of world we want.'

"Bamboo covers more than 30 million hectares of land and is a common sight for rural communities across tropical and subtropical Africa, Asia and Latin America. Fast-growing and flexible, several species grow up to 90 centimetres a day. Some bamboo characteristics are well known, but its ability to lift people out of poverty is frequently overlooked.

More: www.responsiblebusiness.com/news/asia-pacific-news/bamboo-can-power-sustainable-development/

Source: Global Initiatives.com. 23rd July 2018. ❖

Electronics Recycling About to Get a World-wide Shake-up

"Chinese electronics recycle start-up Aihuishou has closed a \$150-million financing round led by global investment firm Tiger Global Management, it said in an announcement. The latest funding round gives Aihuishou a valuation of \$1.5 billion,

"Aihuishou has expanded its presence to Hong Kong, Dubai, Miami, India, Russia, Brazil and other global cities. It claimed to have recorded an average \$45 million transaction volume just six months after the global expansion.

"Founded seven years ago, the start-up collects electronics from consumers and sells them to corporations. It has 260 physical stores and close to 2,000 auto recycling machines. It claims to have serviced 35 million users.

"Aihuishou has in the past formed partnerships with JD.com, Xiaomi Inc and other smartphone brands for its electronics recycling business. It said it will look to go past the RMB1 billion transaction volume mark by end of this year.

"It raised a \$2 million in 2012, followed by a \$10 million ... In 2015, it raised \$60 million ... and subsequently \$58 million ...

"A study by United Nations University's Sustainable Cycles said e-waste in Asia has gone up 63% in the last five years. In China, it more than doubled between 2010 and 2015.

More: www.dealstreetasia.com/stories/tiger-global-aihuishou-101840/ plus www.chinadaily.com.cn/a/201806/22/WS5b2c8821a3103349141ddcbc.html

Source: Rob Skinner, 21st July 2018. ❖

Barefoot is Best for Kids' Bodies and Brains

"Kids who are regularly barefoot have better-developed motor skills than those who regularly wear shoes, according to a new study from the German University of Jena and Stellenbosch University in South Africa.

"The study took two comparable groups of kids from rural Western Cape in South Africa and urban northern Germany and tested three sets of their motor skills. While all regularly barefoot kids performed better in balance and jumping tests, this was especially evident with the younger kids, between the ages of 6-10.

"So if regularly wearing shoes has a detrimental affect on kids' developing motor skills it makes sense to keep shoes off as kids grow.

"But this can be hard – especially when school starts.

"Last year, another study from the University of Bournemouth also found that kids who took their shoes off in the classroom had better levels of concentration, behaviour and did better academically than while wearing shoes.

"So better for their bodies, and better for what's going on in their brains. ...

More: www.vivobarefoot.com/au/blog/july-2018/barefoot-is-best-for-kids-bodies-and-brains

Source: Craig Skinner, 28th July 2018

Editor: See much more about your feet and shoes at www.vivobarefoot.com/au/about-us. Did you know for example your feet have 200,000 nerve endings; the same number as your hands? ❖

Rice Farmers are Substituting Ducks for Pesticides

"On his six-hectare farm in the village of Keisen, on Japan's Kyushu island, Takao Furuno, 61, grows rice and wheat without chemicals.

"He rediscovered an ancient rice-growing practice involving the use of ducks. Dozens of these birds, raised on the farm, patrol the paddy fields. They feed on insects and weeds, without touching the plants. Their wading oxygenates the water and stirs up the soil. Their droppings are a natural fertiliser.

"Furuno has cut production costs and boosted output by about a third compared with his neighbours, who use chemical fertilisers. He sells the ducks too.

"Some 10,000 Japanese farmers have purchased *The Power of Duck*, the book he published in 2000. In 2011 the technique was successfully tried out in Camargue, southern France.

"The trend in rice cultivation in Japan, which provides a livelihood for 1.4 million families, is, however, towards larger farms and more intensive production.

More:

<https://www.facebook.com/ThisIsZinc/videos/10155436862216479/> plus www.nationalgeographic.com/people-and-culture/food/the-plate/2016/09/want-cleaner-rice-paddies--consider-ducks/ among others

Source: Craig Skinner, Facebook post, 21st July 2018. ❖

Economic Development NZ 2018 Conference

"The Conference will focus on the need to 'work as one' and in an innovative way if we are to build equity and inclusive growth within New Zealand. Content includes the 'new localism' rapidly sweeping the globe, economic competitiveness, social inclusion and opportunity, a renewed public life; the challenge of diversity and the imperative of environmental sustainability.

When/Where: Thurs 18th – Fri 19th October, Bay of Islands

More: <https://economicdevelopment.org.nz/conference-2018/>

Source: Karen Remitis, 26th July 2018. ❖

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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