



## Policy Brief #6

# Recommendations on Sustainable Consumption and Production and Climate Change Mitigation

for the UN General Assembly Open Working Group on Sustainable Development Goals (OWG on SDGs)

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The recommendations on sustainable consumption and production (SCP) and climate change mitigation presented here have been compiled from four civil society consultations conducted by UN-NGLS from 2012-2013: a teleconference-based consultation that resulted in the report [Advancing Regional Recommendations on the Post-2015 Agenda](#); an [online consultation](#) on four post-2015 reports to the Secretary-General; an [online consultation](#) for the High-level Panel on the Post-2015 Agenda; and a [teleconference and meeting-based consultation](#) on the UN Secretary-General's Sustainable Energy for All Initiative. A list of organizations that participated in these consultations is available [here](#). Recommendations regarding climate change financing will not be addressed in this brief as the Co-Chairs of the OWG on SDGs have specified that discussions regarding sustainable development financing for the post-2015 development agenda will be handled by the [Intergovernmental Committee of Experts on Sustainable Development Financing \(ICESDF\)](#). Readers may find civil society recommendations for climate change financing conveyed through UN-NGLS's consultation for the High-level Group on Climate Change Financing at <http://bit.ly/AGFconsultation>. While presenting a wide range of views, this brief does not intend to represent the complete breadth of perspectives and recommendations emerging from civil society on the issues of climate change and SCP for the post-2015 development agenda.

Civil society networks highlighted several studies that establish that human activity is severely damaging the ecosystems that support life through increasingly unsustainable consumption and production patterns, particularly inequitable exploitation of natural resources by the extractive, energy, and agro-industrial industries. The Organisation for Economic Co-operation and Development (OECD),<sup>1</sup> the International Energy Agency (IEA),<sup>2</sup> and the World Bank<sup>3</sup> have all recently warned that without urgent, aggressive implementation of robust climate protection, global warming will certainly exceed two degrees Celsius<sup>4</sup> and will be on a trajectory to increase by six degrees Celsius by 2100, which "has catastrophic implications," according to the IEA Chief Economist.<sup>5</sup> "Climate change threatens to undermine the delivery and success of any future global development framework," stressed the European civil society network CONCORD. Although ultimately all societies will suffer from the effects of climate change, the most vulnerable people will be impacted earliest

<sup>1</sup> [The OECD Environmental Outlook to 2050: Key Findings on Climate Change](#), November 2012.

<sup>2</sup> International Energy Agency, "[Redrawing the Energy Climate Map](#)," June 2013.

<sup>3</sup> The World Bank, "[Turn Down the Heat: Why a 4°C Warmer World Must Be Avoided](#)," November 2012.

<sup>4</sup> "Global warming of 1°C relative to 1880 - 1920 mean temperature (i.e., 0.75°C above the 1951 - 1980 temperature or 0.3°C above the 5 - year running mean temperature in 2000), if maintained for long, is already close to or into the 'dangerous' zone. The suggestion that 2°C global warming may be a 'safe' target is extremely unwise based on critical evidence accumulated over the past three decades." From: James Hansen, et al. "[The Case for Young People and Nature: A Path to a Healthy, Natural, Prosperous Future](#)," p. 7.

<sup>5</sup> <http://www.iea.org/publications/worldenergyoutlook/pressmedia/quotes/7/>.

and hardest. Contributors underscored that this is particularly unjust because “the 50 least developed countries contribute less than 1% of global carbon emissions.”<sup>6</sup>

To be sustainable, the post-2015 agenda must mitigate climate change, consultation participants asserted, including by addressing unsustainable consumption and production patterns, particularly in the global North. Organizations identified that inequities in resource use must be corrected, and that major industrial transformation is needed towards a resource-efficient, low-carbon economy. According to the IEA, emissions of carbon dioxide (CO<sub>2</sub>) by the energy industry represent the majority of global greenhouse gas (GHG) emissions, so “the fight against climate change has become a defining factor for energy policy-making.”<sup>7</sup> Civil society networks dedicated significant focus in the consultations inputs to the need to transform and regulate the energy industry, and therefore this brief includes a section of detailed recommendations on this subject.

Civil society called on UN Member States to ensure mutually reinforcing coherence and complementarity between the post-2015 development agenda and a global agreement on climate change. This brief presents contributors’ general recommendations for addressing climate change mitigation in the SDGs, as well as specific recommendations for transforming and regulating the energy industry to mitigate climate change and for establishing sustainable consumption and production practices.

## 1. General Recommendations for Addressing Climate Change Mitigation in the SDGs

- a) Ensure SDGs contribute to GHG emissions mitigation while respecting the principles of equity and fairness.
- b) Include in the post-2015 agenda all principles agreed in the Rio Declaration and Article 3 of the UN Framework Convention on Climate Change (UNFCCC), including the principles of common but differentiated responsibilities (CBDR) and polluter pays (both recently reaffirmed during the 2012 United Nations Conference on Sustainable Development), and translate them into quantifiable goals.
- c) Design goals, targets, and indicators on climate change to be complementary with all other agreed multilateral commitments, including the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), the UNFCCC, the UN Convention on the Law of the Sea, and the Hyogo Framework for Action.<sup>8</sup>
- d) Recognize the historical responsibilities of industrialized countries to take the lead in emissions reduction, and provide the necessary resources and technology transfer for developing countries to transition to a low-carbon economy.
- e) Promote the implementation of existing and future UNFCCC agreements in a fair and ambitious manner, ensuring that the parameters for reducing greenhouse gas emissions follow the ecological limits and timelines defined by science; include a finance package that primarily focuses on non-market mechanisms to address climate change; and ensure that developed countries provide the required funds and technology to developing countries, in line with the principle of CBDR.
- f) Encourage integrated approaches to mitigation, adaptation, loss and damage, and disaster risk reduction that advance gender equality and human rights, social justice, and biosphere/ecosystem health.<sup>9</sup>
- g) “Ensure sustainable use and management of natural resources (land, deserts, oceans, rivers, forests, water and soils); promote and ensure nationally-focused agriculture, women-led agro-ecology and guarantee food sovereignty. Protect and restore the global commons; exclude inefficient and corporatized

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<sup>6</sup> Global Humanitarian Forum, [Human Impact Report](#) (2009). This finding is supported by annual data for carbon dioxide emissions per country available from the UN Statistics Division at: <http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=749&crid=>.

<sup>7</sup> <http://www.iea.org/topics/climatechange/>.

<sup>8</sup> Women’s Major Group contribution for the Seventh Session of the OWG on SDGs (January 2014).

<sup>9</sup> Diverse Voices and Action for Equality (DIVA), Fiji and Development Alternatives with Women for a New Era (DAWN), [Input to OWG7](#) (January 2014).

approaches to climate change mitigation that lead to the privatization and commodification of the commons, and that have proven to be inequitable, ineffective, dangerous and otherwise unsustainable.”<sup>10</sup>

- h) Ensure goals and targets are adaptable to changing global or local conditions, particularly to enable increased ambition, including for finance and other means of implementation.
- i) Incorporate short-term, medium term and long-term indicators measuring rapid response as well as attention to medium and slow-onset climate change issues.<sup>11</sup>

## 2. Transforming and Regulating the Energy Industry to Mitigate Climate Change

- a) Set more ambitious and comprehensive targets than those of the Sustainable Energy for All Initiative, which would not keep global atmospheric temperature rise below 2 degrees Celsius – and 2 degrees itself is not safe.<sup>12</sup> According to the International Energy Agency, a 2°C target requires at least 40% renewable energy and a 50% reduction in energy intensity by 2030.
- b) Work ambitiously to provide universal, clean, safe, efficient, reliable, and climate-resilient energy access in a manner that protects, respects, and fulfils all human rights for all people.<sup>13</sup>
  - i. Indicate clear criteria for clean energy. Require public and private sector energy projects to comply with the highest social and environmental standards, including the [recommendations of the World Commission on Dams \(WCD\)](#).
  - ii. Ensure a human rights-based assessment of energy production, including renewable energy production, with criteria for process and impact, following the [guidelines outlined by the Mining Working Group at the UN](#).
- c) Aggressively phase out the use of fossil fuels while respecting the need and right of all countries to pursue energy access for all segments of the population. Research by the Potsdam Institute calculates that to reduce the chance of exceeding 2°C warming to 20%, only 20% of the total current reserves of 2,795 gigatonnes of CO<sub>2</sub> can be safely burned.<sup>14</sup>
- d) Recognize that nuclear energy cannot benefit the climate and must be aggressively phased out due to its substantial financial, environmental, and social liabilities.
  - i. While atomic reactors themselves are not major emitters of greenhouse gases (GHGs), the full nuclear power fuel chain produces significant emissions of GHGs during construction and operations for: uranium mining, milling, processing, and enrichment; fuel fabrication and transport; and long-term radioactive waste transport and storage.
  - ii. Major studies<sup>15</sup> agree that 1,500-2,000 large new atomic reactors would have to be built for nuclear power to make a meaningful dent in greenhouse gas emissions. This would cost trillions of dollars and take decades, require massive public subsidies due to the high risk of investment, and necessitate numerous massive storage facilities to isolate more than a million tons of high-level radioactive waste from the environment for 240,000 years (the hazardous life of Plutonium-239). The odds of identifying numerous new scientifically-defensible and publicly-acceptable waste dumps

<sup>10</sup> Women’s Major Group contribution for the Seventh Session of the OWG on SDGs (January 2014).

<sup>11</sup> Diverse Voices and Action for Equality (DIVA), Fiji and Development Alternatives with Women for a New Era (DAWN), [Input to OWG7](#) (January 2014).

<sup>12</sup> “Global warming of 1°C relative to 1880 - 1920 mean temperature (i.e., 0.75°C above the 1951 - 1980 temperature or 0.3°C above the 5 - year running mean temperature in 2000), if maintained for long, is already close to or into the ‘dangerous’ zone. The suggestion that 2°C global warming may be a ‘safe’ target is extremely unwise based on critical evidence accumulated over the past three decades.” From: James Hansen, et al. [The Case for Young People and Nature: A Path to a Healthy, Natural, Prosperous Future](#), p. 7.

<sup>13</sup> Two studies, [Reinventing Fire](#) by Rocky Mountain Institute, and [Carbon-Free and Nuclear-Free: A Roadmap for US Energy Policy](#) by Institute for Energy and Environmental Research, demonstrate how to provide 100% carbon-free and nuclear-free energy by 2050 in the United States. Greenpeace International’s report [Energy \[R\]evolution](#) presents a scenario in which 94% percent of global electricity is generated by renewables in 2050.

<sup>14</sup> Carbon Tracker Initiative, [Unburnable Carbon – Are the World’s Financial Markets Carrying a Carbon Bubble?](#), 2011.

<sup>15</sup> By MIT, Commission on Energy Policy, and International Atomic Energy Agency.

are slim; in the US, all proposed solutions for high-level radioactive waste storage have failed over the last 30 years due to insurmountable scientific flaws with proposed sites and political deadlock. “Reprocessing” of nuclear waste actually increases the volume of waste, while exacerbating nuclear proliferation risks due to the extraction of plutonium.

- iii. Economic analysis of nuclear energy demonstrates its inability to compete with more cost-effective, fuel-free energy sources (wind and solar) and demand-reduction/management strategies due to excessive and growing upfront costs; long construction periods; poor economic performance in terms of cost per job created; legacy costs for management of radioactive waste, plant decommissioning, and environmental remediation; and security costs including protection against nuclear proliferation risk. Subsidizing nuclear power over more inexpensive energy options that could be deployed faster, including systemic energy efficiency, will result in an “opportunity cost” as timely attainment of climate goals becomes less viable. Environmental impacts resulting from climate change (surface water warming, drought, and sea-level rise) will reduce the generation capacity and reliability of nuclear units and therefore revenue, while raising operating costs. In addition, the economic impact of nuclear accidents is overwhelming even for advanced industrial nations.
  - iv. Regarding the safety of new proposed Small Modular Reactors (SMRs), the Union of Concerned Scientists warned, “Vendors are cutting corners on important reactor safety features, such as containment structures,” to save capital costs, and any generic defects in mass-produced modular units would spread throughout the entire reactor fleet.<sup>16</sup>
  - v. Nuclear power also has social costs: communities with less economic development and ability to influence government policy-making – particularly Indigenous peoples – have been disproportionately targeted and harmed by nuclear industry operations.
- e) Incorporate a “just transition” for workers as part of the transformation of the energy sector, following an equitable path and providing concrete solutions to all workers. Promote energy cooperatives as central to a just transition.
  - f) Establish an independent technology assessment mechanism at international, regional and national levels to assess the social, economic, environmental, cultural and health impacts of new technologies selected for development, transfer and diffusion, based on the precautionary principle. While this mechanism is under development, subject risky technologies to meaningful moratoria.
  - g) Ensure effective regulation and governance of synthetic biology, particularly for the development of biofuels, following the [oversight principles](#) endorsed by 111 civil society organizations, to protect public health and the environment and prevent human rights violations including land grabs. Ban the release of synthetic organisms and their products until adequate evaluation and regulation are established.
  - h) Adopt the principles and standards of the [Extractive Industries Transparency Initiative](#) to promote revenue transparency and accountability in the extractive sector.
  - i) Decentralize energy production to reduce energy waste, by enabling appropriately scaled, site-specific resource use (solar, wind, or hydro according to potential), and decreasing transmission and distribution distances, reducing significant line losses, while also enhancing electricity access in remote areas.
  - j) Expand and improve public transportation.
  - k) Establish and enforce mandatory national energy-efficient building codes and tougher appliance and vehicle efficiency standards.
  - l) Ensure efficiency measures are accompanied by measures to reduce energy consumption by the wealthy. Particularly in the case of gasoline usage, improvements in energy efficiency have not always led to energy savings because associated cost savings leads to higher consumption; e.g., improved vehicle fuel efficiency leads people to drive more.

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<sup>16</sup> Union of Concerned Scientists, [“Small Modular Reactors Won’t Solve Nuclear Power’s Safety, Security and Cost Problems,”](#) September 2013.

### 3. Establishing Sustainable Consumption and Production Practices

- a) Reduce production and consumption to achieve sustainable consumption through systems of incentives and disincentives, including social and legal means such as reducing packaging, developing guidelines for prolonging the life span of manufactured products, and sanctions against companies that engage in the “programmed obsolescence” of their products.
- b) Implement the [10 Year Framework Programmes on Sustainable Consumption and Production](#), with enhanced involvement of civil society.
- c) Improve financial regulation, including through the use of capital controls, and reverse the financialization of the economy in a manner that would allow for a sustained shift of resources from the financial economy back to the real economy, prioritizing employment-intensive, self-reliant, resilient, low-carbon, and low-resource intensive production.
- d) Implement redistribution and fair shares in terms of access to resources. This will require going beyond resource efficiency to resource sufficiency, and accordingly, reduction in unsustainable consumption levels by the wealthy.
- e) Promote investments in job creation in sectors that reduce the environmental impact of production.
- f) Promote the circular economy and the sharing economy as foundational elements of the post-2015 development agenda. The circular economy “replaces the ‘end-of-life’ concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, within this, business models.”<sup>17</sup> Sharing economy systems enable shared access to goods, services, data, and talent, thereby reducing consumption.
- g) Require businesses to account for social and environmental costs, and report on sustainability practices.
- h) Promote fair trade and ethical consumption to ensure that workers and the environment are respected internationally.
- i) Establish energy standards for products, accompanied by phase-out regulations to ban products that do not meet the standards (e.g., incandescent light bulb bans that many countries have implemented).
- j) Reject unproven technological solutions such as geoengineering, synthetic biology, and nanotechnology.
- k) Redesign industrial processes and the delivery of products and services to do business as nature does, using approaches such as [biomimicry](#).
- l) Adopt measures, including targets, to protect the global commons to ensure natural resources are not over-consumed, such as common-pool resource management, in which a community or village democratically manages its local resources and thereby ensures sustainability and equitable use and distribution of benefits. Reject the commodification of the commons, including measures such as market-based Payment for Ecosystems Services, which cannot deliver on conservation because it ignores the complexity of ecosystem functions and subjects nature to market pressures.
- m) Promote the [ecosystems approach](#) – the primary framework for action under the Convention on Biological Diversity – and [territorial management planning](#), in which communities map their resources, consider sustainable-use studies, and develop plans to holistically manage the physical, social, political, and spiritual dimensions of a territory.
- n) Recognize the unsustainability of the increasing intensification of livestock production both in developed and developing countries, which has enormous negative impacts on human and animal welfare.
- o) Promote collaborative, open-source, traditional, and Indigenous knowledge systems.
- p) Invest in educational programmes to increase understanding about sustainable consumption and production practices, which begins in schools, but extends to supporting social and economic innovation in professional fields.

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<sup>17</sup> Ellen MacArthur Foundation, “[Towards the Circular Economy](#),” (2012), p. 3.