



Namibia - Factsheet

Introduction to the country

Namibia covers an area of about 824,000 km² (excluding ocean), with a population of about 2.1 million. Namibia's economy is heavily dependent, both directly and indirectly, on the primary sectors such as mining, agriculture and fisheries. In 2007, mining alone contributed more than 12% to GDP, and to some 50% of export earnings. GDP growth from 2001 to 2009 has been an average 4% per annum, and stands at US\$ 8.5 billion in 2009.

Through its key policy document, Vision 2030, and its 5-year National Development Plans, the Namibian government seeks to transform Namibia into an industrialized nation by 2030. However substantial challenges, such as unemployment, income dependence from the Southern African Customs Union, income disparities, a fledgling manufacturing sector and high import dependence, need to be addressed.

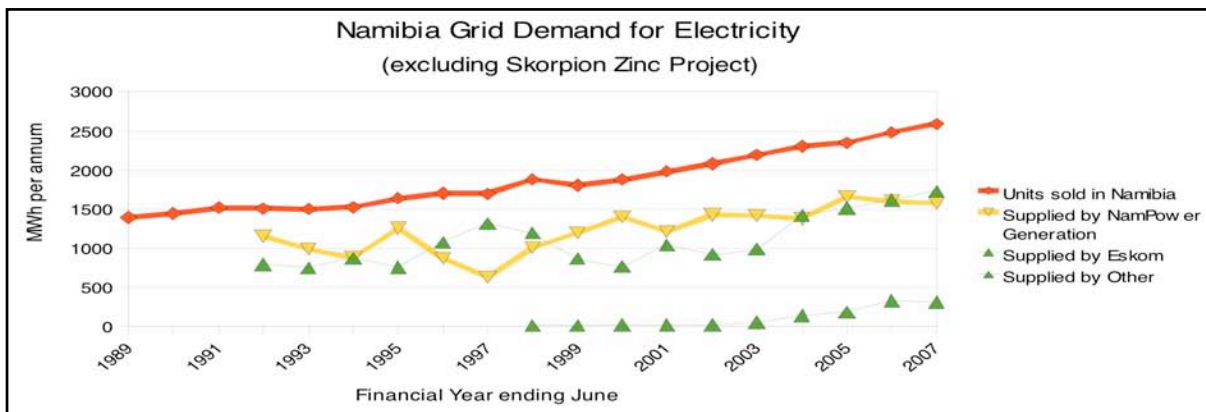
Electricity generation and industrial production

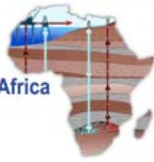
Namibia's current electricity mix, which accounts for about 25% of total energy demand, is heavily dependent on imports, mainly from South Africa and Zimbabwe. Generation through local coal and diesel generation is reserved for periods of import shortages. Average annual electricity imports exceed 50% of total consumption. Only about 30% of Namibia's population has access to electricity. Continued grid expansion and off-grid electrification thus are a key challenges.

Investigations for new electricity generation capacity in the country are underway, and include assessments for a coal-fired power station of up to 800 MW, 50 MW diesel, 800 MW natural gas, 80 MW wind, up to 600 MW from hydro, and a nuclear power station.

Electricity Sources in Namibia	
	Capacity (MW) in 2008
Hydro	249
Coal	120
Diesel	24
Annual Imports	~ 100 to 300 MW
Maximum demand in 2008 was 533 MW	

Namibia does not offer easily exploitable fossil fuel reserves, apart from its natural gas resources at the Kudu gas field. The country's dependence on fuel imports remains a concern. Although only Namibia's utility NamPower currently generates all electricity in Namibia, and is the country's electricity trading entity, various initiatives are under way to establish Independent Power Producers (IPP). The low cost of electricity imports are however a disincentive, and Namibia's existing IPP framework therefore remains untested.





CO₂ emissions

Namibia's greenhouse gas emissions in 2000 were mainly from the agriculture (6,700 Gg) and energy (2,200 Gg) sectors. At the time, Namibia was a net carbon sink, sequestering a total carbon dioxide (CO₂) equivalent of some 1,400 Gg per annum. Some major developments are underway, which would influence this status, such as:

1. Harvesting of about 80,000 tonnes of biomass from invader bush species per annum, to be used for wood gasification power plants, coal-fuel replacement for cement production and export of wood pellets.
2. Commissioning of a cement factory towards the end of 2010 with an annual coal consumption of 120,000 tonnes.



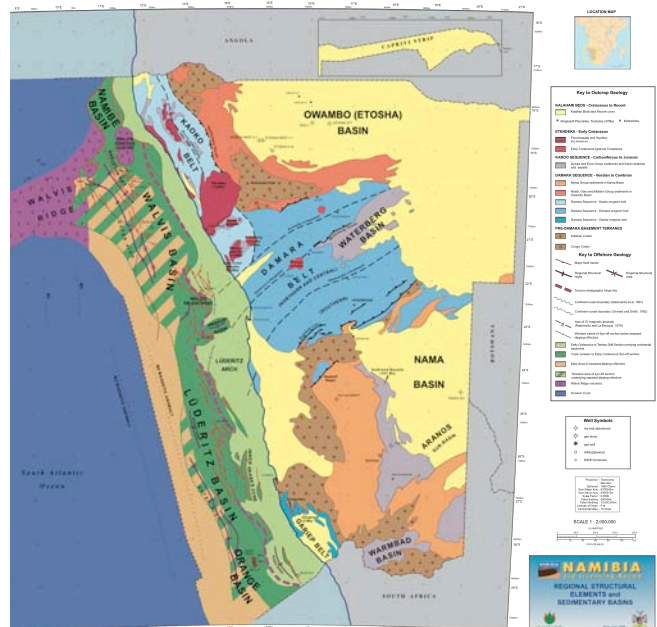
In 1995, Namibia ratified the United Nations Framework Convention on Climate Change and established the country's Designated National Authority (DNA) at the Ministry of Environment and Tourism. By March 2010, the DNA had issued several "Letters of No Objection" to project developers wishing to initiate activities relevant to the Clean Development Mechanism (CDM). The DNA provides guidance on CDM procedures relating to projects and programmatic activities that seek to reduce emissions and/or sequester carbon in Namibia.

As yet, Namibia does not have a registered CDM project, although several Project Idea Notes have been developed. In 2009, Namibia has compiled its first climate change policy, which is now available in draft form for further stakeholder input. Namibia has also signaled its agreement with the Copenhagen Accord, and has a multi-sector stakeholder group – the Namibia Climate Change Committee – which advises government on strategies and policies relating to climate change.

Project developers wishing to tap into international carbon markets remain cognizant that the country offers some CDM and voluntary carbon sequestering opportunities. However, as a sparsely populated country with very limited industrial activities generating greenhouse gases, the scope and scale of such projects remains limited.

Carbon Capture and Storage

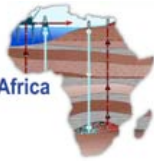
To date, the only initiatives regarding CCS relate to desktop research into carbon sequestration in soils using biochar. No assessment of geological formations in Namibia, which can be used to store CO₂, have been undertaken yet, partially because there are few significant and permanent point source emitters of CO₂. As a consequence, the understanding of CCS potentials in Namibia remains very limited, both at government institutions and the private sector. There is only a very limited understanding where geological formations of relevance to CCS exist, and the associated regulatory requirements remain undeveloped.



Acknowledgement

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