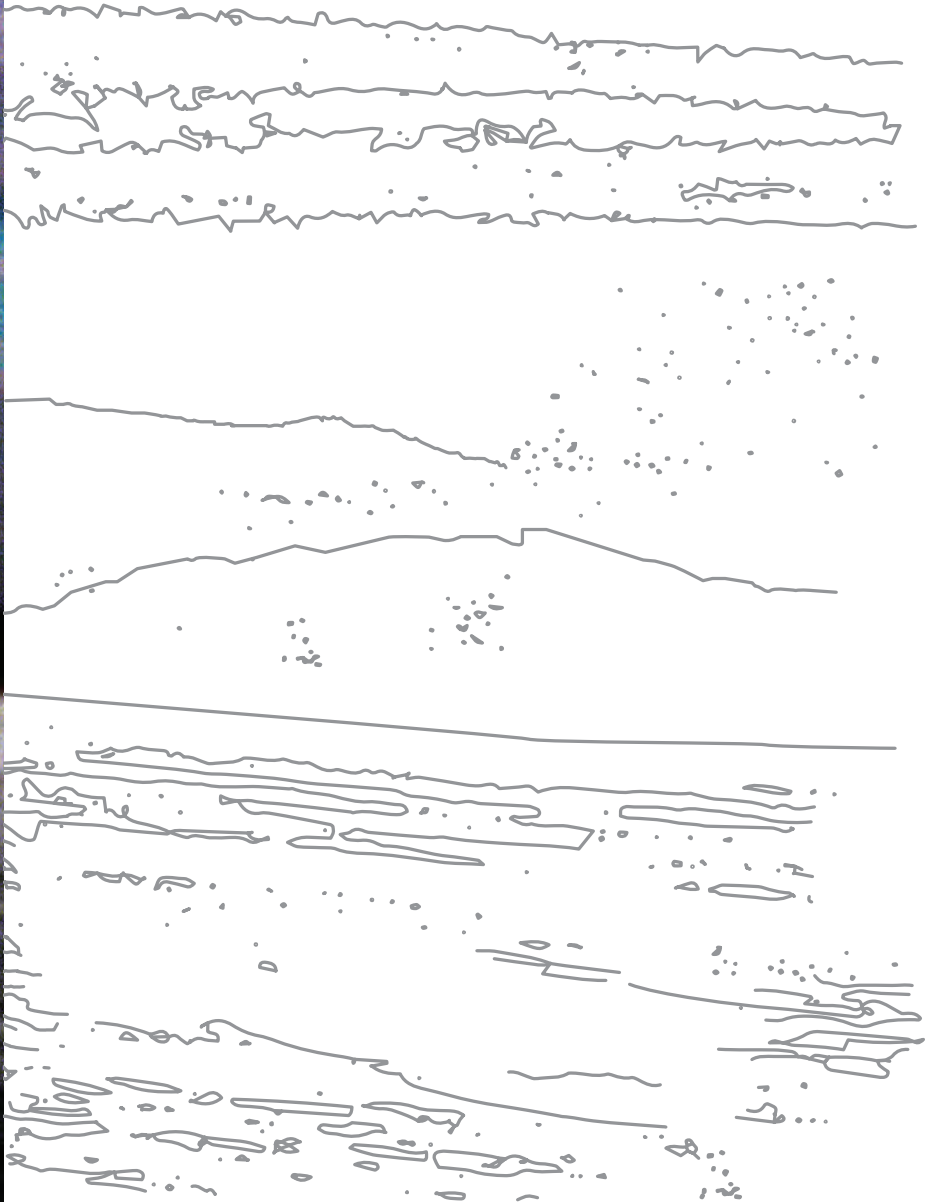




CLIMATE CHANGE

**MINIMIZING THE SCALE AND
IMPACT OF CLIMATE CHANGE**





UNEP Deputy Executive Director Ibrahim Thiaw speaks at an event held by the Global Alliance for Buildings and Construction during the Paris climate meeting. © AFP / Loic Venance

In its work on combating climate change, UNEP focuses on three areas:

- **Climate resilience** – Supporting countries in using ecosystem-based approaches to adapt and build resilience to climate change.
- **Low-emission growth** – Supporting countries to reduce greenhouse gas emissions, adopt renewable energy, increase energy efficiency measures and reduce air pollution.
- **REDD+** – Enabling countries to seize investment opportunities that reduce greenhouse emissions from deforestation and forest degradation with adequate social and environmental safeguards.

UNEP exceeded its climate targets in the last reporting period due to additional income and effective global partnerships – highlighting the importance of the organization to the coming efforts to implement the Paris Agreement and the Sustainable Development Goal on Climate Change.

Climate Resilience

Over the last two years, UNEP enabled 20 countries to implement ecosystem-based and other adaptation approaches. Of these countries, ten incorporated ecosystem-based (EbA) and other supporting adaptation approaches in key sectoral and development plans, bringing the total to 19 – including Afghanistan, Bangladesh and Tanzania.

However, the implementation of such plans requires financing, which is currently lagging behind needs. According to advance findings from UNEP's second Global Adaptation Gap Report, adaptation costs are likely to be up to three times higher than current estimates. UNEP encourages further sources of adaptation funding and helps countries access existing finance. UNEP supported 10 countries with their accreditation process to the Adaptation Fund, of which four (Costa Rica, Mexico, Namibia and Peru) became accredited and can access finance directly. In addition, UNEP helped countries increase the availability of microfinance for adaptation (see in-focus story on page 13).



A man stands near the Toau atoll in French Polynesia. Small Island Developing States are at the frontline of climate change. © AFP/Gregory Boissy

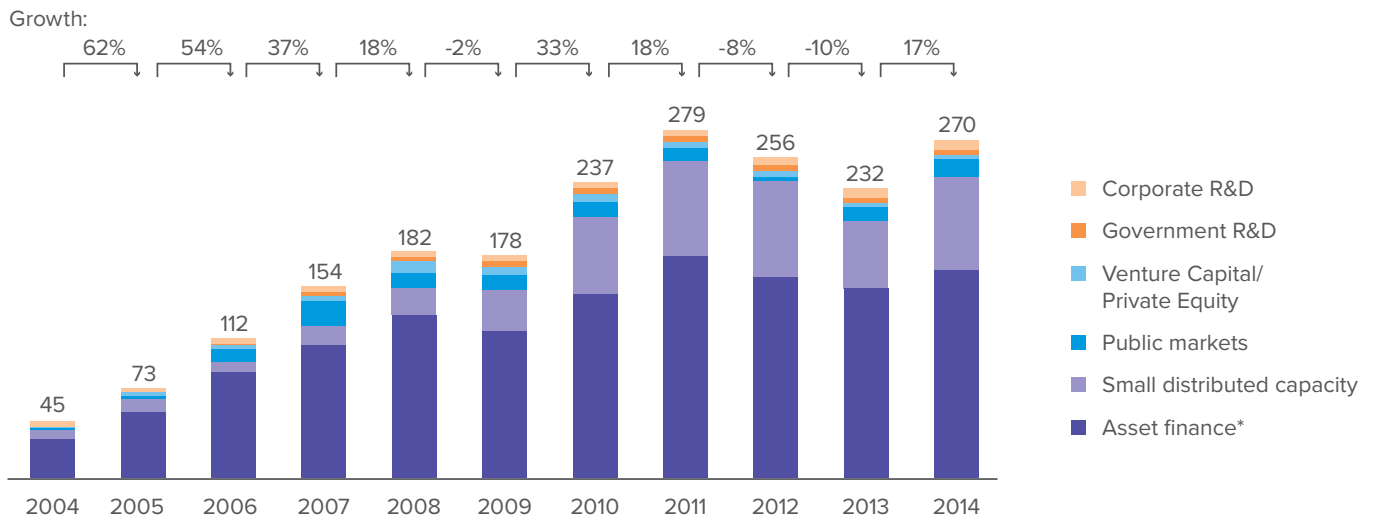
The 2015 Global Adaptation Report

Total bilateral and multilateral financing targeting climate change adaptation in developing countries in 2014 was estimated at \$18.4 billion, representing an 8-9% increase over the past five years – but still far short of what will be needed by 2030.

\$18.4 BILLION

TOTAL BILATERAL AND MULTILATERAL FINANCING TARGETING CLIMATE CHANGE ADAPTATION IN DEVELOPING COUNTRIES

Global trends in renewable energy investment 2015 (billions of dollars)



*Asset finance volume adjusts for re-invested equity. Total values include estimates for undisclosed deals.
Source: UNEP, Bloomberg New Energy Finance

Low-emission growth

UNEP's Emissions Gap Report 2015, a key document in negotiations at the Paris climate meeting, assessed 119 Intended Nationally Determined Contributions (INDCs) submitted to the UN Framework Convention on Climate Change. These pledges, combined with existing measures, could cut up to 10 gigatonnes of emissions (GtCO₂e) per year by 2030. However, this is half what is needed to have a likely chance of limiting global warming to 2°C target this century, beyond which serious climate impacts can be expected.

The report notes that enhanced energy efficiency in buildings, industry and transport, and increased renewable energy, are critical to closing the gap. As these sectors account for around 40% of global energy use, UNEP works closely with its partners and governments to accelerate action in these areas. In the last two years, UNEP provided assistance to 31 countries to implement initiatives to improve energy efficiency or invest in renewables, far exceeding the target of 20 countries set for December 2015. UNEP complements these efforts with major partnerships to enable a broader reach than would be possible on its own.

UNEP-supported achievements in energy efficiency

24 countries completed their national efficient lighting strategies, with the support of the en.lighten initiative, bringing the total to 38.

24 
COUNTRIES



EFFICIENT LIGHTING STRATEGY

13 countries are adopting efficient appliances strategies under the Efficient Appliances and Equipment Partnership, which targets a global shift that could cut 1.25 billion tonnes of emissions and save \$350 billion each year.

13 
COUNTRIES



EFFICIENT APPLIANCE STRATEGY

Chile, Kenya, Mauritius and Viet Nam, with the support of the Global Fuel Economy Initiative, adopted fuel efficiency policies, bringing the total number of countries with cleaner vehicle and fuel efficiency policies to 10.

10 
COUNTRIES



CLEANER VEHICLE AND FUEL POLICIES

CLIMATE CHANGE

Major partnership initiatives on climate change

The 1 Gigaton Coalition

A coalition of 25 countries and 40 organizations that supports nations to report on savings from renewable energy and energy efficiency measures. The first report, released in Paris, found potential savings of 1.7 gigatonnes a year by 2020.

25 
COUNTRIES

40 
ORGANIZATIONS

Portfolio Decarbonization Coalition (PDC)

25 institutional investors have joined the coalition of investors committed to fighting climate change through green investment, run by the UNEP Finance Initiative. Two of the world's biggest institutional investors – Allianz and ABP – joined in December 2015. Some \$600 billion of assets under management will be decarbonized.

\$  **25**
INSTITUTIONAL INVESTORS

\$600 BILLION
ASSETS UNDER MANAGEMENT WILL BE DECARBONIZED

The Climate and Clean Air Coalition (CCAC)

The 110 partners of the CCAC are implementing high-impact measures to reduce black carbon, methane and hydrofluorocarbon in agriculture, brick production, cooking, heating, diesel vehicles, oil and gas production, and municipal solid waste. Members pledged tens of millions of dollars to a new five-year plan at the Paris climate meeting.

110
PARTNERS

5 YEAR PLAN

The Climate Technology Centre and Network (CTCN)

The CTCN, which UNEP manages in partnership with the UN Industrial Development Organization, assists 10 countries on their climate technology challenges – including waste and energy efficiency in Colombia, refrigerant technologies in Namibia and Mauritius, and efficient lighting in the Dominican Republic.

10 
COUNTRIES ASSISTED



Including the 25 members of the Portfolio Decarbonization Coalition, a total of 67 finance institutions have committed to clean technology investments, exceeding UNEP's 2015 target of 55 such institutions. In addition, at the Paris climate meeting the international community pledged over \$10 billion to the UNEP-supported Africa Renewable Energy Initiative, an African-led plan to add 10,000 MW of additional renewable energy on the continent by 2020.

For more information on UNEP's work on climate change, visit unep.org or follow us on Facebook or Twitter.

REDD+

Global momentum on conserving forests increased with the adoption of the New York Declaration on Forests, which aims to halve the rate of loss of natural forests by 2020 and end it by 2030. The UN Collaborative Initiative on Reducing Emissions from Forest Degradation in Developing Countries (UN-REDD) – jointly implemented by UNEP, the Food and Agriculture Organization and the UN Development Programme – scaled up support to 64 countries to help them become ready for the expanded REDD+ approach, up from 48 in December 2013. Twenty-six of these countries had national programmes; half of those went on to develop or adopt national REDD+ strategies in 2014-2015. A total of 20 countries have begun the process of developing, adopting or implementing national REDD+ strategies, exceeding UNEP's target of 15 countries by December 2015.

A view under the Altesch Glacier in Fiesch, Switzerland, which coils 23 km through the Swiss Alps. The glacier has retreated about 3 km (1.9 miles) since 1870 and that pace is quickening.
© Denis Balibouse / Reuters





Colombian farmer Carlos Lopez shows lettuce crops damaged by a lack of rain. Ecosystem-based adaptation can help farmers build resilience to erratic weather. © John Vizcaino / Reuters

ADAPTATION IMPROVING LIVES OF COLOMBIAN FARMERS

For years, Raul Sarmiento and Margot Quintero, farmers from Rionegro in Colombia, struggled to cope with the changing climate. Once, the rains were predictable. Now they are scarce. When they do come, it is often as storms. Both extremes damage their crops. However, as the result of a microcredit project that funds climate change adaptation measures, the husband and wife are among thousands of farmers in Colombia who can thrive despite such erratic weather.

They are on their third loan of \$2,000 from Crezcamos, a partner of the Microfinance for Ecosystem-based Adaptation (MEbA) project, which is implemented in Colombia and Peru by UNEP and the Frankfurt School with German government funding. The drip irrigation system Raul installed with the money has strengthened his farm's resilience to drought – proving that such projects can help communities adapt to the coming climactic changes that even emissions cuts envisioned under the Paris Agreement cannot head off.

“We used to lose around 50% of our crops, now we only lose about 20%,” says Margot. “Last year, there was a drought, but since we had our irrigation system we were able to save our entire production. We harvested over 1,000 boxes of mandarins, which are sold in the market at between \$6 and \$12 each.”

The drip irrigation system and other EbA measures – such as organic fertilizer use, crop diversification and terracing – increase the resilience of small farmers through better use of ecosystem services. They also reduce production costs, increase productivity and diversify income streams.

Their credit is one of nearly 3,300 credits delivered under the project, resulting in roughly \$4.6 million of private investment towards sustainable adaptation alternatives. And the project is growing.

Partner institutions have committed to allocate \$20 million over the next five years, delivering 24,000 credits and training 14,000 clients on EbA. The challenge is to replicate the MEbA concept in vulnerable rural areas throughout the developing world, increasing climate resilience and improving livelihoods to achieve the 2030 Agenda for Sustainable Development. Public-private partnerships like MEbA could reduce the current global shortfall of \$2 billion in adaptation financing.

But EbA projects will only be meaningful if matched with policies to promote private sector participation and the implementation of sustainable and cost-effective adaptation options, on which UNEP is collecting more and more evidence. UNEP is working with governments in the Latin American region to promote such policies, and with national and regional development banks to make the case on EbA and create MEbA-specific credit lines.

For Raul, such wide-ranging support is essential to safeguard traditional rural lifestyles, which produce the food needed to support the planet's growing population.

“We say that it would be good for young people not to leave for the town or city. But how are they going to stay in the fields if they have no support?” he says. “If we don't look for systems to help us produce despite climate change, like these MEbA systems, harvests will be lost. After we all leave our farms, people will start biting their cell phones; that is how they will eat.”

\$20M COMMITTED TO OVER NEXT IN FUNDING 5 YEARS