

# Sustainability Matters

21<sup>st</sup> June 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.**

## Zero Carbon Bill Consultation Opens

"Climate Change Minister James Shaw today [8<sup>th</sup> June] launched a six-week consultation on the government's Zero Carbon bill, legislation that will include a new 2050 emissions reduction target.

"The Zero Carbon Bill is about providing stability and predictability, by setting out a clear path and a plan to upgrade our economy and help ensure a stable climate for the future," Shaw said in a statement.

"Shortly after being elected, Prime Minister Jacinda Ardern announced the government would set a target of a net zero carbon emissions economy by 2050, with legally binding emissions reduction targets and carbon budgets to keep New Zealand on track to this goal.

"Consultation on the bill will run for six weeks from 7<sup>th</sup> June to 19<sup>th</sup> July. Once the bill has been introduced to parliament, a select committee process will follow and the aim is to pass it by mid-2019, according to Shaw. ....

"The discussion document looks at three different options. ....

"The consultation will also look at how to ensure settings laid down in law provide the necessary certainty to business and communities and the right balance of power between the Independent Climate Change Commission and the government of the day. It will also look at how to manage the impacts of climate change and develop a plan to adapt.

"According to the discussion document, New Zealand is already feeling the effects of a changing climate. In the past 100 years, seas have risen around 14 to 22 centimetres in New Zealand ports.

**More:**

[www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=12066440](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12066440) plus [www.mfe.govt.nz/have-your-say-zero-carbon](http://www.mfe.govt.nz/have-your-say-zero-carbon) plus [www.mfe.govt.nz/publications/climate-change/our-climate-your-say-consultation-zero-carbon-bill](http://www.mfe.govt.nz/publications/climate-change/our-climate-your-say-consultation-zero-carbon-bill) 61 pages 1.36mb and <https://thespinoff.co.nz/science/28-05-2018/nz-has-pledged-zero-carbon-by-2050-how-on-earth-can-we-get-there/>

**Source:** James Shaw, 8<sup>th</sup> June 2018. ❖

## Mexico has Found a Beautiful Way to Clean its Polluted Air

Not only are the 600,000sq ft vertical gardens on the columns of raised roadways nice to look at, they put to good use discarded plastic.

**More:**

[www.facebook.com/WeNeedThisbyatn/videos/214985299003343/](https://www.facebook.com/WeNeedThisbyatn/videos/214985299003343/) 2:15 video with 11.9M views as at 17<sup>th</sup> June

**Source:** Geoffrey Rawson, Facebook share, 15<sup>th</sup> June 2018. ❖

## SUSTAINABILITY WORKING GROUP

At another pre-formative meeting held 12<sup>th</sup> June 2001 at Deloitte, NZICA offered free use of its meeting facilities and if it wished to go NZ-wide their video-link facilities could also be made available at no charge. ❖

## Low-emissions Economy – Submissions in Response to Draft Report

Submissions closed on 8<sup>th</sup> June. About 140 submissions were received and have been posted to the web site [below]. They contain a range of perceptions and suggestions regarding the content of the report and in response to the questions raised. Some canvas more aspects than others.

The submissions are now being considered with further research and analysis being conducted in order to finalise the report which will be presented to the Government in August 2018.

Some examples of the submissions are those from;

- Dame Anne Salmond who suggests wholesale planting of exotics is damaging for the environment and provides at best short term carbon sinks – and relates that to current on the ground experiences in the East Coast. Her three page submission is well worth reading.
- Long-time energy campaigner Molly Melhuish who states the draft report gives less than satisfactory attention to household heating and electricity supply and pricing as the current industry structure favours the suppliers of electricity rather than reducing demand or consumer costs. She is also of the view some of her earlier submissions have been ignored by electricity sector regulators.
- Wise Response. At 59 pages there's may be the most comprehensive submission with at least 16 contributors. A key comment [page 3] is; 'Thus, the Draft plan is, at least, not comprehensive and at worst, dangerously misleading and, in its current form, does not provide New Zealanders with an adequate plan for transitioning to a low carbon emissions economy.'

Note: Wise Response submission was reported extensively in *Carbon News* of 15<sup>th</sup> June 2018.

- CA ANZ which in their eight pages encourage the transition to a low-emissions economy, strongly advocate for the appropriate disclosure of climate risk, supports innovation being a high priority within the national innovation system and there be consideration of interaction with existing legislation, including in particular the Resource Management Act.
- thinkstep. In their 32 pages they suggest a full life cycle approach when developing carbon reduction strategies. In the case of the built environment this would mean to take the embodied carbon in the building materials into account, as well as the energy, and related carbon

emissions, associated with the use of the buildings. They also suggest there is too much focus on production point of view and insufficient focus on consumption aspects.

**More:** [www.productivity.govt.nz/news/submissions-received-on-low-emissions-economy-draft-report](http://www.productivity.govt.nz/news/submissions-received-on-low-emissions-economy-draft-report)

**Source:** *Carbon News* and others. ❖

## **Investing for Wellbeing: Balancing Commercial and Social Outcomes**

"Treasury recently launched its 2018 Investment Statement: *Investing for wellbeing – He Puna Hao Patiki*.

"We [CA ANZ] are delighted to partner with Treasury in an event which seeks to explore the link between the Government's investments and New Zealanders' wellbeing. ...

"After 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 will discuss 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.

"Jane will then be joined in a panel discussion by:

- Tim Ng, Deputy Secretary and Chief Economic Adviser, the Treasury
- Simon Tran, CFO at Regional Facilities Auckland Council

### **More:**

<http://events.charteredaccountantsanz.com/events/investing-for-wellbeing-balancing-commercial-and-social-outcomes/event-summary-5d8fcd342e54f52831fcc0923f99398.aspx> plus <https://treasury.govt.nz/publications/investment-statement/2018-investment-statement>

**Source:** CA ANZ, 18<sup>th</sup> June 2018. ❖

## **NZ's First Ever Circular Economy Summit**

"Moving quickly on the circular economy is your fast track to prosperity. So get your ticket now for New Zealand's first ever Circular Economy Summit. ....

"You've probably heard a lot about the circular economy in recent months.

"In a circular economy the lifecycle of materials maximised. The use of materials is optimised. At the end of their lives all materials are reutilised.

"Individuals, businesses and government agencies are already using this thinking to transform the way they work. Its ability to address global business challenges makes its adoption inevitable. This will impact your business.

"We have brought together international and local circular economy experts and practitioners with key NZ decision makers. They include Prof. Dr Michael Braungart, a leading light in the global 'Cradle to Cradle' and circular economy movement. Renowned economist, author and business commentator Shamubeel Eaqub will analyse the profound economic implications for New Zealand. Paul Frasca co-founder and director of Sustainable Salons will explain how circular economy principals can energise your business. ...

**When/Where:** Wed. 29<sup>th</sup> August, Viaduct Harbour, Auckland

**More:** <https://sustainable.org.nz/sustainable-business-events/circular-economy-summit-aotearoa/>

**Source:** SBN, 14<sup>th</sup> June 2018. ❖

## **Child Car Seats – 8,000 recycled**

"3R Group's SeatSmart child car seat recycling programme has diverted more than 8,000 [of New Zealand's] child car seats from landfill since its launch in April 2016. It's estimated 40,000 car seats go to the dump every year. 3R says the growth of the SeatSmart scheme shows, 'how the public is starting to think and act in more sustainable ways'.

Collected from various centres the seats are sent to prisons, dismantled and the materials recycled.

**More:** [www.seatSMART.co.nz](http://www.seatSMART.co.nz)

**Source:** *SBC Weekly Pānui*, 7<sup>th</sup> June 2018. (Sustainable Business Council). ❖

## **Treasury Seeks Feedback on Proposed Living Standards Dashboard**

"Treasury is seeking feedback on the way it measures New Zealand living standards as part of work to strengthen its policy-making and advice to better reflect a new focus on wellbeing.

"It has released an independent report, *Treasury Living Standards Dashboard: Monitoring Intergenerational Wellbeing*, which includes a proposed 'dashboard' of indicators of living standards and intergenerational wellbeing.

"Public consultation on the report and its proposed Living Standards Dashboard is very important to the Treasury. It will help ensure the dashboard we are releasing at the end of 2018 is expert, evidence-based, and reflects the perspectives of a wide range of New Zealanders, said Treasury chief economic adviser Tim Ng.

"While this independent report does not represent government policy or Treasury advice, the work provides a strong foundation for discussion and generating well-informed feedback," he said in a statement. ...

"The aim is to get the dashboard aligned with planning for the Government's 'wellbeing' Budget in 2019.

"We're probably the first country in the world saying, all this conceptual stuff is great but let's take it and apply it to policy and decision-making. ...

**Submissions close:** Tuesday 31<sup>st</sup> July 2018

### **More:**

[https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=12066105](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12066105) plus <https://treasury.govt.nz/information-and-services/nz-economy/living-standards/proposal-living-standards-dashboard> plus <https://treasury.govt.nz/publications/commissioned-report/treasury-living-standards-dashboard-monitoring-intergenerational-wellbeing> 81 pages, 1.38Mb and [www.kotatainsight.co.nz/who-we-are/](http://www.kotatainsight.co.nz/who-we-are/)

**Source:** *NZ Herald*, page A14, 8<sup>th</sup> June 2018, Editor and David Living. ❖

## **Auckland Council Green Bond Offer**

"Auckland Council will open its Green Bond offer next week [W/E 22<sup>nd</sup> June 2018] – becoming the first council in New Zealand to do so.

"The proceeds of the offer are intended to be allocated in accordance with Auckland Council's Green Bond Framework. Specifically, the initial proceeds of the offer are intended to be used to both refinance existing debt used to buy electric trains and equipment as well as to help finance the purchase of more.

"Green Bonds are used to fund assets and projects which have positive environmental impacts, reaching investors who wish to fund this type of infrastructure....

"Auckland Transport fully supports the Bond offer. CEO Shane Ellison says it closely aligns with the organisation's focus on sustainability and a low carbon future for Auckland. ....

"The Green Bonds are expected to be assigned a long-term credit rating of AA from Standard & Poor's and Aa2 from Moody's and are expected to be quoted on the NZX Debt Market. ...

"There is no public pool. ....

### **More:**

<http://ourauckland.aucklandcouncil.govt.nz/articles/news/2018/6/auckland-council-to-open-green-bond-offer/> plus [www.nzx.com/announcements/319227](http://www.nzx.com/announcements/319227)

**Source:** SBC, 14<sup>th</sup> June (Sustainable Business Council). ❖

## I'm Natural Not Plastic

Currently manufactured in Indonesia and soon to be manufactured in NZ, ComPlast bags are made primarily from cassava root, a natural organic starch. They are biodegradable under aerobic composting conditions, they do not produce any micro-plastic particles, and they do not leave any chemical trace elements behind following degradation in the soil, rivers, sea or air.

ComPlast bags are an environmentally sustainable solution to the current petroleum based plastic bag problem the world is facing, which is that they produce micro-plastic that enters into the ecosystem. When ComPlast bags are combined with the use of reusable BYO shopping bags, you have a sustainable and convenient solution that will satisfy all of your Customers.

ComPlast Bag's Facts:

- Made from cassava root which is an all-natural starch, vegetable oil and vegetable based polymer, and tested to be 99.5% organic matter.
- Decomposes back to nature with bio-degradation tested at a rate of 100% in 45 days in controlled composting and 85% in 84 days in ambient conditions.
- Dissolves in the sea and rivers, tested at a rate of 81% within 133 days in sea water and 90% within 141 days in river water.
- Are non-toxic to animals and plants, passing all toxicity tests.
- Does not produce any micro-plastic particles as there is NO petroleum, chemicals or added minerals causing micro-plastic formation during degradation.

More: <https://complast.co.nz/>

Source: Chris Heaton, Complast, 11<sup>th</sup> June 2018. ✦

## New Zealand Waste

Did you know that New Zealand has been described as the 10<sup>th</sup> worst country for the amount of urban waste we create per person? That means when we suddenly lose a major international market like China for mixed plastic recyclables, we're facing big challenges.....

New Zealand has been sending 15 million kg of recyclable materials to China for reuse and recycling every year. But China recently announced restrictions on the import of mixed plastic and other recyclables, creating major challenges for local councils, and waste management and recycling businesses.....

A task-force has been set up to coordinate a national response to this challenge. In the short-term, some recyclables can still be sold to facilities in Indonesia, Malaysia and Thailand. We also need more investment in onshore recycling plants to process plastics into new products.

Longer term, we need to reduce the waste we produce and shift to a Zero Waste economy. Nature doesn't create waste. We don't need to either. We need to invest in projects that accelerate New Zealand's transition from a linear economy of 'take-make-dispose' to a circular economy of 'take-make-re-use' where we can unmake everything we create to re-use their materials.

Proposals to help reduce waste include:

- Expanding the waste levy to more landfill
- Improving the data we have on waste including recyclables
- Using tools like mandatory product stewardship schemes to reduce environmental harm from products like tyres and lithium batteries
- Educating our tamariki on how they and their whānau can best reduce, re-use and recycle.

More: [www.greens.org.nz/news/press-release/government-working-industry-and-councils-solutions-china-waste-ban](http://www.greens.org.nz/news/press-release/government-working-industry-and-councils-solutions-china-waste-ban)

Source: James Shaw, Greens, 14<sup>th</sup> June 2018. ✦

## Event Series on Child Poverty, Wellbeing and Human Capital

Westpac and KPMG are sponsoring a Presbyterian Support Northern Lecture Series focused on child poverty.

The 14 events in Wellington and Auckland from Friday 8<sup>th</sup> June to Friday 20<sup>th</sup> July cover a broad range of issues, including social housing, child poverty measures and public investment. Topics such as;

- How do you measure 'child poverty' and what will the new Child Poverty Reduction Bill achieve?
- Promoting work and entrepreneurship in a small community
- School-based mental health Interventions: What's best policy and practice? ....

More: [www.eventbrite.co.nz/o/presbyterian-support-northern-lecture-series-2018-in-partnership-with-kpmg-and-westpac-16675179855](http://www.eventbrite.co.nz/o/presbyterian-support-northern-lecture-series-2018-in-partnership-with-kpmg-and-westpac-16675179855)

Source: SBC Weekly Pānui, 7<sup>th</sup> June 2018. (Sustainable Business Council). ✦

## Entries Open for 'Oscars of Sustainability'!

Entries are now open for the 2018 NZI Sustainable Business Network Awards! They are New Zealand's longest-running and pre-eminent celebration of sustainable business. This year includes a new category, recognising the contribution of millennials.

The NZI Sustainable Business Network Awards are now in their 16<sup>th</sup> year. They recognise businesses, social enterprises, local government and individuals for success in sustainability.

Entry to the awards is free and open to all organisations and individuals in New Zealand.

Rachel Brown ONZM, CEO of the Sustainable Business Network, says: 'This is the year to promote your sustainability achievements! We're seeing clear signals from government that business must play a role in helping solve a host of social and environmental issues. ...

These awards are one of the best ways of getting widespread recognition of your sustainability achievements. We expect a bigger response than ever before.'...

Rachel says: 'Young professionals tell us they are more productive and excited about work when their employers are engaged in sustainability. They are millennials on a mission, pushing for changes businesses aren't necessarily ready for. So we've decided it's time to create a new category recognising this 'now' crowd.' ....

The 11 award categories are; ....

Entries close: 31<sup>st</sup> July 2018.

More: <https://sustainable.org.nz/sustainable-business-news/entries-open-for-the-oscar-of-sustainability/>

Source: SBN, 12<sup>th</sup> June 2018. ✦

## Ecoware has Produced its First Comprehensive Sustainability Report

Ecoware a young NZ firm supplying sustainable packaging solutions and specialising in consumer food packaging and which wants food and food packaging waste to be returned to the soil has produced its first sustainability report. The report centres around the Sustainable Development Goals. The company's 12 staff comprise eight nationalities and demonstrates what can be achieved with foresight imagination and determination.

Accessible solely from their website as an e-Book the 28 pages have been slickly produced.

More: [www.ecoware.co.nz/sustainability-report/](http://www.ecoware.co.nz/sustainability-report/)

Source: SBN 29<sup>th</sup> May 2018. ✦

## Three Surprising Resource Implications From the Rise of Electric Vehicles

"With the aggressive global uptake of electric vehicles (EV) in the past 12 months, three surprising resource implications have arisen from the growth of the EV sales. The first is that surprisingly it is improvements of efficiencies of gasoline vehicles, not EV's that will have the biggest impact on decreasing global oil demand. Second, the amount of land needed for the adequate number of EV charging stations which will likely become a serious resource constraint. Finally, EV growth has already begun to strain demand for cobalt and lithium and this may become a serious bottle neck to mass adoption of EVs.

**More:** [www.energyts.com/single-post/2018/06/14/SnippETS-for-14-June-2018](http://www.energyts.com/single-post/2018/06/14/SnippETS-for-14-June-2018) plus [www.mckinsey.com/Industries/Automotive-and-Assembly/Our-Insights/Three-surprising-resource-implications-from-the-rise-of-electric-vehicles](http://www.mckinsey.com/Industries/Automotive-and-Assembly/Our-Insights/Three-surprising-resource-implications-from-the-rise-of-electric-vehicles)

**Source:** *SnippETS*, 14<sup>th</sup> June 2018

**Editor:** Note – In the UK and much of Europe private cars are parked on streets and not in garages. ❖

## Beyond Paper and Promises: Assessing the Impacts of Corporate Pulp and Paper Commitments on Forests and Frontline Communities

"A promise is only good if it's kept. Thanks to your pressure, major brands have made commitments to protect forests and communities by eliminating the risk of human rights abuses and forest destruction from their products.

"However, our new report shows three major companies are not doing enough to keep their promises: major office supply company, Office Depot; Penguin Random House, the world's largest publishing house; and Askul, Japan's largest paper company.

"These three major brands' inability to keep their commitments has real impact on Indonesia's forests and the lives of people in frontline communities. People power forced companies to commit to change and now we need your help to ensure they keep those promises. ....

"This report uses an in-depth survey to measure how well brand-name pulp and paper companies are doing in implementing their policies, identifying key leaders and laggards in the ongoing fight to protect forests and the communities that depend on them.

**More:** [www.ran.org/beyond\\_paper\\_promises](http://www.ran.org/beyond_paper_promises) plus [www.ran.org/promises\\_report](http://www.ran.org/promises_report) 32 pages, 4.37Mb

**Source:** Rainforest Action Network, 14<sup>th</sup> June 2018

**Editor:** Given the recent huge impacts of 'slash' on bridges, homes and farms as the result of a storm in the Tolaga Bay area NZ foresters and contractors may face backlash from log purchasers. For the scope of the impacts of poor forestry practices see [www.stuff.co.nz/national/104527525/forestry-slash-reminder-economic-boon-not-without-problems](http://www.stuff.co.nz/national/104527525/forestry-slash-reminder-economic-boon-not-without-problems). ❖

## British MPs Want Big Companies to Report on Climate-change Risks

"The UK government should bring in rules within the next four years that require pension funds and UK-listed companies including banks to disclose climate-related risks, a committee of MPs has said. ...

"The Environmental Audit Committee also said the government should immediately clarify existing rules around corporate risk disclosure to include material climate risks.

"We want to see mandatory climate risk reporting and a clarification in law that pension trustees have a duty to consider long-term sustainability, not just short-term returns', said Mary Creagh MP, chair of the committee. ....

**More:** [www.ft.com/content/3adcf78e-6711-11e8-8cf3-0c230fa67aec](http://www.ft.com/content/3adcf78e-6711-11e8-8cf3-0c230fa67aec) plus <http://economics.com.au/57867/british-mps-want-big-companies-to-report-on-climate-change-risks/>

**Source:** *eco-News*, 7<sup>th</sup> June 2018. ❖

## Exploring the Impacts of Shareholder Activism on Sustainability: A Shareholder Activism for Sustainability Report

"Shareholder activism, where shareholders attempt to influence a company's decisions by exercising their rights as owners, is on the rise. Much of this publicised activism has focused narrowly on improving financial performance, with potential implications for broader sustainability considerations.

"Meanwhile, some investors and other activists, usually local and small in comparison, have been engaging companies on sustainability issues, with concrete results. However, these efforts are usually too diffuse and small-scale to achieve sustainability at the pace and scale required.

"The Luc Hoffmann Institute and SustainAbility Shareholder Activism for Sustainability project aims to convene diverse thinking and practice on the issue of shareholder activism and generate new insights into the intersection of this critical issue with sustainability.

"In April 2018, the Luc Hoffmann Institute published *Shareholder activism: Standing-up for sustainability? The report examines the current landscape and highlights opportunities, risks and challenges of shareholder activism for sustainability. Exploring the Impacts of Shareholder Activism on Sustainability builds further on that research.*

"This report provides insights on the shareholder activism landscape, describes the potential impact of financially and sustainability-motivated shareholder activism on corporate sustainability and presents opportunities to deepen thinking and support further collaboration and engagement on this critical issue.

**More:** <http://sustainability.com/our-work/reports/exploring-shareholder-activism-for-sustainability/> plus 27 pages, 5.11Mb report at <http://s10458.pcdn.co/wp-content/uploads/2018/05/SA-ShareholderActivism-1.pdf>

**Source:** *Radar* (SustainAbility), 16<sup>th</sup> June 2018. ❖

## Wellbeing and Public Policy Conference

"This third in the series of international conferences on Wellbeing and Public Policy will; (1) critically evaluate the rapidly expanding field of wellbeing research across a range of disciplines; (2) share the work of leading international organisations; and (3) distil ideas and practices which will aid governments in developing a wellbeing approach to public policy.

"The first in this series of conferences was held in Wellington in July 2012 (for a review go to web site). The second conference was held at Hamilton College, New York in 2014 (for a review go to web site). This third in the series will bring together leading scholars on wellbeing, speakers from several international organisations and senior practitioners with experience in applying wellbeing principles to public policy.

"The conference will provide extensive opportunity for participants to network and gain exposure to the latest theoretical, empirical and policy related ideas on wellbeing. As such we are open to a variety of disciplines and methodologies. To enhance participants' experience, collaboration and networking opportunities, a social activity is expected to follow the conference on Saturday, 8<sup>th</sup> Sept. ....

**When/Where:** 5<sup>th</sup> to 7<sup>th</sup> September, Wellington

**More:** [www.confer.nz/wellbeingandpublicpolicy2018/](http://www.confer.nz/wellbeingandpublicpolicy2018/)

**Source:** *Tieke: ECO Alerts & Events*, 13<sup>th</sup> June 2018

**Editor:** Some speakers have been announced. ❖

## Cornfields Could Play a Role in Recycling Old Electronics

"A new biochemical leaching process has been developed that uses corn stover\*\* as feedstock and recovers valuable rare earth metals from electronic waste, according to an announcement from the U.S. Department of Energy's Ames Laboratory in Ames, Iowa.

"While corn and its by-products can be used for high-tech applications ranging from bioplastics to ethanol, using corn stover for what is essentially a mining process may seem like a stretch many, but the new process does use stover as a key ingredient, the Ames Lab said....

"They found it by capitalising on the abilities of a strain of *Gluconobacter* bacteria, an acid-producing microbe....

\*\* Leaves and stalks of field crops.

**More:** [www.feedstuffs.com/news/cornfields-could-play-role-recycling-old-electronics](http://www.feedstuffs.com/news/cornfields-could-play-role-recycling-old-electronics)

**Source:** Clean Planet, 7<sup>th</sup> June 2018. ❖

## Liquid Air Storage Technology Challenges Long-duration Battery Storage

"A novel long-duration energy storage technology got one step closer to commercialisation this week [5<sup>th</sup> June 2018].

"U.K.-based Highview Power has completed a test plant for its liquid air energy storage technology. The company uses equipment developed for the conventional power and oil and gas industries to liquefy gas, store it in tanks and release it to spin turbines and produce electricity on demand.

"If it works at larger scale, Highview could pull away from the pack of long-duration storage companies challenging lithium-ion's market dominance.

"The periodic influxes of wind and solar power create demand for storing energy longer than is economical with current batteries, but the field of alternatives so far has produced more bankruptcies and small-scale pilots than runaway successes. ....

"Highview's design uses an industrial air liquefier to cool down air, which it stores at around -180°C in low pressure tanks. When needed, the plant releases the air through an expansion turbine that generates electric power....

**More:** [www.greentechmedia.com/articles/read/highview-power-completes-uk-liquid-air-storage-plant#gs.o6fWK10](http://www.greentechmedia.com/articles/read/highview-power-completes-uk-liquid-air-storage-plant#gs.o6fWK10)

**Source:** Carbon News, 11<sup>th</sup> June 2018. ❖

## First of Its Kind Loan: Barclays' Borrower Pays Less if Sustainability Targets Are Met

"In a first in the US, a company has entered into a syndicated sustainability-linked revolving loan. CMS Energy and its subsidiary, Consumers Energy, have entered into \$1.4 billion revolving credit facilities from Barclays, the sole Sustainability Structuring Agent on the loan. This means CMS can reduce its interest rate on the new credit by meeting targets related to environmental responsibility, CMS says. Sustainability-linked loans are products that allow issuers to demonstrate their commitment to sustainability, according to Barclays. ...

"From a lender's perspective, the facilities encourage a company to make its business practices more sustainable by providing a direct financial incentive through the potential for lower financing cost', Barclays explains. 'In addition to the standard pricing grid, the loan structure incorporates a secondary pricing mechanism tied to a sustainability target.'

**More:** [www.environmentalleader.com/2018/06/first-of-its-kind-loan-barclays-borrower-pays-less-if-sustainability-targets-are-met/](http://www.environmentalleader.com/2018/06/first-of-its-kind-loan-barclays-borrower-pays-less-if-sustainability-targets-are-met/) However, see also [www.ft.com/content/edbc91f0-30f4-11e8-ac48-10c6fdc22f03](http://www.ft.com/content/edbc91f0-30f4-11e8-ac48-10c6fdc22f03)

**Source:** Environmental Leader, 9<sup>th</sup> June 2018. ❖

## Thousands of RMA Breaches – Many Fewer Prosecutions

"Fewer than a hundred prosecutions are being carried out under New Zealand's main environmental law each year, despite thousands of breaches.

"Now a legal researcher is investigating whether the 27-year-old Resource Management Act (RMA) is having the deterrent effect that any law including criminal offences should.

"Under the RMA, councils have delegated responsibility for the everyday management of land, freshwater and other resources, and for ensuring that growth and development occurs within the environmental bottom lines.

"University of Canterbury College of Business and Law doctoral student Mark Wright said it was striking that the same system used to punish assailants and burglars is also used to punish people who have broken RMA rules.

"Equally, from his experience as a lawyer prosecuting environmental non-compliance cases, Wright knows the system can play out substantially differently in RMA cases.

"There is a difference between the law itself and how it works in practice,' he said. 'There are thousands – if not tens of thousands – of breaches of the RMA every year, yet under 100 prosecutions a year.'

"Further, he said, every council had a different approach to prosecution. Criminal law can be a very effective deterrent as it can result in large fines and, in extreme cases, individuals being sent to prison, but it's also a very expensive and time-consuming process.'

"Some of the smaller councils would never consider taking a prosecution, he said.

"What it leads to is a system where there are not many prosecutions being undertaken, and a lot of variation between regions.' ....

**More:**

[www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=12070828](http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12070828)

**Source:** Clare Feeney, 16<sup>th</sup> June 2018

**Editor:** With more by Clare at

[www.clarefeeney.com/environmental-enforcement-balancing-fair-with-fast-for-positive-change/](http://www.clarefeeney.com/environmental-enforcement-balancing-fair-with-fast-for-positive-change/). ❖

## Resilience

"Resilience – 'the propensity of a system to retain its organisational structure and productivity following a perturbation.'

"For an investor in agriculture, this is a vitally important quality, as solid and consistent return streams will only be delivered by resilient systems. This is especially pertinent in a world of increasingly erratic weather patterns.

"This note considers the different resilience characteristics of ecologically managed vs. conventionally managed farmland;

- Conventional vs. Ecologically Managed ....
- Pest outbreaks ....
- Flood ....
- Drought ....

"Conclusion: Resilience ensures a farm system performs robustly, more consistently and at lower cost. As a result farm resilience delivers superiority of income flow and capital appreciation.

**More:** <http://agro-ecological.com/resilience/>

**Source:** AE Ecological Intelligence, 13<sup>th</sup> June 2018

**Editor:** Not a long read and merits reading in full. ❖

## Organisational Fit for Purpose

"If it is accepted that humankind needs to live within the capacity of the Earth to support human life, is our current law fit for purpose for authorising, regulating, directing, constraining and penalising companies and organisations and their actors whose actions are contrary to this acceptance? How accountable are owners and/or board directors and/or senior management when their companies or organisations destroy or damage the basis of our health and survival? What penalties do they face (including personal penalties)? Companies are not the only organisational forms that should be considered: cooperatives and family businesses should be included.

"It is argued here that companies, family firms, and cooperatives are not fit for purpose in meeting societal needs to care for the Earth, rather than exploit it. Adopting legislation based on requirements for mandatory consideration of stakeholders (which includes the environment as a stakeholder) would place the judiciary in a very awkward position choosing between stakeholders: instead it requires Parliament to pass laws and regulations that place obligations on directors and senior managers to observe stakeholders' essential needs. ....

**More:** <http://a-resilient-world.blogspot.com/> [Lengthy article]

**Source:** Robert Howell, 8<sup>th</sup> June 2018

**Editor:** Very pertinent for business owners, directors and senior staff to consider as well as politicians, Institute of Directors members and others. ❖

## What Are We Innovating For?

"Ok last question!" the host said.

"A very young, go-getter raced over to me with the microphone.

"The people on the stage were supposed to be New-Zealand's crème de la crème of big thinking innovators. But according to me and that wailing feeling that had now leaked out into my limbs and instructed them to do the Harlem Shake – this just wasn't quite good enough.

"This question is directed at everyone on the stage" the words rang out from deep inside of me.

"Ok so we are here to discuss innovation, but my question is – what are we innovating for? Wouldn't it make sense to come together and innovate towards making New Zealand truly sustainable and healthy again? Shouldn't the effect that our innovations have on our country and the earth be our first consideration when we are creating a new product? It seems to me none of you have considered how your products are made from finite resources and how they will be broken down after they're finished with. ....

**More:** [www.narrativeimperative.org/s/N197-Jeanne-Reynolds.pdf](http://www.narrativeimperative.org/s/N197-Jeanne-Reynolds.pdf) plus <https://au.linkedin.com/company/narrative-imperative> and [www.radionz.co.nz/national/programmes/afternoons/audio/2018-638022/stories-for-sustainability](http://www.radionz.co.nz/national/programmes/afternoons/audio/2018-638022/stories-for-sustainability)

**Editor:** This extract was from a SDG story selected at random from a raft of others at [www.narrativeimperative.org](http://www.narrativeimperative.org). I have asked myself this very question many times. Much innovation seems to innovate on shallow or unnecessary items – not the type of innovation we really need in NZ and elsewhere – and it's a waste of so much talent – intellectual capital.

**Source:** *SBC Weekly Pānui*, 7<sup>th</sup> June 2018. ❖

## An Alphabet of Reading Accessibility Issues

"This illuminating and moving read by Anne Gibson raises awareness of [web] accessibility issues our audiences may have and should change your communication habits. For instance: 'D is colour blind. Most websites think of him, but most people making PowerPoint presentations or charts and graphs at work do not.'

**More:** <https://the-pastry-box-project.net/anne-gibson/2014-july-31>

**Source:** *TechCommWire*, 13<sup>th</sup> June 2018. ❖

## Recycle Yoghurt Pouches to Win Upcycled Prizes

"To help 'beat plastic pollution' off the back of World Environment Day 2018, Kiwis now have the chance to win upcycled lunch boxes and pencil cases by diverting empty yoghurt pouches from landfill, thanks to a recycling competition run by Fonterra and recycling pioneers, TerraCycle.

"From World Environment Day (5<sup>th</sup> June) to 2<sup>nd</sup> November 2018, the Snap, Recycle & Win Competition invites New Zealanders nationwide to collect all brands of yoghurt pouches and send them to TerraCycle, who will give the waste a second life by creating new products.

"Those who ship yoghurt pouch waste (minimum 1kg) of all brands to TerraCycle during the competition period will go into the draw to win one of 25 upcycled prize packs, which include five upcycled lunch boxes and 10 upcycled pencil cases, valued at \$212.50 per pack, all made from empty yoghurt pouches.

**More:** [www.terracycle.co.nz/en-NZ/contests/snap-n-win](http://www.terracycle.co.nz/en-NZ/contests/snap-n-win)

**Source:** Mahaut Armand, TerraCycle Australia & New Zealand, 13<sup>th</sup> June 2018. ❖

## Researchers Map Environmental Conflicts

"Researchers in Europe have worked to identify and create an inventory of the struggles for environmental justice going on in the world today. The authors have identified several thousand cases, and grouped the most frequently occurring of these into ten main types.

"Land grabbing, especially for palm oil production, tops the list. Conflicts over mega mining and over the trash economy (where waste gets sent to developing countries to be processed by millions in the informal economy) are also highlighted.

"It is a very depressing list, but equally there are many environmental justice campaigns underway to highlight and resist injustice. Often these injustices are created by the way we live in the west, with our demand for products that are created from processes such as mining which deprive others of their lands, water, and livelihoods - and of course devastate habitat for other species.

**More:** <https://theconversation.com/tracking-the-battles-for-environmental-justice-here-are-the-worlds-top-10-97616>

**Source:** *Tieke: ECO Alerts & Events*, 13<sup>th</sup> June 2018. ❖

## Call for Papers: 17th A-CSEAR Conference

"The conference theme for 2018 is 'EnVisioning Value'. The theme seeks to explore contemporary accounting practices and concepts including measurement, accountability, transparency and governance, in order to reflect on present-day approaches to, and envision future possibilities for, value creation. Rapid technological advancements in the areas of artificial intelligence, automation and global connectivity are transforming the way human populations live, work and interact with one another and the natural environment. Global initiatives such as the United Nations (UN) Sustainable Development Goals (SDGs) are also demanding more integrated ways of thinking, moving towards holistic systems design and decision-making. ....

**Deadline for paper submissions:** 6<sup>th</sup> August 2018.

**Registrations open:** 21<sup>st</sup> Sept. 2018

**When/Where:** 5<sup>th</sup> to 7<sup>th</sup> December, Monash Business School, Melbourne

**More:** [www.monash.edu/business/a-csear-conference-2018/about](http://www.monash.edu/business/a-csear-conference-2018/about)

**Source:** Nicholas McGuigan, 10<sup>th</sup> June 2018. ❖

## How New Zealand Companies are Stacking up Strategy and the Art of Motorcycle Maintenance in the Business of Sustainability

"..... The president of the WBCSD, Peter Bakker, predicted 50% of the delegates attending the meeting would, in five years' time, be chief financial officers or financial professionals. He believes environmental and social issues will soon be so critical to a company's value and performance, they will dictate the cost of capital.

"Peter Bakker cited examples of French dairy company Danone and global agri-business Olam as examples of businesses which have done deals, which lower the interest rates on their borrowing every year, when they meet their environmental, social and governance (ESG) reporting requirements.

"In New Zealand, we have a similar success story with fishing company Sanford. They credit having a lower cost of capital to three years of 'Integrated Reporting'.

"Delegates in Switzerland were aware of Sanford's world-leading Integrated Reporting practices, which disclose not only the financial performance of the company, but the social and environmental performance too. One delegate said to me their approach is a global best practice benchmark for fishing globally.

"Overseas, New Zealand is considered a world leader in agricultural innovations and tools for sustainability. Our dairy sector is, for example, understood to be one of the world's most emissions-efficient.

"At the WBCSD meeting it became apparent foreign businesses and governments are looking to our primary industries sector for new technologies and solutions, particularly to reduce greenhouse gas emissions. Fonterra, in particular, was identified as an important leader in this area.....

**More:** <https://idealogue.co.nz/etc/2018/06/how-new-zealand-companies-are-stacking-business-sustainability>

**Source:** *SBC Weekly Pānui*, 14<sup>th</sup> June 2018. ❖

## New ISO Standards for Machine Tools to Improve Environmental Performance, Energy Efficiency

"The performance of machine tools varies depending on technical specifications and operating requirements, making it difficult to determine a common set of environmental performance criteria – but ISO has recently published the first two parts of a new International Standard for the environmental evaluation of such tools based on the commonalities that can be found in the huge variety of types.

"The standard covers the topic in a way it can be applied to each and every tool, despite the product group of machine tools is extremely diverse using different technologies (such as milling, turning, grinding, laser processing, forming), processing of material (metal, wood, plastics), sizes (to produce parts the size of a tooth or to process gears for windmills). The standard focuses on the relevant energy users to achieve a higher environmental performance without losing in technical possibilities, according to Ralf Reines, developer of the standards.

"The ISO standards can help measure energy supplied and improve machine design and performance, ...

**More:** [www.environmentalleader.com/2018/06/new-iso-standards-for-machine-tools-to-improve-environmental-performance-energy-efficiency/](http://www.environmentalleader.com/2018/06/new-iso-standards-for-machine-tools-to-improve-environmental-performance-energy-efficiency/) plus [www.4-traders.com/news/ISO-International-Organization-for-Standardization-for-Standardization-New-ISO-standards-for-greener-machine-tools--26754144/](http://www.4-traders.com/news/ISO-International-Organization-for-Standardization-for-Standardization-New-ISO-standards-for-greener-machine-tools--26754144/) plus [www.iso.org/standard/70035.html](http://www.iso.org/standard/70035.html) and [www.iso.org/standard/66354.html](http://www.iso.org/standard/66354.html)

**Source:** *Environmental Leader*, 14<sup>th</sup> June 2018. ❖

"Last year [2015], when I turned 40, I did something you might think is a little predictable: I bought a motorcycle with the intent of taking it off road to cross the entire Australian land mass from west to east. That first attempt was a big fail (that is not the subject of this article!), but I got back on the steel horse and this month returned from an epic adventure with some close mates that took me from Darwin to Sydney, avoiding tarmac almost the entire way. A total of 6,030 kilometres in 13 days.

"In college, one of my favourite books was *Zen and the Art of Motorcycle Maintenance*. In Robert Pirsig's famous 1974 tome, the autobiographical main character Phaedrus uses motorcycle maintenance as a way to riff on the meaning of quality. Having committed to this crazy notion of adventure motorbiking, in a country as big and barren as Australia, I had to learn enough about my motorcycle to perform basic maintenance and trouble-shooting, given the inevitability of things breaking down.

"As I struggled to climb the steep learning curve (which often involved undoing my own unwitting mistakes), I saw many parallels with my work in strategy consulting. I've gathered these reflections here – lessons from the world of motorcycle maintenance that should resonate with strategists. These have all been acquired the old-fashioned hard way.

1. Slow down and make sure you are solving the right problem. ....
2. Work back from the source of the problem. ....
3. Be empirical. ....
4. Keep doubt alive. ....
5. Gain some distance from the problem.....
6. Be organised. ....
7. Plan for the best but be prepared for the worst. ....

"My mid-life push into motorcycling has taken me out of my comfort zone and thrown me into new circumstances with new teachers. There is something about becoming a novice again that, for me at least, builds a great sense of renewal. And out there, in the wide open landscape of the outback, you have the space to reflect.

**More:** [www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/strategy-and-the-art-of-motorcycle-maintenance](http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/strategy-and-the-art-of-motorcycle-maintenance)

**Source:** *McKinsey Classics*, 14<sup>th</sup> June 2018. ❖

## The New Big Circle. Achieving Growth and Business Model Innovation through Circular Economy Implementation

"In a world of finite resources and growing population, the traditional 'take-make-dispose' economic model is increasingly unsustainable. As a consequence, companies are feeling pressure from customers, NGOs, regulators, and investors to rethink wasteful linear value chains. The 'circular economy' envisions a more regenerative alternative focused on a 'refurbish-repair-reuse-recycle' model that has the potential to sustain global growth in the face of increasing resource scarcity. ...

"It's been estimated the transition to the circular economy could unlock USD \$4.5 trillion of GDP growth worldwide by 2030 – and the executives interviewed agreed the shift would yield economic benefits: ...

**More:** [http://docs.wbcscd.org/2018/01/The\\_new\\_big\\_circle.pdf](http://docs.wbcscd.org/2018/01/The_new_big_circle.pdf)  
42 pages, 4.64MB

**Source:** *Report Alert*, 20<sup>th</sup> June 2018. ❖

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](mailto:ray@sustainabilitymatters.co.nz) Phone: +64 (09) 443 0773 Web: [www.sustainabilitymatters.co.nz](http://www.sustainabilitymatters.co.nz)