PAPER 4: LIVING WITHIN LIMITS

ONE PLANET LIVING

Sue Riddlestone

* Correspondence should be addressed to Freya Seath, researcher for the Director, Freya.Seath@bioregional.com
ABOUT GLOBAL TRANSITION 2012

Global Transition 2012 is a collaborative initiative between Stakeholder Forum and nef (new economics foundation) that focusses on the Green and fair Economy theme towards the UN Conference on Sustainable Development in 2012 (UNCSD), also known as ‘Rio+20’ and ‘Earth Summit 2012’.

GOAL
To achieve an outcome from the UNCSD 2012 that catalyses a ‘Global Transition’ to an economy that maximizes wellbeing, operates within environmental limits and is capable of coping and adapting to global environmental change.

PURPOSE
To build a global civil society and stakeholder movement to promote alternative models of economy that can deliver sustainable development to people, countries and generations that builds on the three pillars of sustainable development: social, environmental and economic.

THE INITIATIVE CONSISTS OF THE FOLLOWING ACTIVITIES:

- **Research and Thinking and Policy and Advocacy**: to commission and publish a series of research reports and think-pieces that will provide the evidence based analysis and address critical components of a Global Transition and translating research and thinking into key policy outputs towards Rio+20 and beyond and organising workshops with governments to discuss policy options; and building capacity and developing tools for countries to institute policies and systems that move towards a Global Transition;
- **Coalition Building and Dialogue**: building a coalition of actors and organisations from the global North and South committed to the principles and objectives of a Global Transition;
- **Submissions**: making official submissions to the Rio+20 process based on think pieces and dialogue;
- **Information and Resources**: publishing informative guides and briefings on aspects of the green economy; in particular developing a ‘how to guide’ for the green economy Roadmap work that is underway in a range of sectors and contexts.

ABOUT STAKEHOLDER FORUM
Stakeholder Forum is an international organisation working to advance sustainable development and promote stakeholder democracy at a global level. Our work aims to enhance open, accountable and participatory international decision-making on sustainable development. Stakeholder Forum works across four key areas: Global Policy and Advocacy; Stakeholder Engagement; Media and Communications; and Capacity Building. Our Global Transition 2012 initiative sits within our work on Global Policy and Advocacy.

ABOUT nef
nef (the new economics foundation) is an independent think-and-do tank that inspires and demonstrates real economic well-being. nef aims to improve quality of life by promoting innovative solutions that challenge mainstream thinking on economic, environment and social issues. We work in partnership and put people and the planet first.

MORE INFORMATION
If you would like to provide feedback on this paper, get involved in the Global Transition 2012 initiative, or put yourself forward to write a paper/blog, please contact Kirsty Schneeberger, Senior Project Officer at Stakeholder Forum: kirstys@stakeholderforum.org
ABSTRACT

If everyone lived the global middle class lifestyle of London or Shanghai we would need three planets to support us. And yet the average citizen of Bangladesh consumes the equivalent of just a third of a planet. What we need is one planet living where people can live happy healthy lives within a fair share of the world’s resources having left sufficient space for wildlife and wilderness. Sustainable communities and businesses around the world show how one planet living is attractive and achievable. A simple approach and framework makes it easy to deliver it. We propose that at The Earth Summit 2012 world leaders make a statement recognising the planetary boundaries in a world with a large, growing human population and commit to take action through a multilateral framework to enable the world to define and deliver a safe operating space within the timeframe that science and morality tell us is necessary. Key components of this multilateral framework would include Global and National Roadmaps to enable citizens to achieve one planet living supported by a new “Intergovernmental Panel on Resources”, a peer reviewed “Solutions Bank” and a raft of policy solutions to support the transition to a one planet living with a fair and green economy.
INTRODUCTION: ONE PLANET LIVING

The challenge for all of us if we are to achieve a green economy in the context of sustainable development and poverty eradication is that we are currently producing pollution and consuming resources at a rate forty percent higher than the planet can absorb or replenish annually (Figure 1)\(^3\)\(^4\). To draw an economic analogy, we are living off nature’s capital, not nature’s interest.

Figure 1: World Ecological Footprint 1963-2007 (GFN)

This has come about because of an increasing world population, which has doubled from 3 billion in 1960 to nearly 7 billion today and because we are not yet being sufficiently resource efficient.

We are seeing the results of this in many ways including unsustainable management of fisheries and forests, increased food, energy and other commodity prices and increasing levels of greenhouse gas emissions in the atmosphere which will add costs to the global economy. If we do not take action we will see an increase of these problems and, as set out by Lord Stern\(^5\) and Pavan Sukhdev\(^6\), an increasing cost to turn things around. Figure 1 shows that approximately half of our ecological footprint is comprised of our carbon footprint and that this has increased nine-fold since 1963.

A further challenge is that resources are not being consumed equitably. If everyone lived the global middle class lifestyle of a citizen of London, Brazil or Shanghai we would need three planets to support us, whereas many people do not have enough, for example the average citizen of Bangladesh consumes the equivalent of a third of a planet (Figure 2).

\(^2\) Ecological Footprint Atlas 2010, Global Footprint Network  
\(^4\) Stockholm Resilience centre, Nine Planetary Boundaries 2009  
\(^5\) Stern Review  
\(^6\) TEEB, Valuing ecosystems services
If we are to achieve a green economy in the context of sustainable development and poverty eradication then we need to recognise that there are planetary boundaries in a world with a large and growing human population and define and actively work towards a safe and equitable operating space\(^7\). We need to re-set the world on a trajectory to achieve one planet living, where citizens can live happy, healthy lives within their fair share of the world's resources, wherever they live in the world and still leave sufficient space for wildlife and wilderness.

\(^7\) Planetary Boundaries: Exploring the safe operating space for humanity, Rockstrom et al, Ecology and Society 14(2) (online) URL [http://www.ecologyandsociety.org/vol14/iss2/art32](http://www.ecologyandsociety.org/vol14/iss2/art32)
One Planet Living – a proposition for Rio+20

One planet living is our challenge and our opportunity to be seized. Since the UN CSD in Rio 1992, the UN, governments and civil society have been working to develop and implement solutions for sustainability.

Many examples around the world are starting to show how we can achieve a next generation, resource efficient lifestyle for 7-9 billion people and how it can be achieved technically and cost effectively. We can achieve one planet living and this can bring all citizens of the world a better quality of life.

At BioRegional we know that one planet living is possible. Working with partners, we’ve developed cost effective working examples of sustainable communities and businesses which show one planet living in practice.8

From this experience we’ve developed a simple approach and ten principle framework (Figure 4) which enables others to implement one planet living. It is being used in over fifty countries.

The approach taken, which is consistent with good practice, is:

1. to consider what is needed to enable citizens to achieve one planet living;
2. measure and benchmark where consumption based impacts arise, identifying ,
3. stakeholders work together to co-create solutions to deliver one planet living considering all three pillars of sustainability using the ten one planet living principles
4. write this up in an action plan with a time-bound trajectory to achieve one planet living
5. implement the plan, reporting on progress towards one planet living on a regular basis (annually or bi-annually)
6. share knowledge with others.

We contend that two key reasons why we are not achieving sustainability yet are that firstly, we find it difficult to alter our behaviour and secondly, that sustainability is made too complicated which disempowers people from taking action and also gives tacit permission not to act. We suggest that one planet living offers a solution to these two barriers at Rio+20.

8 www.bioregional.com/oneplanetliving
Considering the first point, many people are aspiring to the three planet global middle class lifestyle for our family and nobody really wants to give that up. Therefore we need to show, and we can show, with real life examples, that one planet living is easy, attractive and affordable, a better way of living and something to run towards rather than run away from.

Considering the second point on the need for simplicity, the beauty of one planet living is that even a small child can understand that we only have one planet, that we can’t all consume three planet’s worth and that it is not fair if some people consume three planets worth meaning that others can only use a third of a planet. In addition, the ten simple principles (Figure 4) which anyone can understand as a checklist of what sustainability is, makes it easy for anyone, from a shopkeeper in Panama to a plumber in Russia to understand and act on what they need to do.

Because many people find one planet living an easy way to understand sustainability we want to let it “float up” and be used more widely. We are offering it as a banner for others to get behind around Rio+20 where we can tell our own and others real life stories of sustainability and offer scale-able solutions and tools to help others to act. We say that all countries need to create an action plan or Roadmap to achieve one planet living within the limits and timeframe that the science and morality tells us is necessary.

BioRegional have considered this further ourselves as we got involved in the preparatory meetings and spoke to stakeholders. We also sought the views of our partners who are working to implement one planet living in sustainable communities from North America to China and operating both local and multinational businesses. The questions we asked were “What stops you from implementing one planet living? and “What are your practical proposals and solutions to enable one planet living for Rio+20?”

Our concrete practical proposal and solution is that at Rio+20 UNCSD world leaders:

- Make a statement recognising the planetary boundaries in a world with a large, growing human population;
- Commit to take action to define and deliver a safe operating space for humanity, our fellow creatures and biodiversity within the timeframe that science and morality tell us is necessary. We note that we would call the safe operating space “one planet living” but we are aware that some people think that is proprietary and so don’t want to use it. This would be interesting to discuss;
- Create a multilateral framework to enable the world to define and deliver a safe operating space to include:
  - A new “Intergovernmental Panel on Resources” which will provide advice to decision makers to inform multilateral and national decisions. Advice to be based on peer review of scientific evidence of resource availability, resource consumption and safe planetary boundaries. The IPR could follow the working model of the IPCC and work with the IPCC and TEEB. National Panels be established with regard to local consumption and resource availability to advise national strategies;
  - A “Solutions Bank” of peer reviewed solutions for sustainability with clear explanations of the solution, how to implement it, the status and existing use of the idea, measured results and impacts. This could begin with case studies showcased at Rio+20;
  - A Global Roadmap and National Roadmaps to enable citizens to achieve one planet living and create a fair and green economy, with globally consistent indicators. National one planet living roadmaps would differ from current national sustainable development plans in that they will be based on what citizens need for a good quality of life and what citizens consume – taking in the wider picture – and set out a clear goal and trajectory to one planet living. For some nations this means becoming more resource efficient but for others it is about growing and sustainable development. National consumption-based roadmaps will provide visibility to individuals and
business that Governments are committed to creating a resource efficient green economy. With national commitments in place, business will respond by working with its suppliers to improve resource efficiency and help consumers to lead One Planet lifestyles. Pioneering nations from the developed, emerging and least developed countries could prototype the development and implementation of National Roadmaps and showcase the idea at Rio+20. Pioneer nations could develop toolkits and approaches for national Roadmaps during 2012-2015 for all nations to adopt. It would be ideal if all nations commit to adopt and implement National Roadmaps by 2020 to deliver one planet living by 2050 or earlier, guided by the scientific advice of the Intergovernmental panel on resources and the national equivalents. This proposal builds upon the UK’s 2008 Climate Change Act which sets a target for the year 2050 reduction of GHG emissions, provides for carbon budgeting and an advisory committee on climate change. It is in tune with the European Commission 20 June 2011 communication for Rio+20 which maps out a range of actions with milestones, indicators and targets and a framework of environmental accounts. It is also in line with the World Business Council for Sustainable Development Vision 2050 approach.

- **Determine alternatives to GDP**: With a better understanding of natural capital risks the financial sector will be in a position to build sustainable economic models and become the pace setters of the future. By formulating codes of conduct and evaluation methodologies investors, for example, would be in a position to differentiate those companies who are trying to do the right thing and help ensure a sustainable return on investment. We call for action to develop practical and robust systems that enable broader and longer-term factors to be taken into account more effectively in accounting and decision-making in governments and financial institutions. Without this - the world will continue to live off capital rather than income.

- **Create Closed Circular Economies**: Materials must be dealt with more efficiently by using waste as a raw material for new products – completing the cycle. A paradigm shift is necessary to move away from the linear “take – make – dispose” model our current economy relies on. In order to make the transition towards a more sustainable economy requires changes in governance, lifestyles and behaviours. We therefore ask governments to embrace the closed loop model and take action through providing the right incentives for research and development.

- **Protect Natural Capital**: informed by the new “Intergovernmental Panel on Resources”. Two examples are cited here.
  - **Sustainable Forestry**: Recent figures show that deforestation rates are not slowing down and that 12-15 million hectares of the forest are lost each year. Forest loss is not just an environmental issue; pressures on the availability of timber over the next 5-10 years is one of businesses biggest supply chain challenges. Deforestation and illegal logging distort global markets and timber prices. Despite many excellent initiatives aimed at raising the alarm regarding global forest loss as well as a recognition for action as an outcome of COP16, there is little or no firm international agreement to achieve a target of zero net deforestation. Our concrete proposal is for an agreement at Rio+20 for net zero deforestation.
  - **Protecting peat bogs**: As a haven for biodiversity and a carbon store it is a travesty that peat bogs are routinely stripped for fuel or soil or are allowed to deteriorate through poor land planning. The experience of B&Q, part of the third largest home improvement group in the world, is that trying to move away from using peat as a base for compost towards a lower impact alternative is hampered by the economics of an established mining industry against those incurred by a new entrant.
  - **Remove subsidies** for unsustainable activities including fossil fuel and mining
  - **Introduce an Actuarial based carbon price** – This is necessary to enable renewable energy to become viable in many countries in our experience.
- **Enable decentralised renewable energy**: Our experience is that national regulations make this difficult in many countries.
- **Provide Training, Information and Education**: This could be linked to the adoption of the ten-year framework of programmes on sustainable consumption and production, which we would like the UN to ratify at Rio+20.

**DISCUSSION**

The impact of the implementation of Roadmaps to achieve one planet living and a fair and green economy could be forecast and assessed using a number of metrics:

- **Ecological footprint** and **consumption based carbon footprint** (e.g. Scope 1, 2 and 3) - using an ecological budget type approach with a trajectory to achieve the goal. It is important to count consumption based impacts, because otherwise we delude ourselves that we are reducing emissions when we are merely outsourcing them. The goal would vary according to population and so this would bring that issue to the notice of decision makers.

- The nine planetary boundaries (Figure 5), Climate change, ocean acidification, stratospheric ozone depletion, Nitrogen cycle (bio-geochemical flow boundary), Phosphorus cycle (bio-geochemical flow boundary), global freshwater use, Land system change, Biodiversity loss, atmospheric aerosol loading, chemical pollution.

- A new measure of well-being as an alternative to GDP e.g. happiness or number of neighbours known by name. Any Indicators should be simple and comparable at a national level.

- One planet living is the same target for every person and every country rich or poor
Considering what the proposition means for the north and the south, National Roadmaps to enable citizens to achieve one planet living are based on contraction and convergence ideas and so if you are in the Global south you may be growing and increasing consumption to a sustainable level, whereas in the Global North you are becoming more resource efficient.

In London, where citizens have a three planet lifestyle, modelling carried out by BioRegional using the Stockholm Environment Institute’s REAP tool starts to paint us a picture of what life would be like. The Capital Consumption report\(^9\) modelled one way in which a 90% reduction in London’s consumption based CO\(_2\) emissions could be achieved. The scenario modelled presents an aspirational vision of a city powered primarily by renewable energy from 2030, which has designed local communities to enable us to live a sustainable lifestyle where we reduce the need to travel, where we eat less meat and dairy and walk and cycle more and are healthier as a result. We can still fly, but half as much in 30% more efficient aeroplanes. We are more resource efficient, buying fewer, but better quality goods and there is little waste. The measures modelled were stretching and ambitious but are achievable on a practical level and would lead to a high quality of life.

The report highlighted that the measures are unlikely to be achieved by action only within London. As the supply chains and policy contexts influencing consumption in London are global in scope, responsibility for bringing about the measures must be shared between governments at all levels, businesses and consumers. It highlights that this is not something for governments alone to achieve at Rio+20 but requires the involvement of all levels of society in concerted action to a common goal.

The fossil fuel industry serves us all and we all need to take responsibility for this. We can also use the current economic system to highlight how the fossil fuel industry has to be phased out in the transition to a green

A recent report, Unburnable Carbon\textsuperscript{10} noted that 80% of fossil fuel assets noted on the accounts of oil companies are unburnable without causing dangerous climate change and as such should be shown as impaired on their accounts.

BioRegional have more limited experience in implementing one planet living in less developed countries. Our work in China, Mexico and South Africa has however been more challenging than in Europe for example. There is less awareness amongst decision makers of the need to be sustainable. This is why we are suggesting more information, education and training in our proposal. National policies have not yet paved the way for more sustainable practices and rules, regulations and price signals all make it difficult to build and connect renewable energy and make it uneconomic. This is why we have called for an actuarial based carbon price and for every country to introduce enabling legislation for renewable energy.

A tension and barrier to achieving one planet living in many countries is unfair trade, with resources being stripped without proper compensation. The work of Global Financial Integrity, a Washington DC based think tank put this at around one hundred times the amount of aid received. There is a lot of power in the hands of unaccountable multinational interests and corrupt and inept governments. This has to be addressed, perhaps through the UN and through better global governance and accountability, this could include an international court for the environment or Ombudsperson for Future generations.

We live in a globalised world with people and countries trading internationally and avoiding tax and regulation. Perhaps the way to counter this is now coming into our hands through the fast moving, people powered greater transparency and communications seen at work in the Arab Spring and in Wikileaks. World leaders will see that they need to be fairer to the population and enable one planet living if they want to remain in power.

**CONCLUDING REMARKS**

The idea of a Roadmap for a green and fair economy is gaining ground for Rio+20 and we consider that there is an opportunity to integrate the planetary boundaries and one planet living approach.

The concept is simple, fair and just, with one standard all around the world. It is about a positive vision of a better world and a new middle class aspirational lifestyle, which should be achievable for all citizens and still leave space for our fellow creatures and wilderness.

One planet living is an easy to understand concept, but it is also deeply rooted in deep green good practice and a mainstream business approach. The world urgently needs us to de-mystify sustainability and it needs action to be taken at all levels of society, so we have to keep it simple.

If we can find and show examples of truly sustainable (measured) one planet living all around the world and show that at Rio+20, together with a simple and consistent multilateral framework and local approach to enable all levels of society to take action, then we believe that we can dissolve away the objections and create the sustainable and fair world we all so dearly want to see.

\textsuperscript{10} See for instance, http://www.carbontracker.org/unburnable-carbon