Nature Conservation Council
The voice for nature in NSW

STEADY STATE ECONOMY POLICY, 2017

Introduction

The Nature Conservation Council (as the 'Voice for Nature' in NSW) strives for Government to aim at policy which serves both people in communities and the natural world. Such aims, as advanced in a steady state economy, show how we can develop a society that can flourish within ecological limits. We believe our economy must serve society and operate within the limits of the Earth. This policy affirms that NCC believes:

- The Earth is finite, hence physical growth cannot continue forever. While this may be obvious, it is also denied by many neoclassical economists who advise government.

- Humanity has exceeded ecological limits, as noted by: the Millennium Ecosystem Assessment; the Global Ecological Footprint; the Living Planet Index; and extinction predictions by 2100 that range from *half to two thirds* of all multicellular life (see background for details).

- In regard to population, NCC in its 'Ecologically Sustainable Population and Nature' policy notes:

  > *Human population and consumption must thus be kept within limits that allow natural ecosystems to flourish into the future … There are limits to both population and consumption, beyond which the life support systems of the Earth degrade, ecosystems collapse, species extinction escalates and essential ecosystem services decline. These limits are being exceeded globally and within Australia.*

  Hence our economy must reflect and address concerns for both overpopulation and overconsumption.

- Inequality of income is currently increasing rapidly around the world, as reflected by a rising Gini Coefficient. This is having both negative social effects, but also likely negative environmental effects.

POLICY

Accordingly, NCC believes that neoclassical economics is fundamentally *un*sustainable, and that the human economy must operate within ecological limits. Hence it supports *ecological economics*. Further:

- Within ecological economics, NCC supports in particular the *steady state economy* that is based on three principles:
    - A sustainable population size for the carrying capacity of its region,
    - Low resource use,
    - A distribution of wealth which is fair and equitable on an intergenerational basis.

- Within ecological economics, NCC also supports a transitional period to a steady state economy.

- Within ecological economics, NCC accepts that Gross Domestic Product (GDP) is a poor indicator of how our society is truly progressing. NCC supports alternative indicators such as the Genuine Progress Indicator (GPI) and other relevant indicators. NCC accordingly believes that the Australian Bureau of Statistics should report GPI per capita *as well as* GDP per capita.

BACKGROUND

The Nature Conservation Council (like all environment groups) faces a major problem – society's endless growth (neoclassical) economy is trashing the world. As such NCC cannot sit by and ignore this fundamental driver of unsustainability – it needs a policy on a sustainable alternative, the steady state economy.

It is obvious to anyone seeing a picture of the Earth from space that it is ***finite***. Clearly nothing can grow physically forever on a finite planet. However, neoclassical economics insists we can. The world's GDP increased by an astounding 25-fold over the last century (Dietz and O'Neill, 2013). Concurrently, environmental science tells us irrefutably that humanity has exceeded ecological limits, hence we have a major and worsening environmental crisis. This was pointed out by the prestigious Millennium Ecosystem Assessment (MEA, 2005). It is clearly shown by a Global Ecological Footprint of 1.6 Earths (GFN, 2017), and by the Living Planet Index which has dropped by 50% since 1970 (WWF, 2014). If society continues along this path, then by this century's end we may cause the extinction of a half (Wilson, 2003) to two thirds (Raven et al, 2011) of *all multi-cellular life*.

Traditional neoclassical economics is the dominant form of economics for Australia and most of the world. This *does not accept limits* (to population or resource use), denies the Laws of Thermodynamics, believes we can substitute human-made capital for natural capital (despite the mass extinctions this would cause), ignores issues of inequality, and sees environmental damage as

merely an 'externality' to business. Endless growth economics is the driver stopping society reaching sustainability.

As the NCC is the 'Voice for Nature' in NSW, it is incumbent upon us to seek to change society's worldview away from an anthropocentric Modernist worldview (where nature is just a 'resource') and towards an eco-centric worldview that accepts ecological limits, and where humanity is seen as part of nature, and has a responsibility for its care (as indicated in its 'Intrinsic value of nature' policy). Such ethics should also be reflected in society's economics.

As many environmental scientists and scholars note, the endless growth economy of neoclassical economics is not (and cannot be) sustainable. Indeed, it is the cause of the current environmental crisis (Daly, 2014). Neoclassical economics is built on a number of unsustainable assumptions (Washington, 2014a):

1) Strong *anthropocentrism*. Nature is seen as 'just a resource' to be used to provide the greatest 'utility' to the greatest number of people (Daly, 2014).
2) The idea that the *free market* will control all that is needed, that the 'invisible hand' will regulate things for human benefit (Daly, 1991). Of course the free market needs regulation to protect nature.
3) The idea that the economy can *grow forever* in terms of continually rising GDP, with associated environmental impact. 'Decoupling' (as suggested by UNEP and others) is never absolute (Victor and Jackson, 2015).
4) The *refusal to accept any biophysical limits to growth*, for when classical economics was developed, limits were distant (Daly, 1991). Today we have exceeded ecological limits so that 60% of ecosystem services are degrading (MEA, 2005).
5) A *circular theory of production* causing consumption that causes production in a never-ending cycle. Daly (1991) notes that real production and consumption are in *no way circular*.
6) Neoclassical economics *ignores the Second Law of Thermodynamics* and fails to consider 'entropy' as a key feature of economics and reality (Georgescu-Roegen, 1971; Daly, 1991).
7) Environmental damage is *merely an 'externality'*. Externalities are costs or benefits arising from an economic activity that affects somebody *other* than the people engaged in it, and are not reflected fully in prices. Environmental damage is known as a 'negative externality', something external to the economic model and is seen by neoclassical economics as being worth only 'peripheral attention' (Daly and Cobb, 1994).
8) All forms of *capital can be substituted*, thus human capital can be substituted for natural capital ('weak sustainability', Daly and Cobb, 1994). This assumes we can replace ecosystem services and the biodiversity that supports our societies with human-made capital. This is a recipe for ecocide (as is occurring) (Washington, 2015).

From the viewpoint of environmental science and ethics, the above assumptions are actually absurd, unethical and unsustainable (Washington 2014b, 2015), yet they underlie the neoclassical economic synthesis that currently dominates economics. However, many scholars (scientists, ethicists and some economists) have rebelled against this unsustainable economics that is the root cause of the environmental crisis (Daly 1991, 1996; Dietz and O'Neill 2010, Washington and Twomey, 2016). They point out the need for *ecological economics*, which acknowledges the ecological limits of the planet, and which considers interactions between economic systems and ecological systems (Common and Stagl, 2005). Faber (2008) explains that ecological economics is defined by its focus on nature, justice, and time. Issues of intergenerational equity, irreversibility of environmental change,

uncertainty of long-term outcomes, and sustainability guide ecological economics. Within ecological economics, the sustainable alternative is the *steady state economy* (developed by Herman Daly) that is based on three principles:

- A sustainable population size for the carrying capacity of its region,
- Low resource use,
- A distribution of wealth which is fair and equitable on an intergenerational basis.

This thus addresses the key causes of the environmental crisis, overpopulation, overconsumption of resources, and the growth economy, plus a key cause of social unsustainability – inequality of income (Washington, 2015). Daly (1990) lists three rules we should apply to help define the sustainable limits to material and energy throughput:

- For a *renewable resource* (soil, water, forest, fish, etc.), the sustainable rate of use can be no greater than the rate of regeneration of its source.
- For a *non-renewable* resource (fossil fuel, high grade mineral ore, fossil groundwater, etc.), the sustainable rate of use can be no greater than the rate at which a renewable resource (used sustainably) can be substituted for it.
- For a *pollutant*, the sustainable rate of emission can be no greater than the rate at which that pollutant can be recycled, absorbed, or rendered harmless in its ecosystem 'sink' (where it ends up).

While other economies ranked under ecological economics (such as UNEPs green economy, the circular economy) may to some address the resource use issue, and while the sharing economy may assist with inequality, only the steady state economy *combines all three* (Washington, 2017).

Inequality of income is getting worse, and this is causing serious social problems (Wilkinson and Pickett 2010) as well arguably as damaging biodiversity (Islam, 2015). Increasing inequality is tracked by the Gini coefficient (https://en.wikipedia.org/wiki/Gini_coefficient). A sustainable economy would reduce inequality, as the steady state economy aims to (Stillwell, 2016). Another term increasingly spoken of is the need for 'degrowth' (Perey, 2016). This acknowledges that the scale of the world economy is already too big, causing major environmental impacts. Hence ecological economists generally agree (Daly, 2014) that there is need for a transitional degrowth to a steady state economy.

Given that people tend to value what they measure, there is a need for a better indicator to replace GDP, which increases with both what we think of as 'good' things (building a school or hospital) as well as with 'bad' things (spending money to control air pollution or restore degraded land). The best replacement suggested by ecological economists is the Genuine Progress Indicator or GPI (Lawn, 2016). The GPI assesses 26 variables related to economic, social, and environmental progress. Economic indicators include inequality and the cost of unemployment. Environmental indicators include the cost of water pollution, air pollution, climate change, wetlands depletion, forest cover change, and non-renewable energy resources. Social indicators include the value of housework, higher education and volunteer work as well as the cost of commuting and crime. Specifically, the GPI reveals that much of what economists now consider economic 'growth', as measured by GDP, is really one of three things: 1) fixing blunders and social decay from the past; 2) borrowing resources from the future; or 3) shifting functions from the community and household realm to that of the monetized economy. The GPI strongly suggests that the costs of the nation's current economic trajectory have begun to outweigh the benefits, leading to growth that is actually ***un***economic (see: http://www.sustainwellbeing.net/gpi.html). The GPI is reported in the USA and Canada (and has

been estimated by scholars for Australia in the past). However the Australian Bureau of Statistics, while it has recently updated its reporting system, refuses to report on the GPI (but easily could). The GPI is a much more balanced indicator of how our economy is tracking in terms of sustainability.

There are many positive steps we can take immediately to move to a steady state economy within many different parts of society, as shown in the book 'Positive Steps to a Steady State Economy' (Washington, 2017) available on the CASSE NSW website https://steadystatensw.wordpress.com/ . Direct link is https://steadystatensw.files.wordpress.com/2017/06/posstepsroyal11ptjustheaderfinaljune12theboklowres.pdf

[Draft Policy provided by Dr Haydn Washington, environmental scientist, former Director of NCC, Co-Director of CASSE NSW and author of *Addicted to Growth?* (Washington, 2014) and editor of *A Future Beyond Growth* and *Positive Steps to a Steady State Economy*].

References

Common, M. and Stagl, S. (2005) Ecological Economics: An Introduction, Cambridge: Cambridge University Press.

Daly, H. (1991) *Steady State Economics*, second edition, Washington: Island Press.

Daly, H. (1996) *Beyond Growth: The Economics of Sustainable Development*, Boston: Beacon Press.

Daly, H. (2014) *From Uneconomic Growth to a Steady State Economy*, Cheltenham: Edward Elgar.

Daly, H. and Cobb, J. (1994) *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*, Beacon Press, Boston

Dietz, R. and O'Neill, D (2013) *Enough is Enough: Building a Sustainable Economy is a World of Finite Resources*, San Francisco: Berrett-Koehler Publishers.

Faber, M. (2008) 'How to be an ecological economist', Ecological Economics, vol. 66, no. 1, pp. 1-7.

Georgescu-Roegen, N. (1971) *The Entropy Law and the Economic Process*, Cambridge, MA: Harvard University Press.

GFN (2017) World footprint: Do we fit the planet?', Global Footprint Network, see: http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/

Islam, S. N. (2015) *Inequality and Environmental Sustainability* (No. 145). UNDESA Working Paper. http://www.un.org/esa/desa/papers/2015/wp145_2015.pdf

Lawn, P. (2016) 'The Genuine Progress Indicator: An indicator to guide the transition to a steady state economy', In: Washington, H. and Twomey, P. (ed) *A Future Beyond Growth: Towards a Steady State Economy*', London: Routledge.

MEA (2005) *Living Beyond Our Means: Natural Assets and Human Wellbeing, Statement from the Board, Millennium Ecosystem Assessment*, United Nations Environment Programme (UNE), see: www.millenniumassessment.org.

Perey, R. (2016) 'Degrowth: More than just a transition', In: Washington, H. and Twomey, P. (ed) *A Future Beyond Growth: Towards a Steady State Economy*', London: Routledge.

Raven, P., Chase, J. and Pires, J. (2011) 'Introduction to special issue on biodiversity', American Journal of Botany, vol. 98, pp. 333-335.

Stillwell, F. (2016) 'Sustainable, equitable, secure: Getting there', In: Washington, H. and Twomey, P. (ed) *A Future Beyond Growth: Towards a Steady State Economy*', London: Routledge.

Victor, P. and Jackson, T. (2015) 'The problem with growth', in Starke, L (ed) *2015 State of the World Report, Confronting Hidden Threats to Sustainability*, Washington: Worldwatch Institute

Washington, H. (2014a) 'Addicted to Growth?', conference booklet for the 2014 Fenner Conference on the Environment, CASSE NSW, see: https://steadystatensw.files.wordpress.com/2015/01/addictedtogrowthdocfinalboxesprintfinaloct17th.pdf

Washington, H. (2014b) 'Economic sustainability: what should it be?', in *Opportunities for the Critical Decade: Enhancing well-being within Planetary Boundaries*, Presented at the Australia New Zealand Society for Ecological Economics 2013 Conference, The University of Canberra and Australia New Zealand Society for Ecological Economics, Canberra, Australia, see:http://anzsee.org/download/anzsee_2013_conference_proceedings/16_%20Washington.pdf

Washington, H. (2015) *Demystifying Sustainability: Towards Real Solutions*, London: Routledge.

Washington, H. (2017) *Positive Steps to a Steady State Economy*, Sydney: CASSE NSW.

Washington, H. and Twomey, P. (2016) *A Future Beyond Growth: Towards a Steady State Economy*, London: Routledge.

Wilson, E.O. (2003) *The Future of Life*, New York: Vintage Books.

WWF (2014) Living Planet Report 2014: Species and space, people and places, World Wide Fund for Nature, see: http://wwf.panda.org/about_our_earth/all_publications/living_planet_report/ (accessed 8/5/15).