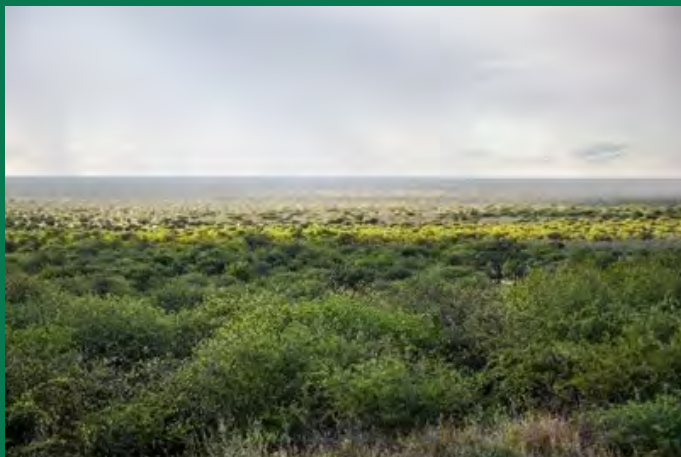




INTRODUCING THE NAMPOWER OTJIKOTO BIOMASS POWER STATION (OBPS)

BUSH ENCROACHMENT: BACKGROUND AND IMPACTS

Namibia's open grasslands are being overrun by thick, unwanted bush. This problem is known as bush encroachment. It affects over 45 million hectares of land and causes serious issues like reduced grazing capacity for animals, loss of biodiversity and reduced groundwater. Many farms are no longer profitable as a result of bush encroachment.



THE BENEFITS OF BUSH CONTROL

Controlling encroacher bush through thinning and harvesting creates a range of benefits:

- Increased carrying capacity of rangeland which will make farms more productive
- Enhanced eco-tourism as the wildlife viewing experience is improved
- Increased farm value, potentially leading to more business opportunities
- Increase in groundwater recharge
- Improved scenic beauty as a diverse landscape is more visually appealing
- Increased biodiversity
- Restored land can help preserve traditional farming practices and local heritage



A FORERUNNER IN GREEN ENERGY

Namibia's energy supply strategy includes electricity production from encroacher bush biomass resources. NamPower, the national electricity utility, is constructing the first 40 MW biomass-to-electricity plant, located 12 kilometres from Tsumeb.

Feeding electricity generated from biomass into the national grid will greatly reduce Namibia's reliance on electricity imports. It will ensure stable power supply as baseload power plants can be controlled. This will support the wind and solar generated electricity which is typically associated with the weather patterns.

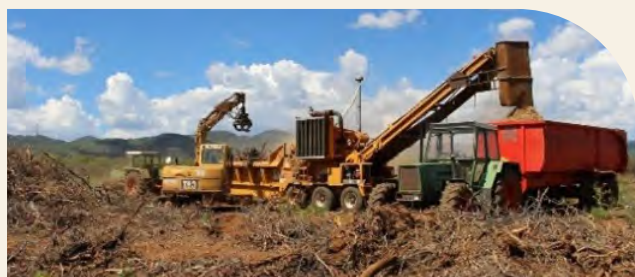
The Otjikoto Biomass Power Station (OBPS) will require approximately 250,000 tonnes of bush biomass annually in baseload operating, sourced within a 100-kilometre radius of the plant. Based on a conservative estimate of approximately 12.65 tonnes per hectare of sustainable harvestable biomass yield, around 20,000 hectares of bush encroached land can be rehabilitated per year. Over its 25-year projected lifespan, OBPS has the potential to contribute to the restoration of 600,000 hectares of bush encroached land.

KEY IMPACTS

OBPS champions a greener future for Namibia, combining renewable energy production with land restoration. This initiative represents a true win-win for landowners, farmers, local communities, biomass producers and transporters, SMEs, the energy sector (NamPower), government, and the broader Namibian economy, offering the following benefits and positive-impacts:

- Bush thinning contributes to the rehabilitation of degraded savannah ecosystems, enhancing biodiversity, water retention and ultimately land productivity.
- The local economy is stimulated, with job creation across multiple industries, particularly within the biomass harvesting sector, including positive spin-offs for agriculture and tourism.
- Namibia's energy self-sufficiency and security are strengthened, as the country diversifies its energy mix from imported carbon-intensive sources to locally sourced renewable biomass energy.
- A local biomass fuel supply chain is established in Namibia, creating a foundation for further development of bush biomass-based industries.

OUTLINE OF THE FUEL SUPPLY CHAIN



The NamPower Biomass Fuel Supply Chain is a structured system designed to ensure a continuous, sustainable and efficient supply of biomass to the OBPS.

- Biomass will be sourced by contracted harvesters and fuel suppliers from farms, then processed, chipped and transported to the power plant under the Forest Stewardship Council (FSC) mandates. At the plant, the biomass will be stored, managed and utilised.
- OBPS will only accept woodchips from Forest Stewardship Council (FSC) certified farms. Therefore, fuel suppliers must ensure that any farmland from which they intend to harvest is formally approved and certified under the NamPower FSC Group Scheme.
- NamPower will establish a dedicated Safety, Health, Environment and Wellness (SHEW) team, based at the plant, to monitor field compliance and produce environmental and social impact reports.
- Contracted harvesters must ensure that all harvesting activities and labour practices fully comply with relevant occupational health and safety regulations and Namibian laws.
- Landowners will be expected to sign agreements with long-term fuel suppliers. With support from the FSC Group Scheme Manager, Farm Management Plans will need to be developed. Farmers are expected to attend training on sustainable bush control, biomass production, restoring rangelands and environmental compliance as per EMP. Farmers can participate in the ad hoc programme directly.

HOW YOU AS A LANDOWNER CAN GET INVOLVED

For long-term fuel supply, NamPower will contract suppliers to carry out bush thinning operations as well as the first round of aftercare at no cost to landowners. Contracted fuel suppliers will cover all harvesting-related expenses, including equipment and operations. The farmer's responsibility will be to ensure long-term land management and restoration.

NamPower will also procure additional fuel resources in the form of wood logs from emerging fuel suppliers, such as SMEs, farmers, community forests and resettlement farms, through a tendering process currently under development.

Farmers and farm owners can benefit as follows from this development:

- Access to cost-free bush thinning services
- Free firebreak establishment services on farm
- Access to free first round of aftercare
- Access to free capacity building and rangeland expert: Rangeland Management advisory service
- Free FSC certification – Biomass quantification and access to premium markets for FSC-certified biomass products.
- Increased farm value due to increased productivity potential

Landowners/farmers interested in participating in this initiative can engage with contracted fuel suppliers through the Namibia Biomass Industry Group (N-BiG) by emailing info@n-big.org or calling +264 61 242 949.

This provides an opportunity to link farms with approved suppliers and be integrated into the fuel supply chain, supporting participation in Namibia's green energy value chain.

Financing Bank



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