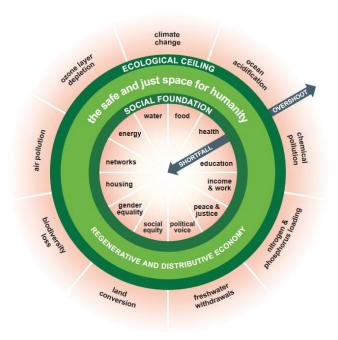
Sustainability/environmental education for the community: What is Sustainability?

Introduction: The Brundtland Report 1987 *Our Common Future* defines sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

Appendix A contains the current version (for 1 December 2018, Part 3 Section 6) from which the Local Government Act 1993 is derived with the requirements for ecological sustainability. Part 3: Section 6: point 2 states: "In the application of the precautionary principle, public and private decisions should be guided by: (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and (ii) an assessment of the risk-weighted consequences of various options"

This brochure attempts to bring such abstract terms into sharper focus for individuals and groups attempting to live and promote sustainability. First we will examine the Raworth (2017) and BIC (1995) new paradigm facing humanity and the work of Marjorie Kelly (2012) in helping us understand sustainability. Then we will contrast this with the structural problems associated with many but not all Corporations to get a contrast between examples of what is sustainable and what is not; followed by a methodology from Baptist World for assessing sustainability.

Diagram 1 Doughnut Economics by Kate Raworth (Raworth, 2017, pp.44-45).



"The essence of the doughnut: a social foundation of well-being that no one should fall below, and an ecological ceiling of planetary pressure that we should not go beyond. Below the Doughnuts social foundation lie shortfalls in human wellbeing, faced by those who lack lifes essentials such as food, education, and housing. Beyond the ecological ceiling lies pressure on Earth's life-giving systems, such as through climate change, ocean acidification, and chemical pollution. But between these two sets of boundaries lies a sweet spot – shaped unmistakenly like a doughnut – that is both an ecologically safe and socially just space for humanity. The twenty first century task is an unprecedented one: to bring all humanity into that safe and just space" (Raworth, 2017, p. 45).

At this link: https://doughnuteconomics.org/tools-and-stories/14 the Doughnut Economic Action Lab (DEAL) provides two most excellent downloadable resources for "Downscaling the Doughnut" to the local level, using Amsterdam as an example to learn from.

Humanity has entered a new paradigm. "History has thus far recorded principally the experience of tribes, cultures, classes, and nations. With the physical unification of the planet in this century and acknowledgement of the interdependence of all who live on it, the history of humanity as one people is now beginning. The long, slow civilizing of human character has been a sporadic development, uneven and admittedly inequitable in the material advantages it has conferred. Nevertheless, endowed with the wealth of all the genetic and cultural diversity that has evolved through past ages, the earth's inhabitants are now challenged to draw on their collective inheritance to take up, consciously and systematically, the responsibility for the design of their future". (BIC, 1995, p.1) The main problem facing humanity collectively is its disunity, with nation pitted against nation, looking after their own self interests. The history of humanity as one people is in its collective infancy an grow into social maturity with the leaders of the world looking after the best interests of the planet, and of all humanity. United, a mature humanity stands a strong chance of survival. Disunited, and remaining in collective infancy, like a foetus born handicapped that fails to develop; we could easily perish as a species at our own hands. Therefore, this new paradigm - of the history of humanity as one people, becomes the new survival paradigm for our species. If this sounds dramatic, so too are the multitude of problems facing humanity, including a profusion of nuclear weapons that have no place in this new paradigm.

"Buckminster Fuller once said, 'You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete' "(Raworth, 2017, p.4).

Kelly (2012, p.111) says trying to change a Corporations functioning under the old paradigm of externalities can be harder than trying to change an animals DNA. Promoting the Doughnut Economy, and the Generative Economy are the new models we need in the hope of making the existing model obsolete.

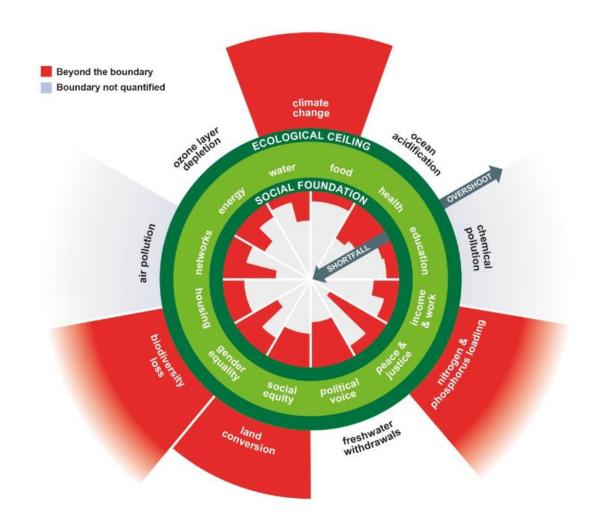


Diagram 2 Current overshoot of planetary boundaries (Raworth, 2017, p.51).

The red portions of this diagram represent areas of overshoot already beyond the ecological ceiling of planetary boundaries; and areas of planetary failure below the social foundation no person ought to fall below. The areas exceeding the planetary boundaries have the highest risk-weighted consequences for the planet. While those below the social foundation may have lower risk weighted consequences, they are never-the-less, considerably important.

Each person on earth is a trustee for the whole. That is a trustee for every other person on the planet (BIC, 1995, p.5). Sometimes that trusteeship can be

as simple as not littering, not throwing rubbish and cigarette butts on the ground. It also encompasses our consumer lifestyles. With Corporations it can be more demanding.

Personal Sustainability Assessment

At a personal level, please kindly take the time now to do the World Wild Life Fund *ecological footprint calculator* by typing in the following link to your internet search engine.

https://www.wwf.org.au/get-involved/change-the-way-you-live/ecological-footprint-calculator#gs.wuoxqw

The result you obtain will be something like this: If everyone on Earth lived the same lifestyle as yourself, it would take the natural resources of (however many) other Earth like planets to support the current total population of the world at your level of consumption.

From a personal level, if your result is only one earth or less, you are living sustainably. If it exceeds this figure, it is a measure of your personal level of ecological overshoot already surpassing the ecological ceiling of planetary boundaries. Don't be too shocked by the results. Use the information to make improvements in your way of life, in particular, in relation to any of the red areas of Diagram 2. To help reduce climate change, Nambucca Shire Council is encouraging individuals and companies to achieve zero net greenhouse gas emissions by 2050.

Corporate Sustainability Assessment

At a business or corporate level, say for a sustainable procurement policy, or for any businesses in our area of jurisdiction; a study of the Baptist World 2019 Ethical Fashion Report will show principles we can apply, to ensure we are neither purchasing products whose manufacture from raw natural material extraction to finished product; exceeds the ecological ceiling of planetary boundaries, nor supports economic structures that keep people below the social foundation we have to bring people out of; for the products we are purchasing. If we are proposing to use the same suppliers for repeated future purchasers, for the sake of planetary unity, it is worth the trouble taken to investigate ethical and sustainable sourcing principles.

The Baptist World (BW) 2019 Ethical Fashion Report, traces the sustainability of 130 fashion corporations selling clothes in our Australian shopping malls, imported from the poor nations. We may not be interested in fashion – but the principles are applicable across the various sectors of our purchasing. An assessment survey based on those principles could be generated as part of our procurement policy. See Appendix B for the research methodology used by BW.

BW (2019, p.6) says "a 'truly ethical' company not only ensures that it's supply chain empowers workers and pays them a living wage, it also understands its impact on the environment and manages its footprint to keep waterways, the earth, and the atmosphere healthy".

"A living wage is a wage that is sufficient for workers to be able to afford the basics (food, water, healthcare, clothing, electricity, and education) for themselves and their dependents" BW (2019, p.9). Even in Australia, many farmers are struggling to obtain a living wage with Corporations undermining their production costs.

Traceability is the first principle. BW (2019, p.9) says that supply companies should be encouraged to be enabled to trace corporate social responsibility of their products all the way from raw material suppliers to the product we may be procuring. This may be a big ask, however it is integral to the new survival paradigm facing humanity. To make this task easier, BW (2019, p.94) suggests a company with a branch in Sydney, "the Supplier Ethical Data Exchange (Sedex Australia https://www.sedex.com/sedex-australia/) a global ethical supply chain management platform" that could be used to source existing information for some sectors of the economy. Further, BW (2019, p.18), cites the New South Wales Modern Slavery Act of June 2018 that "requires commercial entities with an annual turnover of at least \$50 million, and at least one employee in New South Wales, to annually report on the structure of their supply chain: key risk areas and mitigation strategies; policies and due diligence processes relating to modern slavery; and training practices relating to modern slavery".

"The NSW Modern Slavery Act also provides penalties of up to \$1.1 million for non-compliance or providing false or misleading information". BW (2019, p.18), then cites the Commonwealth Modern Slavery Act of January 2019, giving its guidelines for companies "that have an annual consolidated revenue of more than \$100 million, estimating 3,000 businesses [Australia wide] may be affected by this legislation. These laws impress on business the necessity for undertaking corporate social responsibility down their supply chains.

Let's look at Corporations as they stand under the previous paradigm.

Corporations

Many corporations still function under the previous paradigm. Corporations tend to be owned by share holders. The chances are pretty strong that a corporations' share holders may have never physically set foot on the work site, so they are not intimately aware of environmental, ecological and social conditions in and around the work site. The structure of the corporation is to maximise profits to the benefit of shareholders. Associated with profit maximisation is what we call externalities. Externalities are costs paid for by people outside the corporation, for which no economic allowances are made within the economic production costs of the company. Examples of externalities include:

- <u>Air pollution</u>. Close to the business, medical costs may fall on people suffering asthma or respiratory conditions. Costs for air pollution as green house gases may fall on subsistence farmers on the opposite side of the world in the form of extreme weather events wiping out the crops they depend on for their survival.
- River and ocean pollution. Plastics and nylon, breaking down to micro plastic in the oceans, or not breaking down is paid for with the lives of marine creatures, and marine birds who either digest the micro plastics or become entangled in the larger pieces. Chemicals finding their way into rivers and oceans from crop spraying, and various manufacturing industries. Fertilizer getting into water ways causing algal blooms and massive dead zones in oceans. Poor people downstream from some industries, depending on the river for its water supply, may pay the cost in birth defects or medically related conditions from drinking and bathing in contaminated water.
- <u>Groundwater pollution</u>. From produced goods and chemicals ending up in landfill, or from gas fracking.
- <u>Displacing Indigenous populations</u>. Many Indigenous populations do not have the land tenure systems we in the developed world have where a certificate of title is issued to identify land ownership. Such groups are easily displaced from their lands as has happened in the palm oil industry and cattle industry in many tropical regions of the earth. Tropical forest is cleared for these industries, denying Indigenous people access to forest foods on which they are dependent for their survival. We in the West for the most part unthinkingly, blindly, enjoy the products of those industries in our supermarkets
- <u>Biodiversity loss.</u> When tropical forest is cleared for palm oil or cattle industry, so is all of the biodiversity associated with the forest. In dry

- climates such as Australia, trees are cleared for pastoral development, also clearing biodiversity.
- <u>Job Losses</u>. Even within a corporation, the employees can be viewed as externalities, when , for the sake of profit maximisation, they are replaced by automation. The new development of artificial intelligence promises massive unemployment in the future.
- <u>Resource depletion</u> from a linear economy with inbuilt planned obsolescence.
- Economic inequality. What Kelly calls the 1percent problem, where the wealthiest 1 percent own more than half the assets of the USA (Kelly 2012, p.74). This 1 percent problem extends itself between the developed and undeveloped nations. Resource extraction generally tends to be a form of colonialism where the rich countries extract resources from the poor countries with little return for the poor of those countries. Often poor countries are locked into unsustainable resource extraction to pay for exorbitant foreign debt.

These externalities are examples of the kind of structural damage corporations do to nature and society. Such externalities are toxic to humanities survival as a species under the new paradigm. While pollution itself happens, if we are to thrive economically; there are technologies available to capture and minimise pollution, and economic incentives in the form of pollution permits to minimise pollution that could be applied if the will was there to apply them.

The Generative Economy: Promoting a Community wide sustainable mindset¹.

Contrasting from the corporation descriptions above, Kelly (2012, p.11) says "The Generative Economy is one whose fundamental architecture tends to create beneficial rather than harmful outcomes. It's a living economy that has a built-in tendency to be socially fair and ecologically sustainable"

• Kelly (2012, pp163-169) says Generative businesses have "rooted membership ship" or employee ownership. They do not list shares on the stock exchange. If they have shares, they can only be sold locally. This way externalities are not out of site and out of mind by occurring in far away places. The owners have to live with any direct consequences of production, whether physically or socially, and therefore try to

¹ Note:Pages 7,8 and 12 of this paper are extracted from de Mol, M. 2020 . *The Covid-19 Pandemic and the New Economy*. University of New England, Armidale.

- minimise such consequences. Further, democratic processes with employee input govern the running of the business.
- Generative economies are based on a sufficiency principle (Kelly 2012, p.121), that places both employment and community above maximising profits. The wealth of the company is shared by the employees who only need sufficient income to live comfortably.
- Generative economies have a "living purpose ... of serving a broad base of human needs, not simply the interests of the financial elite" (Kelly 2012, p.181). A "living purpose" is where a company coexists with and regenerates living ecosystems, while still producing its products.
- Generative economies have "missioned control governance...embodied in the constitution" (Kelly 2012, pp.181-184). This could be manifest in green energy production; diverting large amounts of waste from landfill; looking after local ecologies; looking after the social problems of the community.

Kelly cites a number of companies working in different and varied sectors of the economy that operate under these conditions, including one company in the USA with "more than 76,000 employees" (Kelly 2012, p.180).

Example of a Generative Economy - Case Study 1.

Kelly cites a Generative forestry project. "Three decades ago, the Zapotec tribe [of Southern Mexico] won the right to communally manage forests previously exploited by state-owned companies. Over time the problems that bedevilled other forests in Mexico, like deforestation and illegal logging became relatively unknown at Ixtlan. The reason is that community members have incentive to be stewards of the forest, since forest enterprises employ 300 people doing work such as harvesting timber, making wooden furniture, and caring for the forest. In this design of commons governance, the forest is not walled off as a pristine preserve, nor is it clear-cut to enrich absentee owners. It's a *working forest*, with control in the hands of those with an incentive to look out for the long-term interests of both the human community and the natural world.

"This is Rooted Membership at work-operating hand-in-hand with Living Purpose. The forest is not seen as an object whose sole purpose is permitting owners to extract maximum amounts of financial wealth. It's a living forest, a community of trees and humans. The purpose is to live well together, maintaining the living forest and supporting the human community. Because governance rights are in the hands of humans rooted to that place, they have a natural incentive to be good stewards. And they are able to carry out their mission because they govern the forest; it's Mission Controlled Governance.

"In Mexico today, I discovered community forests represents an astonishing 60-80 percent of all [Mexico's] forests. Worldwide, more than a quarter of forests in developing nations are managed by local communities. Community forests hold promise as a key tool in fighting deforestation which accounts for nearly one-fifth of all greenhouse gas emissions. But here's the truly remarkable part: The story of community forests, like the story of cooperative banks remains virtually unknown. Even within Mexico, the phenomenon is largely invisible" (Kelly 2012, pp.104-105).

Example of a Generative Economy - Case Study 2.

In Appendix C, we will set out what was once the ambitious 1997-2005 National Reserve System (NRS) for Australian Forests. This system appears now to have been reduced to private land conservation through the NSW Biodiversity Conservation Trust (https://www.bct.nsw.gov.au/). However, with a change in political will, the NRS system *could be* revived.

Referring again to Diagram 2: *Current overshoot of planetary boundaries* (Raworth, 2017, p.51); (see page 3); we can see that we are exceeding planetary boundaries for biodiversity loss and land conversion. As planetary boundaries are a guide to the limits we need to stay within, to maintain the ability of the Earth to support life, it is already obvious to the European Commission (EC), that as a global community we need to shoulder the responsibility of "Bringing nature back into our lives" (EC 2020 p.1).

The EC are currently proposing policies for "legally binding naturerestoration targets in 2021 [EU Biodiversity Strategy for 2030] providing stricter protection of EU forests". We must bring their ambitious goals to the attention of our Australian leadership to encourage their adoption of similar goals. "Key Elements of [their] Biodiversity Strategy" include:

² [As quoted by Kelly] Luis Ubinas, president of the Ford Foundation, "at Global Climate Change Talks, an Answer Grows Right outside," *Huffington Post*, November 29, 2010, www.huffingtonpost.com/luis/at-global-climatechange b 788256.html. Elisabeth Malkin, Growing a Forest, and Harvesting Jobs," *New York Times*, November 22, 2010, www.nytimes.com/2010/11/23/world/americas/23mexico.html.

• "Establishing protected areas for at least 30% of land in Europe and 30% of European seas.

"Restoring degraded ecosystems at land and sea across the whole of Europe by

- "increasing organic farming and biodiversity-rich landscape features on agricultural land.
- halting and reversing the decline of **pollinators**.
- reducing the use and harmfulness of pesticides by 50% by 2030.
- restoring at least **25,000 km** of EU rivers to a free-flowing state.
- planting **3 billion** trees by 2030[under ecological conditions as opposed to monocultures).
- Unlocking €20 billion per year for biodiversity.
- Making the EU a world leader in addressing the global biodiversity crisis".

(Source: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030 en)

Under such a program the EC will also be formulating regulations to prevent wood and wood product sourcing from non-sustainable sources.

Adopting Generative Economy Principles.

Kelly (2012, p.144) says "When a culture lacks precis words for things, we have difficulty perceiving them. At one time, we lacked language for sexism and racial discrimination. The bringing forth of this new language helped a new world to emerge, where women and racial minorities gained power. Words have impact when they name something on the edge of emergence in the collective awareness, some collective impulse seeking recognition and release". **Just as in Kelly's example, we need new language to describe the needs of our new economy.**

If instead of logging natural forests, as some propose, with the only logging permitted were to be from plantations developed on already degraded lands, they would do well to study the report at the link below, containing a further link to download the related pdf document:

https://www.oaklandinstitute.org/carbon-colonialism-failure-green-resourcescarbon-offset-project-uganda

This Oakland Institute 2017 paper *Carbon Colonialism: Failure of Green Resources' Carbon Offset Project in Uganda* outlines mistreatment and violence perpetuated by a plantation company in Uganda against local residents.

As the Climate Emergency accelerates in intensity, and as operating within the limits of planetary boundaries gains legalised and meaningful momentum; local, small scale mill owners may need to increase their capacity to articulate a Generative Economic business plan for their business proposal when negotiating forest agreements, even under plantation circumstances. Recycling industries may need to step up production to fill the gap left by reduced forestry industry capacity as the legalities of operating within the limits of planetary boundaries kicks in. We need to pro-actively work for such legislation to be implemented as quickly as possible.

Conclusion:

Our aim has been to understand sustainability at a practical level. At the personal level this helps bring the word out of the abstract into the arena of personal responsibility. For those involved in industry, we have used diagrams to illustrate the social foundation humanity needs to rise above, and the ecological ceiling we need to keep below, with our economic systems, and shown that we are already living in ecological overshoot. These diagrams help the business person focus on upper and lower limits of sustainability in a practical way.

We have used forestry management purely as an example to help understand the Generative Economy. However, the Generative Economy is not just about forestry. The principles can be applied across many sectors of the economy. It is also to do with any company that incorporates any externalities within its business plan mindset. It is about internalising externalities and being caring for both the community and the planet.

As stated earlier Kelly cites a number of companies working in different and varied sectors of the economy that operate under these conditions, including one company in the USA with "more than 76,000 employees" (Kelly 2012, p.180). The Baptist World (2019) paper has helped focus on practical sustainability.

Continuing with the old paradigm mentality many corporations are still functioning under, with all their externalities, sets humanity on the path to war and civilizational collapse. Spending ourselves with all our might on establishing instead a "Generative (Kelly 2012), Doughnut Economy (Raworth 2017)" with this new language will, as the global crisis deepens, it is hoped, awaken humanity collectively. The future is not written in stone. The *Seville Statement on Violence* tells us "Just as 'wars begin in the minds of men', peace also begins in our minds". So too with the environment.

It would be a worthwhile investment to obtain a copy of Marjorie Kelly's "Owning Our Future" book, and studying it to obtain first hand the intricacies of the Generative Economy, as well as Kate Raworth's "Doughnut Economy" book, both referenced below. Maybe the Local Library could be encouraged to purchase some copies. There is also a You Tube video link to Kate Raworth's subject matter. Well worth the watch.

We need to struggle to establish a new economic order, not by fighting the existing reality, as Buckminster Fuller suggested, but by 'building a new model that makes the existing model obsolete' (Raworth, 2017, p.4) so that the history of humanity as one people can evolve further, from a juvenile state of nation pitted against nation, looking after its own self interests, to a level of maturity where it begins to take on adult responsibilities in looking after the best interests of all of humanity and its ecological systems.

We also need to outlaw planned obsolescence, and introduce a circular economy, but that is another story.

There is also a new method of turning coal into 90% hydrogen gas, while eliminating all the nasties associated with coal, to get us past 'peak oil', fraught with its own environmental problems, but environmentally safe if done Generatively, but that again is another story.

References

Bahá'í International Community Office of Public Information, 1995, *The Prosperity of Humankind*, Baha'i Publications Australia p.1. www.bic.org

Baptist World 2019. The 2019 Ethical Fashion Report: The Truth Behind the Barcode.

Brundtland, G. 1987. Report of the World Commission on Environment and Development: *Our Common Future*. Oxford University Press.

European Commission. 20.5.2020. Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions: EU Biodiversity Strategy for 2030: Bringing Nature back into our lives". Brussels.

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030_en

Joint ANZECC/MCFFA National Forest Policy Statement (NFPS) 1997. Comprehensive, Adequate and Representative Reserve System for Forests in Australia. Commonwealth of Australia.

Kelly, M., 2012, Owning Our Future: The Emerging Ownership Revolution: Journeys to a Generative Economy .Berrett-Koehler Publishers, Inc. USA.

Local Government Act 1993

https://www.legislation.nsw.gov.au/#/view/act/1993/30/dict1

Natural Resource Management Ministerial Council, Commonwealth of Australia (2005). *Directions for the National Reserve System –A Partnership Approach*. Retrieved from: https://www.environment.gov.au/system/files/pages/35ded9a1-0a17-47fa-a518-05f7bfe045ce/files/directions.pdf

NSW Legislation (from which the Local Government Act 1993 is derived) with a 'Current version for 1 December 2018' Protection of the Environment Administration Act 1991 No 60 Part 3 Section 6

https://www.legislation.nsw.gov.au/#/view/act/1991/60/part3/sec6

The Oakland Institute, 2017. Carbon Colonialism: Failure of Green Resources' Carbon Offset Project in Uganda. Publisher Oakland Institute.

Raworth, K., 2017. *Doughnut Economics: Seven ways to Think Like a* 21stCentury Economist. rh Business Books.

Raworth You Tube https://www.youtube.com/watch?v=TQCuBGTHwFo https://www.youtube.com/watch?v=1BHOflzxPjI

UNESCO 1991. The Seville Statement on Violence: with commentary by David

Adams https://unesdoc.unesco.org/ark:/48223/pf0000094314

Appendix A

This appendix contains the NSW Legislation (from which the Local Government Act 1993 is derived) with a 'Current version for 1 December 2018' Protection of the Environment Administration Act 1991 No 60 Part 3 Section 6

Part 3 Section 6

- 6 Objectives of the Authority
- (1) The objectives of the Authority are:
- (a) to protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development, and
- (b) to reduce the risks to human health and prevent the degradation of the environment, by means such as the following:
- promoting pollution prevention,
- adopting the principle of reducing to harmless levels the discharge into the air, water or land of substances likely to cause harm to the environment,
- minimising the creation of waste by the use of appropriate technology,
- regulating the transportation, collection, treatment, storage and disposal of waste,
- encouraging the reduction of the use of materials, encouraging the re-use and recycling of materials and encouraging material recovery,
- adopting minimum environmental standards prescribed by complementary Commonwealth and State legislation and advising the Government to prescribe more stringent standards where appropriate,
- setting mandatory targets for environmental improvement,
- promoting community involvement in decisions about environmental matters,
- ensuring the community has access to relevant information about hazardous substances arising from, or stored, used or sold by, any industry or public authority,
- conducting public education and awareness programs about environmental matters.
- (2) For the purposes of subsection (1) (a), ecologically sustainable development requires the effective integration of social, economic and environmental

considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:

- (a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:
- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
- (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration.
- (d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:
- (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
- (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
- (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

Appendix B Research Method used by Baptist World (BW)

BW (2019, p.13) "The 2019 Ethical Fashion Report Grading Tool classifies the fashion manufacturing supply chain into three stages of production: Final stage, inputs stage, and raw materials. Across these three stages of production, this research considers five broad themes of social responsibility and environmental impacts: policies, traceability and transparency, auditing and supplier relationships, worker empowerment, and environmental management. BW (2019, p.15) sets out why these five broad themes matter and what is

actually assessed. BW (2019, pp.17-23) divides each category into further subcategories.

BW assesses the following areas in its sustainability procurement of fashions sold in Australian shopping Malls.

Page 7

- Gender inequality
- [Socially] Responsible purchasing practices
- Child and forced labour
- Manufacturing Restrictive Substance List (MRSL) "to ensure workers are not exposed to hazardous chemicals with dire environmental impacts".

Page 8

- Traceability "if companies don't know (or don't care) who their suppliers are, then there's virtually no way of ensuring that the workers who make their products aren't being exploited".
- Transparency "Without making information known, it becomes impossible for the public to know if these companies are doing anything to combat exploitation in their supply chains".

Page 9

- Living Wage (see p.4 above).
- Environmental management.

Pages 23-24 Environmental concerns has subcategories of

- Governance "Has the company undertaken an assessment of its environmental impact and risks throughout its supply chain.
- Materials "Has the company assessed the environmental impact of its [materials used in production of its product]"
- Emissions "Has the company publicly announced a net-zero carbon emissions reduction target by 2050 for its supply chain? Or is it lobbying for this target in the countries that it is operating in?
- Chemical use "Does the company have a restricted substances list against which it tests compliance? and Does the company have a manufacturing restricted substances list against which it tests compliance?"
- Water Use "For what percentage of water intensive facilities has the company collected and benchmarked water use?" and; "Has the company used the above data to implement a water use plan?"

- Wastewater "For what percentage of wet-processing facilities has the company collected waste water quality data?" and; "Of these, do all have wastewater improvement strategies?"
- Material/Product waste "Does the company make available to customers a take-back and /or repair program?" "These questions allow for recycling and longevity of [the product]".

Page 27

• Gender strategy: Is there "peer education programs on nutrition, reproductive health, pre-and post natal care, and early detection of breast cancer [available to female employees in nations supplying materials and products]?". Is there any paid maternity leave? For how long?

Pages 34-35

• "What percentage of facilities are audited over a 2-year period by trained social auditors (internal and /or third party)". "What percentage of companies audit all of their final stage facilities with unannounced audits, anonymous worker surveys or off-site worker interviews per year?" "Are corrective action plans pertaining to wages and/or overtime resolved within 12 months?"

The report has a list of auditing questions that could be included if Council wishes to pursue this line of thought).

Not in the report

- Do worker premises comply with fire safety and building safety standards?
- Does the company have Work Health and Safety (WH&S) procedures in place ?
- Are the WH&S procedures audited/monitored?

Appendix C: The 1997-2005 National Reserve System for Australian forests.

In Australia, forests are state government run. However, the Commonwealth Government set out a standard for a system of forestry reserves in *The National Forest Policy Statement (NFPS, 1997)*. This document provided the framework for all states in Australia, to reserve areas of forest from being logged. All states

fall under the "Comprehensive, Adequate and Representative (CAR) System for Forests in Australia. This was a form of Generative Economy. Under this system, 'Comprehensive' indicated that there is a reserve system for the full range of [different types of forest ecosystems or] forest communities across the [entire Australian] landscape. 'Adequacy' addressed the difficult question of extent: what is the level of reservation that will ensure viability and integrity of populations, species and communities" [of plants, insects and animals]. 'Representativeness' – those sample areas of the forest that are selected for inclusion in reserves should reasonably reflect the biotic diversity of the communities" (NFPS 1997, pp.5-6).

For old growth forests, "if a large area is already logged then all remaining forest is to be reserved and protected. For 'other forest ecosystems' 60% of the old growth forest is to be reserved and protected from logging. Ninety percent or more of 'high quality wilderness' is to be reserved and protected from logging under the CAR agreement" (NFPS 1997, pp. 12-16). Each forestry area within each state has to come under a Regional Forest Agreement (RFA), based on the NFPS to which logging companies must abide.

The National Resource Management Ministerial Council of Australia (2005), produced a paper called *Directions For The National Reserve System – A Partnership Approach*. This document provided guidelines for CAR protected areas. The Executive Summary (p.7) states: "The Directions Statement recognises ...the role of protected areas on indigenous lands and the importance of engaging indigenous communities in protected area planning and management". Table 1 (taking up pages 8-12) on p.12 states: "Community awareness and involvement 38. A communication strategy to be prepared to increase awareness and understanding of the objectives and achievements of the National Reserve System".

These extracts suggested an avenue for local groups interested in promoting/preserving areas of Forest of concern to them, provided the areas meet the stated guideline directions. This paper is available at: https://www.environment.gov.au/system/files/pages/35ded9a1-0a17-47fa-a518-05f7bfe045ce/files/directions.pdf

This link, https://www.environment.gov.au/land/nrs/getting-involved titled: The National Reserve System: Getting Involved; provided case studies of various projects, and provided information on how to get involved with the National Reserve Systems.