

Papua New Guinea's Commitment to Act on Climate Change





Climate change endangers PNG's unique ethnic heritage and biodiversity

With more than 850 languages and 5% to 10% of the world's biodiversity, Papua New Guinea's (PNG) cultural heritage is a jewel that the world should treasure.

Picture a land where more than four-fifths of the population still lives in rural areas and most depend on the forests as a hunting ground as well as a source of vegetables and traditional medicine. Indigenous agriculture has sustained the people since 7,000 BC, and many living in the most remote parts of the country only made contact with the broader world in the last century.

Climate change is tarnishing PNG by endangering the traditional life of our people and our country's vast biodiversity. Climate change causes gradual shifts of agricultural yields, constant increases in malaria prevalence and the bleaching of corals. Moreover, climate change increases the likelihood and potential magnitude of event driven hazards like coastal and inland flooding as well as landslides. In fact, PNG is already home to the world's first climate change refugees from its Carteret atolls.



WORLD'S BIODIVERSITY UNDER THREAT

PNG encompasses roughly half of New Guinea, the world's second largest island and third largest tropical rainforest area. The island is a priceless example of biodiversity: less than 0.5% of the world's land nourishes 5-10% of the world's biodiversity. Approximately one in five of the species found on the island are endemic to it. Tragically, more than a fifth of its invertebrates and about half of its plants are listed as threatened species.

WORLD'S FIRST CLIMATE CHANGE REFUGEES

A rise in the sea level has afflicted the Carteret atolls, putting 2,500 villagers at risk, of whom 1,700 will be relocated to Bougainville. WHO estimates that the six islands will disappear under water by 2015, and PNG's government began to evacuate the islanders, 10 families at a time, in 2007.



“PNG is ready to act! ...We plan to cut emissions between 50-75% by 2030 and become carbon neutral before 2050 ...My government has developed a strategy for climate-compatible development and set up a new, lean and professional Office of Climate Change and Development.”

– *Sir Michael Somare,
Prime Minister of
Papua New Guinea*



PNG has a comprehensive plan to reduce emissions and mitigate the effects of climate change

PNG is ready to contribute its share to global action against climate change. Our National Strategy for Climate-Compatible Development will capture the opportunities of carbon mitigation and protect PNG against climate-driven hazards while fostering sustainable economic growth. Our goals are to halve our projected emissions by 2030 and become carbon neutral by 2050, to reduce vulnerability to climate change-associated risks while tripling GDP per capita by 2030.

How we will halve emissions by 2030

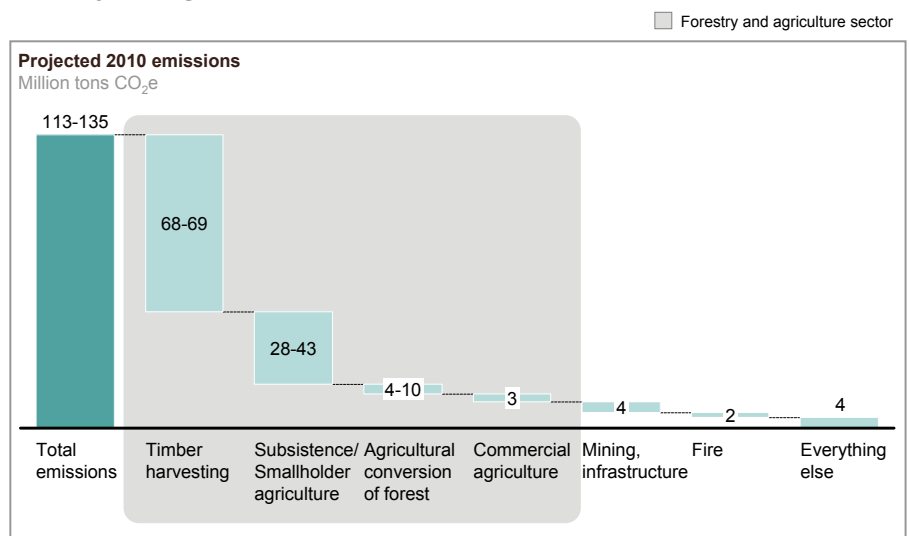
Our current emissions are projected to increase by up to 40% by 2030 to 180 Mt CO₂e. We cannot continue down this path, and we won't. We have already made a conditional commitment under the Copenhagen Accord to halve our emissions from the business as usual (BAU) forecast by 2030. And our focus for reduction is clear. With over 95% of our emissions deriving from land use, land-use change and forestry (LULUCF), we must target these activities.

PNG's current logging activities are unsustainable. If we continue to extract from primary forest, and fail to practice repeated rotation more broadly, we are likely to run out of commercially accessible primary forest shortly after 2030. This will be doubly devastating as we would lose both our source of family incomes as well as the bounty and protection afforded by our great forests. Forest conservation will provide us with critical opportunities to protect

At an average cost of USD 5.60 per tonne of CO₂e, PNG offers cost-efficient abatement potential, as compared to the long-term price of CERs which has almost always been above EUR 10 per tonne CO₂e (~USD 13.50).

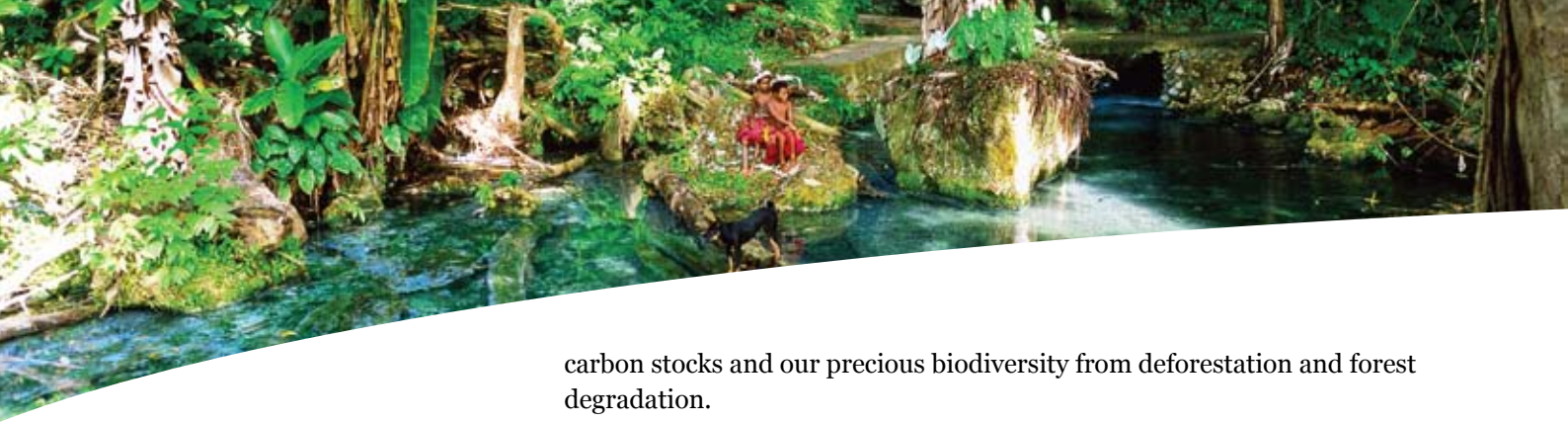
EXHIBIT 1

Forestry and agriculture account for more than 90% of PNG's emissions



1 Estimate of 2010 extrapolated from 2008/09 data
 2 Exact emission for 2010 still to be verified

SOURCE: Shearman et al (2008, 2009, 2010); Fox et al (2010); Hunt (2010); REDD+ technical working group



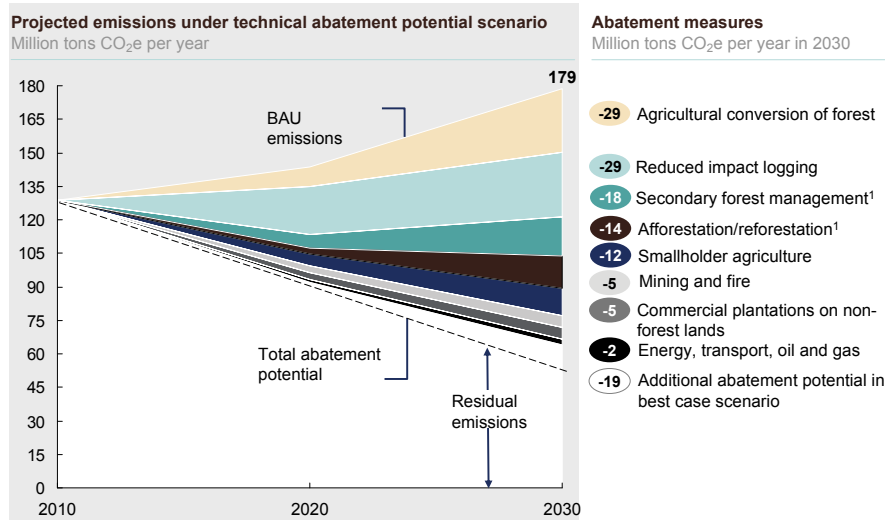
carbon stocks and our precious biodiversity from deforestation and forest degradation.

Cost-efficient abatement potential in forestry and agriculture

Given that almost all of PNG's abatement potential lies in forestry and agriculture, our most important abatement measures are to:

EXHIBIT 2

PNG has significant abatement opportunities in forestry and agriculture



¹ A/R and secondary forest management are not emissions reduction initiatives, but carbon stock enhancement initiatives
² Assuming A/R abatement potential comes from its usage as conservation areas. If the areas will be used for plantation forestry, further research/analysis is needed to calculate the abatement potential

SOURCE: REDD+ technical working group

- Review clearance of primary forest for large-scale agricultural development that would contribute about 25% of total emissions in 2030 by reviewing agricultural concessions
- Reduce collateral damage and forest degradation via reduced impact logging
- Increase yields in subsistence and smallholder agriculture through an agricultural extension program in order to preserve forest cover

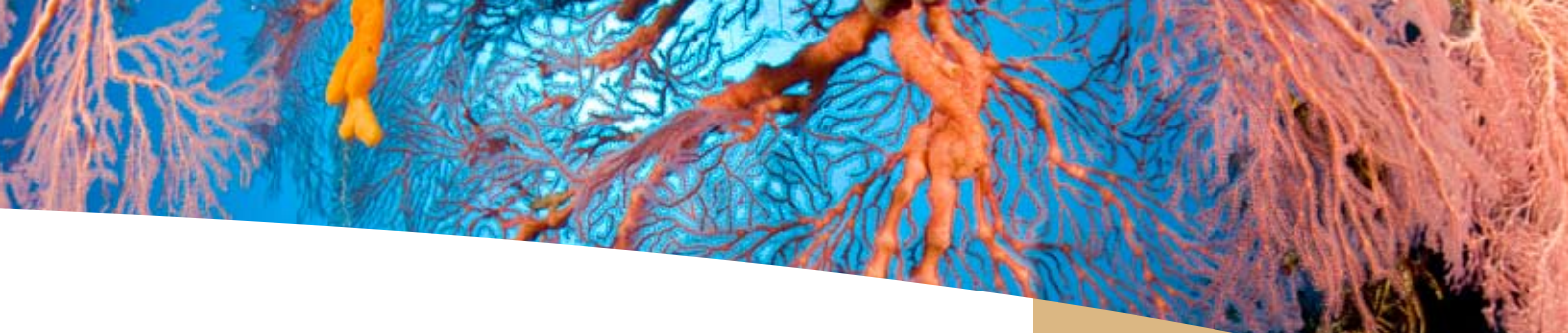
These three abatement measures will be tested in the field before any roll-out across the country. In parallel, we will be readying PNG for our national Reduction of Emissions from Deforestation and Forest Degradation (REDD+) program so that we can participate in a global REDD+ mechanism.

PNG's national REDD+ programme has the potential to abate 125 Mt CO₂e p.a. in 2030, approximately equal to 2.5 times Switzerland's emissions (with a population of 7.7m as compared to 6.5m in PNG).

Preparing for REDD+

Our priorities include:

- Setting up a transparent system for measurement, reporting and verification (MRV) of REDD+ activities to prove actual emission reductions to international counterparts under the principle of payment for performance
- Determining a simple, transparent and equitable way to distribute and allocate international REDD+ funds to our indigenous peoples
- Designing community REDD+ programmes to test concepts, especially the use of funds to promote sustainable livelihoods and forest conservation
- Introducing integrated local land use planning to optimise land allocation between forestry, commercial and subsistence agriculture and other uses



How we will adapt to climate change-related hazards

Without action on our part, the total annual cost of climate-related hazards in PNG is forecast to double between 2015 and 2030 to USD 280–370 million. By applying cost-effective adaptation measures, we can avert up to half of these losses.

Our National Malaria Control Programme is already working to prevent malaria. Five prioritised initiatives will address coastal and inland flooding: implementation of flood protection measures for Lae (PNG’s largest cargo port and second largest city), set-up of both coastal and inland early warning systems in partnership with the private sector, community-based planting of mangrove and coastal engineering protection.

Further hazards that we must also address are changes in agricultural yield due to changing weather patterns and the bleaching of coral due to increases in water temperatures.

How we will use low carbon growth to fuel a better future for PNG

Decisions taken today on land use, energy mix, transport and infrastructure affect the overall impact of abatement opportunities. Early action is critical to avoid negative long-term lock-in effects, such as gas- or diesel-fuelled power stations. Our low-carbon initiatives include rural electrification through rehabilitating mini-hydro systems, renewable energy for Port Moresby through a hydro or geothermal power station and energy efficiency measures.

As LULUCF activities remain a major source of income for local communities, alternative livelihoods are needed to encourage a shift to an environmentally sustainable future. Beyond reducing emissions, a low-carbon growth pathway has to promise an equal or superior long-term social outcomes compared with our current development path. Alternatives exist, with eco tourism, downstream processing of forest products and the conversion of raw agricultural products into consumable goods offering employment potential for PNG’s communities.



PNG IS WORKING TO OVERCOME INSTITUTIONAL OBSTACLES



Beyond the technical aspects, our REDD+ program faces several challenges, notably institutional as exemplified by our rankings in the Transparency International index (Rank 154 out of 178) and the World Bank Index of ‘Cost of Doing Business’ (Rank 103 out of 183). To make the national REDD+ program work, we need to scale up and increase the efficiency of our institutions, stop illegal logging and tackle technically demanding tasks.

In March 2010, the Office of Climate Change and Development (OCCD) was established by the Cabinet, to coordinate all climate change-related policies and activities in PNG. It replaced the discredited Office of Climate Change and Environmental Sustainability (OCC&ES).

Operational in August 2010, the OCCD has been developing its institutional capabilities by building a lean and high calibre team through training on key skills, explicit mentorship and a strict performance management process.

It has already begun to coordinate the implementation of selected adaptation and mitigation initiatives, including the development of an effective coastal early warning system and the potential review of forest clearance concessions for agricultural development.

The Cabinet also created the National Climate Change Committee to take full and exclusive responsibility for all policies and actions concerning climate. Chaired by the Chief Secretary, PNG’s highest ranked civil servant, it includes the heads of all relevant government departments and authorities. The Committee meets monthly to ensure that climate change is approached by the whole of government.



OCCD PROVINCIAL CONSULTATION IN MANUS PROVINCE

Climate change is already a day-to-day challenge in Manus, PNG's smallest

province that is comprised of over 200 islands. Besides the king tide that hit in 2008, people are facing threats from rising sea levels, coastal erosion and saltwater flooding of agricultural lands.

In September, the OCCD met with more than 150 Ward Councillors and Local-Level Government (LLG) Presidents at the Manus Leaders' Summit. In collaboration with the provincial administration, agencies and NGOs, the OCCD actively engaged participants in discussion about climate change-related issues. The result was action plans, detailing the required adaptation and alternative livelihood initiatives at the ward, LLG and provincial levels.

Besides engaging with provincial leaders, the OCCD reached out to the people through public discussions at the Lorengau marketplace, a radio talk-show and a public documentary screening on how climate change affects Manus.

Consultation with stakeholders is underway

We are undertaking an intensive period of consultation with a broad range of stakeholders, including government, civil society, private sector and local communities. We are working to:

- Inform and educate on the facts of climate change and options for climate-compatible development
- Gain on-the-ground understanding of local community needs and perspectives in order to refine the national strategy
- Develop working relationships between relevant government departments, provincial authorities and civil society
- Empower local government to communicate the national strategy and test community interest and willingness to participate in REDD+ schemes

Importantly, in a land where few have access to TV or internet, the OCCD has begun stakeholder consultation with some creative solutions in remote communities and through radio programs. The OCCD has also engaged with other stakeholders and held various events, e.g., a whole-of-government workshop in June, an NGO workshop in July, provincial consultation events in Manus, Milne Bay and East New Britain as well as regular meetings with bilateral and multilateral development partners and with private companies.

Beyond broad engagement with stakeholders, four technical working groups – REDD+, adaptation, low carbon growth and national consultation – have been meeting regularly since January 2010 to discuss relevant issues. Participants include representatives of government, NGOs, development partners and industry experts.





PNG's REDD+ program has local and global benefits

REDD+ is crucial for us if we want to conserve our forests while also fostering sustainable economic development. Not only does REDD+ offer the opportunity to conserve our forest, it also offers us a sustainable alternative to logging. Moreover, funds acquired via a REDD+ scheme can be used to finance alternative livelihoods.

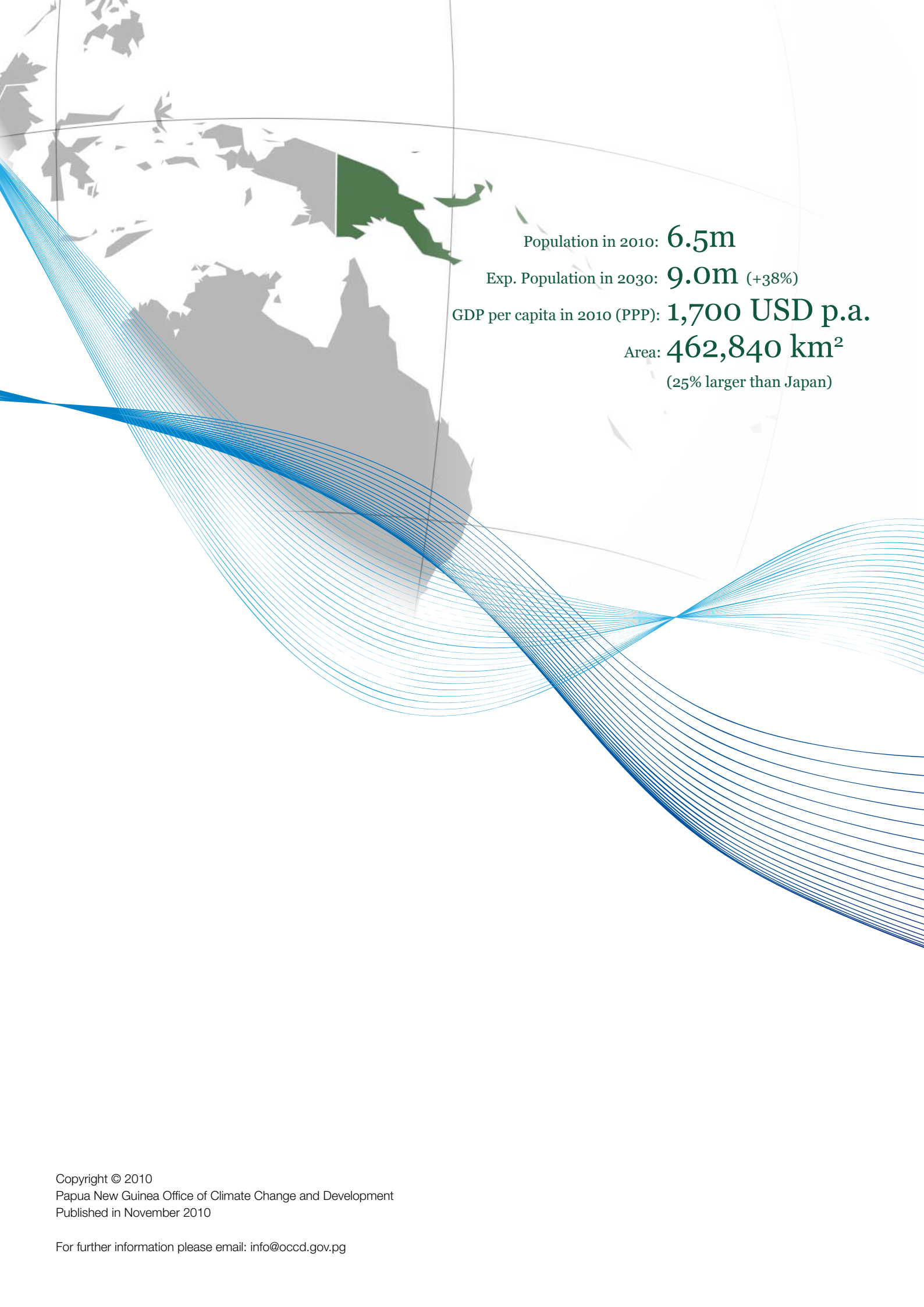
At the same time, benefits of a national REDD+ program in PNG will spill over to the global community. PNG's emission reduction of up to 135 Mt CO₂e by 2030 is equivalent to 2% of total emission reductions committed by developing countries, and at a rate of USD 5.60 per tonne of CO₂e abatement in PNG is cost efficient.

PNG is well positioned to advance the global REDD+ initiative

We are fully committed to make our national REDD+ program work. However, we require international financial support to scale up the initiatives to keep our rainforest intact. The promises of large international funds have raised our hopes, as they would allow us to compensate customary landowners (who own 97% of PNG's land) for their abatement actions and to finance sustainable alternative livelihoods for our indigenous peoples.

Compared to countries such as Indonesia and Brazil, PNG's abatement contributions seem small. However, to avoid international leakage it is crucial to support REDD+ in PNG as the country is already experiencing increasing demand for agricultural conversion often driven by regionally acting companies. At the same time, PNG can play an important role in unlocking the abatement potential of the international LULUCF sector. Given our nation's commitment to act and the size of our country, the execution of a national REDD+ program in PNG could be simpler compared with other countries. Moreover, as challenges faced in other countries would be similar and most solutions replicable, a successful implementation in PNG could become a blueprint for other REDD+ programs.

Papua New Guinean has developed REDD+ project criteria and safeguards for demonstration projects. These criteria are currently being released for public consultation with domestic and international stakeholders.



Population in 2010: **6.5m**

Exp. Population in 2030: **9.0m** (+38%)

GDP per capita in 2010 (PPP): **1,700 USD p.a.**

Area: **462,840 km²**

(25% larger than Japan)