

Sustainability Matters

22nd Nov, 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.**

Institutional Investors Called to Help Solve Social and Environmental Issues

"A new report is calling for New Zealand institutional investors to allocate around 10% of their portfolios to socially and environmentally positive 'impact' investments.

"*Financing the Future*, a multi-media report released by green growth promotion group Pure Advantage, cited the huge potential of impact investment to improve environmental and social conditions while generating a return for investors.

"Simon Millar, executive director of Pure Advantage, said impact investing was possibly the most viable financing strategy for creating a desirable future.

"To resolve societal and environmental challenges such as affordable housing, biodiversity loss and climate change, we have three basic options: raise taxes, raise national debt or facilitate more private and community sector investment into social and environmental issues", Millar said.

"Impact investing represents a growing global movement, and, perhaps, the most viable financing strategy for creating a desirable future."

"The report focuses on areas of potential impact investing in NZ:

- Forestry – Forest and land-based assets that can be used to off-set carbon emissions and align to New Zealand's SDG and Paris agreement goals.
- Housing – Allowing progressive housing ownership models through access to long term low interest capital.
- Circular Economy – There is potential for up to \$8.8 billion worth of additional GDP in Auckland by 2030 if the city established a circular economy.
- Social Procurement – buying power to deliver social, cultural and environmental value, above and beyond the value of the goods or services being procured.

"Author of the report's core narrative Alex Hannant said New Zealand is primed for impact investing given the increasing public and commercial interest in making a positive difference through our business strategies and consumer choices.

"Right now, our impact investment market is ad-hoc and underperforming", Hannant said.

"But with a strategic approach to growth, we can build a capital market that aligns the goals of economic success with well-being and sustainability, rather than seeing them as trade-offs.

More:

www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12163305 plus
<https://pureadvantage.org/news/ftf/financing-the-future/>

Source: *NZ Herald*, page B3 and Pure Advantage 21st Nov. ❖

SUSTAINABILITY WORKING GROUP

At the NZICA's AGM held 15th Nov. 2001 members unanimously voted in favour of the following remit presented by Peter Hays FCA, Tony Gray FCA and Leanne Holdsworth CA on behalf of the Sustainability Working Group;

'That the Institute recognise that Sustainable Development Reporting (or Triple Bottom Line reporting) will be an important part of the reporting responsibilities of many organisations.

'Accordingly this meeting requests that the Executive Board actively support the involvement of Institute members in this development, such as through the establishment of a National Committee.' ❖

Updated GRI OH&S Standard Calls for More Comprehensive, Worker-centric Reporting

"Healthy and safe working conditions are recognised as a human right – yet it is estimated that close to 2.8 million people die from work-related injuries and illnesses every year, according to the International Labour Organization. A lack of robust occupational health and safety (OH&S) management can put the lives of workers and their families at risk and can limit countries' potential for sustainable development. To address these concerns, GRI has launched an updated version of its widely used GRI 403: Occupational Health and Safety reporting standard. ...

"The standard puts the worker at the centre. First, it covers a wide range of workers that goes beyond the traditional idea of employees on a payroll, offering a response to modern ways of working – such as the gig economy or the mobile workforce. Second, the standard places a greater emphasis on worker's recovery from work-related injuries – leaving behind those measures that focus solely on lost work time.

"The benefits of occupational health and safety are far-reaching. A healthy workforce is more productive and engaged. Promoting a healthy work environment also helps to attract – and hold on to – talented workers. Implementing the new GRI 403 standard will help drive improvements in the lives of millions of workers around the globe. ...

More: www.globalreporting.org/information/news-and-press-center/Pages/Updated-GRI-OHS-standard-calls-for-more-comprehensive-worker-centric-reporting.aspx plus www.globalreporting.org/standards/media/1910/gri-403-occupational-health-and-safety-2018.pdf 32 pages, 430kb

Source: GRI, 1st November 2018. ❖

Kōkako Sustainability Report 2018

"Following this framework was quite a departure from the way we usually do business so don't worry, we are not going all corporate on you, we are just trying to set higher standards for how we report!

"*Tēnō pai Kōkako Organic Coffee!* An excellent sustainability report focussing on the critical sustainability issues. Great to see the big effort to meet the Global Reporting Initiative (GRI) standards and proving that big or small, everyone can set the bar high!

"Great work Mike Murphy Nick Morrison and team!

More: www.kokako.co.nz/pages/our-sustainability-report

Source: Calum Revfem, LinkedIn, 14th November 2018

Editor: A remarkable two yearly report for a growing company with a staff of 10 FTE's. ❖

Donation Opportunity!

If You Enjoy *Sustainability Matters*

and gain stimulation or value from it consider providing a donation. Doing so would support creation of the newsletter ☺

As a suggestion NZ\$46 would be very welcome. Invoices/GST receipts issued. Every contribution is much appreciated.

Bank account details are;
Sustainability Matters

A/c No. 123 011 0249104 00

ASB Bank, Queen Street branch, Auckland.

Designing Impactful Engagement

"Our new report *Common Threads: Designing Impactful Engagement* provides practical guidance to help companies better engage their external stakeholders.

"Today's businesses are increasingly recognising stakeholder engagement is critical to understanding their context, navigating disruption and formulating successful business strategies.

"*Common Threads* outlines:

- The business case for stakeholder engagement
- Best practices in organising and implementing strategic engagement
- Case studies that outline useful insights for practitioners

"The report is part of a suite of outputs from our research, which include Sector Deep Dives (see below) and member-only tools.

More: <https://sustainability.com/our-work/reports/common-threads/> 49 pages, 8.94Mb

Source: SustainAbility, 16th November 2018. ❖

Smartphone App Identifies Plant Pests In the Field

"An app that uses artificial intelligence to identify plant disease is being deployed in India as an early-warning system to stop the advance of a crop-destroying caterpillar that is having a devastating impact on maize crops in Africa.

"Plantix, a diagnostics smartphone app developed by Berlin-based Progressive Environmental and Agricultural Technologies (Peat), has used its geo-tagging software to create a live tracking map of verified cases of the fall armyworm in India, which was first discovered in a field of maize in Karnataka in May. ...

"Cabi estimated in September that improper management of the armyworm could cost 10 of Africa's major maize-producing economies \$2.2bn-\$5.5bn per year in lost harvests. Though known primarily for attacking maize fields, the pest eats 186 plant species, including sorghum and soya beans. Each female moth can lay 1,000 to 1,500 eggs and moth populations can fly almost 100km per night

More: www.ethicalcorp.com/indian-farmers-using-smartphones-fight-fast-moving-crop-killer plus www.cabi.org/news-and-media/2018/cabi-trials-peats-smartphone-app-plantix-that-identifies-plant-pests-in-the-field/ and [https://en.wikipedia.org/wiki/Plantix_\(mobile_app\)](https://en.wikipedia.org/wiki/Plantix_(mobile_app))

Source: Ethical Corp, 27th October 2018. ❖

Major New Initiative to Improve New Zealand Homes Launched

"A significant new initiative to improve the nation's homes has been launched today [Monday 19th November] by the New Zealand Green Building Council.

"For the very first time in New Zealand, Kiwis will be able to simply check any home to see if it is warm, safe and dry, thanks to the launch of the new project, called HomeFit. HomeFit empowers Kiwis to find out the health of a home in two ways.

"Firstly, there's a free online check which all Kiwis can use to examine their own home, or a home they're looking to buy, sell or rent. The online check is available at homefit.org.nz and contains around 20 questions before providing a tailored report on the home, detailing how warm, safe, efficient and dry it is. And, if it isn't, how to improve it.

"Secondly, there's an independent appraisal, carried out by a trained assessor. The assessment looks at damp, mould, insulation, heating, ventilation and other key areas and, if a home passes, it will be awarded a HomeFit stamp, showing it is warm, dry, safe and efficient. ...

"The Green Building Council is hoping thousands of keen house-hunters make use of the online check during open homes, and sellers and landlords use HomeFit to make their homes healthier, and prove it with a HomeFit stamp. ...

More: www.nzgbc.org.nz/Story?Action=View&Story_id=367 plus www.homefit.org.nz

Source: NZGBC, 19th November 2018. ❖

Leading Corporate Reporting Bodies Launch Two-Year Project for Better Alignment

"Major international corporate reporting standard setters and framework providers have today [Wednesday 7th November] announced a ground-breaking new two-year project focused on driving better alignment in the corporate reporting landscape, to make it easier for companies to prepare effective and coherent disclosures that meet the information needs of capital markets and society.

"Launched simultaneously at the Bloomberg Sustainable Business Summit in London and in Sydney, during the World Congress of Accountants 2018, Corporate Reporting Dialogue participants committed to driving better alignment of sustainability reporting frameworks, as well as with frameworks that promote further integration between non-financial and financial reporting. ...

"Through this new project, participants will map their respective sustainability standards and frameworks to identify the commonalities and differences between them, jointly refining and continuously improving overlapping disclosures and data points to achieve better alignment, taking into account the different focuses, audiences and governance procedures. Participants will identify how non-financial metrics relate to financial outcomes and how this can be integrated in mainstream reports.

"In undertaking this project, participants of the Corporate Reporting Dialogue are focused on bringing about visible improvement in the coherence, consistency and comparability of corporate reporting by business. This will lead to improvements in reporting from a multi-capital perspective, which will be essential for the long-term efficient allocation of capital given the changing nature of risks and opportunities.

"Speaking in Sydney, Ian Mackintosh, Chair, Corporate Reporting Dialogue said: "The different elements of the corporate reporting system are not working as harmoniously as possible, with the result being that corporate reporting can be seen to pursue conflicting objectives, under disjointed definitions with unclear aims.

"Bloomberg Philanthropies will be providing funding for this project.

"The participants:

- CDP (Carbon Disclosure Project)
- Climate Disclosure Standards Board (CDSB)
- Financial Accounting Standards Board (FASB)
- Global Reporting Initiative (GRI)
- International Accounting Standards Board (IASB)
- International Integrated Reporting Council (IIRC)
- International Organization for Standardization (ISO)
- Sustainability Accounting Standards Board (SASB)

More: <http://corporatereportingdialogue.com/wp-content/uploads/2018/11/Corporate-Reporting-Dialogue-Better-Alignment-Project.pdf> plus <http://corporatereportingdialogue.com/>

Source: Callum Revfem, LinkedIn 7th November 2018. ❖

Time Capsule

"30 years ago this week [Last week of October], Malta became the first country to raise climate change as a dedicated agenda item at the UN General Assembly.

"A dozen countries shared its concern about global warming, the transcript shows with no dissenting voices regarding the science. There was little sign of how politically fraught the subject would continue to be three decades later.

More: www.climatechangenews.com/2018/10/24/time-capsule-30-years-ago-malta-put-climate-un-agenda/

Source: *Climate Weekly*, 27th October 2018. ❖

New Zealand's Old Plastic Bags Will be Made Into Fence Posts for Farms

"This country's old, discarded plastic bags and bottles will soon be given new life as fence posts for farms.

"Material from soft plastic recycling bins, which are at most supermarkets, has been sitting in storage since about September after the Australian company that was accepting it became inundated with too much plastic.

"But the Packaging Forum, which runs the Love NZ Soft Plastic Recycling Scheme, has now partnered with new company Future Post to convert some of the stockpile into fence posts....

"A standard post could be made out of 208 milk bottles, or about 1700 single use plastic bags, she said.

"The final post would be about 10kg of solid plastic, expected to last about 50 years. ...

More: www.stuff.co.nz/environment/108474737/new-zealands-old-plastic-bags-will-be-made-in-to-fence-posts-for-farms

Source: *SnippETS*, 15th November 2018. ❖

Auckland Council Reaffirms Commitment to Tackling Climate Change

"Today (13th November) Auckland Council recommitted to membership of the C40 Cities Climate Leadership Group with the council's Environment and Community Committee endorsing Auckland's reapplication for C40 affiliation.

"The main component of Auckland's application is a commitment to the aims of Deadline 2020. This report says that temperature increases must be held to a rise of no more than 1.5° Celsius to avert catastrophic climate change.

"Councillor Penny Hulse, chair of the Environment and Community Committee, says the C40 report stresses that cities and nations must commit to bold and coordinated climate action in the next few years.

"Auckland's Climate Action Plan, currently under development, is being significantly aided by C40 engagement. The council's Chief Sustainability Officer, John Mauro, says Auckland's Climate Action Plan will comply with and help deliver the 1.5°C target.

"Auckland's Climate Action Plan will present practical solutions for delivering a healthy, resilient, prosperous and zero carbon Auckland. By working with businesses, government, organisations, mana whenua and individuals throughout the development and implementation of the plan, we expect to deliver the necessary collaboration, innovation and solutions to address key climate challenges.

"Auckland's Climate Action Plan will help us become more resilient to extreme weather events and sea level rise, further improve sustainable transport options, increase efforts to retrofit buildings and homes, support innovation and new technologies, expand on the greening of our urban areas and shift us to greater energy security.

More: <http://ourauckland.aucklandcouncil.govt.nz/articles/news/2018/11/auckland-council-reaffirms-commitment-to-tackling-climate-change/> plus <https://climateauckland.co.nz/> → "We want your ideas."

Source: Alec Tan, LinkedIn, 13th November 2018. ❖

Redrawing the Map: How the World's Climate Zones Are Shifting

"This week at *Yale Environment 360*, our contributing writer Nicola Jones paints a vivid picture of how key climatic boundaries around the globe are shifting in the face of steadily rising temperatures. Illustrated with detailed maps, Jones's article examines how, among other changes, the tropics are expanding, land suitable for wheat cultivation is moving poleward, the U.S. 'tornado alley' has shifted dramatically to the east, and the permafrost line is creeping north. As Jones explains, these stark changes – many of which have unfolded in just a few decades – will have major consequences for food and water security, local economies, and public health.

More: <https://e360.yale.edu/features/redrawing-the-map-how-the-worlds-climate-zones-are-shifting>

Source: *Yale Environment 360*, 26th October 2018. ❖

Mining Bitcoin Uses Enough Energy to Warm Building

"As mining machines harvest bitcoin, they generate excess heat. Instead of letting it go to waste, a Canadian company is capturing and using it to warm people's homes.

"Bitcoin mining uses massive amounts of energy as computers churn through the steps needed to make a record on the blockchain. Now, one mining company is recycling some of that energy to heat buildings.

"Heatmine, a Canadian mining company, works in Quebec, where almost all electricity comes from renewable sources, so its carbon footprint is relatively small. But the company saw that it could also extend the value of that electricity by harvesting the waste heat from its mining machines.

"The company started first with its own large warehouse. 'We're in Quebec – it's very cold 10 months of the year', says Jeremy Dahan, Heatmine's COO. 'So we started recycling the heat'. Heatmine first used the excess energy from its processing systems to heat its water....

"One of the company's machines can provide 75,000 BTU/hr, or enough to heat up to 300 sqm 24 hours a day. In larger buildings, the company can install additional units. The system can be used in houses or in industry. It's similar to projects which heat buildings with waste energy from servers (often giving eliminating heating bills for residents) or data centres that send heat into district heating systems for neighbourhoods.

"It's one small way to offset bitcoin's massive footprint. Globally, the process of bitcoin mining uses so much electricity that, by one estimate, the industry is already using as much power as the entire country of Ireland. One recent study projected that if the industry grows at a similar rate as some other technologies, it could single-handedly produce enough emissions over the next 15 years to lock in the world for 2°C of global warming. The industry will be forced to evolve. But harvesting waste heat makes sense now, and could also make sense in the future.

More: www.fastcompany.com/90268985/a-solution-to-bitcoins-energy-waste-use-it-to-warm-buildings

Source: Rob Skinner, 18th November 2018. ❖

Beyond Simple Payback: Calculating the True Value of Project Savings

"Calculating the potential savings that a resource efficiency project might generate can be a guessing game at best, and at worst, outright misleading.

"This is because factors such as the 'rebound effect' that can lead to increased consumption after the project has actually been implemented.

"For example, more efficient heating may be installed at a site where you would expect a reduction in kWh used, however, the tenants, knowing that the heating is now more efficient, may decide to turn on the heating more often than they used to or not be as diligent about turning them off as they would have been prior to the implementation of the project.

"This can lead to reduced savings from the initial projections, or in some case actually lead to all of the savings being wiped out by the increased consumption!

"Therefore, you need to factor this in to your savings projections and most definitely take this into account when calculating realised savings after the project is completed.

"So if you want to increase your accuracy of calculating the real savings of a project you need to first have a Monitoring & Targeting (M&T) programme in place.

"The Energy Efficiency and Conservation Authority (EECA) estimates the savings realised by just having an effective M&T program amount to 5-25% of your total utility expenditure!

More: www.energyts.com/single-post/calculating-project-saving

Source: Energy and Technical Services, 19th Nov. 2018. ❖

As Global Demand for Electricity Grows, Geothermal Energy Heats Up

"Power producers around the world are increasingly turning their attention to the heat beneath our feet.

"Geothermal electricity generation might not have the high-tech flashiness of solar, or the romance of wind and wave, but it's the solid, steady workhorse of the renewable energy race. The never-flagging heat lurking at various depths below the Earth's surface is tapped to produce steam that is used to drive turbines and generate electricity. This heat can also be used more directly to warm spaces or swimming pools, but sustainable electricity generation is the goal that most have in their sights. ...

"The use of geothermal electricity varies enormously around the world. In 2015, 24 countries had a total of around 13.3 gigawatts of geothermal power capacity. The United States is the single biggest, with just over 3,500 megawatts of capacity – although this only contributes around 0.3% of the nation's electricity capacity – followed by the Philippines, Indonesia and Mexico in the 1,000 to 2,000 MW range.

"Geothermal energy's star seems to be on the rise. The Japanese government has committed to tripling its geothermal electricity capacity, from around 540 MW in 2011 to 1,500 MW, by 2030. El Salvador is aiming to source 40% of its electricity from geothermal by 2019 – up from around 25% – and in Kenya, geothermal energy has now taken over hydro as the top supplier of electricity, providing 51% of the nation's electricity ...

"A 2008 report by the U.S. Geological Survey estimated there are more than 500,000 MW of untapped enhanced geothermal energy in the western United States alone. ...

More: <https://ensia.com/features/geothermal-energy/> plus <https://www.facebook.com/climatereality/videos/1726709110749473/> and www.forbes.com/sites/rrapier/2018/10/18/fact-checking-bernie-sanders-on-geothermal-energy/#29831b7e5b6b

Source: *SnippETS*, and Craig Skinner, Facebook share 15th November 2018

Editor: NZ's installed capacity is 854MW; 13% of electricity production. ❖

The Response

"The first three episodes of *The Response*, a new podcast documentary series exploring the remarkable communities which arise in the aftermath of natural disasters, are available for download. *The Response* is part of the 'From Stories into Action' project, a collaboration between Shareable, Post Carbon Institute, Transition US, Upstream Podcast, and NewStories.

"*Radical approaches to disaster relief in New York:* We explore how, in the immediate aftermath of Hurricane Sandy, a grassroots network of activists and volunteers emerged to coordinate one of the most effective relief efforts in the city.

"*How Puerto Ricans are Restoring Power to the People:* The story of the grassroots response that arose after Maria. In the midst of all the austerity and hurricane-driven chaos, a quiet revolution has been slowly taking place on the island.

"*The Impact of Northern California Fires on the Undocumented Community.* In this episode, we put the focus on last year's Tubbs Fire in Santa Rosa, California – the state's most destructive fire to date – and how it impacted the undocumented community.

More: www.postcarbon.org/the-response-podcast-radical-approaches-to-disaster-relief-in-new-york/ plus www.postcarbon.org/the-response-podcast-how-puerto-ricans-are-restoring-power-to-the-people/ and www.postcarbon.org/the-response-podcast-the-impact-of-northern-california-fires-on-the-undocumented-community/

Source: Post Carbon Institute, 1st November 2018. ❖

One Billion Signatures for Peace

"Our mission is to create the tipping point of peace by building this global registry of people that have a vision of a future wherein everyone gets to spend the dividend of peace. What does that mean you may ask? Alternative Expenditures. If your government spends \$5,000,000 dollars, rupees, rubles, yuan or pesos on a missile, it cannot be spent on Alternative Investments. Such as clean water, eliminating poverty, education for every child, solving our climate challenges, and gender equality. In fact, every problem we face could be better solved with a world living in sustained peace.

"We believe One Billion signatures will be the support needed to change our path from destruction to peace. We also believe passionate intention alone will not create sustained peace. The establishment of the Infrastructures of Peace are fundamentally necessary the foundation upon which peace can be built upon. These infrastructures support peace through education, economic and social development, respect for human rights, gender equality, democratic participation, expanding understanding and tolerance, supporting participatory communications and international peace.

More: www.peacenow.com/mission/ plus www.peacenow.com/vision/

Source: PeaceNow, 14th November 2018. ❖

Why 536 was 'The Worst Year To Be Alive'

"Ask medieval historian Michael McCormick what year was the worst to be alive, and he's got an answer: '536'. Not 1349, when the Black Death wiped out half of Europe. Not 1918, when the flu killed 50 million to 100 million people, mostly young adults. But 536. In Europe ...

More: www.sciencemag.org/news/2018/11/why-536-was-worst-year-be-alive

Source: *Carbon News*, 21st November 2018

Editor: Remarkable scientific discovery which includes a New Zealand contribution. ❖

Wellington Building Takes Out International Green Award

"Aorangi House on Molesworth Street, home to engineering consultancy Beca, was praised by the World Green Building Council as a 'well-deserved winner', and a 'stellar example' of a green building [at the awards on 6th September].

"Aorangi House is one of New Zealand's most energy-smart buildings, and co-won the Leadership in Sustainable Design & Performance Award in the Commercial category, alongside Barangaroo South in Sydney, Australia, as part of the World Green Building Council's (WorldGBC) Asia Pacific Leadership in Green Building Awards.

"The biennial awards programme celebrates iconic green buildings, up-and-coming innovators and inspiring companies driving change and creating a better future throughout the Asia Pacific region.

"Previously an outdated 1970s office block in Wellington, the Aorangi House revitalisation project demonstrates how the up-cycling of an existing commercial office building can not only significantly reduce environmental impact but also achieve positive user perceptions coupled with leading environmental performance outcomes.

"The building was vacated in 2005 due to issues with heating, cooling and ventilation. The single glazed windows leaked, and the uninsulated façade was considered user-unfriendly. The building remained untenanted until purchased by developer Prime Property Group.

More: www.nzgbc.org.nz/Story?Action=View&Story_id=354 plus www.stuff.co.nz/national/106901305/formerly-abandoned-leaking-wellington-building-is-now-one-of-countrys-best

Source: Editor, 19th November 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 Phone: +64 (09) 443 0773 Web: www.sustainabilitymatters.co.nz