



**LEAVES, A Newsletter of the  
INTERNATIONAL  
ENVIRONMENT FORUM**  
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**International Environment Forum** A Baha'i inspired organization addressing  
the environment and sustainable development

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### **From the Editor, Request for information for upcoming newsletters**

This newsletter is an opportunity for IEF members to share their experiences, activities, and initiatives that are taking place at the community level on climate change action. All members are welcome to contribute information about related activities, upcoming conferences, news from like-minded organizations, recommended websites, book reviews, etc. Please send information to [newsletter@ief.org](mailto:newsletter@ief.org)

Please share the *Leaves* newsletter and IEF membership information with family, friends, and associates and encourage interested persons to consider becoming a member of the IEF.

### **Welcome to New Members**

The IEF Governing Board, at its December meeting, welcomed the following new members to IEF:

Robert John Kendall (Canada)	Taurai Mtetwa (Zimbabwe)
Patrick Leahey (USA)	Tara Pelembe (UK)
Marjolein Lips-Wiersma (New Zealand)	Suha Rawhani (South Africa)
Kadima Mpoyi Long'sha (DRC Congo)	

### **Beyond the Limits: Implementing a Resilient Future**

<http://iefworld.org/node/660> 21. December 2013

The Global Environmental Policy Programme (GEPP) at the University of Geneva, Switzerland, which IEF President Arthur Dahl has helped to design, organizes policy briefings as well as a summer training programme. GEPP has now issued a two-page brief on "**Beyond the Limits: Implementing a Resilient Future**" summarizing its 28 November 2013 event with Ian Johnson, Secretary-General of the Club of Rome, and Per Olsson of the Stockholm Resilience Centre. This can be downloaded [here](#). The brief highlights five pressure points threatening our future: ecology and climate change; food price crises; financial and banking crisis; employment; and poverty. It proposes action on values, new economic thinking, reforming the institutions that organize society, and creating global governance, including global commons, global conscience issues and global rules. Since transformation can be triggered by a crisis, we need to prepare for the transformation, navigate the transition, and then stabilize the new more resilient system. There is a clear convergence with ideas the IEF has put forward for many years

## Interfaith Power & Light National Preach-In



The goal of the 2014 National Preach-In on Climate Change, which is happening over Valentine's weekend, is to have a bigger impact than last year when they sent over 30,000 postcards to President Obama asking him to act boldly on climate, and he has. This summer he issued his Climate Action Plan, and this fall the EPA issued proposed carbon safeguards for power plants. The goal this year is for more than 1,000 congregations in all 50 states

You are here: [Home](#) / [How to Participate in the Preach-In](#) / [Download Free Kit](#)

DOWNLOAD FREE KIT FOR NATIONAL PREACH-IN ON CLIMATE CHANGE

**NATIONAL PREACH-IN ON CLIMATE CHANGE**  
**FEBRUARY 14-16, 2014**

[Download Kit Now](#)

to take part and to send 40,000 Valentine postcards to U.S. Senators, urging them to support the EPA's action to curb carbon pollution from power plants, to hear our call to protect Earth's climate, and thus our children's future and all of Creation.

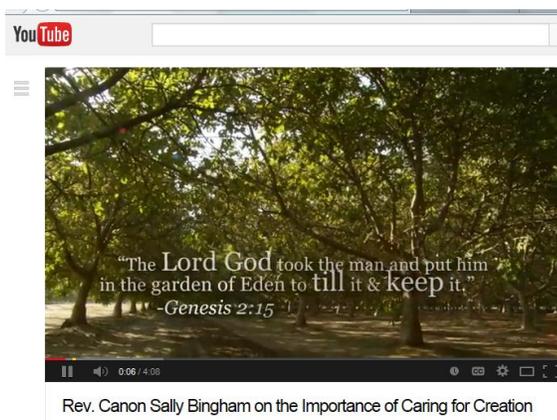
All major faith traditions call on their supporters to be good stewards of Creation, and to love God by loving others — especially those in our community most in need. The theme of the 2014 Preach-In is "Doing our Part," and congregations all over the country are doing their part by using energy more efficiently and greening their facilities.

**Download the free kit or order the \$20 printed kit at <http://www.preachin.org/>** including Love Creation Valentine's postcards for your U.S. senators that your members can sign, educational bulletin inserts, and free access to the award-winning film about climate change, *Chasing Ice*.

### National Spiritual Assembly of the United States encourages involvement in the Preach-in on Climate Change

The Baha'i Office of Public Affairs has posted two short videos as part of a series to be released over the next few months to encourage involvement by Baha'is throughout the United States in the Preach-in on Climate Change, which is organized by Interfaith Power & Light, and to continue to engage in environmental stewardship and justice themes. Both videos are posted on the "Get Involved" page at [www.publicaffairs.bahai.us](http://www.publicaffairs.bahai.us) and also posted directly on YouTube at:

- Video 1:** [Rev. Canon Sally Bingham on the Importance of Caring for Creation](#)  
**Video 2:** [Christine Muller, a Baha'i, shares her views on the Preach-In on Climate Change](#)



The National Spiritual Assembly sent an email to members of the American Baha'i Community, encouraging them to join the February 14-16 Preach-in. The email included links to [register now online](#) and to download the Preach-in kit prepared by Interfaith Power & Light, as well as to download the [Bahá'í-specific material](#) prepared by our Office of Public Affairs, both which will aid plans for holding local activities. The Baha'i materials include resources to supplement devotional gatherings, children's classes, and junior youth groups, and may be useful in communities before, during, and after the Preach-in.



## Local Climate Summit Grassroots Effort

A small group of individuals in Northfield, MN, population 20,000, organized to hold a climate summit, the results of which surpassed their expectations. As they networked in the community, they were referred to others with specific talents who stepped up and joined the effort. Northfield is home to two private liberal arts colleges, St. Olaf College and Carleton College, both of whom became sponsors, along

with others.

Despite the blizzard, over 600 people attended to hear keynote speaker meteorologist Paul Douglas (whose software was used in Stephen Spielberg's movies "Jurassic Park" and "Twister") share his thoughts on "Climate Change: Natural Cycle or Troubling Trend." Paul was followed by 9 workshops with 20 speakers (each workshop being offered twice, and including Julia Nerbonne, the Director of MN Interfaith Power & Light), as well as a sustainable community action and idea exhibit area with 40 organizations.

Workshop topics included the science of climate change, clean energy and energy conservation options, business perspectives on climate and energy, inter-faith perspectives and responses to climate change, food and local agriculture, socially responsible investing, effective energy conservation steps for homeowners and businesses, climate change and local flooding, and transportation best practices for creating energy efficient communities.

Complete information on the summit can be found at <http://northfieldclimatesummit.org/> and at the workshop the new website <http://www.northfieldsustainability.org/> was announced, again a collaborative effort.

## First-Ever Environment and Gender Index

For the first time in history, there is a tool to monitor progress toward gender equality in the context of global environmental governance. The Environment and Gender Index (EGI) - a project of IUCN - provides the best quantitative data to date on how nations are translating gender and environment mandates into national policy and planning. Comparative data across 72 developed and developing countries will help decision-makers, civil society, and others evaluate progress while identifying where the gaps lie in achieving gender equality in the environmental context. The index will be particularly useful for those working on issues related to environment, livelihoods, governance, education, health and security. The EGI 2013 pilot was launched in November during UNFCCC COP19. For more information or to download the report and a 4-page summary, go to: [environmentgenderindex.org](http://environmentgenderindex.org).

## Policy Briefs for the Open Working Group on SDGs

The UN Non-Governmental Liaison Service (UN-NGLS) is delivering a series of policy briefs to the UN General Assembly Open Working Group on Sustainable Development Goals (OWG on SDGs) presenting civil society recommendations on the subjects in focus during their sessions.

The following **policy briefs** were produced for the November, December, and January sessions of the OWG on SDGs:

### 1) Recommendations on Macroeconomic Issues:

<http://bit.ly/NGLSmacroeconOWG>

### 2) Recommendations on Energy:

<http://bit.ly/NGLSenergyOWG>

### 3) Recommendations on Means of Implementation in the New Global Partnership for Sustainable Development:

<http://bit.ly/NGLSmoiOWG>

### 4) Recommendations on Human Rights:

<http://bit.ly/NGLShumanrightsOWG>

### 5) Recommendations on Global Governance:

<http://bit.ly/NGLSglobalgovernanceOWG>

### 6) Recommendations on Sustainable Consumption and Production and Climate Change Mitigation:

<http://bit.ly/NGLSclimate-scpOWG>

The **recommendations** have been compiled from civil society consultations conducted by UN-NGLS, as described in the introduction of each brief, including:

- > A teleconference-based consultation that resulted in the report [Advancing Regional Recommendations on the Post-2015 Agenda](#) in 2013;
- > An [online consultation](#) on four post-2015 reports to the Secretary-General in 2013;
- > A [teleconference and meeting-based consultation](#) on the UN Secretary-General's Sustainable Energy for All Initiative in 2012;
- > A [consultation](#) for the UN Secretary - General' s High - level Advisory Group on Climate Change Financing (AGF) in 2010;
- > A [consultation](#) for the Commission of Experts of the President of the UN General Assembly on Reforms of the International Monetary and Financial System in 2009.

The full sessions of the OWG on SDGs are broadcast live and available on archive at [webtv.un.org](http://webtv.un.org). Each day of the session begins with a hearing between civil society Major Groups and other stakeholders and the co-chairs of the OWG on SDGs, from 9:00-10:00am EST.

Source: <http://www.un-nqls.org/spip.php?article4371>

## INTERGOVERNMENTAL PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES

### Pollination and Land Degradation Top Priorities

The groundbreaking Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) was established in April 2012 in Panama City, Panama , and currently has 115 Member States. The Platform is an independent intergovernmental body,

open to all Member countries of the United Nations. UNEP provides the Secretariat for the Platform, which operates from Bonn in Germany . Anne Larigauderie of France, formerly Executive Director of DIVERSITAS and Head of Science in Society at the International Council for Science (ICSU), has

been appointed as the Head of the IPBES Secretariat.

Biodiversity from terrestrial, marine, coastal, and inland water ecosystems provides the basis for ecosystems and the services they provide that underpin human well-being. However, biodiversity and ecosystem services are declining at an unprecedented rate and the world failed to reach the Convention on Biological Diversity target of a significant reduction in the rate of biodiversity loss by 2010.

In order to address this challenge, adequate local, national and international policies need to be adopted and implemented. To achieve this, decision-makers need scientifically credible and independent information that takes into account the complex relationships between biodiversity, ecosystem services and people. They also need effective methods to interpret this scientific information in order to make informed decisions. The scientific community also needs to understand the needs of decision-makers better in order to provide them with relevant information.

The IPBES was established to this end. It provides a mechanism recognized by both the scientific and policy communities to synthesize, review, assess and critically evaluate relevant information and knowledge generated worldwide by Governments, academia, scientific organizations, non-governmental organizations and indigenous communities.

The second IPBES meeting in Antalya, Turkey, which concluded on 14 December 2013, agreed to develop a set of assessments on pollination and food production, land degradation and invasive species aimed at providing policy-makers with the tools to tackle pressing environmental challenges.

The first assessment, to be available as early as December 2015, will look at pollination and food production. Studies show that some three-fourths of the world's crops depend on pollination by bees and other pollinators for optimum production. However, more information is needed in order to fully understand how pollination underpins food production and assess the effectiveness of current policies.

A second assessment will focus on the status of land degradation and restoration worldwide, as well as the effect this has on biodiversity, ecosystem services and human well-being. According to the United Nations Convention to Combat Desertification, land degradation over the next 25 years may reduce global food production by up to 12 percent, resulting in an increase of as much as 30 percent in global food prices.

Over the next five years, the sub-regional, regional and global scale assessment and capacity-building activities undertaken by IPBES will strengthen the science-policy interface at all levels. In doing so, IPBES will contribute to the objectives of the strategic plans of the biodiversity-related multilateral environmental agreements. The Platform will also support work on the integration of indigenous and local knowledge in scientific processes, and on valuation and accounting of biodiversity and ecosystem services.

Overall, this work will require contributions from thousands of scientists from around the globe in the fields of natural and social sciences, and indigenous and local knowledge. They will work together to synthesize cutting-edge scientific information and produce tools in order to support the creation of the best possible policies. A distinguishing characteristic of the IPBES is its mandate to build the capacity of developing countries to conduct biodiversity science.

Most nations have yet to devote or acquire the resources needed to properly measure and assess biodiversity and the value of ecosystem services. Correcting that is a priority assignment from the world community to IPBES. The UN's 2015 Sustainable Development Goals, now under consideration, are expected to include biodiversity-related targets for achievement by 2030, together with indicators of progress. It is vital that nations have the tools and personnel to establish authoritative scientific baselines and collect ongoing data to know whether headway is being made or not.

More information on IPBES, including Frequently Asked Questions and key facts and figures on biodiversity and ecosystem services, is available at [www.ipbes.net](http://www.ipbes.net)

## ENVIRONMENTAL CRIME

Environmental crime -- from the illegal trade in wildlife and timber and the smuggling of ozone-depleting substances to the illicit trade in hazardous waste and illegal fishing -- is a serious and growing international problem, whose impacts transcend national borders. It affects all sectors of society and is often linked with the exploitation of disadvantaged communities, human rights abuses, violence, conflict, money laundering, corruption and international criminal syndicates.

Environmental crime is now one of the most profitable forms of organized crime. Penalties for environmental crime vary amongst national Governments, where some States impose criminal sanctions for environmental offenses, while others rely on civil or administrative sanctions. Imposing strict penalties for engaging in environmental crimes may have a significant deterrent effect. Recovering assets and proceeds of environmental crime by "following the money trail" as well as freezing and ultimately confiscating proceeds to ensure that criminals do not benefit financially from their criminality is also crucial because the proceeds of environmental crime may be used to finance other serious crimes.

### Wildlife Crime

Wildlife crime alone is estimated to be worth US\$15 - 20 billion annually and is recognized as the fourth largest global illegal trade behind illegal drugs, human trafficking and trade in armaments. Studies indicate that the illegal trade in wildlife and timber may help finance terrorism and organized crime across the world. The same routes used to smuggle wildlife across countries and continents are often used to smuggle weapons, drugs and people.

### Elephants in the Dust

There is a resurgence of elephant poaching. Populations of elephants in Africa continue to be under severe threat as the illegal trade in ivory grows -- with double the numbers of elephants killed and triple the amounts of ivory seized over the last decade. According to a recent report by UNEP and partners, the systematic monitoring of large-scale seizures of ivory destined for Asia is indicative of the involvement of criminal networks, which are increasingly active and entrenched in the trafficking of ivory between Africa and Asia.

An estimated 17,000 African elephants were illegally killed in 2011 at sites monitored by the

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) that are believed to hold around 40 percent of the total elephant population in Africa. Large-scale seizures of ivory (consignments of over 800 kg) destined for Asia have more than doubled since 2009 and reached an all-time high in 2011. Large movements of ivory that comprise the tusks of hundreds of elephants in a single shipment are indicative of the increasingly active grip of highly organized criminal networks on Africa's illicit ivory trade. These criminal networks operate with relative impunity as there is almost no evidence of successful arrests, prosecutions or convictions.

Poaching is spreading primarily as a result of weak governance and rising demand for illegal ivory in the rapidly growing economies of Asia, particularly China, which is the world's largest destination markets. The high levels of poaching are, in some cases, facilitated by conflicts that, through lawlessness and ensuing abundance of small arms, provide optimal conditions for the illegal killing of elephants.

Earlier this year, an INTERPOL-led operation targeting criminal organizations behind the illegal trafficking of ivory in West and Central Africa resulted in some 66 arrests and the seizure of nearly 4,000 ivory products and 50 elephant tusks, in addition to military grade weapons and cash. Interventions across five countries -- Central African Republic, Côte d'Ivoire, Congo, Guinea and Liberia -- also resulted in the seizure of 148 animal parts and 222 live animals, including crocodiles and parrots, which were released back into the wild.

### Illegal Logging

Between 50 to 90 percent of logging -- in key tropical countries of the Amazon basin, Central Africa and South-East Asia -- is being carried out by organized crime, threatening efforts to combat climate change, deforestation, conserve wildlife and eradicate poverty. Globally, illegal logging -- worth between US\$30-100 billion annually -- accounts for between 15 and 30 percent of the overall global trade, according to a UNEP-INTERPOL report entitled, Green Carbon, Black Trade. The transnational nature of illegal logging raises difficulties for law enforcement and regulators, who are often limited in their ability to work outside their own domestic jurisdiction.

INTERPOL's first international operation targeting large-scale illegal logging and forest crimes, in February 2013, resulted in almost 200 arrests as well as in the seizure of millions of dollars' worth of timber and some 150 vehicles across Latin America. The operation, carried out under Project Leaf, an INTERPOL-UNEP initiative, was undertaken in 12 countries in Central and South America and brought together law enforcement agencies to combat forestry crime in Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Paraguay, Peru and Venezuela. The resulting seizures of wood and related products during the operation are estimated to amount to more than 50,000 m3 of seized wood, equivalent to some 2,000 truckloads of timber. The total value of the seized timber is estimated at around US\$8 million.

### **Fishy Business**

The world's marine fisheries are socially and economically vital, providing animal protein and supporting food security to over 1 billion people. World fisheries deliver annual profits to fishing enterprises worldwide of about US\$8 billion and support directly and indirectly 170 million jobs, providing some US\$35 billion in household income a year, according to studies by UNEP's Green Economy team. When the total direct, indirect and induced economic effects arising from marine fish populations in the world economy are accounted for, the contribution of the sector to global economic output is found to amount to some US\$235 billion per year.

At the same time, illegal, unreported and unregulated fishing accounts to 11 - 26 million tonnes a year. Such pirate fishing accounts for an estimated 20 percent of the world's catch and as much as 50 percent in some fisheries, according to WWF estimates, with the value of pirate fish products estimated at between US\$10-23.5 billion annually. The UN Food and Agriculture Organization (FAO) reports that 52 percent of the world's marine fish stocks are fully exploited, 16 percent are overexploited and 7 per cent are depleted.

### **Illegal Trade in Electronic Waste**

Electrical and electronic waste (e-waste) is the fastest growing waste stream in the world, a consequence of rapid turnover of electronic devices, particularly in developed countries. Up to 50 million tons of e-waste is generated annually with only a 10 per cent recycling rate. Shipments of

waste across the globe are in some cases contravening the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. E-waste is often diverted to the black market to avoid the costs associated with legitimate recycling.

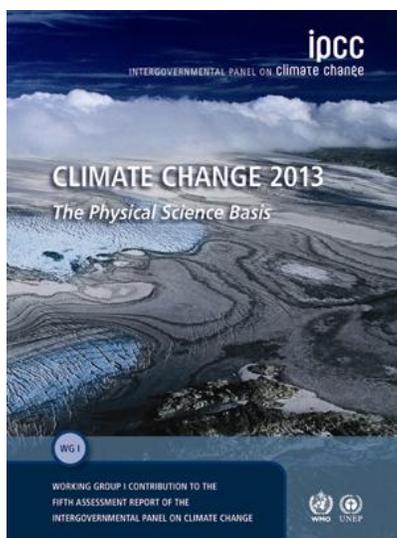
The first INTERPOL operation targeting the illegal trade of electronic waste in 2012 saw the seizure of more than 240 tonnes of electronic equipment and electrical goods and the launch of criminal investigations against some 40 companies involved in all aspects of the illicit trade. The operation aimed to identify and disrupt the illegal collection, recycling, export, import and shipping of discarded electronic products such as computers, televisions and other electronic devices, before they are dumped in landfills or other sites where they can cause severe environmental harm. Checks were conducted at major ports in Belgium, Germany, the Netherlands and the United Kingdom in Europe, a region considered to be a common source of electronic waste being shipped internationally, and in Ghana, Guinea and Nigeria in Africa, a region considered to be a destination for this waste. Almost one third of the checks resulted in the discovery of illegal electronic waste. The operation also uncovered evidence of new concealment methods used by individuals and companies implicated in the illegal trade of electronic waste.

**From a UNEP/INTERPOL press release 6 November 2013**

## **Climate Change School in England Announced**

The Climate Change Special Interest Group, based in south-central England is holding a one-day school entitled "Nature is God's Will: Responding to the Seven-Year Plan of Action on Climate Change".

The School will take place on Sunday 23 February 2014 from 9:30 to 16:00 in Abingdon Oxfordshire. As places are limited, please contact the School Registrar, Mrs Susie Howard as soon as possible for further details and to book your place. Email Susie on [susiehoward1@googlemail.com](mailto:susiehoward1@googlemail.com).



# Climate Change 2013: *The Physical Science Basis*

From <http://www.climatechange2013.org/>

## IPCC Working Group I Contribution to AR5

The Twelfth Session of Working Group I (WGI-12) was held from 23 to 26 September 2013 in Stockholm, Sweden. At the Session, the Summary for Policymakers (SPM) of the Working Group I contribution to the IPCC Fifth Assessment Report (WGI AR5) was approved and the underlying scientific and technical assessment accepted.

<b>Working Group I</b> (Stockholm, Sweden)	23-26 September 2013
<b>Working Group II</b> (Yokohama, Japan)	25-29 March 2014
<b>Working Group III</b> (Berlin, Germany)	7-12 April 2014
<b>Synthesis Report</b> (Copenhagen, Denmark)	27-31 October 2014

### Quick Links

[Full Report](#) (158MB)

[More on Working Group I \(WGI\) report](#)

[Fifth Assessment Report \(AR5\)](#)

[Background on AR5](#)

[Annex I: Atlas of Global and Regional Climate Projections](#)

[Annex II: Climate System Scenario Tables](#)

[Annex III: Glossary](#)

[Changes to the Underlying Scientific/Technical Assessment \(IPCC-XXVI/Doc.4\)](#)

[Complete Underlying Scientific/Technical Assessment](#)

### Report by Chapters

[Technical Summary](#)

1. [Introduction](#)
2. [Observations: Atmosphere and Surface](#)
3. [Observations: Ocean](#)
4. [Observations: Cryosphere](#)
5. [Information from Paleoclimate Archives](#)
6. [Carbon and Other Biogeochemical Cycles](#)
7. [Clouds and Aerosols](#)
8. [Anthropogenic and Natural Radiative Forcing](#)
9. [Evaluation of Climate Models](#)
10. [Detection and Attribution of Climate Change: from Global to Regional](#)
11. [Near-term Climate Change: Projections and Predictability](#)
12. [Long-term Climate Change: Projections, Commitments and Irreversibility](#)
13. [Sea Level Change](#)
14. [Climate Phenomena and their Relevance for Future Regional Climate Change](#)

Disclaimer: The accepted WGI report, comprising the Technical Summary, 14 Chapters and three Annexes, has been released online in unedited form.

The accepted Report has to be read in conjunction with the document entitled "Climate Change 2013: The Physical Science Basis. Working Group I Contribution to the IPCC 5th Assessment Report - Changes to the Underlying Scientific/Technical Assessment" (IPCC-XXVI/Doc.4). This document lists the changes necessary to ensure consistency between the Full Report and the Summary for Policymakers, which was approved line-by-line by 12th Working Group I Session and accepted by the Panel at its 36th Session.

## Headline Statements from the Summary for Policymakers

Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased.

Each of the last three decades has been successively warmer at the Earth's surface than any preceding decade since 1850. In the Northern Hemisphere, 1983–2012 was likely the warmest 30-year period of the last 1400 years (medium confidence).

Ocean warming dominates the increase in energy stored in the climate system, accounting for more than 90% of the energy accumulated between 1971 and 2010 (high confidence). It is virtually certain that the upper ocean (0–700 m) warmed from 1971 to 2010, and it likely warmed between the 1870s and 1971.

Over the last two decades, the Greenland and Antarctic ice sheets have been losing mass, glaciers have continued to shrink almost worldwide, and Arctic sea ice and Northern Hemisphere spring snow cover have continued to decrease in extent (high confidence).

The rate of sea level rise since the mid-19th century has been larger than the mean rate during the previous two millennia (high confidence). Over the period 1901 to 2010, global mean sea level rose by 0.19 [0.17 to 0.21] m.

The atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. Carbon dioxide concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from net land use change emissions.

The ocean has absorbed about 30% of the emitted anthropogenic carbon dioxide, causing ocean acidification.

Total radiative forcing is positive, and has led to an uptake of energy by the climate system. The largest contribution to total radiative forcing is caused by the increase in the atmospheric concentration of CO<sub>2</sub> since 1750.

Human influence on the climate system is clear. This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system.

Climate models have improved since the AR4. Models reproduce observed continental-scale surface temperature patterns and trends over many decades, including the more rapid warming since the mid-20th century and the cooling immediately following large volcanic eruptions (very high confidence).

Observational and model studies of temperature change, climate feedbacks and changes in the Earth's energy budget together provide confidence in the magnitude of global warming in response to past and future forcing.

## Global Economy Growing, But May Leave Well-being Behind

<http://www.worldwatch.org/global-economy-growing-may-leave-well-being-behind-0>

*As the world marks the 80th birthday of GDP, a new Worldwatch Institute report examines its inadequacy as the sole metric for prosperity*

**BY MARK KONOLD AND RALPH ALBUS | JANUARY 9, 2014**

In 2012, gross world product increased to just over \$83 trillion, a 4.85 percent increase over 2011. On the surface, this metric supports the argument that

the worst of the global recession is in the past; however, the economy continues a pattern of slowing growth rates since 2010 and 2011, when

gross world product grew 6.35 and 5.67 percent, respectively. Moreover, closer inspection shows that growth is taking place mostly in emerging economies: the total gross domestic product (GDP) of emerging economies is now roughly equal to that of all the advanced economies.

The gross world product is the sum of the GDPs of all countries. This typically includes levels of consumption, investment, government spending, the cost of imports, and the proceeds from exports. Because of various transaction costs, floating exchange rates, and barriers such as tariffs, a metric known as the “purchasing power parity exchange rate” is applied to put purchasing power for different countries on an even footing.

Countries that avoided overleveraging themselves while experiencing robust growth in recent years have had relatively healthier fiscal positions and therefore higher levels of foreign direct investment. This growth was hindered slightly, however, as advanced economies such as the United States, Japan, and the members of the European Union (EU) dealt with headline-grabbing crises such as the “fiscal cliff” and the possible breakup of the EU.

Unemployment levels also indicate that, despite continued growth, economic health is far from a rosy picture. According to the International Labour Organization, 200 million people around the world are unemployed—about 6 percent of the global workforce.

Conventional economics regards economic growth as an unalloyed good, necessary to improve human well-being. But it is only a nominal indicator, lacking the many intricacies and more subjective goods that are essential to a more encompassing, holistic, and meaningful metric. Given the disparity of benefits, it is clear that in and of itself, growth is far from an effective measuring stick.

*In 2012, gross world product increased to just over \$83 trillion, a 4.85 percent increase over 2011.*

Newer metrics seek to paint a more comprehensive and accurate picture of humanity’s overall welfare. One enhanced and widely cited metric is the Genuine Progress Indicator (GPI), which includes the economic cost of expenditures that diminish “community capital.” And in 2011, the United Nations General Assembly passed a resolution

stating that all countries should begin measuring happiness—taking a cue from Bhutan, which began tracking Gross National Happiness in the 1970s. Similarly, the UN Development Programme prepares a Human Development Index as an indicator of well-being that relies primarily on health (life expectancy at birth), education (mean and expected years of schooling), and living standards (gross national income per capita on a logarithmic scale.)

Regardless of the approach or specific metrics involved, all studies seem to conclude that sole reliance on GDP growth as the measuring stick for prosperity and well-being is woefully inadequate and probably has been for some time. Higher human development can begin to be seriously measured only when the impact of expenditures is evaluated and when more-qualitative elements are examined as part of a much larger and more complex mechanism to decipher human development.

But even when these more qualitative factors are considered, most approaches to global economic health ignore the planet’s capacity to provide the resources necessary to sustain it. The resources of the natural environment are finite, whereas human consumption has reached such a point that humanity consumes a year’s worth of resources in less than 365 days.

#### **Further highlights from the report:**

- Non-energy-related commodities were down 7.5 percent in 2012, while oil prices stayed relatively flat throughout the year.
- The ILO estimates that between 1999 and 2011 (the last year with complete data), labor productivity in advanced economies increased twice as much as average wages. Excluding China, real wage growth has averaged less than 1 percent a year since the onset of the financial crisis in 2007–08.
- In the mid-1970s, per capita figures for GDP and GPI, which had shown a strong correlation up to that point, began to diverge for several countries. Although GDP per capita continued to rise, broader economic well-being leveled off and has even declined.

[Click here to subscribe to Vital Signs Online and download the complete trend.](#)

## With an Eye Toward the Future: Building Resilience in a Changing World

SUBMITTED BY HABIBA GITAY ON FRI, 01/10/2014

CO-AUTHORS: SOFIA BETTENCOURT

<http://blogs.worldbank.org/climatechange/eye-toward-future-building-resilience-changing-world>



Typhoon Haiyan, the Category 5 super storm that devastated parts of the Philippines and killed thousands late last year, continues

to remind us, tragically, of how vulnerable we are to weather-related disasters.

As the images of destruction and desperation continue to circle the globe, we're also reminded that those most at risk when natural disaster strikes are the world's poor – people who have little money to help them recover and who lack food security, access to clean water, sanitation and health services.

Over the last year, as one major extreme weather event after another wreaked havoc and claimed lives in the developing world, terms such as "resilience" and "loss and damage" have become part and parcel of our efforts here at the World Bank Group – and for good reason.

Developing countries have been facing mounting losses from floods, storms and droughts. Looking ahead, it's been estimated that up to 325 million extremely poor people could be living in the 49 most hazard-prone countries in 2030, the majority in South Asia and Sub-Saharan Africa.

These scenarios are not compatible with the World Bank Group's goal to reduce extreme poverty to less than 3 percent by 2030, or with our goal to promote shared prosperity.

So what was 2013 like from a disaster point of view?

As is the case every year, there were hundreds of weather catastrophes worldwide, many of which were declared official disasters.

Before mid-year, for example, there had been two separate earthquakes in Yunan and Sichuan in China that affected nearly 2.5 million people, a drought in Chad that affected 1.6 million, a cyclone

in southern Bangladesh that disrupted life for 1.3 million, floods in Mindanao, Philippines, that affected 500,000; and a storm in Guangdong, China that affected another 1.4 million.

Then came Cyclone Phailin in India, Typhoon Haiyan in the Philippines and severe flooding in Somalia and Pakistan.

Munich Re, a reinsurance company that collates such data, reported the 2013 tally this week: \$125 billion in overall damage, with Typhoon Haiyan causing the largest loss of lives.

### Needed: A New Approach

Any climate change expert will tell you that no single weather event can be attributed to climate change. However, scientists have warned that extreme weather events will only increase in intensity and frequency if climate change is left unchecked.



In a recent report, *Building Resilience: Integrating Climate and Disaster Risk into Development*, we noted that the people who are trapped in poverty, especially in sub-Saharan Africa and South Asia, will be most at risk when this happens.

The people and assets in the ever-expanding urban centers, especially at the coast, are another major area at risk from loss and damage. Projected annual losses in major coastal cities from flooding and rising sea levels could be as high as \$1 trillion by the middle of this century.

We believe that to effectively meet the World Bank Group's poverty reduction goal, we must address the impacts of poverty and climate risks in a more coordinated way. By working across different disciplines such as disaster risk management, climate adaptation and poverty reduction we'll save

more lives and build stronger resilience to disasters and climate change.

Within the World Bank Group, we're taking the first steps toward this integrated approach. Now we

need support, encouragement and help from our partner countries and donors to make the major leaps that are necessary for people and our changing planet.

## The Year the World Bank Fused Sustainable Development with Its Goals for the Future

<http://www.worldbank.org/en/news/feature/2013/12/23/year-world-bank-fused-sustainable-development-goals-future>

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Stephan Bachenheimer/World Bank

A herder purchases a portable solar power system in Mongolia. A World Bank-supported "Solar Gers" project in Mongolia is bringing clean electricity to about 70 percent of the country's nomadic herders, about half a million people.

The World Bank Group set two ambitious goals in 2013, and in the process made clear that one concept will underlie its actions toward both: sustainability.

"Ending extreme poverty within a generation and promoting shared prosperity must be achieved in such a way as to be sustainable over time and across generations," the goals document reads.

"This requires promoting environmental, social, and fiscal sustainability. We need to secure the long-term future of our planet and its resources so future generations do not find themselves in a wasteland."

With the goals as a foundation, the Bank Group set a clear direction for its energy work going forward that focuses on expanding energy access, use of renewable energy, and improvement in energy efficiency. In urban development, it launched the Low-Carbon, Livable Cities Initiative to help fast-growing cities in developing countries plan for sustainable development and prepare to finance it. The World Bank Group also established a firm, evidence-supported position on climate change and on the critical need for building resilience and integrating disaster risk management into development to save lives and avoid millions of people falling back into poverty.

In other sectors, the Bank Group expanded sustainable development principles by ramping up work in the use of information and communication technologies, support for public transportation systems, development of climate-smart agriculture, and work in integrated urban water management. A

new report on social inclusion dove deeper into the forces behind exclusion that challenge sustainable development and the goal of shared prosperity.

### Sustainable Energy for All

In June, the World Bank Board of Directors, representing 188 member countries, put expanding energy access and accelerating energy efficiency and renewable energy at the core of the Bank Group's work in the sector. The energy directions paper embraced the goals of a new international initiative: Sustainable Energy for All, chaired by World Bank Group President Jim Yong Kim UN Secretary-General Ban Ki-moon. Its goals: by 2030, achieve universal energy access, double the share of renewable energy in the global mix, and double the rate of improvement in energy efficiency.

The energy directions paper also drew global attention for its position on coal: It affirmed that the World Bank Group will "only in rare circumstances" provide financial support for new greenfield coal power generation projects. Several multilateral development banks and developed country governments followed with similar pledges.

The Bank also increased its focus on geothermal exploration, reducing gas flaring, and, through its ESMAP partnership, increasing the use of cleaner

cookstoves and helping cities improve their energy efficiency.

Significantly, the directions paper emphasizes energy prices as a key to energy efficiency and growing the share of renewable energy sources in countries' energy mix.

### **Low-Carbon, Livable Cities**

From Africa to Asia, city leaders were talking with the World Bank about resilience and low-carbon development. They want to build a long, successful future, but most of them face a serious challenge: finance. Only 4 percent of the 150 largest cities in developing countries are considered creditworthy in international financial markets, and only 20 percent in local markets.

The World Bank launched its Low-Carbon, Livable Cities Initiative in 2013 to help. It focuses on two vital steps: urban planning, including developing the greenhouse gas accounting and other data and analysis needed for informed decisions, and helping cities raise their credit ratings so they can tap into the finance needed.

The Bank's first City Creditworthiness Training Program for African cities drew 55 senior municipal administrators from 10 countries for a five-day training event in October to get them started. The program's ambitious goal: help 300 cities in developing countries raise their credit ratings over the next four years and begin securing projects and finance. With the many other partners focused on cities, we see momentum growing around support for municipal and city leaders and institutions.

### **World Bank Group Goals Document -- Climate Change**

Throughout 2013, the World Bank focused attention on large-scale work to address climate change through sustainable development across the sectors. The Turn Down the Heat reports provided

evidence of the danger: without action to stop it, climate change threatens to roll back decades of development progress, and while everyone will be affected, the poor will suffer the most.

The Bank focused on where climate action can make the greatest difference: building low-carbon, resilient cities by mobilizing finance, urban planning, and expertise; moving forward on climate-smart agriculture to make the food supply more resilient to climate change and help sequester carbon; accelerating energy efficiency, investment in renewable energy, and universal access to energy; and, underpinning these actions, the Bank began looking at how to lay the groundwork for a robust price on carbon and how to ramp up efforts to remove harmful fossil fuel subsidies.

"Get the prices right, get finance flowing, and work where it matters most," Vice President for Sustainable Development Rachel Kyte told world leaders at the climate change conference in Warsaw in November.

### **Looking Ahead**

In the coming year, Vice President Kyte will move to a new role as World Bank Group Vice President and Special Envoy for Climate Change. The new structure allows expertise from across the entire World Bank Group to be brought together to support solutions for all clients. It is a concrete response to mitigating and adapting to climate change and building investment in resilience through urban planning, sustainable energy and transportation, energy efficient construction, integrated water management, disaster risk management, and climate-smart agriculture.

As 2013 turns into 2014, and with Typhoon Haiyan and the people of the Philippines in our hearts and minds, World Bank Group President Kim's call for plans that are appropriately scaled to the size of the challenge is matched by the requests for partnership. We will do all we can to play our part and encourage others to step up