



STRAIGHT TO THE POINT

- » The Republic of Namibia aims to reduce greenhouse gas (GHG) emissions by approximately 89 percent by 2030 relative to a business-as-usual scenario. Increased adaptive capacities and reduced vulnerabilities are of central importance for Namibia and two-thirds of all required finance is focused on adaptation.
- » Namibia is one of the largest and driest countries in sub-Saharan Africa, and currently has a population of approximately 2.5 million; this is expected to increase to 3.3 million by 2030. Namibia's climate can be classified under the desert, arid, and semi-arid categories, and hosts a high degree of variability.
- » Namibia contributes less than 0.1 percent to global emissions and per capita carbon dioxide (CO₂) emissions are around a quarter of the global average. Namibia's carbon dioxide-equivalent (CO₂e) emissions profile stands at around 63 percent CO₂, 21 percent methane (CH₄), and 16 percent nitrous oxide (N₂O).
- » National Development Plans (NDPs) act as building blocks to Namibia's Vision 2030. In addition to Namibia's NDC, the 2011 National Policy on Climate Change and National Climate Change Strategy & Action Plan 2013-2020 work to strengthen ambition and to support the government's short- to medium-term climate and development agenda.
- » A joint venture from the Government of Namibia, Southern African Development Community (SADC), regional newspaper—The Southern Times, and the NDC Partnership resulted in a high-level forum on climate action on 12-13 October 2017. The Forum aimed to coordinate high-level public and private sector actors toward mainstreaming Namibia's sustainable development and climate goals into development agendas.

BACKGROUND

WORKING TOWARDS INCLUSIVE, LOW EMISSION, AND CLIMATE RESILIENT DEVELOPMENT

Namibians gained their independence from apartheid rule during the 1990's, and have since progressed with a development agenda that aims to build a strong, independent, and resilient nation. The agenda has adopted many of the 2030 Sustainable Development Goals (SDGs); this is most prominent within Namibia's medium-term development strategy—Namibia Vision 2030.

The country is one of the largest and driest countries in sub-Saharan Africa, and currently has a population of approximately 2.5 million; this is expected to increase to 3.3 million by 2030.¹ Namibia's climate can be classified under the desert, arid, and semi-arid categories, and hosts a high degree of variability.²

Overall, mining is the major contributor to the Namibian economy in terms of economic output and exports.

¹ http://hdr.undp.org/sites/default/files/hdr_2016_statistical_annex.pdf

² <http://www4.unfccc.int/ndcregistry/PublishedDocuments/Namibia%20First/INDC%20of%20Namibia%20Final%20pdf.pdf>



Other primary economic sectors such as agriculture and fisheries also provide key contributions; primary economic sectors combined account for around one-third of all Gross Domestic Product in Namibia.² Tourism also acts as a key economic pillar, and has been reported to contribute up to 14.2 percent to national GDP.³ Over half of all Namibian livelihoods rely on subsistence agriculture, and subsequently water scarcity poses a serious threat to the welfare of the Namibian people.² Even though Namibia has more than 200,000 skilled workers, many still depend on subsistence farming, and are not afforded opportunities to diversify into new job sectors and make the most of their skills.³

Creating a strong and stable investment environment will be a key factor when it comes to attracting sustainable, climate-friendly investment. Namibia has rapidly developed its banking and insurance sector over the past few years and—according to the International Monetary Fund (IMF)—has the fourth most developed financial sector in sub-Saharan Africa.⁴ Increases in per capita gross national income (GNI) have also pushed Namibia into the Upper Middle Income Country category under World Bank classifications.

Namibia has slowly but consistently improved its Human Development Index (HDI) ranking over the past few decades and now sits under a medium human development standard within the UNDP Index. Overall, Namibia has an HDI value of 0.64 (where a value of 1 would mean fully developed), and sits in 125th position out of the 188 countries surveyed within the HDI.⁵ However, Namibia is host to a substantial degree of inequality, and once this is accounted for within the HDI through the inequality adjusted measure (IHDI), the figure reduces substantially to 0.415 (a 35 percent reduction in development within the index).⁵

Although much hard work has gone into improving health and security in Namibia, HIV/AIDS is still causing a vast amount of damage to the welfare of the Namibian people, and is exacerbating socio-economic vulnerabilities; the HIV/AIDS prevalence rate for adults aged 15 to 49 stood at 13.3 percent in 2015.⁶

Another development challenge comes in the form of multidimensional poverty, which accounts for poverty in education, health, and income; in 2016, 44.9 percent of Namibia's population were living in multidimensional poverty.⁵

The Constitution of Namibia highlights the need to develop and implement policies to maintain Namibia's rich and diverse ecosystems. Namibia's biodiversity is both a fundamental basis for livelihood generation and a national asset.³ Ecosystems provide many provisioning; supporting; regulatory; and cultural services to Namibia. This is especially evident within the agricultural and tourism sectors. However, there is growing concern that ecosystems are not being managed sustainably; Namibia's forested area has reduced by 21 percent over the 1990-2015 period.⁵

EMISSIONS PROFILE AND CLIMATE IMPACTS

Namibia contributes less than 0.1 percent to global emissions and per capita CO₂ emissions are around a quarter of the global average.⁷ Namibia's carbon dioxide-equivalent (CO₂e) emissions profile stands at around 63 percent carbon dioxide, 21 percent methane, and 16 percent nitrous oxide.⁸ It is important that phrases like *decarbonization* and *low-carbon development* do not distract efforts away from the large greenhouse gas reductions that can be made through reducing methane and nitrous oxide emissions. When emissions are analyzed in different sectors we see that approximately 78 percent of national emissions are from the Agriculture, Forestry, and Other Land Use (AFOLU) sector, and that the energy sector is the fastest growing emissions source (currently responsible for approximately 18 percent of emissions).⁸

³ http://www.adaptation-undp.org/sites/default/files/downloads/namibia_nationalclimatechangepolicyfornamib.pdf

⁴ <http://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2016/12/31/Financial-Development-in-Sub-Saharan-Africa-Promoting-Inclusive-and-Sustainable-Growth-44220>

⁵ <http://hdr.undp.org/en/countries/profiles/NAM>

⁶ <http://www.unaids.org/en/regionscountries/countries/namibia>

⁷ <http://data.worldbank.org/indicator/EN.ATM.CO2E.PC>

⁸ <http://cait.wri.org/profile/Namibia>



Namibia has characteristically high climatic variability. Climate change will carry on increasing average temperatures, and further worsen already existing climatic variability within Namibia. Such climatic concerns include droughts and elevated temperature extremes; food insecurity from reduced crop yields; and increased water scarcity from more variable rainfall patterns and increased evaporation rates.² The economy of Namibia is highly dependent on its endowment of natural resources including diverse rangelands, arable land, mineral deposits, ecosystems, and biodiversity. The impacts of climate change pose a serious threat to Namibia becoming a strong, independent, and resilient country if mitigation and adaptation efforts are not successful. This threat is especially serious for those that live in rural areas and have little access to modern infrastructure services. Adaptive capacities amongst these vulnerable groups are considered to be very low.³

COUNTRY AMBITION

The Republic of Namibia aims to reduce greenhouse gas emissions by approximately 89 percent by 2030 relative to a business-as-usual scenario.² There is a strong focus on adaptation within its Nationally Determined Contribution (NDC). Increased adaptive capacities and reduced vulnerabilities are of central importance for Namibia's natural and human systems. Specific examples of adaptation objectives come in the form of climate smart agriculture (CSA); economic and livelihood diversification; smart irrigation and water management systems; and the development of early warning systems and climate data and forecasting.

Approximately ten percent of the estimated USD 33 billion needed to implement the NDC will be sourced by Namibia, the remaining 90 percent of funding is dependent on international finance transfers. This total figure is broken down through approximately USD 22 billion being focused on adaptation, and approximately USD 11 billion on mitigation.²

As previously mentioned, the AFOLU sector (Agriculture, Forestry, and Other Land Use) in Namibia is responsible for over three-quarters of national emissions⁸, and unsurprisingly most mitigation efforts focus in on this area. Over 90 percent of the 20 Megatons CO_{2e} reduction under the NDC comes from changes to AFOLU, with the reduction of deforestation rates, afforestation, reforestation, and land restoration alone accounting for over 80 percent of all reductions (16 Megatons CO_{2e}).²

The country's broader development ambitions are formed in National Development Plans over five-year periods (currently in the fifth National Development Plan).⁹ The fifth National Development Plan was drafted and adopted in May 2017 and has included sectoral programs that were referred to within the NDC. These development plans act as short- to medium-term building blocks to Namibia's Vision 2030.¹⁰ In addition to Namibia's NDC, the 2011 National Policy on Climate Change³, and National Climate Change Strategy & Action Plan 2013-2020¹¹ work to strengthen ambition and to support the government's short- to medium-term climate and development agenda.

Namibia's NDC will be implemented and coordinated by the multi-sectoral National Climate Change Committee (NCCC), with the help of the Parliamentary Standing Committee on Economics, Natural Resources and Public Administration, and the Ministry of Environment and Tourism (MET). The MET—which is responsible for all environmental issues in the country and is also the National Focal Point to the UNFCCC—will report on NDC activities to the UNFCCC.²

⁹ <http://www.gov.na/documents/10181/14226/NDP+5/5a0620ab-4f8f-4606-a449-ea0c810898cc?version=1.0>

¹⁰ www.npc.gov.na/?wpfb_dl=36

¹¹ <http://www.met.gov.na/files/files/National%20Climate%20Change%20Strategy%20&%20Action%20Plan%202013%20-%202020.pdf>



STATE OF PLAY

PIONEERING WITH INTERNATIONAL CLIMATE FINANCE

Namibia has made a great deal of progress in working toward low emission and climate resilient development. Ninety percent of Namibia's NDC relies on access to international finance transfers and a great deal of progress has been made in accessing this finance through the Green Climate Fund (GCF). The Green Climate Fund is the designated authority that manages climate finance transfers mobilized through the United Nations Framework Convention on Climate Change (UNFCCC). Namibia has been proactive in its approach to accessing these funds through setting up the Ministry of Environment and Tourism (MET) as its National Designated Authority (NDA) to the GCF.¹² Additionally, Namibia has been a pioneer, by being the first nation to be supported by the Green Climate Fund's Readiness Program. The program provided a grant of up to USD 392,000 to help ensure that the Environmental Investment Fund's (EIF) approach to community-based natural resources management in tourism-reliant communities is underpinned by strong local engagement.¹³

Most recently, the Green Climate Fund approved two projects that work to help increase adaptive capacities and climate resilience in Namibia. The GCF has provided USD 20 million in grants to implement two projects that aim to help reach adaptation goals:

- » **Project FP023:** Climate Resilient Agriculture in three of the Vulnerable Extreme northern crop-growing regions (CRAVE)
- » **Project FP024:** Empower to Adapt: Creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management

Beyond the GCF, international assistance is being provided in the framework of a German-funded SDG support project, directed at the National Planning Commission as well as the Namibia Statistics Agency and Ministry of Finance. UNDP is also working to develop a dashboard that will allow open access to live data from the region through the Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL), which is a German Ministry of Education and Research (BMBF)-funded joint initiative with Angola, Botswana, Namibia, South Africa, and Zambia in response to global climate change.

The French Development Agency (AFD) has worked with the Namibian Government to develop a project through the Sustainable Use of Natural Resource and Energy Fund (SUNREF) program. SUNREF aims to finance projects related to sustainable agriculture, climate resilience, and renewable energy. The disbursement of funds is expected to take place from late 2017. The project will also involve four local commercial banks.

INTRA-NATIONAL INITIATIVE

The Government of Namibia has worked to set up independent initiatives that aim to support the ambition within its NDC. The Solar Revolving Fund that is administered by the Ministry of Mines and Energy (MME) is part of Namibia's *Off-Grid Energy Master Plan* (OGEMP), and has developed a credit facility to help increase climate resilience in rural communities throughout Namibia. The credit facility provides loans that help rural communities gain access to renewable technologies (e.g. solar water pumps, solar water heaters, and solar cookers/stoves).¹⁴

¹² https://www.greenclimate.fund/documents/20182/574745/NDA_nomination_-_Namibia.pdf/280c4f16-c66c-400f-9bd4-036a42c4ab56

¹⁴ http://www.mme.gov.na/files/publications/a5f_SRFFactSheet.pdf

¹³ <http://www.greenclimate.fund/-/namibian-environmental-investment-fund-is-first-direct-access-entity-to-sign-gcf-readiness-grant-agreement>



Large-scale renewable energy projects have also been developed in Namibia. The 330 Megawatt Hydro Power Station in Ruacana—which generates up to 50 percent of Namibia’s power supply¹⁵—recently had its fourth turbine commissioned in 2012.¹⁶ The Hydro Power Station has helped Namibia become more self-sufficient in providing clean energy to its growing population.

Namibia has also recently developed its first Nationally Appropriate Mitigation Action (NAMA) under the UNFCCC, titled “Rural Development in Namibia through Electrification with Renewable Energies.”¹⁷ The NAMA will span the 2015-2030 period and works to support the goals defined in the Off-Grid Energy Master Plan (OGEMP). It will provide electricity to households and companies that are currently without access by developing mini-grids that capitalize on low carbon technology. However, this NAMA is still in the process of securing funding.

NDC PARTNERSHIP ENGAGEMENT

MULTI-STAKEHOLDER EMPOWERMENT AND COORDINATION

Namibia has been an active and participatory member of the NDC Partnership, engaging in discussions throughout May, June, and July 2017. The following needs were identified by Namibian stakeholders in collaboration with the NDC Partnership:

- » **Raising high-level awareness on the links between climate and development, and promoting multi-sector/multi-stakeholder ‘buy-in’**
- » **Improving the technical capacity of the Ministry of Environment and Tourism (MET) and other relevant authorities to effectively connect existing development and budgetary**
- » **planning and M&E/MRV frameworks to climate change related mitigation and adaptation strategies**
- » **Supporting Namibia in effectively generating public and private sector/ international resources to implement climate change programs**

A joint venture from the Government of Namibia, Southern African Development Community (SADC), regional newspaper—The Southern Times, and the NDC Partnership resulted in a high-level forum on climate action on 12-13 October 2017. The Forum aimed to coordinate high-level public and private sector actors (e.g. the Ministry of Finance and National Planning Commission) toward mainstreaming Namibia’s sustainable development and NDC Goals into development agendas. Regional and sectoral climate and development topics were discussed during the forum, and a technical meeting was planned to promote a “whole-of-government and whole-of-society” approach to climate action. This approach helps to ensure that both state and non-state actors are engaged, and works to capitalize on climate ambition from a wide range of stakeholders. These actors are key to ensuring that policy development and implementation is transparent, equitable, and benefits those most in need.

¹⁵ <https://www.namibian.com.na/index.php?id=95824&page=archive-read>

¹⁶ <http://www.nampower.com.na/Page.aspx?p=184>



OPPORTUNITIES FOR PARTNERSHIP

Addressing climate change and working towards sustainability requires transformative change over many decades, both Namibia and the NDC Partnership recognize that sustainability requires change in every sector and stratum of society.

With Namibia's mitigation efforts being heavily focused on AFOLU, there are great opportunities to expand and diversify this approach by exploiting policies in other sectors that a) provide low cost emissions reductions and b) offer synergies with the Sustainable Development Goals (SDGs). A good example of this sort of policy comes from the building sector. Light-Emitting Diode (LED) lighting and housing insulation have been shown to be some of the best options for reducing energy consumption and costs, and increasing emissions abatement.¹⁸

Another area of great potential comes from the energy sector. With Namibia's population set to increase by 800,000 come 2030, meeting energy demand will be a considerable challenge. Namibia could utilize parts of the less-habitable Namib and Kalahari through building a portfolio of solar thermal power plants, with the support of international finance. This would also have the additional benefit of opening up habitable land for other functions, rather than energy production. Namibia would benefit from working with the NDC Partnership on developing investment plans and strategies, and conducting cost-benefit analyses to see how the country can best reach its climate and energy goals.

Looking at things more holistically, Namibia has stated an openness to market-based policy interventions. By doing so, the nation could take a leading role within the Southern African Development Community (SADC) in addressing climate change. There is a majority consensus among world-leading economists that pricing carbon is the most cost-effective policy when it comes to transforming economies to zero-carbon pathways. By putting a price on carbon, Namibia can disincentivize carbon intensive production and consumption, and use tax (or emissions trading) revenues to reinvest back into the green economy. The NDC Partnership can work with Namibia through initiatives like the World Bank's Climate Action Peer Exchange (CAPE) to help initiate a technical dialogue on how Namibia can benefit from putting a price on carbon.

A key resource for the NDC Partnership and its members comes from Namibia's most recent Biennial Update Report to the UNFCCC. The report elicits those financial and technical needs that are most important and the amount of finance that is required to overcome existing barriers to successfully implement Namibia's NDC. The NDC Partnership could work with Namibian stakeholders in order to identify which technical, financial, and capacity building needs are most vital, and incorporate these into implementation plans moving forward.¹⁹

A final key area where the NDC Partnership can assist Namibia comes in the form of the National Adaptation Plan (NAP). Considering Namibia's existing challenges when it comes to development, a dynamic and cross-cutting vulnerability-based approach—rather than a discrete impacts approach—to adaptation is vital to increasing climate resilience. The NDC Partnership can work with Namibia to increase technical capacities in developing the NAP. As Namibia mentioned in the NDC, the aim is to adapt to climate change in a planned and anticipatory, rather than reactive, manner; the creation of a NAP would help to make this reality.

¹⁷ http://www.nama-database.org/index.php/Rural_Development_in_Namibia_through_Electrification_with_Renewable_Energies

¹⁸ <http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/greenhouse-gas-abatement-cost-curves>

¹⁹ http://unfccc.int/files/national_reports/non-annex_i_parties/biennial_update_reports/application/pdf/namibia-bur2_10_november_2016_.pdf



SOUTH-SOUTH EXCHANGE: LEADING BY EXAMPLE

Namibia's work to develop a Nationally Designated Authority and capitalize on the Green Climate Fund's Readiness Program stands as a notable example for other countries when working to gain access to international finance transfers through the UNFCCC. Namibia has already seen success through a USD 20 million grant that will provide two large-scale adaptation projects that work to increase climate resilience within communities that are reliant on climate-vulnerable natural resources.

As for Namibia, a good example of an efficient institutional framework and knowledge network comes from Morocco. Morocco has created 4C Maroc (Climate Change Competence Centre). The Centre acts as an empowerment and training network that increases technical capacities at the national and regional level. 4C Maroc also hosts a climate database that works to ensure that decision makers and project developers are informed by conclusions from clear and credible data and analytics. Namibia's National Climate Change Committee (NCCC) could form a similar integrated approach in empowering decision makers through a NCCC knowledge-sharing network.

Further to this, Morocco serves as a fitting example when it comes to the widespread deployment of solar technologies in desert areas. Ouarzazate solar power station is located in the Saharan desert, and has benefitted from a series of loans from the likes of the World Bank and African Development Bank (AfDB). The project stands as a good example of how best to utilize international finance mechanisms to provide clean energy.²⁰

As a final example of progress, South Africa have taken the leading role in working towards putting a price on carbon within the SADC region. The country is currently on track to have a carbon tax passed through parliament this year, with the aim of the mechanism becoming functional by the end of 2017.²¹

²⁰ <http://www.constructionweekonline.com/article-16983-afdb-helps-fund-144bn-moroccan-solar-project/>

²¹ <https://openknowledge.worldbank.org/bitstream/handle/10986/26565/9781464811296.pdf?sequence=4&isAllowed=y>

NDC Country Outlook

NAMIBIA

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The NDC Partnership is guided by its partners and assisted by a Support Unit hosted by the World Resources Institute (WRI). The Partnership is co-chaired by the Governments of Germany and Morocco.

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