Working for a sustainable future

The impact of the United Nations Sustainable Development Goals

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Sustainability is in demand by consumers, regulators and businesses

Sustainability is now an expected standard for businesses and governments around the globe. Where once sustainability was an additional feature, it is quickly becoming a minimum requirement to do business. Consumers and regulators are demanding higher standards of sustainability from products and services.

With increased access to information, consumers have become aware of the downstream impacts their purchases are making. As a result, they are demanding businesses do better. Regulators are responding to growing environmental and social concerns with stricter standards. Across issues such as environment, labour, discrimination, waste and climate change, governments are putting minimum requirements and standards in place.

The reputational risk of failing to bring sustainability into your business can be significant. The NZ Super Fund and many private superannuation funds in New Zealand were challenged in 2016 about investments in industries that go against international law or are perceived to be unethical – principally weapons and tobacco. Workers were upset that their investment funds were profiting from the plight of others and regulators were concerned a blind eye had been turned to banned investments such as cluster munitions. Within two months of the public outcry, KiwiSaver providers had divested from more than $100 million in stocks in banned weapons and tobacco and a new international fund had been established to exclude such investments.[1]

Businesses are going beyond reputation and integrating sustainability across all their activities. In the past, executives said they pursued sustainability to reduce costs or to support their reputation. More recently however, executives said their companies seek to align sustainability with their overall business goals, mission or values.[2] Sustainability is becoming the new normal and businesses are working it into many different aspects of their operations.

With the recent change of government in New Zealand, public sector agencies may face additional pressure to respond. PwC New Zealand is at the forefront of these efforts to support sustainability. PwC established a greenhouse gas accounting division in 2014 and has been involved with the Sustainable Development Goals (SDGs) since early 2017, shortly after they were agreed. We have been working with AgResearch in New Zealand and researchers overseas since 2014 on resilience and sustainability and have recently assisted with developing ways of tracking progress towards the SDGs.

In developing our local advice we also work closely with other PwC offices. PwC in the UK is working with a wide array of businesses, helping industry to engage with the Sustainable Development Goals to improve their business, and to meet customers' and regulators' growing expectations.

[1] **Cook, F. 'Fund manager launches ethical investment option', NZ Herald, 13 December 2016.** http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11765993
[2] **Bonini, S. and Bové A. 'Sustainability's strategic worth: McKinsey Global Survey results', McKinsey&Company, July 2014.**
https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/sustainabilitys-strategic-worth-mckinsey-global-survey-results

The world is changing and Sustainable Development Goals are part of that

The world is rapidly changing, and sustainability is at the heart of many of those changes. We see change being driven by five global megatrends: demographic and social change, rapid urbanisation, a shift in global economic power, technological innovation, climate change and resource scarcity. These megatrends are inescapable and they are here now. Successful organisations will be the ones who can adapt to these trends and discover how to treat them as opportunities.

The Sustainable Development Goals

In September 2015, 193 countries agreed to the Sustainable Development Goals, 17 moonshot goals for a better world. The SDGs are a response to the rapid change being driven by global megatrends. The 17 SDGs (also known as the Global Goals) cover every facet of life and society from sustainable agriculture to gender equality to safety and education (see Figure 1: The Global Goals). The SDGs are a statement of commitment by world governments to peace, equality, justice and sustainability.

This report explores The Global Goals, how they relate to the five megatrends, and what they mean in a New Zealand context.

Figure 1: The Global Goals

Megatrends

Demographic and social change

The global population continues to grow. By 2025 the world will be home to over 8 billion people. With advances in medicine and growing economic wealth, worldwide life expectancy at birth has increased from 53 years in 1960 to 72 years in 2015, a 35 per cent increase.[3] The populations of mature economies are potentially constraining their workforce. Meanwhile many developing and emerging economies are young and growing, creating larger labour forces and consumer markets. For sustainable development there needs to be systems in place to address the disparate needs of young and old people.

Growing young populations in emerging economies need decent work and economic growth to earn a secure living. SDG 8 Decent Work and Economic Growth sets a target for GDP to grow seven per cent per annum in the least developed countries – an achievable task with a young and able workforce. But the jobs and key industries of today will look different by 2030 because of technological breakthroughs, automation and worldwide innovation. Development-oriented policies will help cultivate an environment where industries are internationally competitive, and sufficient jobs are available that leverage technology, not evade it.

Ageing populations in more developed economies need adequate healthcare to meet their medical needs. SDG 3 Good Health and Well-being is a commitment to ensure healthy lives and promote wellbeing at all ages. Part of this goal is substantially increasing health financing and building up the healthcare workforce. This is crucial to ensure sustainable financing arrangements and a large enough aged care workforce to accommodate retired populations.

Rapid urbanisation

Globally, populations are condensing in urban areas. Over half of the world's people live in urban areas and another 1.5 million people join cities every week.[4]

Rapid urbanisation is a double-edged sword. Pooling together people with their individual skills and talents boosts economic growth, creates knowledge and diffuses innovation. However, densely populated areas create issues for clean water and sanitation and the wider ecosystem. SDG 6 Clean Water and Sanitation is about managing these impacts. Part of this goal is a commitment to improving water quality, and protecting and restoring water-related ecosystems. To achieve this goal local communities will need to support efforts to improve water and sanitation management.

With rapid urbanisation, infrastructure needs to be robust and provided in sufficient volumes to support these large groups. Living standards will be compromised if systems, services and facilities fail to grow with the volume of urban residents. SDG 11 Sustainable Cities and Communities shows a global commitment to addressing this threat. Specific targets are in place to push for adequate, safe and affordable housing, basic services, transport systems, natural disaster preparation, waste management, green spaces and heritage protection.

Shift in economic power

The global economic order is rapidly changing. In the early 2030s China will pass the United States to become the largest economy in the world. Emerging economic powerhouses including India, Mexico and Indonesia will overtake some of the existing major economies.[5]

This development must be cleaner and more sustainable than past development of today's industrialised economies. If it is not, this growth will exacerbate environmental problems and further contribute to climate change. SDG 12 Responsible Consumption and Production is a global pledge to mitigate the negative impacts of this shift in economic power, encouraging companies to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

[3] **'Life expectancy at birth, total (years)'. Accessed 12 October 2017.** https://data.worldbank.org/indicator/SP.DYN.LE00.IN

There is an expectation that developed countries will take the lead, implementing national action plans and policies to motivate sustainable consumption and production. However, developing countries will be able to leapfrog environmentally destructive technologies such as coal and gas power, moving straight to greener technology. For example, India is on target to build 100 gigawatts of solar-power generation capacity by 2022, even installing floating solar power projects to overcome land constraints.[6]

Reduced inequalities are helping drive this megatrend. Outsourcing and offshore production has promoted income growth in emerging economies. A worldwide commitment to the SDGs will put wage and social protection policies in the spotlight. The shape of growth economies like China and India will change as the populations become more wealthy and educated. Outputs will become centred on people rather than manufactured goods and resources, reducing inequality as the value of people grows, supporting SDG 10 Reduced Inequalities to shrink income disparities within and among countries.

Technological breakthroughs

Technology is changing the way we socialise, work, relax, learn and live. We are living through a fourth industrial revolution which aims to remove as much manual processing as technologically possible. Machine learning, artificial intelligence and robotics are some of the latest innovative sparks setting fire to the industry as we know it.

SDG 9 Industry, Innovation and Infrastructure promotes sustainable practices by establishing solid foundations for a tech-empowered, future-proofed society. Technological breakthroughs are forging a clear path toward achieving this goal. For example, moving responsibility of repetitive tasks from people to technology is an opportunity to support human wellbeing as well as economic development.

Built into this goal is the target to boost adoption of clean and environmentally sound technologies, putting a keen focus on sustainable industrialisation.

Renewable energy developments signal a bright future for affordable and clean energy. 2016 marked the first year solar power was cheaper to build than fossil fuel generated electricity.[7] This will drive cleaner investment decisions, helping to deliver on SDG 7 Affordable and Clean Energy and SDG 13 Climate Actions.

Climate change and resource scarcity

Leaders globally have agreed to address climate change. 195 countries have signed the Paris Accord[8] and are actively working to reduce emissions and limit the increase in global average temperature to 1.5 degrees Celsius.[9]

Emerging economies are investing heavily to develop sustainably. Mature economies are making a concerted effort to retire existing investments in fossil fuel energy to convert to environmentally friendly alternatives. The Netherlands is working to close all coal plants by 2030, even closing down those that have been recently built.[10]

SDG 13 Climate Action directly relates to this megatrend. It is a call to arms for our planet as both its own goal and is echoed in most other SDGs. Targets are in place to embed action in policies, and promote research and development on the best course. All people, businesses and governments need to make a serious effort to ensure a better future.

SDG 7 Affordable and Clean Energy is also essential to this goal. It pushes for a collective effort to substantially increase the share of renewable energy in the global energy mix. As renewable alternatives become cheaper, clean energy will be the natural result of savvy investment decision making.

[4] **'World Urbanization Prospects: highlights 2014 revision', United Nations.** https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf
[5] **Bolton, D. 'US? China? India? The biggest economies in 2030 will be…', Independent, 15 April 2015**
http://www.independent.co.uk/news/business/us-china-india-the-10-biggest-economies-in-2030-will-be-10178587.html
[6] **'20 Megawatts of Floating Solar Power Projects Are Coming Up In India Soon', Clean Technica, 13 October 2017**
https://cleantechnica.com/2017/10/13/20-megawatts-floating-solar-power-projects-coming-india-soon/
[7] **Coren, M. J. '2016 was the year solar panels finally became cheaper than fossil fuels. Just wait for 2017', Quartz, 26 December 2016**
https://qz.com/871907/2016-was-the-year-solar-panels-finally-became-cheaper-than-fossil-fuels-just-wait-for-2017/
[8] **'Paris Agreement', United Nations Treaty Collection. Accessed 16 October 2017**
https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=_en
[9] **United Nations. 'Paris Agreement'. Accessed 16 October 2017.** https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=_en
[10] **Darby, M. 'Netherlands to end coal power by 2030, closing down new plants', Climate Home, 11 October 2017**
http://www.climatechangenews.com/2017/10/11/netherlands-agrees-coal-phase-calls-stronger-2030-eu-emissions-target/

Key challenges for New Zealand

Sustainability is a growing concern for organisations across the globe. Our clients and stakeholders are increasingly talking about the challenges and opportunities they are seeing coming out of a growing public awareness of sustainability. Sustainability is going to be a big part of business planning and government policy development over the coming decades.

For all that sustainability challenges existing ways of working, it's also an opportunity. It's an opportunity for growth, market share and renewal. The Sustainable Development Goals affect all organisations and activities – planning, reporting, tax business structures, operational capability, value chains. The organisations that get a jump-start on sustainable business practices will be the ones that succeed in the global environment.

Sustainable agriculture

Agriculture is core to New Zealand's economy. It is intertwined with the environment, significantly impacting life on land and below water as well as climate action, and clean water and sanitation. A key challenge will be reducing emissions from livestock and embedding best practice for a sustainable agricultural sector.

Inequality

The social landscape of New Zealand is constantly evolving. Historically, New Zealand has led the charge with key equality landmarks including women's suffrage, and celebrating indigenous and global culture. New Zealand has above average income inequality compared with other OECD countries. National income inequality measures have been fairly stable for the past 20 years after worsening in the 1980s and 1990s.[11]

Climate change

New Zealand faces difficult challenges in addressing its carbon emissions. Our agricultural economy and mostly renewable electricity system mean there are few easy options for New Zealand to reduce its emissions. However, they also present opportunities for New Zealand to lead the global charge by electrifying other parts of our energy system and leveraging our agricultural expertise into new approaches.

Energy

Increasing population density, especially in Auckland, puts a strain on existing infrastructure. As our population grows, so will our energy needs. This presents an opportunity to adopt sustainable options where development is required, and further invest in a sustainable and resilient national grid. With electric vehicles we can leverage our high levels of renewable electricity to reduce our use of fossil fuels.

[11] **Stats NZ. 'Income inequality', NZ Social Indicators. Accessed 16 October 2017.**
http://www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Standard%20of%20living/income-inequality.aspx#anchor26

Apple Futures – Reducing pesticide use

New Zealand exports more than $360 million worth of apples every year, mainly to key markets in Europe and Asia. European Union (EU) pesticide regulations require growers to use less pesticides and supermarkets are requiring exporters to demonstrate their environmental sustainability. The Apple Futures programme, which included Plant and Food Research and Pipfruit New Zealand, allows growers to balance the demands of its customers for minimal pesticide residues with the challenge of effective control of pests and diseases. Crop production guidelines combine computer modelling to optimise disease prediction, monitoring of insect pests and beneficial organisms, pheromone-based mating disruption technologies to reduce insect pest populations, and targeted spraying of selective pesticides when justified.

As a result, pesticide residues on fruit at harvest have been reduced to significantly below regulatory requirements and below even the most stringent levels required by leading European supermarkets. By the 2009 growing season, 65 per cent of New Zealand apples were grown under the Apple Futures programme, and these apples met the phytosanitary requirements of over 65 countries and were either residue-free or with residues below 10 per cent of EU requirements. Evaluation showed that the programme directly protected more than $113 million of export revenue over four years.[12]

Grocery plastic bags

Public concern had been growing about the high number of single-use plastic bags entering the waste stream. Plastic bags are a common sight at landfills and can become airborne and float into surrounding areas. They are a particular hazard to marine life where they can choke or strangle fish and marine mammals.

The government is responding to public pressure on plastic waste. The government released a discussion document in August 2018 seeking feedback on a proposal to ban the sale and use of all single use plastic bags at retail sale.

For businesses, there's profit associated with limiting plastic bags. PAK'n'SAVE was a first-mover in this area, charging per plastic bag primarily for cost-saving, rather than environmental, reasons.

Recently both major supermarket chains in New Zealand – Countdown and New World – decided to phase out single-use plastic bags. Countdown introduced New Zealand's first plastic bag-free supermarket on Waiheke Island in May 2016.

Both New Zealand supermarket chains collect and recycle plastic bags, which are not able to be recycled at conventional plastic recycling facilities. Reusable bags will be encouraged and both supermarkets are investigating alternatives options ahead of the December 2018 phase-out.

These moves show how consumer-focused businesses are responding to growing pressure to reduce their impact on the environment and demonstrate the sustainability of their business practices.

[12] **Plant & Food Research. 'Low residue apples for export', September 2012.** http://www.plantandfood.co.nz/growingfutures/case-studies/low-residue-apples-for-export

How PwC can help

We're working across the Sustainable Development Goals

PwC New Zealand is working to support organisations to reach and respond to the SDGs:

AgResearch: We've supported this Crown Research Institute with sustainability indicator development including bringing diverse stakeholders together to research how to meet the UN SDGs.

Our Land and Water National Science Challenge: PwC is providing research, insight and coordination to make better use of indicators for sustainable development, particularly in sustainable agriculture.

Global network: PwC is a global network of firms solving important problems worldwide. We are helping organisations engage with the SDGs in a range of industries including the primary and public sectors.

With our experience working with both government and businesses, we are helping organisations tell their sustainability story and back it up with analysis and evidence.

Contact us

If you would like to find out more about how your organisation can respond to the changing global dynamics reflected in the SDGs, please contact:

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