Official Launch

NamPower Corporate Strategy & Business Plan 2019 - 2023

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24 July 2019

DISCUSSION POINTS

- Presentation Objectives
- Reflecting on 2014 – 2018 Corporate Strategy
- New Corporate Strategy & Business Plan 2019 – 2023
- Project Update
- Progress Made Thus Far
- Conclusion

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Objectives for today's engagement

- **Provide feedback / share with you, our stakeholders on the outcome of our Strategy development process**
- **Create awareness on NamPower strategic direction for the next five years**
- **Build and maintain positive relationships which will advance the implementation of our Strategy going forward.**

Reflecting on 2014 – 2018 Corporate Strategy & Business Plan

- NamPower follows a five-year strategic planning cycle.
- Thus the 2014 – 2018 Corporate Strategy and Business Plan ended on 30 June 2018.
- The Strategy served us well, as it motivated us to take responsive actions and make collective efforts in **“Ensuring Security of Supply”** through power supply and demand constraints, experienced locally and regionally.
- However, the Electricity Supply Industry is ever-evolving and we had to adjust our strategies to remain relevant, resulting in some shortfalls as well as achievements against set goals and objectives.

Reflecting on 2014 – 2018 Corporate Strategy & Business Plan cont…

Strengthened transmission network	• built **810km** of transmission lines resulting in 11,673km length of transmission network
Increased installed local generation capacity	• Local installed capacity in Namibia increased from 375.5MW to **606 MW**
Collaborated with private sector to deliver renewable capacity	• 117MW from IPPs connected • 129MW from IPPs committed
Ensured continuous supply during a volatile environment	• Ensured continuous supply and avoided load shedding during the supply constraints
Maintained a strong financial position and investment grade rating	• debt to equity ratio of 9:91. • maintained a local investment grade (Zaf) rating • debt service cover ratio above 4

New 5-year Corporate Strategy and Business Plan

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2019 – 2023 Corporate Strategy & Business Plan

- Last year we started the process of developing a new five-year Corporate Strategy and Business Plan (2019 – 2023) with assistance from Price Waterhouse Coopers (PwC).

- It was an extensive and consultative exercise which involved internal and external stakeholders.

- The Corporate Strategy and Business Plan (2019 – 2023) has been completed and will guide and provide strategic direction for the next five years.

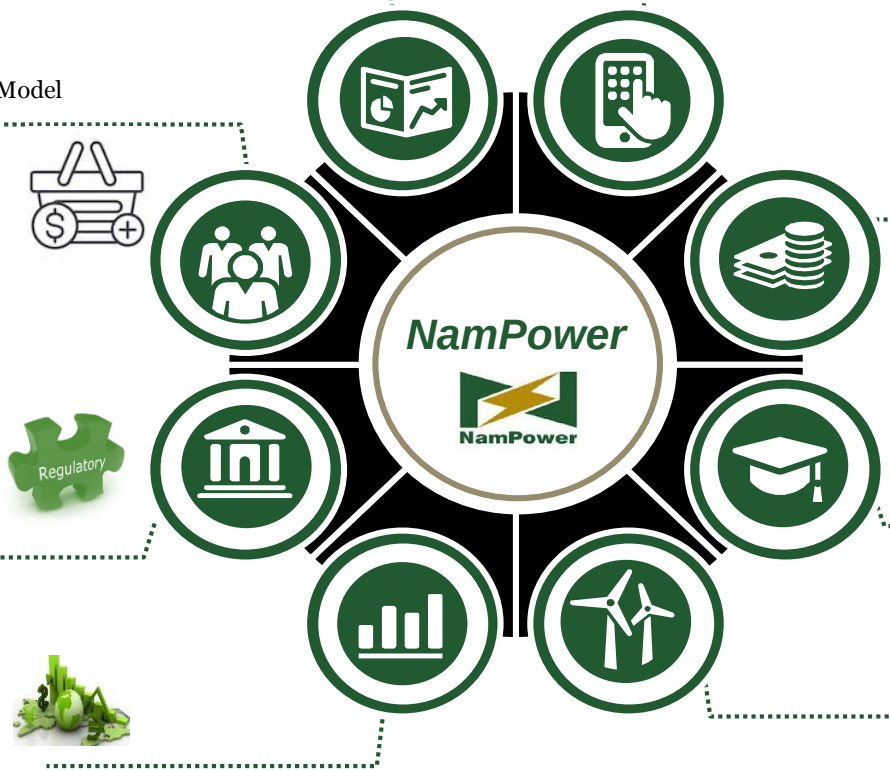
Strategic Issues considered in the development of our Strategy

Market
- Trends Global/Regional/Local
- IPPs
- Competitors
- Partners
- Regional trade
- Modified Single Buyer Market Model

Customer
- Customer behavior
- Customer segmentation
- Potential new customers
- Self generation
- "Prosumers"

Policy/Regulation
- National energy policy
- NIRP
- NDP 5 and HPP
- Public Procurement Act
- PPP Act
- Supplier of last resort [MSB]

Namibian Economy
- Expected GDP
- Public spending



Technology
- Solar PV
- Wind
- Energy Storage
- Smart grids
- Thermal
- Behind the meter solutions

Finance
- Financial position
- Tariff and Trading
- Investment Options
- Options

- ***Internal capabilities***
- Technical capabilities Management capabilities
- New capabilities
- Succession planning

Asset base
- Transmission network
- Hydro-power
- Coal
- HFO diesel

Challenges and opportunities

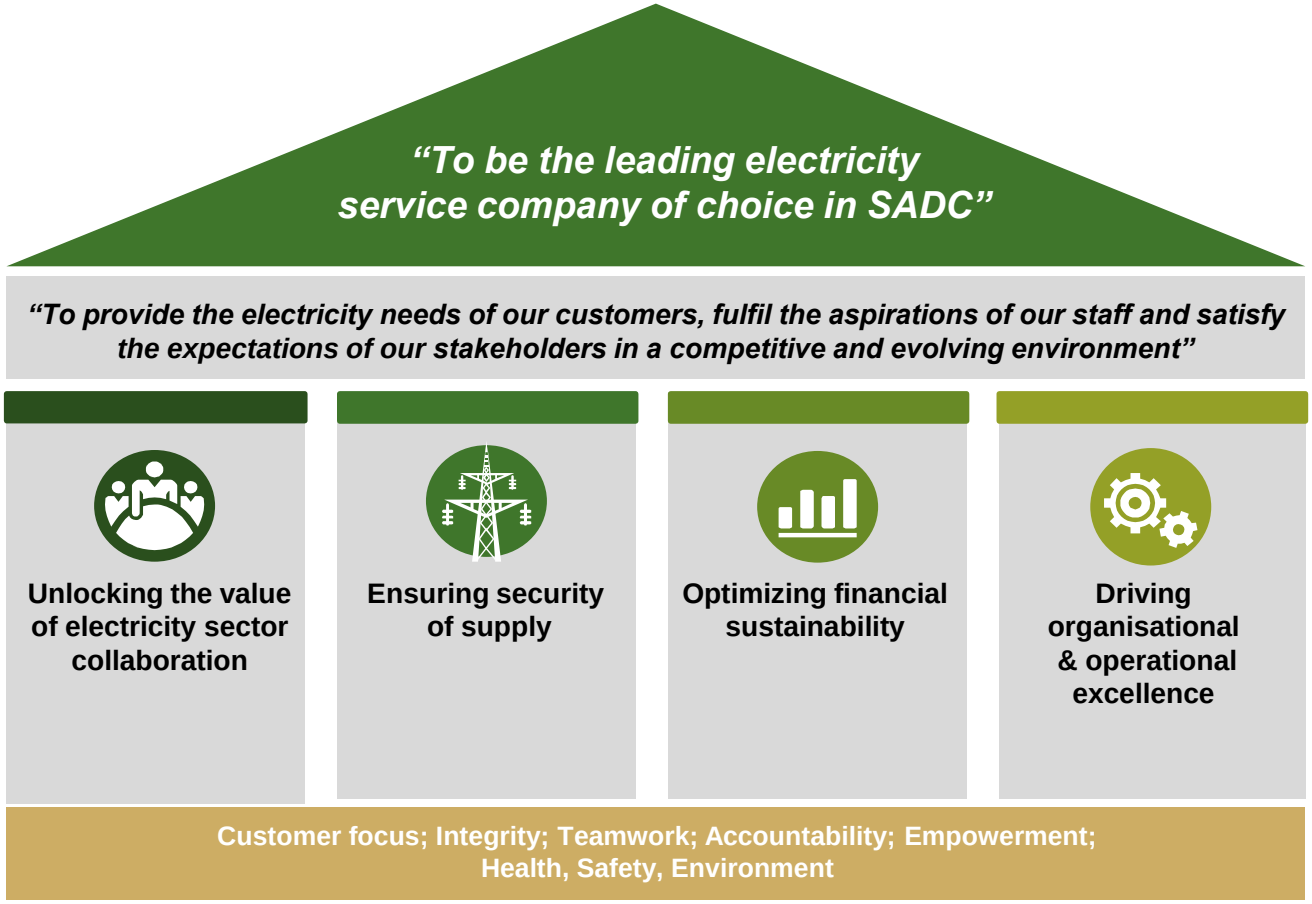
Challenges

- Intermittency of renewables
- Limited availability of government funding
- Large dependency on power imports
- Alignment of supply mix to changing demand profile
- Challenges in the full execution of the Public Procurement Act
- Timely alignment of processes and functions towards the role of the modified single buyer model

Opportunities

- Advancement of renewable energy technology and digital solutions
- Advancements of regional power markets
- Energy storage
- Diversified supply mix
- Distributed generation solutions to reduce losses in the overall system
- New sources of funding for generation projects
- Partnerships to implement new products and services

NamPower Strategic Direction / Map



Pillar 1: Unlocking the value of electricity sector collaboration

Support the development of the electricity industry and the economy

Collaborate with stakeholders on the developments in the electricity market to foster a conducive environment for economic growth

Support the acceleration of electrification

Engage with communities, suppliers and the private sector to design solutions for accelerated electrification across Namibia

Deliver project portfolio

Engage with investors, lenders, project developers and government to drive the timely delivery of our project portfolio

Develop new products and services

Identify and engage with existing and potential customers to understand their needs and requirements for new products and services

Pillar 2: Ensuring security of supply

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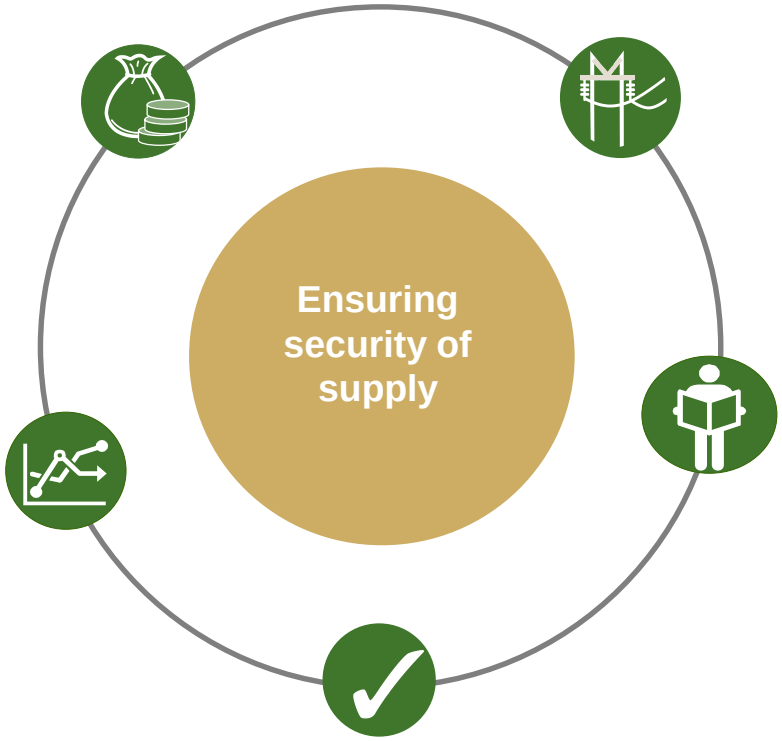
Deliver a least cost electricity supply mix

Invest in a project mix and technologies that result in the least cost electricity to customers

Strengthen Namibia's transmission network

Improve network reliability through development of key projects to cater for future generation capacity and market demand



Leverage regional market opportunities

Leverage trading opportunities to complement and optimise local supply mix

Prepare business units for a change in the local market model

Prepare business units for the changing market model to expand capabilities and drive market alignment

Support government in the development of strategic projects

Increase local generation capacity through the implementation of strategic projects

Pillar 3: Optimizing financial sustainability

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Implement an investment framework to align to market requirements

Consistently implement an investment framework to guide the investment and financing of our project portfolio

Form financial and technological partnerships

Identify and collaborate with technical and financial partners to leverage capabilities and drive competitiveness

Support the development of a sustainable electricity market

Support the development of an electricity market and tariff design to maintain electricity market sustainability

Leverage new sources of funding

Pursue alternative sources of funding for the delivery of our project portfolio

Pillar 4: Driving organizational & operational excellence

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Build an ethical, engaging and high performance culture

Align strategy implementation with change in behaviours to transform the corporate culture

Achieve and retain top employer status

Recruit and retain top talent to prepare a leadership pipeline and rank NamPower as a top employer in Namibia

Develop additional capabilities to meet the new market requirements

Secure the new skills and capabilities required in the new market environment

Establish a business development and innovation function

Drive business innovation for new products and services; and operational excellence

NamPower Strategy Map
2019 - 2023

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ENSURING SECURITY OF SUPPLY

Vision

"To be the leading electricity service company of choice in SADC"

Mission

"To provide the electricity needs of our customers, fulfil the aspirations of our staff and satisfy the expectations of our stakeholders in a competitive and evolving environment"

Strategic pillars & goals

Ensuring security of supply

- Deliver a least cost electricity supply mix
- Strengthen Namibia's transmission network
- Prepare business units for a change in the local market model
- Leverage regional market opportunities in SAPP
- Support government in the development of strategic projects

Unlocking the value of electricity sector collaboration

- Support the development of the electricity industry and the economy
- Support the acceleration of electrification
- Develop new products and services

Optimising financial sustainability

- Implement an investment framework to align to market requirements
- Leverage new sources of funding
- Form financial and technological partnerships
- Support the development of a sustainable electricity market

Driving organisational & operational excellence

- Drive innovation and new business opportunites
- Achieve and retain top employer status
- Develop additional capabilities to meet the new market requirements
- Build an ethical, engaging and high performance culture

Values

Customer focus; Integrity; Teamwork; Accountability; Empowerment; Health, Safety, Environment

NamPower's strategy is in alignment with national policies

ENERGY POLICY
- Development of generation and transmission through NIRP.
- Prioritise generation projects from renewable, non-polluting indigenous, diverse and decentralised resources in manner which optimises long-term cost of electricity supply;
- Ensure procurement of sufficient and affordable base-load power

RE POLICY
- Namibia should aim to become energy secure and also aim to become a net-exporter by 2030 by leveraging renewable resources;
- 70% or more electricity installed capacity in Namibia should be from renewable sources by 2030.

NDP
- Increase local generation capacity to 755MW by 2021/22
- Increase national electrification rate to 50% by 2021/22

NIRP
- Guaranteed access to power markets for electricity imports
- Plan A and Plan B

HPP
- Locally generated electricity capacity will increase from 400MW in 2015 to 600MW by 2020
- All schools and health facilities will have access to electricity by 2020
- Rural electrification will increase from 34 percent in 2015 to 50 percent by 2020

Strategy

Projects Update

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Strategic Transmission Projects

400kV lines

- **400kV Auas–Gerus:**
  - Provide security of supply to northern / north-eastern areas
  - Provide capacity for wheeling path via HVDC interconnector to Zambia up to 300MW
  - Reduce network losses on loaded 220kV system and bypass 400/220kV transformer bottleneck at Auas Substation.
- **400kV Auas–Kokerboom 2:**
  - Provide security of supply, network stability and sufficient capacity especially during peak times with Ruacana low Kunene river flow scenarios
  - Allow maintenance and refurbishment opportunities on existing line and associated equipment
- **400kV Obib–Oranjemond (Eskom)**
  - Provide security of supply and network stability as a 2nd main interconnector to the Eskom network as the main source of network strength / stability
  - Reduce reliance upon the Eskom Aries substation
  - Provide network capacity for wheeling of energy

Generation Projects

- Omburu PV Power Project
- Otjikoto Biomass Power Project
- Lüderitz Wind Power Project
- Firm Power (Anixas II) Project

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Omburu PV Power Project

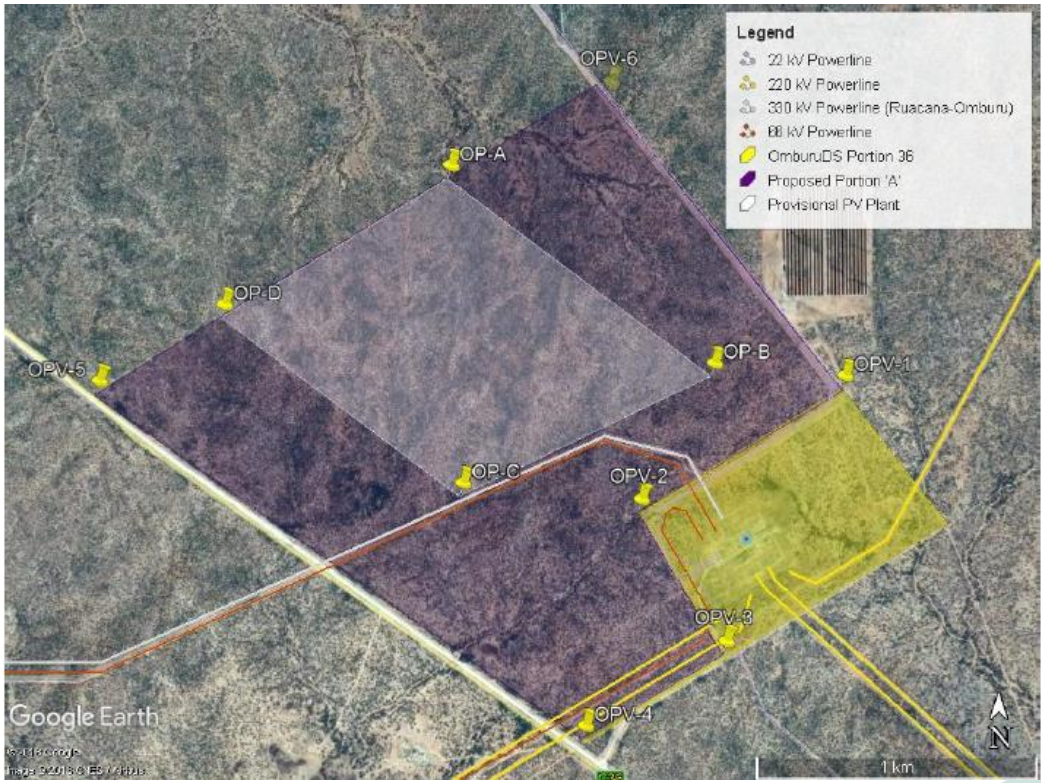
Project Description

Technical:

- Size: 20 MW (export capacity)
- Availability: 99%
- Lifetime: 25 years
- Storage ready

General:

- COD: 2020
- Estimated Cost: NAD 500 Million
- Nearest Town: Omaruru (± 12km)



Status / progress:

- Land obtained, transfer to commence after approval from Surveyor General
- EIA / Amended ECC obtained
- Geotechnical studies almost completed
- Technical Advisor / Owner's Engineer appointed
- Procurement of EPC contractor underway with CPB

Otjikoto Biomass Power Project

Project Description

Technical:

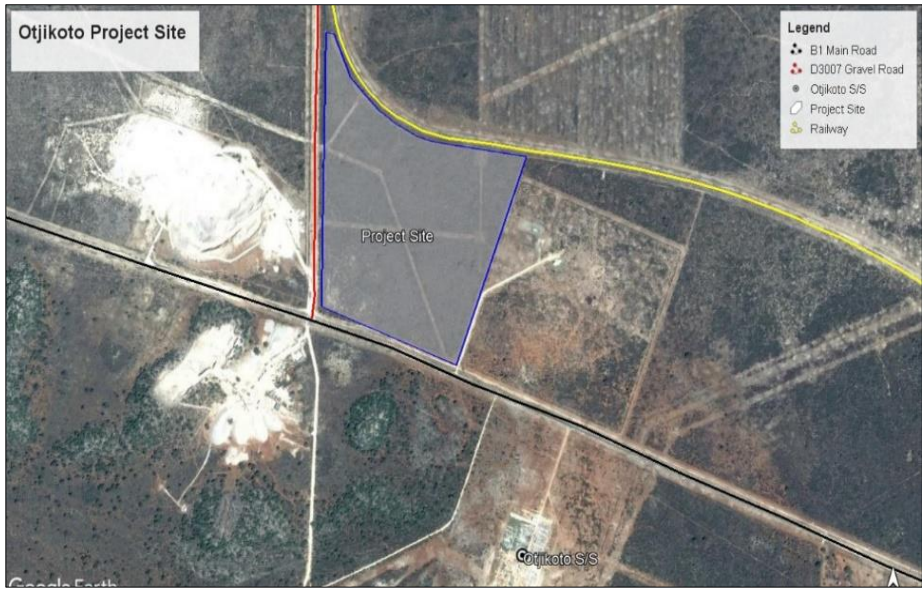
- Size: 40 MWe or 2 x 20 MWe
- Site area: ±44 ha
- Grate fired boiler technology
- Fuel: Encroacher Bush Biomass Wood Chips
- Availability: 85~92%
- Capacity factor (CF): 60~70%
- Lifetime: 25 years

General:

- COD: 2022
- Estimated Cost: NAD 1.9 Billion

Status / progress:

- Land obtained and transfer in progress
- EIA studies completed, to be submitted to MET, IFC audit being finalized



- Geo-technical studies 75% completed
- Technical advisor appointed and EPC technical specifications underway
- Prequalification of EPC contractors underway with CPB
- Procurement of Owner's Engineer ongoing with CPB
- Fuel supply agreement developed, for Board approval

Lüderitz Wind Power Project

Project Description

Technical:

- Size: 40 MW (export capacity)
- Availability: ±95%
- Capacity factor >50%
- Lifetime: 25 years

General:

- COD: 2022
- Estimated Cost: NAD 1.1 Billion
- Nearest Town: Lüderitz (± 20km)

Progress:

- Awaiting approvals for land
- EIA and bird monitoring services procured
- Namibia Civil Aviation Authority Clearance awaited
- Wind mast services procured, awaiting approval for site access
- Micro-siting services procured, awaiting approval for site access
- Procurement of Technical Advisor / Owner's Engineer currently underway

Firm Power (Anixas II) Project

Project Description

Technical:

- Size: 50 MWe
- Technology options:
  - ICRE: 4x 12.5 or
    3x 17.8MWe (HFO/LFO)
  - Aero-GT: 1x 50MWe (LFO)
- Fuel: Liquid fuel (LFO/HFO)
- Lifetime: 25 years
- Availability: >92%
- Capacity factor: <10%
- CNG/LNG future retrofit option

General:

- COD: 2021
- Estimated Cost: N$1.2 billion

Progress:

- NamPower owns land
- Procurement of EIA consultant underway
- Procurement of Technical Advisor / Owner's Engineer currently underway
- Procurement of Automated Weather Station (AWS) underway

20 MW Solar PV IPP Projects

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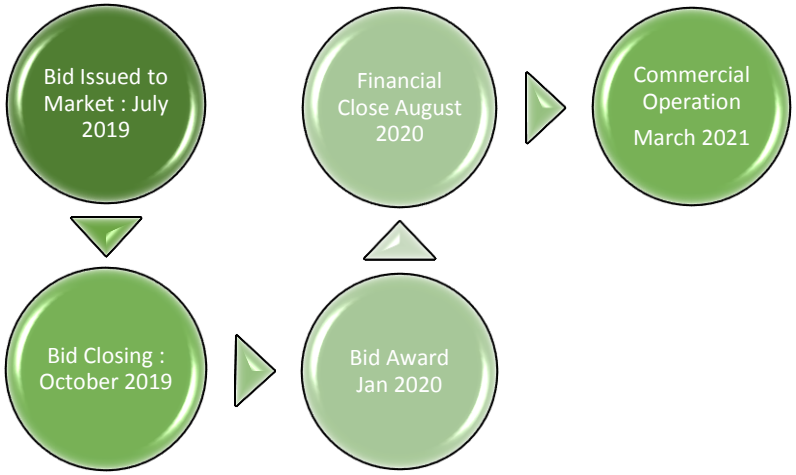
NamPower to procure Independent Power Produces to develop 20 MW Solar PV Plants

Project Overview:

- Size: 20 MW (export capacity)
- Availability: ±99%
- Lifecycle : 25 years
- Technology : Single-axis tracking, crystalline silicon/thin-film modules
- Target COD : March 2021
- Investment: N$ +/- 400 million
- Location : Near to Gobabis & Rehoboth Town

Timelines



Progress

- Bidding Documents Complete
- Land procurement tentatively agreed for one site
- Power Purchase Agreement and Transmission Connection Agreement updated
- Bid to be issued to the

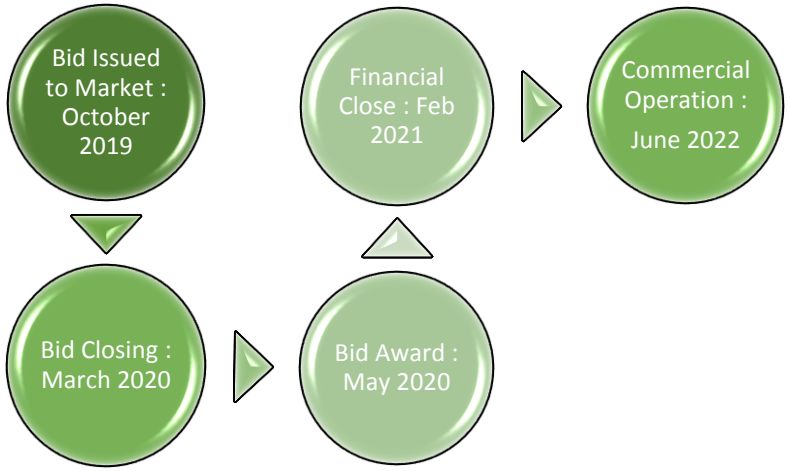
50 MW Wind IPP Projects

NamPower to procure Independent Power Produces to develop 50 MW Wind Plants

Project Overview

- Size: 50 MW (export capacity)
- Availability: ±95%
- Lifecycle: 25 year
- Target COD: June 2022
- Investment : N$ 1242 million
- Location : ± 20km from Lüderitz Town

Timelines



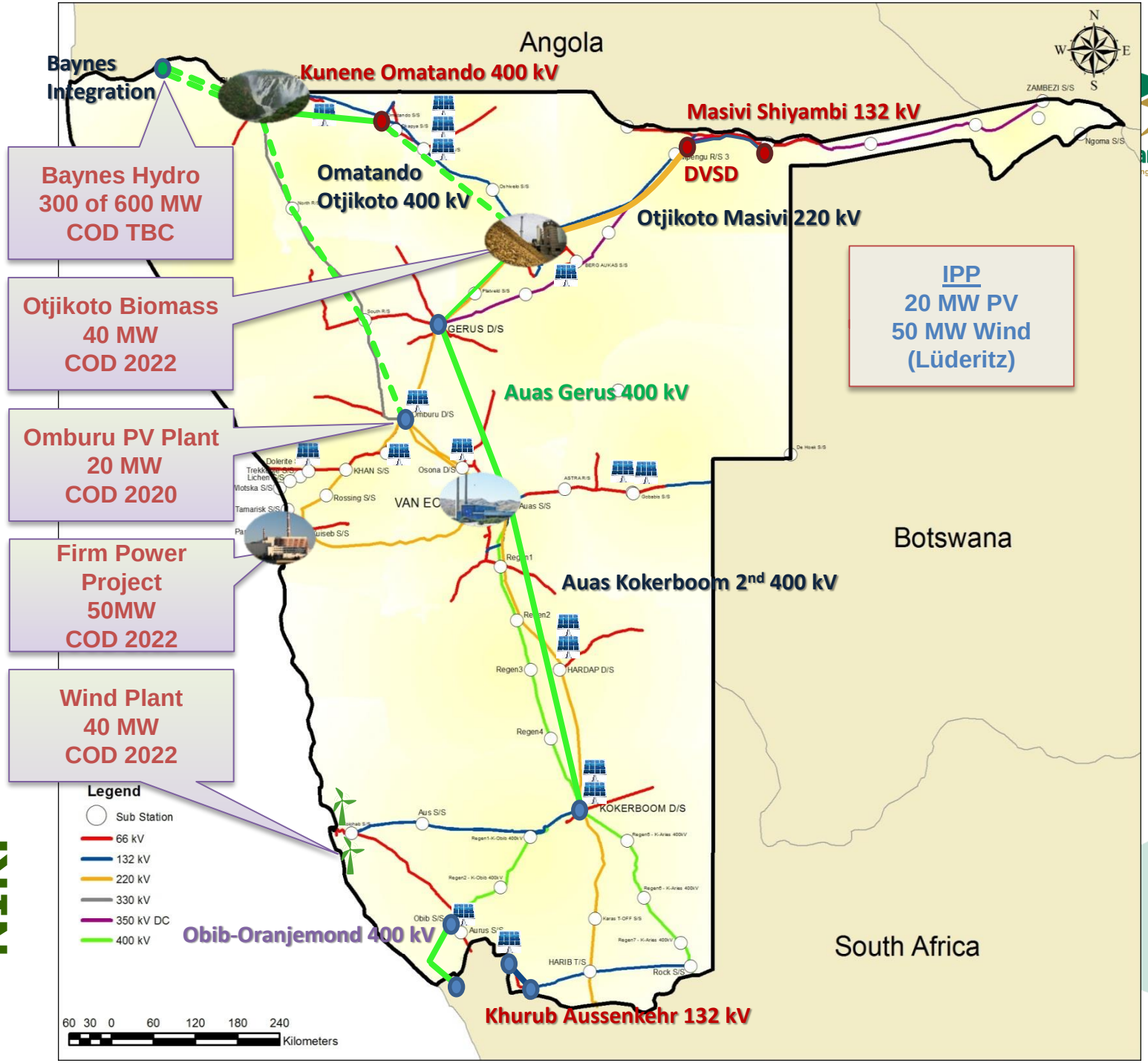
Progress

- Preliminaries Transmission studies completed to ascertain the adequacy of existing infrastructure to evacuate power for all planned projects
- Identify suitable site for Wind IPP projects, Site 1 +/- 22 KM from Lüderitz.

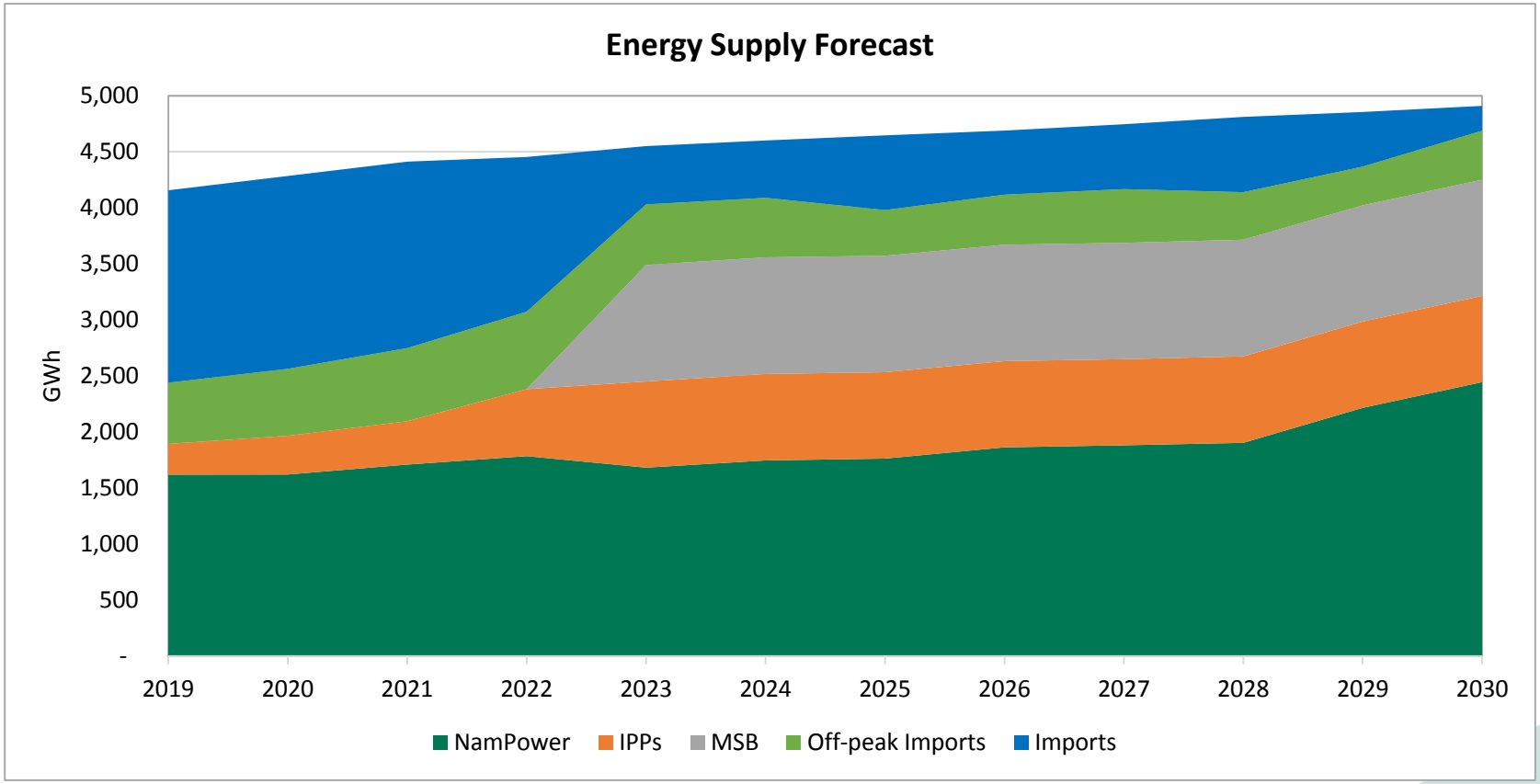
Next Steps:

- Detailed Tx studies to determine best option to increase evacuation capacity;
- Install Wind Mast at identified Sites and commence with Wind Measurement ;
- Finalise Land Lease Agreement with MET ;

Project Portfolio Mix Aligned with NIRP



Energy Supply Portfolio

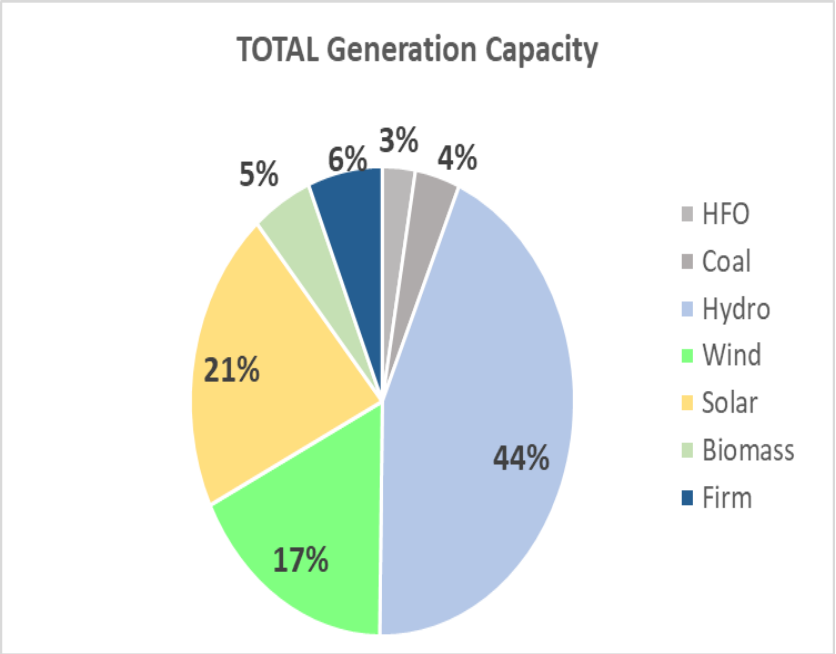


The supply forecast includes:

- NamPower new projects (150MW)
- IPP new projects (70MW)
- Modified Single Buyer (30% on energy)

Overview of the Generation Capacity (5 years)

	Existing MW	Development MW	TOTAL MW	% Contrb Capacity
NamPower	**399**	**150**	**549**	**69%**
Hydro	347		347	44%
Coal	30		30	4%
HFO	22		22	3%
Wind		40	40	5%
Solar		20	20	3%
Biomass		40	40	5%
Firm (HFO)		50	50	6%
IPPs	**122**	**124**	**246**	**31%**
Solar	117	30	147	18%
Wind	5	94	99	12%
	521	**274**	**795**	



KEY HIGHLIGHTS ON THE PROGRESS MADE THUS FAR

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Highlights of past six months

Tariffs

- NamPower requested for a tariff decrease of 3.1%. The Electricity Control Board (ECB) allowed a decrease of 2.5%, a relief to our customers. This is the first decrease in 36 years, the last tariff decrease was in 1983.

Tax

- NamPower contributed to state revenue during the period under review: paid N$250 million in respect of provisional tax for the 2019 financial year.

Debtors days

- We are experiencing serious challenges with rising Debtors' Days,
- I therefore urge those who receive our services to pay for it timeously.

Highlights of past six months con…

Strategy Implementation

- Although we are officially launching the new Corporate Strategy and Business Plan 2019 – 2023 today only, it has already been approved and its implementation is effective from 1 July 2019.
- To remain relevant, NamPower Corporate Strategy and Business Plan will be reviewed periodically and will be monitored and evaluated twice a year using our Plan-Do-Review tool.

Conclusion

- The successful implementation of a strategy requires collective effort and support from all strategic partners and stakeholders
- Let us collaborate, as partners in “Ensuring Security of Supply”.
- I am therefore calling on all our valued stakeholders to support NamPower in your respective roles

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I thank you!