

Understanding the Socio-Environmental Policy Space

By Leisa Perch

I. Introduction

The social pillar—and thus social equity and social development—is critical to understanding what green growth (or making the economic patterns of development more sustainable) needs to do (that has not been done before), who it needs to serve (who has been left out) and why we have failed to do this before (structural realities). The emerging focus on the socio-environmental policy space in the context of Rio +20 is timely considering the staggering evidence available about the interconnectedness of environmental vulnerabilities and resource inequality in hampering and undermining social development. Resource inequity abounds in numerous areas: sanitation, access to water, and energy, to name a few. Leading voices, particularly President Dilma Rousseff of Brazil, lend necessary visibility and validity to the importance of debate and discussion on this theme. While Rio 1992 signalled significant advances within global policy frameworks, the promise has been largely unfulfilled.

As reflected in their submissions to the United Nations Conference on Sustainable Development (UNCSD) for Rio +20, governments of the South recognise the need to better respond to the intersections between people and the environment. This is also reflected in their engagement with and on a number of global agreements such as the Nagoya Protocol on Benefit-sharing and in their participation in global efforts such as the Poverty and Environment Initiative, managed by the United Nations Environment Programme (UNEP) and the United Nations Development Programme (UNDP), and Reducing Emissions from Degradation and Deforestation (REDD). This recognition also exists at the level of country policy and is evident in a number of policy innovations in the emerging South—India's National Rural Employment Guarantee Scheme, Brazil's biofuel model of engagement with small-scale farmers and its approach to the right to food, South Africa's Expanded Public Works Programme and Ethiopia's Productive Safety Net Programme, all of which directly or indirectly link growth, gender, poverty and environmental issues. A number of reviews highlight the contributions these can make to maximise the social protection benefits of public works programmes which also deliver public environmental goods (Lieuw-Kie-Song and Lal, 2010), the lessons they can provide for 'green jobs' (Lal et al., 2010) and the examples they present for proving the case that growth, sustainability and equity are compatible (Perch, 2010; Perch, 2011).

To date, the development community's response—and the response of policy at large—has been generally weak on such multi-factor analysis and guidance, in particular the potential direct and indirect distributional impacts of a new green growth model. Limited attention has been paid to the specific needs of countries (by the typologies in which they are defined) or to the needs of specific groups within society for whom growth has delivered in either limited or inconsistent ways: indigenous peoples, people with disabilities, people living with HIV, women, youth, refugees and displaced persons. Even those notable successes in the arena of social policy, including in the emerging South, have not always addressed the structural and strategic needs of marginalised and excluded groups and have benefited some while not always benefiting others. In seeking to advance socio-environmental policy as a key outcome of Rio +20, it is important to understand who and what are at stake and the nature of what we want to protect and what we must mitigate against.

In response to the Government of Brazil's call for a socio-environmental protection framework and continuing advance, this Policy Brief reviews, in summary, (i) the nature of socio-environmental interaction in reality; (ii) successes, lessons and failures in existing policy, and (iii) the nature of the policy shift required.

II. The State of Nature and Society – Beyond Poverty

One of the reasons behind the move towards understanding the interactions and intersections between society and the environment has been escalating resource 'scarcity'. As planetary boundaries appear to be increasingly under pressure, and concerns about 'tipping points' increase, manifested by either climate change, rapidly declining biodiversity or rapacious deforestation, crisis management efforts have expanded— often seeking to achieve a balance between survival of people and survival of ecosystems, survival of small groups and survival of the planet, survival of the unique balanced with what is more commonly consumed. Thus, efforts to manage forest resources in one corner of the world, from a scarcity perspective, seem somewhat out of sync with mineral exploitation (resulting in water and air pollution) in another part of the world driven by a growing global middle class, construction and demand for new technologies. One potentially ignores the poverty and inequality

driving extraction as well as the reasons for preservation, while the other has often been good for growth and somewhat neutral in its overall development impact. Moreover, a focus on poor people as drivers of environmental change as a collective ignores the individual and collective impact of resource consumption as a factor of growing economic wealth within countries and at the global level. The ecological footprint of Europe,¹ and even Latin America, outweighs that of Africa, and the high per capita emissions of the G20 underlie the call for rapid emissions reductions and a low-carbon approach to development.

The importance of the environment to society is not just a matter of economics (see Figure 1); it is multi-dimensional and multi-layered—encompassing many intangibles which are difficult, if not impossible, to fully capture in purely financial terms. Critically, when one looks at the reason behind deforestation, for example, across the world, one also sees varying socio-economic drivers: agriculture-related deforestation (which was given the lowest economic value in existing assessments) in Africa, deforestation driven by commercial logging (high value) in Asia or cattle farming and ranching (medium value) in Latin America (Vattenfall, 2007).

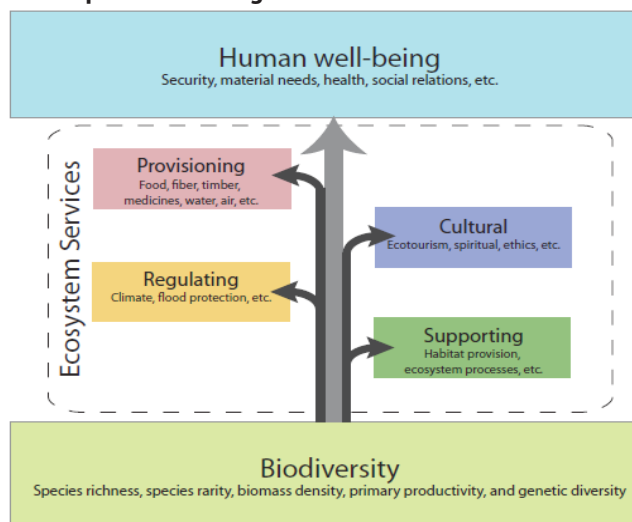
The fact that arable land per head of agricultural population and irrigated land as a percentage of arable land are so low in Africa compared to other regions² also explains how and why the state of agriculture in Africa is so closely linked to poverty, food insecurity, deforestation and excessive resource extraction. A recent article spoke of the impact of what it referred to as “agriculture inequity”:³

Vulnerability presents challenges too. Findings in Wheeler (2011) suggest that *climate* surpasses *income* as a significant contributor to present and future vulnerability (2008–2015), with China topping a list which also includes a number of African countries including Zimbabwe. Such patterns of vulnerabilities and inequalities reflect the growing friction of the intersection in policy of the economy and the environment with the social, and they have significant socio-political implications. Importantly, China’s involvement in global economic activity has implications for the global economy and, in particular, the scale and scope of resource extraction and consumption and, in turn, for those economies highly dependent on such patterns for their own economic development.

Evidence of cyclical disequilibrium (a system out of balance) highlights the need for new models of resilience. Beyond the escalation of severe and infrequent weather-related events, **volatility, negative multipliers and escalation** have significantly undermined development. A series of High-Impact, Low-Probability Events (HILPs),⁴ also known as ‘black swans’, in the last decade help to explain the following situations:

- In Haiti, **structural and systemic vulnerabilities in the physical, built and social environment** reflect all three elements to varying degrees and explain the extent and duration of the devastation from the earthquake and the protracted nature of a recovery beset by political, governance-related, financial and technological challenges.

Figure 1
Overview of the Biodiversity-supported Ecosystem Services that Improve Well-being



Source: Ewing, D., et al, 2010; Global Footprint Network.

- **Volatility** manifests itself in different ways— either in terms of income (often through low-quality employment), which usually leads to people falling back on free environmental goods as part of their individual protective framework and internal safety net or at the macro scale in resource-dependent economies, wherein the volatility of tourism income and increasing climate variability act as high-intensity/low-frequency drags on long-term growth. Both interact in a cyclical fashion by putting pressure on the environment through the resource intensity of growth and the resource intensity of coping and survival. In the labour market, income volatility driven by high informality in households with only one employed adult, particularly female-headed households, results in higher vulnerability to the effects of economic and financial crisis or inflationary pressures on food prices (Perch and Roy, 2010).
- In the developed world, there are few experiences like 2005’s Hurricane Katrina and its aftermath in effectively making the point about the disastrous **multiplier** effect of the twinning of social and environmental vulnerabilities. After \$1 billion of support, New Orleans in 2007 still faced significant risks from flooding and from hurricanes, and the protection provided by repaired systems seems to entrench rather than resolve systemic vulnerabilities. According to Schwartz (2007),⁵ on one side of the city (Gentilly), a household was likely to get as much as four feet of water in a 1-in-100 flood scenario, while in another wealthier part of the city, Lakeview, flood risk had been reduced by five and a half feet.
- **Escalating** crisis highlights the dynamic nature of three strands of sustainable development—particularly the extent to which societal well-being and nature are intertwined and interconnected. One clear example of this is the Japanese earthquake and tsunami in 2011. Not unlike the multiple fuel, food and economic crises which stunted global growth between 2008 and 2010, each element (tsunami, floods, nuclear exposure and wintry weather) added to the crisis and amplified its

reach and its scale. Compromised energy services (heavily dependent on nuclear capacity) generated health concerns for elderly and sick people and young children and undermined water and food safety and security.

Viable responses, therefore, require multiple needs and interests to be accommodated, across temporal scales, and strong governance mechanisms particularly for effective participation, and will depend on effective institutional frameworks which can leverage the capacity and strengthen the political power of excluded and marginalised populations. A number of distinctly qualitative policy levers become critical to the discourse as well as policy reform including adequate and consistent income, environmental quality and access to basic services and resources. Still, ensuring that the interests of economically, socially and environmentally marginalised communities will be protected or ensured is a complex undertaking, and the effects of possible trade-offs remain largely unclear.

III. Emerging Patterns in Socio-Environmental Protection Efforts

The preceding analysis suggests that the systemic vulnerabilities arising from income inequality and volatility, lack of opportunities, unequal distribution of and access to resources and poor and vulnerable people's high dependence on climate-sensitive sectors (Perch et al., 2010) add to the urgency to define the right 'mix' of actions to address immediate and long-term impacts in terms of how society influences and changes the environment and how the environment changes society.

A number of policy innovations across the South (see Table 1, next page) summarise the range of options for socio-environmental policy or action and the potential for purposive policy to deliver growth, sustainability and equity as reflected in the submission by the Government of Brazil and the ethos behind an intensified focus on social and productive inclusion.

By delivering across all three pillars and the emerging four elements of inequality (through gender as a lens which also captures the political and the cultural), these examples show the way forward. Moreover, Ethiopia's PNSP in particular demonstrates the potential to create new income and also protect it from insecurity and stress. In so doing, the 'right' policy can both mitigate against crisis and protect livelihoods.

This type of 'adaptation' of tried and tested tools to respond to newer, emerging problems is a key element of policy analysis and research on adaptive social protection (ASP), where instruments can be adapted to include disaster risk reduction and climate change adaptation needs. Policy "adaptation" can take place in other forms such as the step taken by the Government of Fiji to require that commercial banks include at least 2 per cent of holdings as renewable energy loans.⁶ South Africa's "Working for Water" and the Barefoot College are a contrast in scope and scale in linking social needs, environmental opportunity and structural change. Brazil's PNPB helps to shift the conversation towards a balance between efficiency and effectiveness in greening the energy sector and the economy.

Combined with other examples (Brazil's advances in social technology transfer—i.e. Bolsa Familia; the potential of Bolsa Verde to combine both social and environmental goals; and advances on 'the right to food' in South Africa and India), social innovations may potentially emerge as a new area of focus and policy emphasis. Other models of innovation are starting to emerge such as technologies created for and designed with communities in mind (see: www.oneearthdesigns.com/) and El Salvador's Ciudad Mujer, which reflect the potential to advance equity, mitigate against risk and volatility and protect critical progress at the same time.

Still, a number of policy failures resulting from climate change adaptation and mitigation practice underscore the need for a global consensus on socio-environmental protection which is mainstreamed across all policy instruments. As Table 2 suggests, attention to and prioritisation of socio-environmental dimensions of climate change are still inconsistent, particularly in countries (in Africa, in particular) where the social nature of vulnerability to climate change is proven (see also Table 3, page 5).

Table 2
Analysis of Inclusion by Group or by Vulnerability in National Adaptation Programmes of Action (NAPAs) to Date
(Perch, 2011; see Coding Process in Perch, 2010*)

Indusivity factor	Yes % of available NAPAs	No % of available NAPAs	Yes % of African NAPAs reviewed	No % of African NAPAs reviewed
Mentions gender	78.0	22.0	80	20
Prioritises gender	37.5	62.5	45	55
Mentions poverty	97.0	3.0	100	0
Prioritises poverty	81.0	19.0	100	0
Mentions ethnicity	22.0	78.0	15	85
Prioritises ethnicity	97.0	3.0	0	100
Lists vulnerable groups	65.5	34.5	75	25
Identifies participatory actions*	56.0	6.0	55	45

* Y (Yes); N (No); NC (Not Clear); Yns (Yes not specified). NB. It is important to note that for the last element the level of participation was often not clear for many. Thus 'not clear' and 'no' above relate to this rather than a lack of participation in itself.

Additionally, a review of the overall capacity and preparedness of a select number of countries to address food security highlights the significant diversity and performance of existing policy frameworks at the national level in responding to the multiple layers which would comprise a socio-environmental protection approach to access to food, for example. Table 3 reveals some of the specific challenges countries are facing in undertaking a holistic approach and, more critically, the extent to which the critical policy underpinning it exists (or does not exist). A similar policy mix would be critical for addressing many existing socio-environmental challenges. Few countries, however, exhibit policy capacity and preparedness in all five of the key areas, in particular those countries in which food security is a significant development threat. According to the

Table 1
Co-benefits in Action: Selected Case Studies

(Extracted from Perch et al., 2010)

Programme summary	Growth co-benefits	Gender co-benefits	Poverty co-benefits	Environmental co-benefits	Unique structural elements
1. Barefoot College: a non-profit organisation in India, focusing on rural development through self-sufficiency and sustainability. Focuses on training women for “technologically challenging” jobs that have traditionally been done by men (Barefoot College, 2).	Engaging women in productive activities and hence improving their contribution to economic growth. Helps India move towards low-carbon development.	Improving women’s social and economic position and expanding opportunities for them.	Increased skills likely to lead to new income-generating opportunities. Sense of ownership. Reduces energy poverty in rural villages.	Women are trained to install, maintain and repair solar panels in rural villages. Contributes to climate change mitigation (IAP, 2010).	Community-based: A Village Energy and Environment Committee (VEEC) determines how much each family can pay for the solar energy per month, and who will be selected to be trained as a Bare foot Solar Engineer (Roy, n.d.).
2. Called at first <i>Working for Water</i> in South Africa, it transformed afterwards into eleven programmes. Initially targeted water losses caused by invasive weeds and secondary effects on downstream ecosystems (Lieuw-Kie-Song, 2009).	Facilitates greater participation by women and the poor in productive areas and reduces productivity losses for invasive plant species.	A clear gender-directed policy on environmental issues.	Contains underlying poverty reduction strategy and has benefited 119,000 persons.	Reduces the harm of invasive plant species on ecosystems and access to water.	Government, through the funding mechanism, could act as intermediary, buyer or as a market regulator to avoid unanticipated consequences (Lieuw-Kie-Song, 2009).
3. Brazil’s PNPB adopts an explicit policy to incorporate family farmers into the biodiesel value chain. Incentives by GOB included distribution of seeds, technical assistance, credit and formal contracts for small-scale family farmers. Special economic incentive instruments target the less developed Northeast region (Zapata et al., 2010).	Structures the supply chain of biodiesel in Brazil and expands the sources for the production. Linked to a regulation that demands biodiesel/diesel blending into gasoline (of at least 5 per cent) (Zapata et al., 2010).	Gender is not an issue that has been identified in the policy design of the PNPB per se. However, several women are small-scale farmers and take part in the programme.	Directly integrates small farmers in new markets and provides a guaranteed additional source of income for them and their families.	Expands low-carbon path of development.	The Selo Social (Social Label) certification for purchases gives tax exemptions to the refineries purchasing a minimum required amount from smallholder farmers, and full tax exemption to those purchasing from farmers in the Northeast region. (Zapata et al., 2010).
4. Ethiopia’s PSNP provides cash and food in exchange for work during the food insecurity and hunger period (Davies et al., 2008).	Maximises benefits across sectors; reduces need for emergency welfare mechanisms in times of drought.	Includes focus on women and gender dimensions of poverty.	Cash transfers alleviate stress and insecurity; build assets and gather funds for mitigating climate-related risks.	Prevent the use of environmentally-damaging coping strategies particularly in times of drought.	Safety net programme –linking social protection and climate change.

Action Aid Hunger Free Scorecard, the top 10 most vulnerable countries based on a combination of climate, food insecurity and vulnerability are Democratic Republic of Congo, Burundi, South Africa, Haiti, Bangladesh, Zambia, India, Sierra Leone, Ethiopia and Rwanda.

Even where policy and programme success exists, as in South Africa, India and Ethiopia, other challenges remain. The spaces for policy emphasis also differ significantly across all countries. With some, policy reforms are needed in three or more areas (for example, The Gambia, Sierra

Leone and Haiti), and in others, strategic attention to one weak sector could deliver multiple benefits (for example, Nepal on social protection). National and global financing frameworks will be required to adapt to these realities and, in particular, to focus on effectiveness as well as efficiency.

Table 3
Overall Capacity and Preparedness for Food Security
 (Adapted from Action Aid 'Hunger Free Scorecard 2011')

Overall capacity and preparedness index (from most to least prepared from 1–28)						
		Legal commitment	Sustainable agriculture	Social protection	Gender equality	Climate change adaptation
Weight		10%	30%	20%	10%	30%
1	Brazil	1	2	1	1	3
2	Malawi	4 (right to food legislation in progress)	1 (high agriculture budget)	12 (low social protection)	13 (good gender guidelines)	1 (good climate adaptation plans)
3	Rwanda	23	7	20	15	2
4	Ethiopia	13	5	13	24	7
5	Tanzania	6 (low right to food legislation, but in progress)	8 (high agriculture budget)	27 (low social protection)	10 (good gender guidelines)	9 (moderate climate adaptation plans)
6	Nepal	10	11	24	14	4
7	Uganda	5	16	28	17	8
8	Bangladesh	15	9	9	25	12
9	Haiti	11	3	25	5	18
10	South Africa	3 (right to food legislation in progress)	22 (low agriculture budget)	3 (medium social protection)	7 (good gender guidelines)	13 (moderate climate adaptation plans)
11	China	27	13	5	20	14
12	Lesotho	25 (no right to food legislation)	21 (high agriculture budget)	6 (low social protection)	6 (good gender guidelines)	3 (good climate adaptation plans)
13	Zambia	26 (no right to food legislation)	12 (medium agriculture budget)	22 (low social protection)	21 (moderate gender guidelines)	10 (moderate climate adaptation plans)
14	Burundi	16	4	18	8	21
15	Ghana	17	25	14	11	6
16	Liberia	18	23	15	23	5
17	Sierra Leone	19	10	21	28	25
18	India	7	20	2	27	17
19	Mozambique	9 (low right to food legislation, but in progress)	15 (medium agriculture budget)	10 (low social protection)	18 (moderate gender guidelines)	23 (poor climate adaptation plans)
20	Nigeria	14	19	16	22	11
21	Guatemala	2	26	4	4	26
22	Viet Nam	28	6	11	3	28
23	The Gambia	22	14	19	16	22
24	Kenya	8	18	7	12	19
25	Cambodia	20	27	23	2	15
26	Senegal	24	17	8	9	24
27	DRC	12 (no right to food legislation)	24 (low agriculture budget)	26 (low social protection)	19 (moderate gender guidelines)	16 (moderate climate adaptation plans)
28	Pakistan	21	28	17	26	27

IV. Towards Equity and Sustainability: Defining the 'Socio-environmental' Futures we Want

Socio-environmental protection frameworks, where they do exist, seem to be effective where the intersections are understood and well defined, where policy impacts across multiple elements of development (economic, social and environmental), where macro-policy provides an over-arching vision, and where purposive policy is in place (Perch, 2010).

Our narrow analysis of the extent of policy solutions defined in country submissions to Rio+20 which link society and environment suggests that countries already recognise that a complex web of concerns affect the capacity for citizens to benefit from and contribute to growth.

This is represented in a number of articulated strategies: **energy and jobs (Algeria, South Africa); equity and water resource management (Mexico, South Africa); and food security and low-emission agriculture (Brazil).**

However, in defining this new policy space, both debate and experimentation must go beyond the immediacy of 'additionality'—i.e. creating secondary development benefits by better linking social dimensions in environmental policy and linking environmental dimensions in social policy.

Mainstreaming a socio-environmental approach is highly warranted to avoid some of the negative knock-on effects seen by 'greener efforts' which have not been participatory or beneficial to communities, and to ensure that what is good for reducing the risk of catastrophic climate change is also good for the rest of the environment.

This shift in focus to 'who and how' requires an immediate focus on Stage 4 of Figure 2, where both social and environmental issues are integrated into each other and also into economic planning/strategy. Both the post-2015 agenda and emerging consensus around sustainable development goals present opportunities to make critical socio-environmental links to: (i) improve access to employment for marginalised groups; (ii) reduce the social impact of environmental health externalities (poor sanitation, malaria) on productivity and growth; (iii) narrow the gap between urban and rural people in access to basic services and resources (water, energy and sanitation); (iv) ensure that renewable energy expansion does not enhance food insecurity; and (v) significantly reduce the impact of poor sanitation on GDP.

Getting policy right also means eliminating or reducing reliance on projects that generate new sources of income (through economic incentives for the collection of recyclable materials) but fail to provide poor people with consistent access to waste disposal systems and sanitation services, and fail to promote new opportunities for poor people, particularly female heads of poor households as collectors, sorters, bundlers and distributors of recyclable materials.

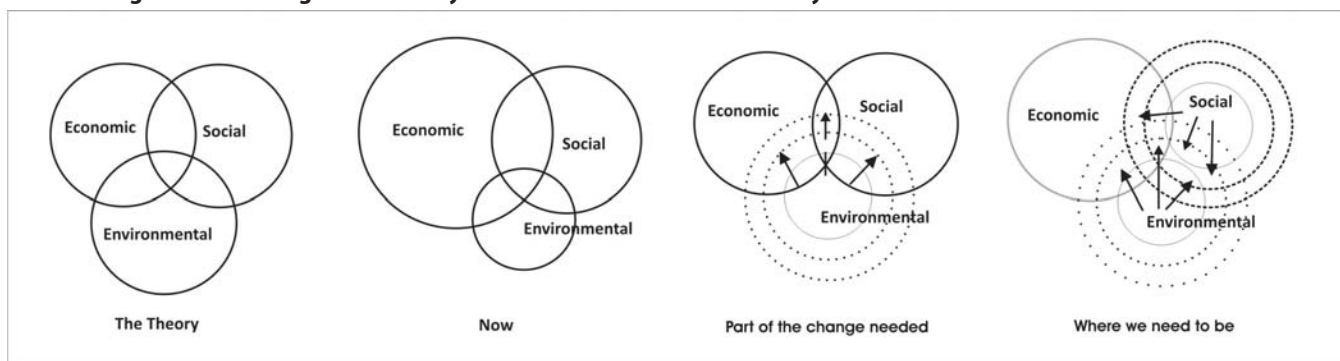
Furthermore, it means mitigating or eliminating the likelihood that creating new environmental public and private goods could lead to new or additional social ills and that efforts to rapidly reduce poverty and resource inequality do not exacerbate ecological stress points.

Building resilience, strengthening capacity to adapt and being able to weather crisis are critical qualitative metrics for the long-term sustainability of development; a socio-environmental protection framework significantly advances efforts on such cross-cutting issues.

1. See: <http://www.footprintnetwork.org/images/uploads/Ecological_Footprint_Atlas_2010.pdf>.
2. Arable land per head of agricultural population in Africa (hectare per capita) in 2007 was 0.4, compared to 1.5 in Latin America and the Caribbean, and irrigated land as a percentage of arable land was 2.2 per cent, compared to 21.6 per cent in the Middle East and North Africa and 35.7 per cent in Asia and the Pacific (IFAD, 2010).
3. See: <<http://allafrica.com/stories/201203141230.html>>.
4. A term used in a recent paper – Royal Institute of International Affairs (2012). Preparing for High-Impact and Low-Probability Events. London, Royal Institute of International Affairs, <http://www.chathamhouse.org/sites/default/files/public/Research/Energy,%20Environment%20and%20Development/r0112_highimpact.pdf>. (accessed 16 April 2012) – which examines the economic impact of the Icelandic Volcanic Ash Cloud in 2010. The report agrees with the assignation of Hurricane Katrina and the Japanese earthquake and tsunami as HILPs.
5. See: <<http://www.nytimes.com/2007/08/17/us/nationalspecial/17protect.html>>.
6. See: <<http://energy-liisd.org/news/fiji-to-require-commercial-banks-to-use-at-least-2-percent-of-holdings-for-renewable-energy-loans/>>.

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Figure 2
Interlocking Circles Showing the Necessary Movement to Attain Sustainability



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