



Two Articles of the Constitution of Kenya directly state that every Kenyan has the right to a healthy environment including protecting the environment for future generations, the right to the highest available standards of health, and the right to safe water. A third Article guarantees sustainable exploitation, use, and management of the environment.

Yet in 2013, the government approved the construction of a 1,050-megawatt coal plant in Lamu County that would violate these rights. This would be the first coal-fired generation plant in Kenya, and the first in all of East Africa. There has been no convincing argument on the need for the plant given the consensus on projected electricity demand and that Kenya has more than enough current capacity and potential for renewable generation to meet and exceed projected demand through 2030.

The proposed plant also raises issues of compliance with international treaties to which Kenya is a Party.

In 2015, 24% of Kenya's electricity was generated from geothermal, wind, and solar and 34% from Hydro.ⁱ The country has far from exhausted its renewable resources:

- Kenya has harnessed less than 10% of its geothermal resources and approximately 30% of its hydro potentialⁱⁱ
- Kenya's daily insolation is equivalent to 250 million tons of oil equivalentⁱⁱⁱ
- Wind in Turkana, Marsabit, Ngong, and the Coast can support commercial electricity generation^{iv}

Even so, a contract for the Lamu Coal Plant was awarded to Amu Power, a special purpose joint venture between Gulf Energy, a petroleum company, and Centum, an investment company, in September 2014. Amu Power's sole project, the Lamu Coal Plant, is to be designed and built by Power China. The plant is owned by the Kenyan government and in order to fuel the plant, Amu Power will import coal primarily from South Africa and Mozambique.^v The government has plans to mine coal for the plant in nearby Kitui, Kenya – but this development will take an additional six years to get online and requires a railway to be built to transport the coal from the mine to the plant.^{vi}

The emissions and effluents from the operations of the plants, the 75% of funds coming from foreign investment, and the impact on indigenous peoples in the region are worth evaluating in light of Kenya's commitments to: the United Nations Framework Convention on Climate Change; the Nairobi Convention for the Protection, Management, and Development of the Marine and Coastal Environment of the Western Indian Ocean; the Basel Convention; the Declaration on the Rights of Indigenous Peoples; the African Charter on Human and People's Rights; and the International Covenant on Civil and Political Rights.

ⁱ Vision 2030, 'Progress (2016 March): Energy Generation and Distribution' (Vision 2030, 2016)

<http://www.vision2030.go.ke/493/progress-2016-march-energy-generation-distribution/> accessed 15 November 2017

ⁱⁱ J.K. Kiplagat, R.Z. Wang, T.X. Li, 'Renewable energy in Kenya: Resource Potential and status of exploitation' (2011) 15(6) RENEW SUST ENERG REV < <http://www.sciencedirect.com/science/article/pii/S1364032111001262> > accessed 20 November 2017, 2972

ⁱⁱⁱ *ibid*, 2966

^{iv} *ibid*, 2968

^v Kurrent Technologies Ltd, Description of the Project-ESIA Study for 1050MW Coal Fired Power Plant, Lamu County, Kenya (July, 2016) 14

^{vi} Kurrent Technologies Ltd, Project Alternatives-ESIA Study for 1050MW Coal Fired Power Plant, Lamu County, Kenya (July, 2016) 2.

Article of the Constitution of Kenya

Questions of Compliance

<p>Article 42: Every person has the right to a clean and healthy environment, which includes the right (a) to have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69;</p>	<p>The Lamu Coal Plant will deny the present and future generations of Kenyans their Constitutional right to a clean and healthy environment. Coal combustion is the dirtiest form of generating electricity. It is responsible for 800,000 premature deaths worldwide each year.</p> <p>The emissions and effluents from the proposed plant in Lamu will destroy the local environment. An independent study found that it is "likely to result in approximately 27 (present day) and 43 (2030) premature deaths per year due to exposure to PM2.5 [particulate matter with a diameter of 2.5 micrometers and less] and NO2 [Nitrogen Dioxide] including deaths of infants due to an increased risk of respiratory infections" and that "assuming a 40-year lifetime, and applying the projected health impacts for 2030, the proposed power plant would be responsible for a total of 1,600 premature deaths (95% confidence interval: 1,000-2,200) and 800 low birth weight births over its entire operating life."</p>
<p>Article 43(1)(a): Every person has the right to to the highest attainable standard of health, which includes the right to health care services, including reproductive health care</p>	<p>The particulates in emissions from coal combustion cause asthma, bronchitis, cardiac disease, and cancer and waste from coal combustion damage human health. The toxins in coal ash waste have been linked to cancer, neurological damage, reproductive failure, organ failure, and other serious health problems as well as widespread damage to ecosystems.</p> <p>Damage to human health and human life is unavoidable, regardless of the controls put on the smokestacks. This would create a lower baseline of health for people in the region and require exorbitant resources in order to provide health care services to treat the acute and long-term diseases caused by exposure to pollutants and effluents from coal-fired generation.</p>
<p>Article 43(1)(d): Every person has the right to safe water in clean and adequate quantities</p>	<p>Burning coal will contaminate the waters upon which people who live near the plant rely for drinking, washing, and deriving food through fishing. Acid rain (which results from air emissions from smoke stacks) will deposit pollutants - including carcinogens and neurotoxins - in the rivers and the bay</p> <p>Once coal is burned, Amu Power will store the coal ash in a pond. This pond will be located in what the Environmental and Social Impact Analysis (ESIA) recognized as a flood zone - meaning all of the hazardous waste in the ash pond will spill into Manda Bay when the region receives its seasonal rainfall.</p> <p>The pond is designated to be placed over a fresh water aquifer, the source of drinking water in the region. Leachates from the ash yard will seep into the soil and groundwater as liners of ash ponds are not 100% secure and will also contaminate surface water as there is no protection for above-ground leachate, runoff, or slurry discharges.</p>
<p>Article 69(1)(a): The State shall ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits;</p>	<p>Coal mining (as planned for the Mui Basin) is an unsustainable activity. Coal mining has significant negative impacts on water resources and water quality; soil quality; vegetation; agriculture through loss of topsoil; ecosystems; air quality; and human health including causing COPD, coal worker's pneumoconiosis (black lung), and progressive massive fibrosis.</p>
<p>Article 69(1)(b): The State shall work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya;</p>	<p>Construction and operations of the plant will destroy the mangrove forests in Lamu both through mangrove removal during construction and the death of mangroves during operation. Mangroves will be destroyed due to two factors of operations: 1) Acid rain deposits 2) release of cooling water into the bay. Such a reduction in forest coverage will put Kenya in violation of the government's constitutional obligation of at least 10% forest cover.</p>
<p>Article 69(1)(e): The State shall protect genetic resources and biological diversity;</p>	<p>There are two national parks and numerous critical land and marine habitats in the zones identified as most affected by emissions from the plant.</p> <p>The Department of Fisheries Livestock and Cooperative Development found that marine water pollution from the Coal Plant would cause loss of fishing ground, loss of nursery and feeding grounds, and disappearance of priority species. In addition, the region also houses endangered species such as the triton shell, sea horse, and shiny lobster. Any destruction of the mangroves, beaches, or water systems would have irreparable impacts on their existence.</p> <p>The increase in water temperature resulting from the plant's cooling system will disrupt the entire ecosystem. Within marine ecosystems, the aquatic life is adapted to specific ranges of water temperature. When the temperature changes, it affects rates of reproduction and interspecies interaction including the potential extinction of a species that another relies on for food.</p>
<p>Article 69(1)(g): The State shall eliminate processes and activities that are likely to endanger the environment</p>	<p>Coal Combustion is recognized as the most environmentally destructive method for generating electricity.</p>