

Namibia Country Window:

Energy System Transformation Outlook (ESTO)



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Abbreviations

Term	Meaning
ANNA	Angola – Namibia
BESS	Battery Energy Storage System
DBN	Development Bank of Namibia
ECB	Electricity Control Board of Namibia
EELA	Energy Efficient Lighting and Appliances (EELA) project
EIB	European Investment Bank
ESI	Electricity Supply Industry
HVDC	High Voltage Direct Current
MSB	Modified Single-Buyer
MW	Mega Watt
NamPower	Namibia Power Corporation Pty Ltd
NDP	National Development Plan
NIRP	National Integrated Resource Plan

Term	Meaning
NUST	Namibia University of Science and Technology
PPA	Power Purchase Agreement
PUE	Productive use of energy
PV	Photo-voltaic
RE	Renewable Energy
REFIT	Renewable Energy feed-in tariff
SACREEE	SADC Centre for Renewable Energy and Energy Efficiency
SAEP	Southern Africa Energy Program
SANA	South Africa - Namibia
SAPP	Southern Africa Power Pool
SOLTRAIN	Southern African Solar Thermal Training and Demonstration Initiative
UNDP	United Nations Development Programme

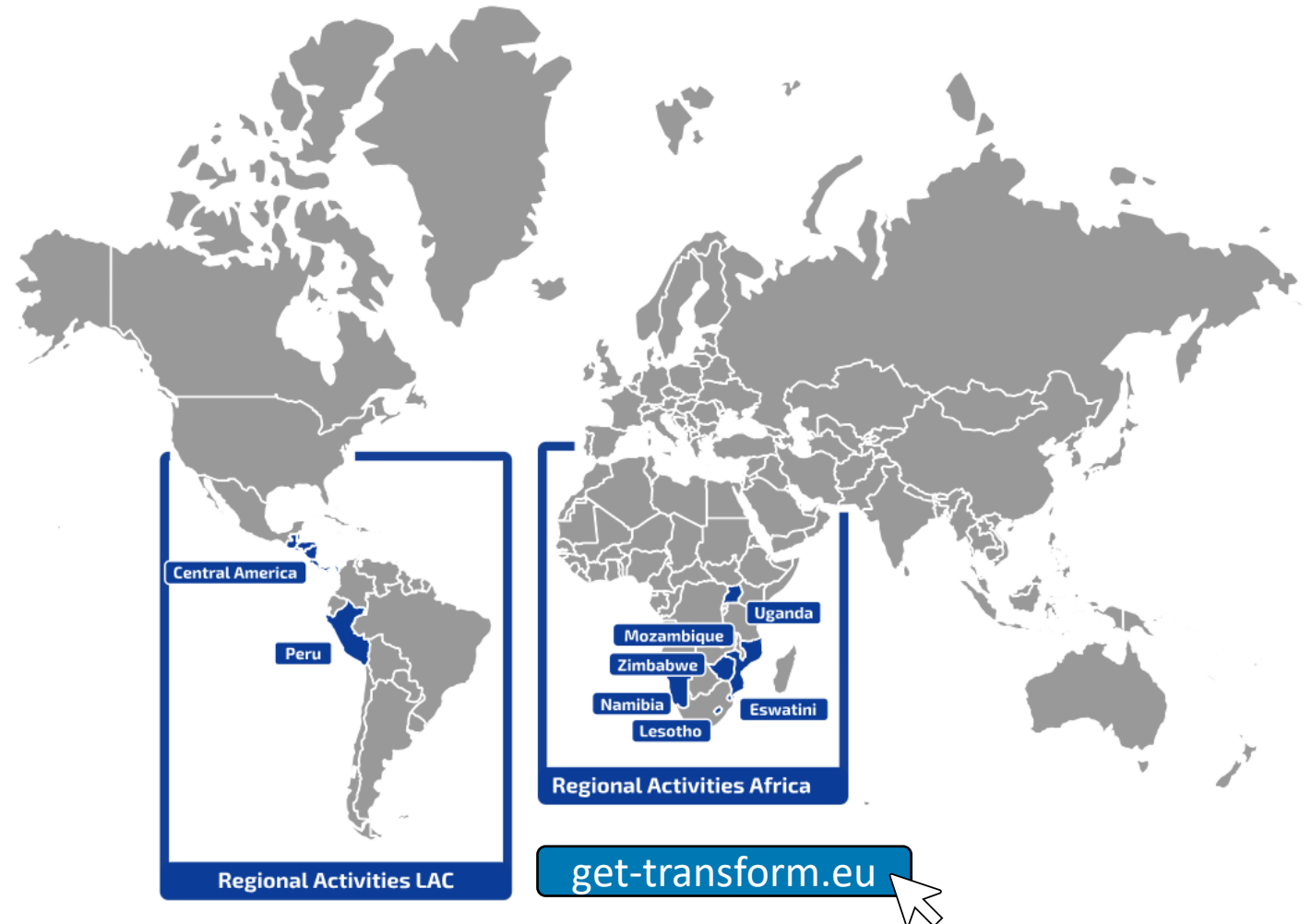
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ABOUT GET.transform

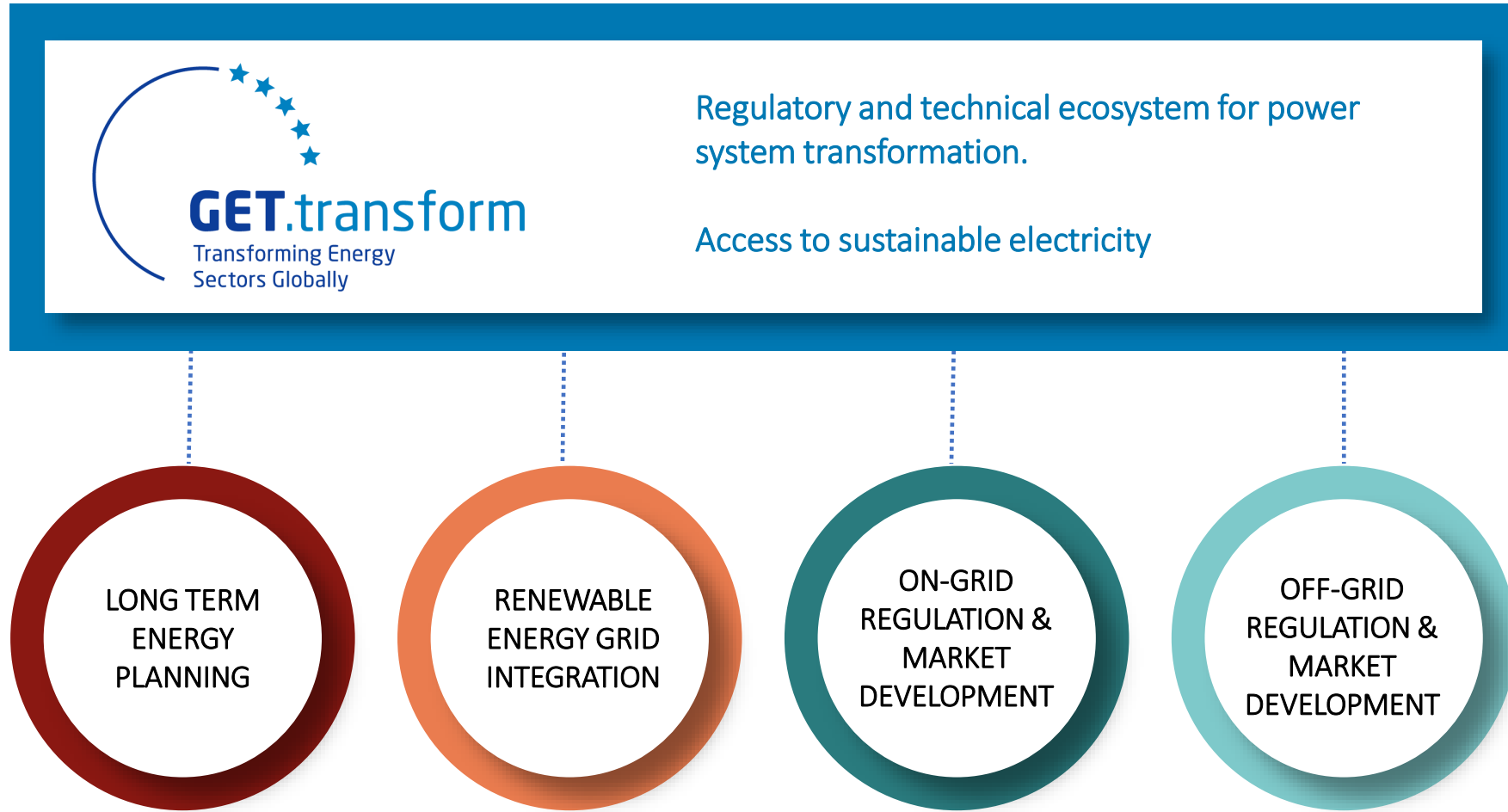


What is GET.transform?

- Technical assistance (TA) and capacity building for the **public sector** to establish conducive policy and investment frameworks for the transition of the energy sector
- Hub of expertise with > 50 renowned (inter)national energy experts
- Implementation through **regional** and **country windows** with expert staff on the ground incl. secondments
- **Scaling across countries** through collaboration with regional institutions and other TA initiatives



GET.transform Workstreams



GET.transform Workstreams



LONG TERM ENERGY PLANNING

Developing **integrated energy and power system investment plans**, outlining development paths for energy sector transformation



RENEWABLE ENERGY GRID INTEGRATION

Updating of **technical power system planning and operational procedures** that enable the operation of renewable energy dominated power systems



ON-GRID REGULATION & MARKET DEVELOPMENT

Supporting **institutional reforms** that allow for new market actors and renewable energy participation: market model design, non-discriminatory grid access, cost-reflective services
Design and management of **solicited auctions** as well as **market-driven mechanisms** for procuring on-grid energy



OFF-GRID REGULATION & MARKET DEVELOPMENT

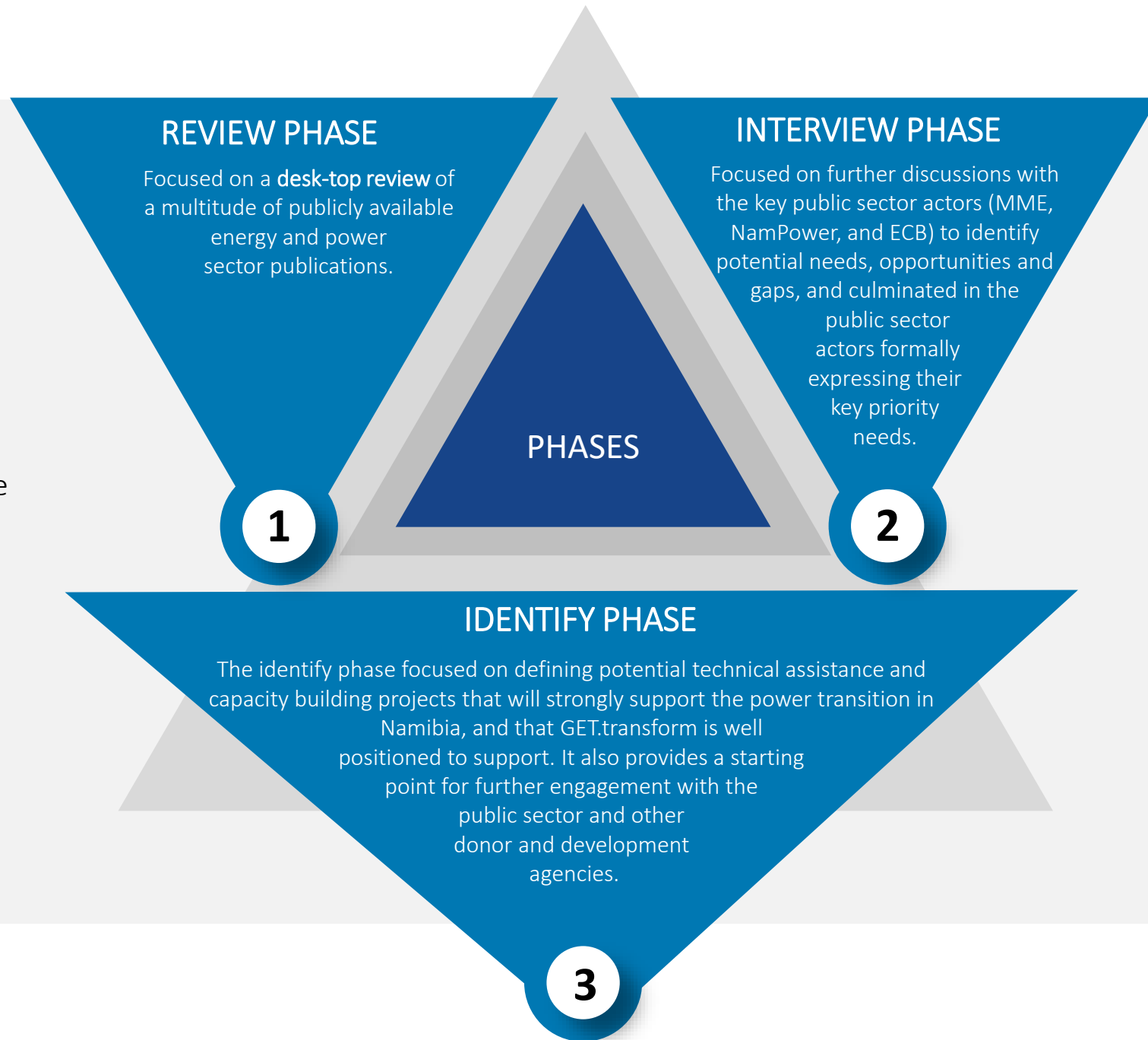
Supporting **off-grid electrification planning** and data management frameworks
Developing mini-grid **regulatory frameworks** and technical standards and designing award mechanisms for **procuring off-grid energy**

2

NAMIBIA ESTO

Foreword

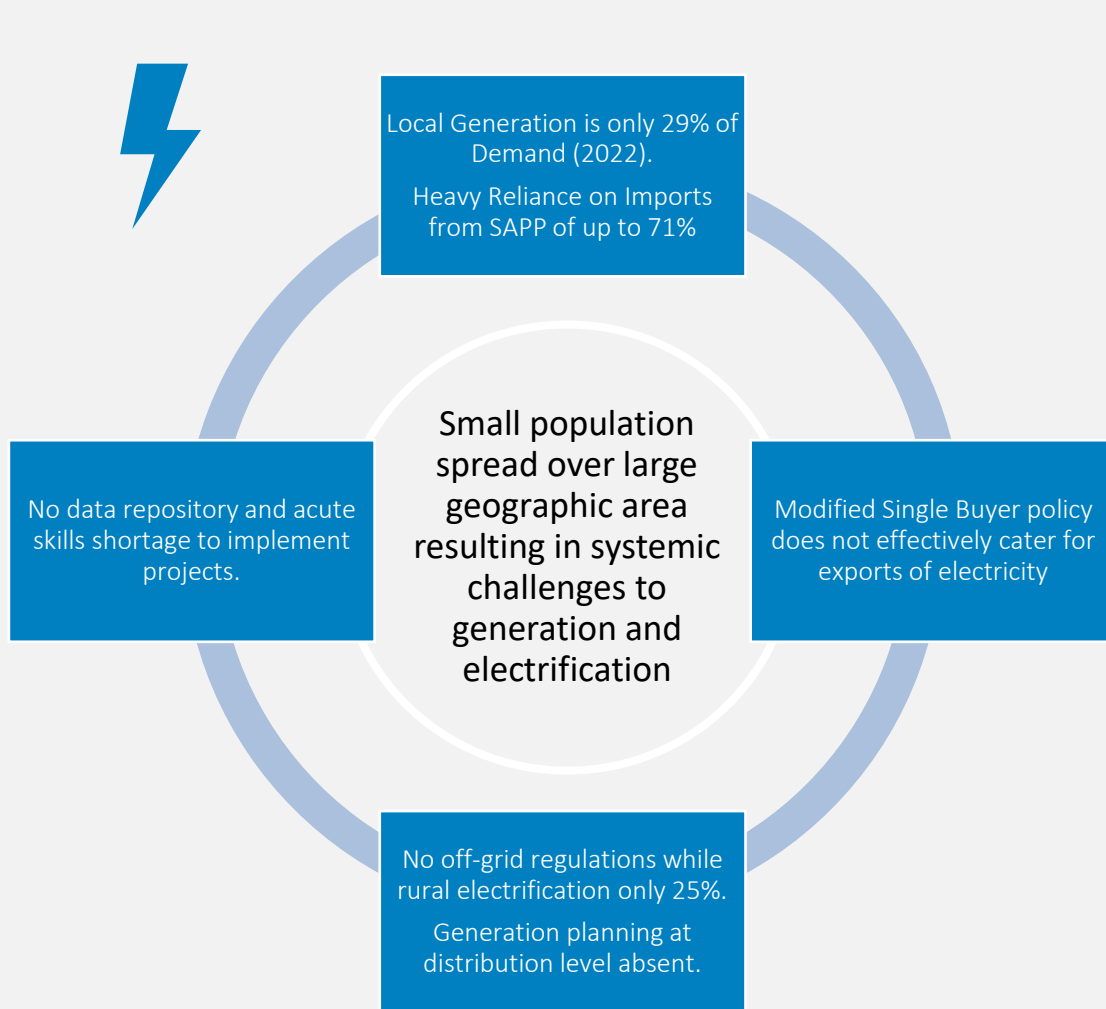
The purpose of the Energy System Transformation Outlook (ESTO) is to document a **high-level summary of the electricity landscape** in Namibia and to present the outcome of a high-level overview and assessment that followed a 'review, interview, identify' approach.



The ESTO is not a formula of what should be done by the country or the public sector actors.

The ESTO is a means of obtaining feedback to enrich our understanding of the power sector in Namibia and to identify support activities and synergies with other donor and development agencies.

Challenges and Opportunities



The country has ambitions to increase local generation from 29% to 80% by 2028

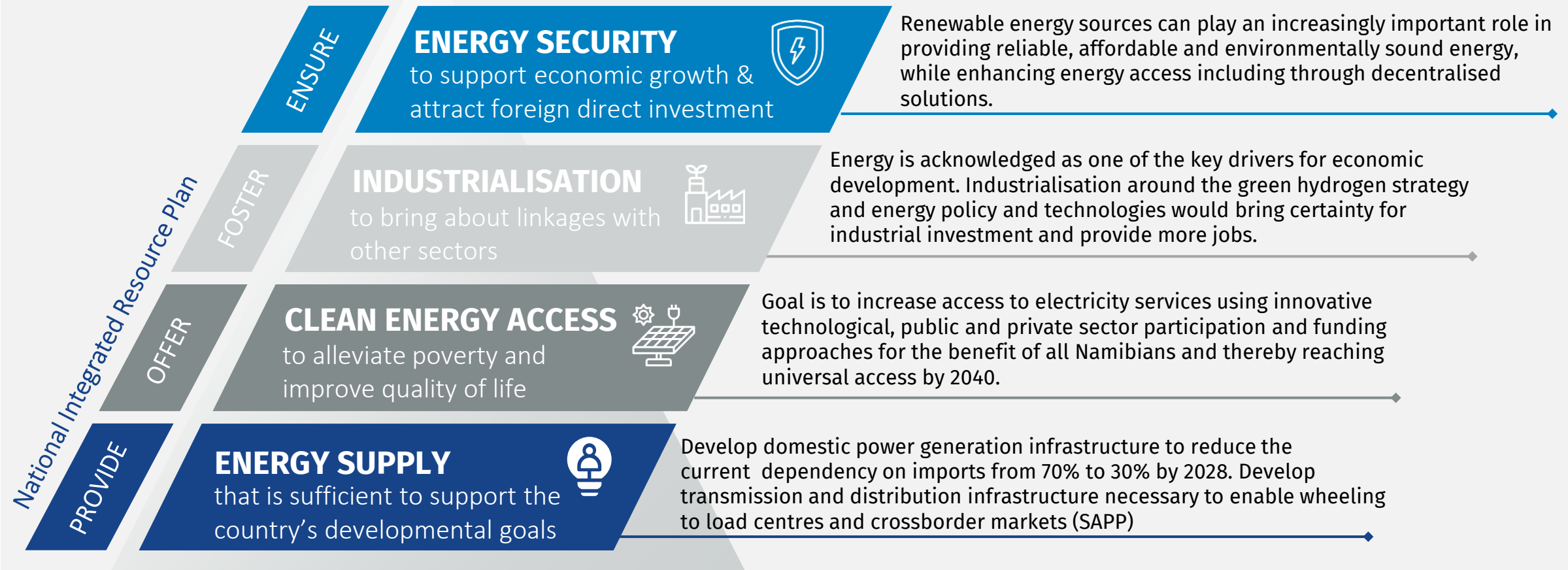
- Receptive government and clear ambitions.
- The electricity industry is cost reflective
- A Common understanding of the need for interagency coordination.
- MSB legislation is in place which provides a framework for IPP entry

The off-grid sector can benefit from the large RE resources of solar and wind

- Solar well accepted in society as an energy source making roll-out possible.
- Off-grid regulation and implementation also a priority for Government
- RE developers already present and active in Namibia

Namibia's Energy Vision

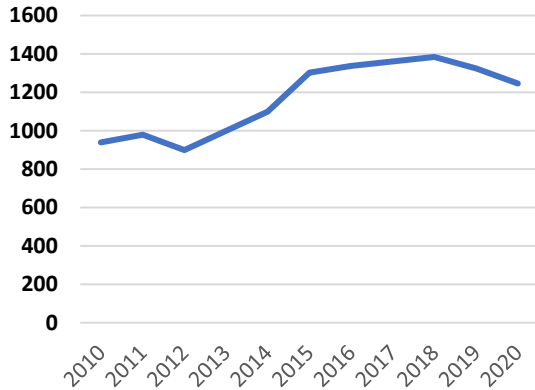
To become a regional leader in the development and deployment of Renewable Energy within the Southern African Development Community (SADC) Renewable Energy policy 2017



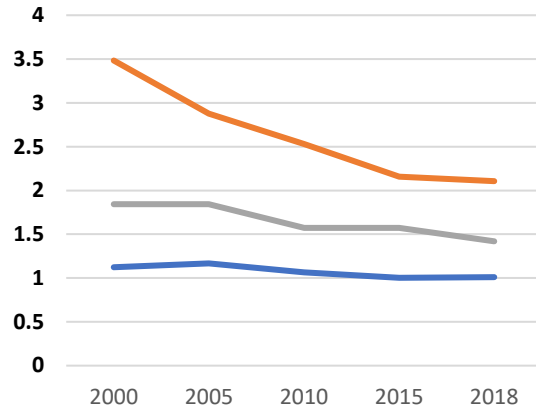
Energy Snapshot

— World — Sub-Saharan — Namibia

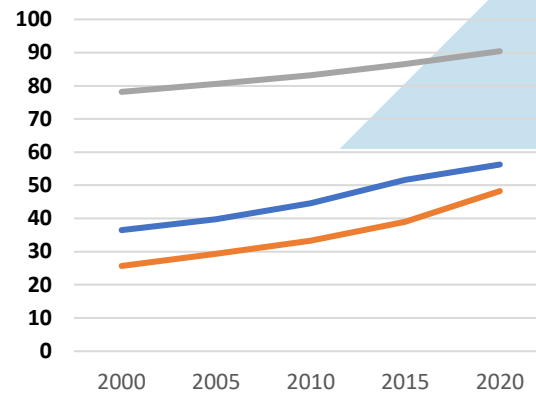
Per capita electricity consumption (kWh/person)



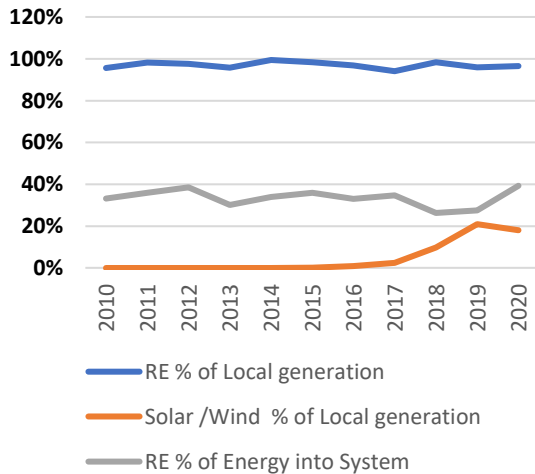
Energy intensity (kWh per 2011 \$, PPP)



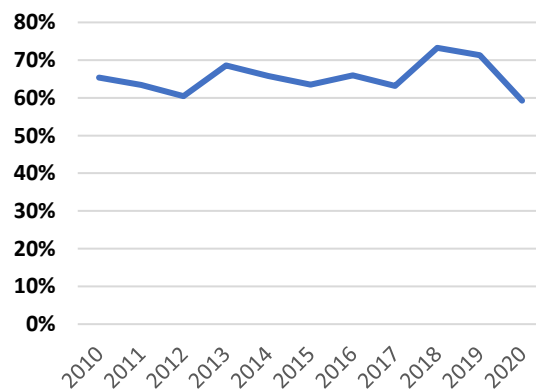
Access to electricity (%)



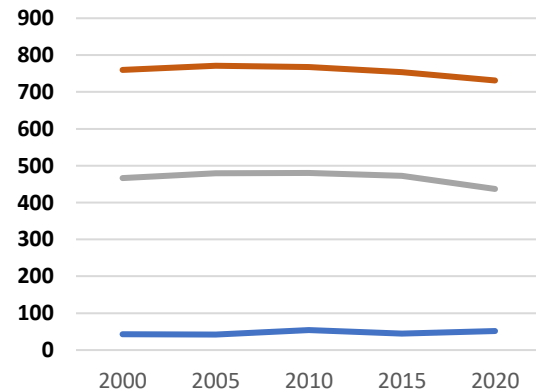
Renewable share of electricity (%)



Net electricity imports (%)



Electricity carbon intensity (grams of CO2eq. per kWh)



Key Figures

Economy

Population: 2.5 million

GDP per capita (2020 US\$): 4,920.00
NIPDB fact sheet (March 2023)

GDP (2020): US\$ 12.3 billion

GDP growth (2022): 4.2% (Projected)

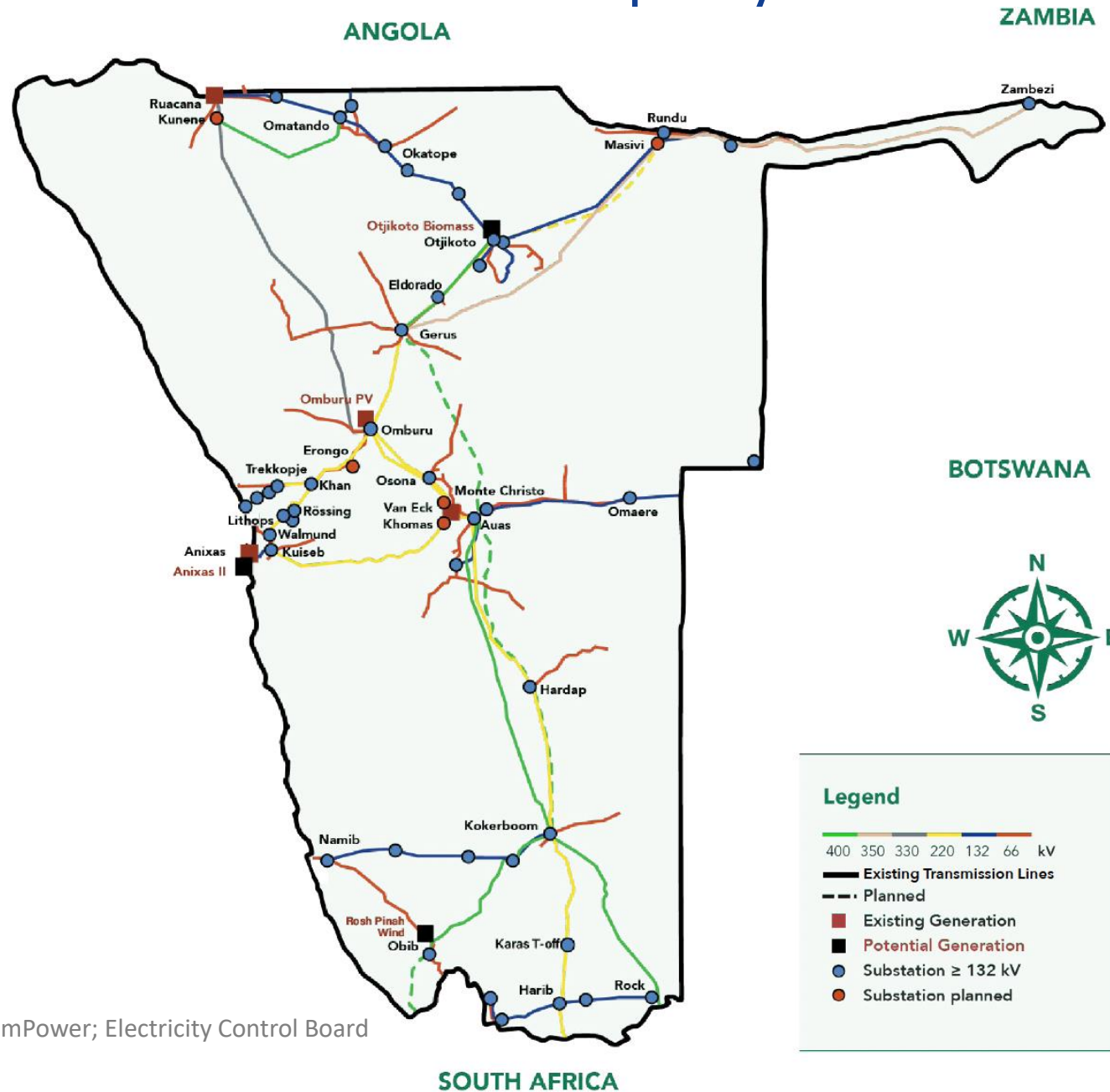
PPP Investments (Energy):
US\$ 70 million
World Bank (2018)

Energy

Per capita electricity consumption:
1,246 kWh/person
Electricity Control Board 2020

Access to electricity:
National: 56%
Urban: 72%
Rural: 35%
NIPDB fact sheet (March 2023)

Generation Mix & Installed Capacity



Key Statistics for Namibia (2021/22)

Installed capacity: 638 MW
 Energy consumption: 3 983 GWh
 Local generation: 1 155.07 GWh
 Imported energy: 2 827.93 GWh

Capacity of Interconnectors

Zambezi: 350 kV HVDC; operated at 300 MW (upgradable to 600 MW capacity)
ANNA: 400 kV planned, 600 MW capacity
SANA: 400 kV, 600 MW capacity

Carbon Intensity

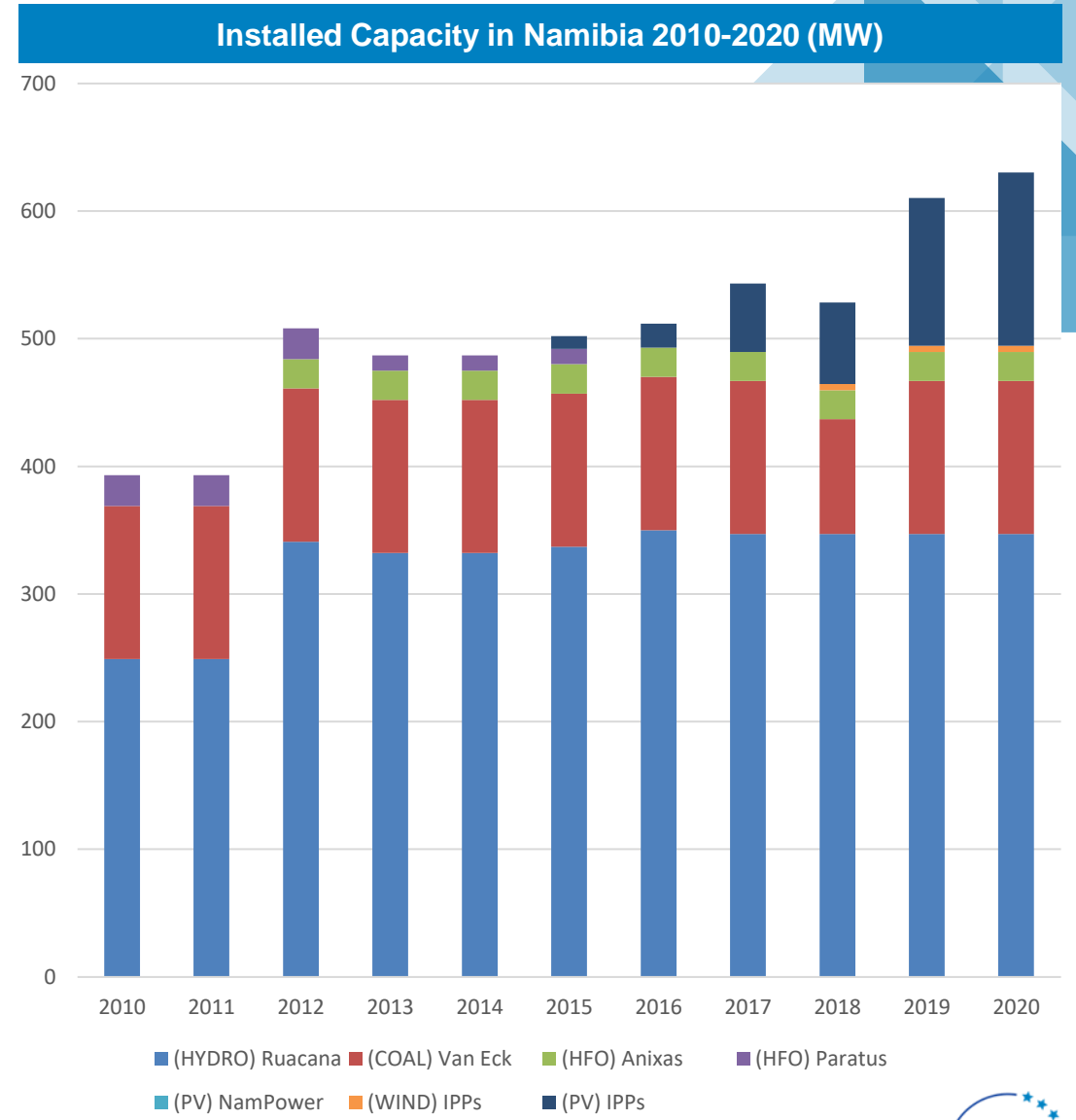
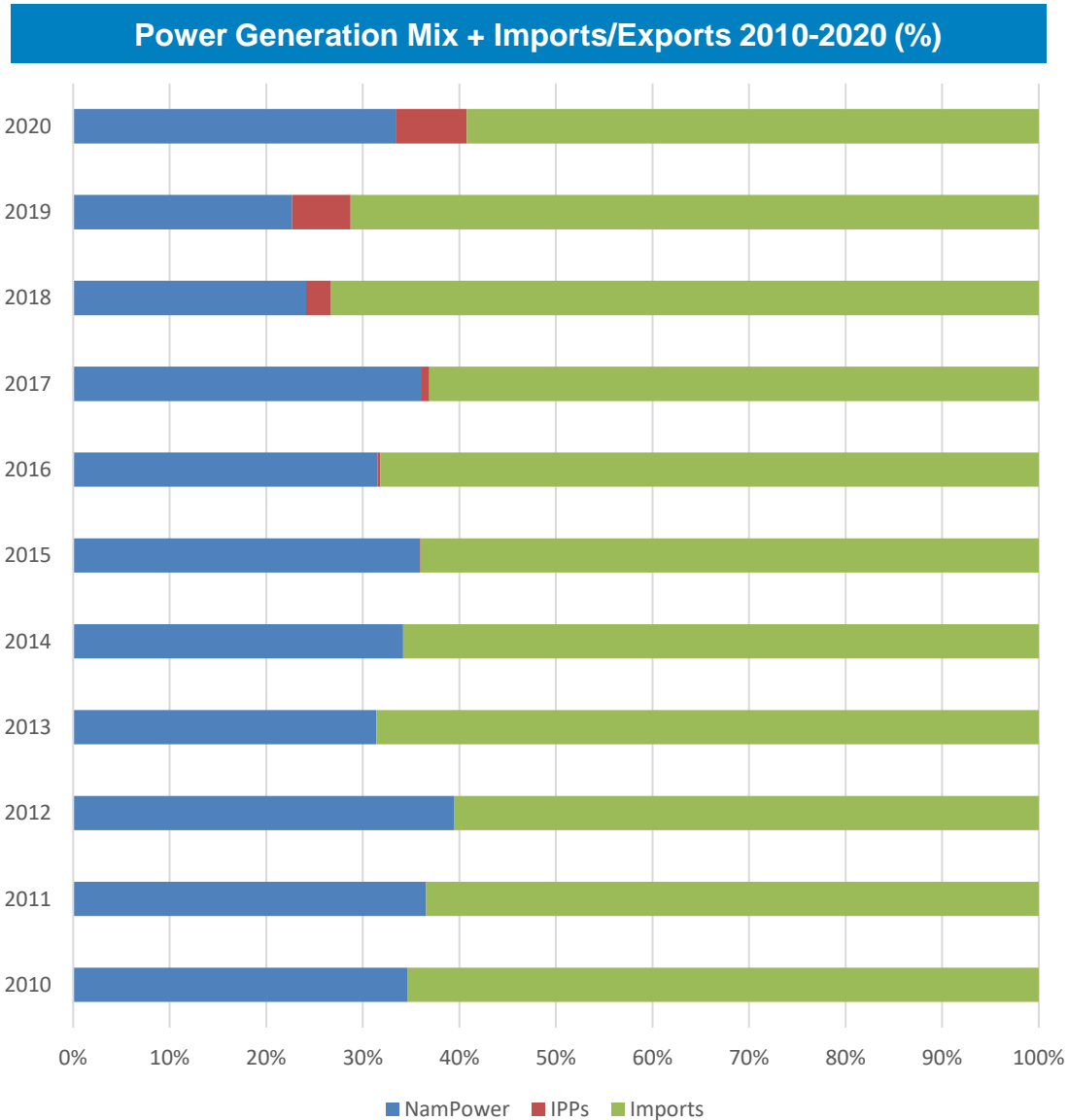
Namibia 64 gCO₂e
 South Africa 717 gCO₂e

Installed Capacity





NamPower	Hydro – 347 MW Diesel / HFO – 22.5 MW Solar PV – 20.0 MW Coal – 120 MW
IPP-REFIT	Solar PV – 65 MW Wind – 5 MW
IPP-Hardap	Solar PV – 37 MW
IPP-Greenham1 substation)	Solar PV – 10 MW (Hardap
IPP-Greenham2 Kokerboom substation	Solar PV – 10 MW at
IPP-Omburu Omburu Substation	Solar PV – 4.5 MW at
IPP Otjiwarongo Otjiwarongo, CENORED	Solar PV -5 mW at
IPP Arandis	Solar PV-3MW for

Source: NamPower; Electricity Control Board

Generation Mix & Installed Capacity

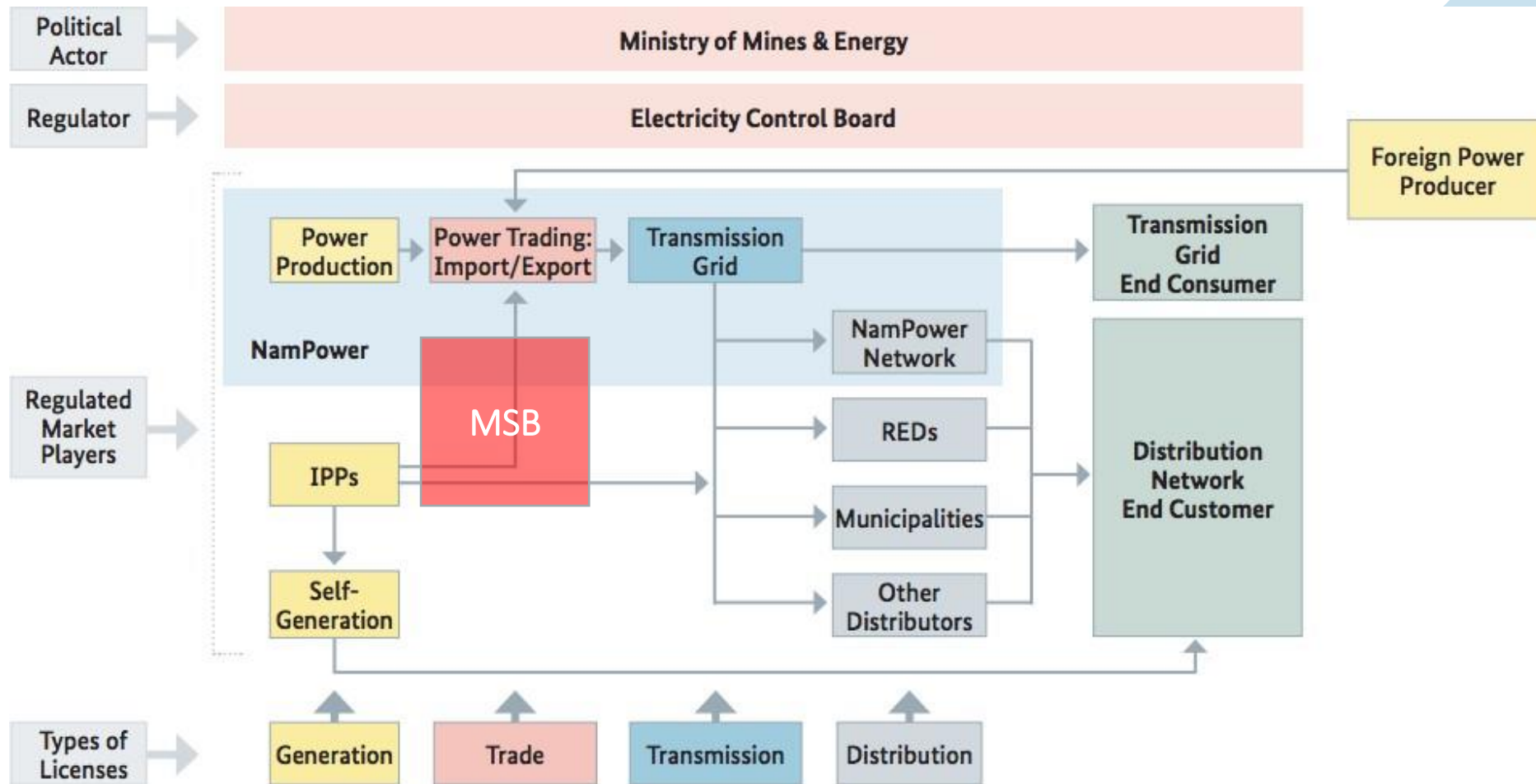


Key Stakeholders in Current Power Supply Market

Institution		Description
Ministry of Energy and Mines (MME)	 <p>Ministry of Mines & Energy</p>	<p>The Energy Directorate of the Ministry of Mines and Energy (MME) is responsible for the implementation of energy policies and for enforcing the legal requirements of energy legislation (Electricity Act, 2007) and regulations. Further, the directorate researches new and renewable sources of energy. The mandate of the Energy Directorate is to ensure an adequate and affordable energy supply in a sustainable manner taking advantage of natural resources in support of the nation's socio-economic development.</p>
Electricity Control Board of Namibia (ECB)	 <p>ELECTRICITY CONTROL BOARD</p>	<p>The Electricity Control Board (ECB) is a statutory regulatory authority established in 2000 under the Electricity Act 2 of 2000. The Act has subsequently been repealed by the Electricity Act, 4 of 2007, thereby expanding the ECB mandate and responsibilities. The core mandate of the ECB is to exercise control over the electricity supply industry with the main responsibility of regulating electricity generation, transmission, distribution, supply, import and export in Namibia through setting tariffs and issuance of licenses.</p>
Namibia Power Corporation (NamPower)	 <p>NamPower</p>	<p>Namibia Power Corporation (Proprietary) Limited (NamPower) is the national state-owned power utility. NamPower is designated as a commercial public enterprise and as such reports to the Ministry of Public Enterprises (MPE), as per the provisions of the Public Enterprises Governance Act 1 of 2019 ("PEGA Act"), now incorporated with the Ministry of Finance. NamPower also has a reporting obligation to the Ministry of Mines and Energy, as the government entity responsible for establishing policy in the country's energy sector. NamPower is responsible for generation, transmission, energy trading, and (to a lesser extent) the distribution of electricity in Namibia.</p>
Modified Single Buyer Market		<p>Modification of the Single Buyer model is now legislated. MSB will allow electricity consumers and Independent Power Producers (IPPs) to transact with each other directly for the supply of electricity. NamPower is responsible for the ring-fenced operation of the Modified Single Buyer.</p>
Private Sector Self-Generators and/or IPPs		<p>Key private sector players include solar (PV) and wind generators that supply some 140 MW into the national (NamPower) grid through various PPA's.</p>
Import Platform	 <p>SAPP</p>	<p>NamPower imports electricity through the Southern African Power Pool (SAPP) via its Energy Trading System to complement supply and meet demand. Namibia envisages being a net exporter [to the SAPP] as opposed to a net importer after the implementation of the planned projects in the near future.</p>

Source: www.ecb.org.na MME, SAPP, NamPower

Electricity Industry Market Structure



Key Takeaways

The Ministry of Mines & Energy (MME) provides political and policy oversight.

Regulatory oversight by the Electricity Control Board (ECB) is independent but needs the approval of the Minister (MME) for activation.

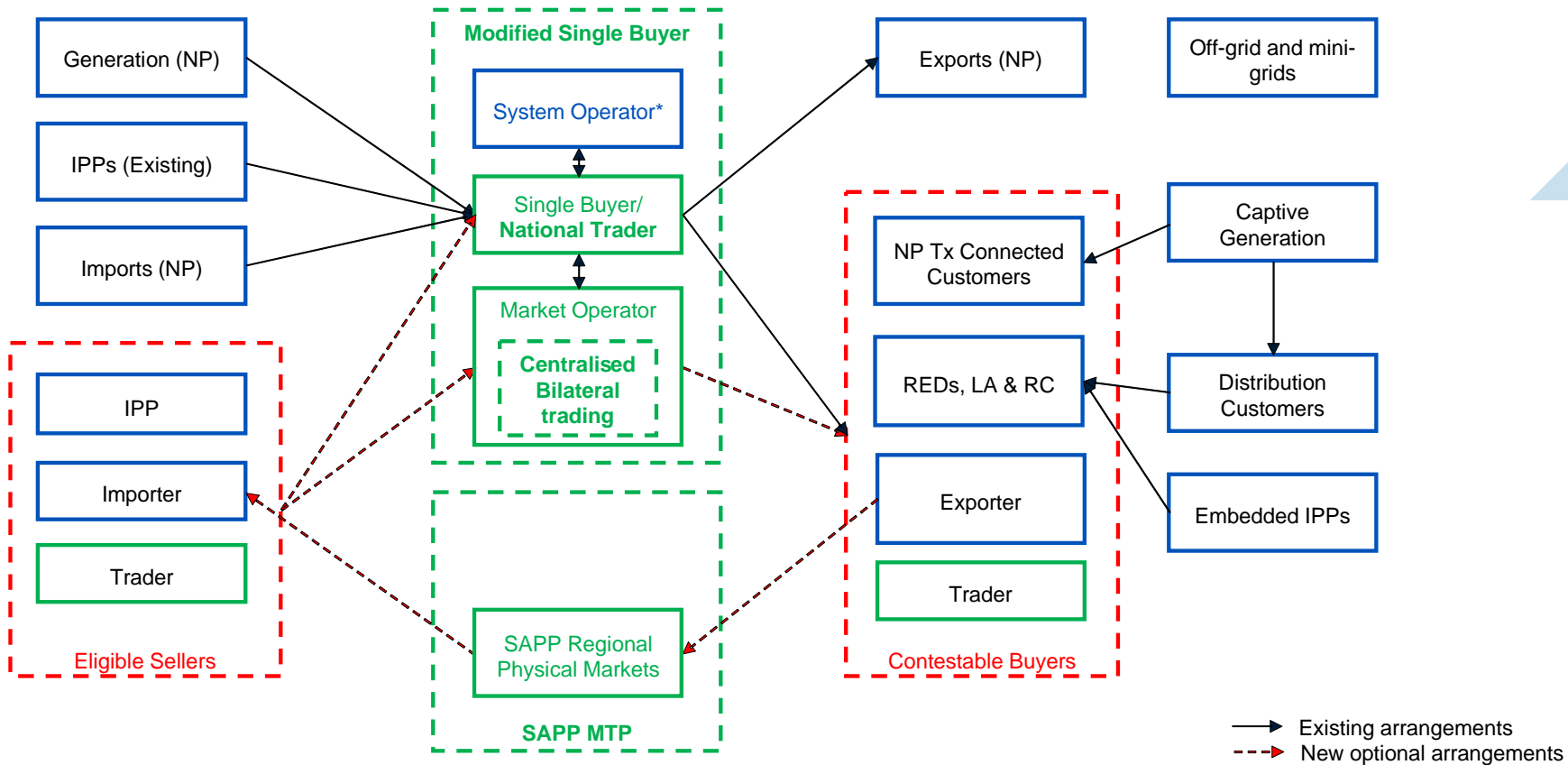
ECB to become the “Energy” regulator once the Energy Bill, 2019 is passed in Parliament.

Namibia’s distribution providers can be “off-takers” from IPPs under MSB rules.

Traders are now an active class of licensees.

Source: Own elaboration based on MME, ECB and HATCH

Modified Single Buyer



Key Takeaways

The Modified Single Buyer (MSB) provides a further liberated electricity market.

Phase 1b increases private sector participation by allowing licenses to Traders other than NamPower.

MSB allocation of 683 MW (100%) already at 81% (552 MW) *NamPower Annual Report 2022*

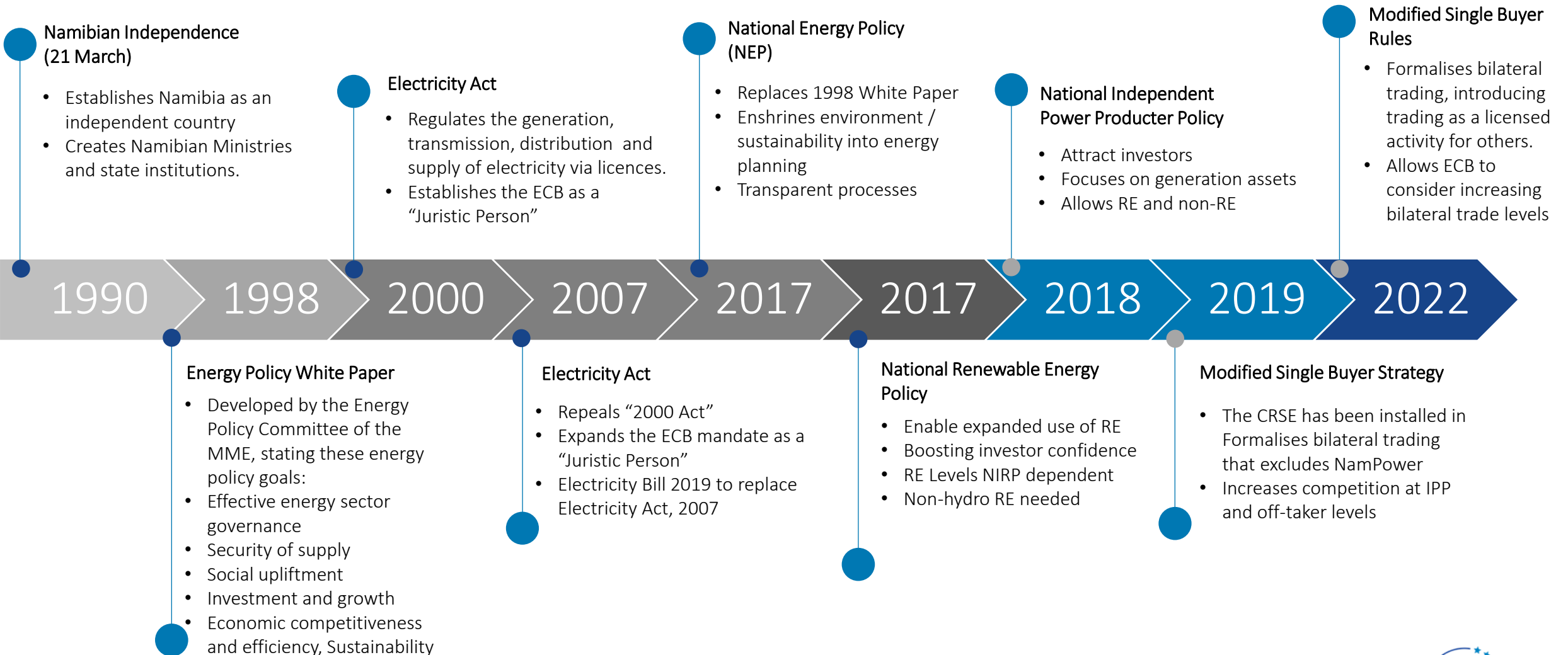
NamPower is the supplier of last resort.

Balancing mechanisms are still to be resolved.

Need for cross-border contracts that are accepted in SAPP.

Sourceown elaboration based on MME, ECB and HATCH

Regulation and Energy Policy Instruments

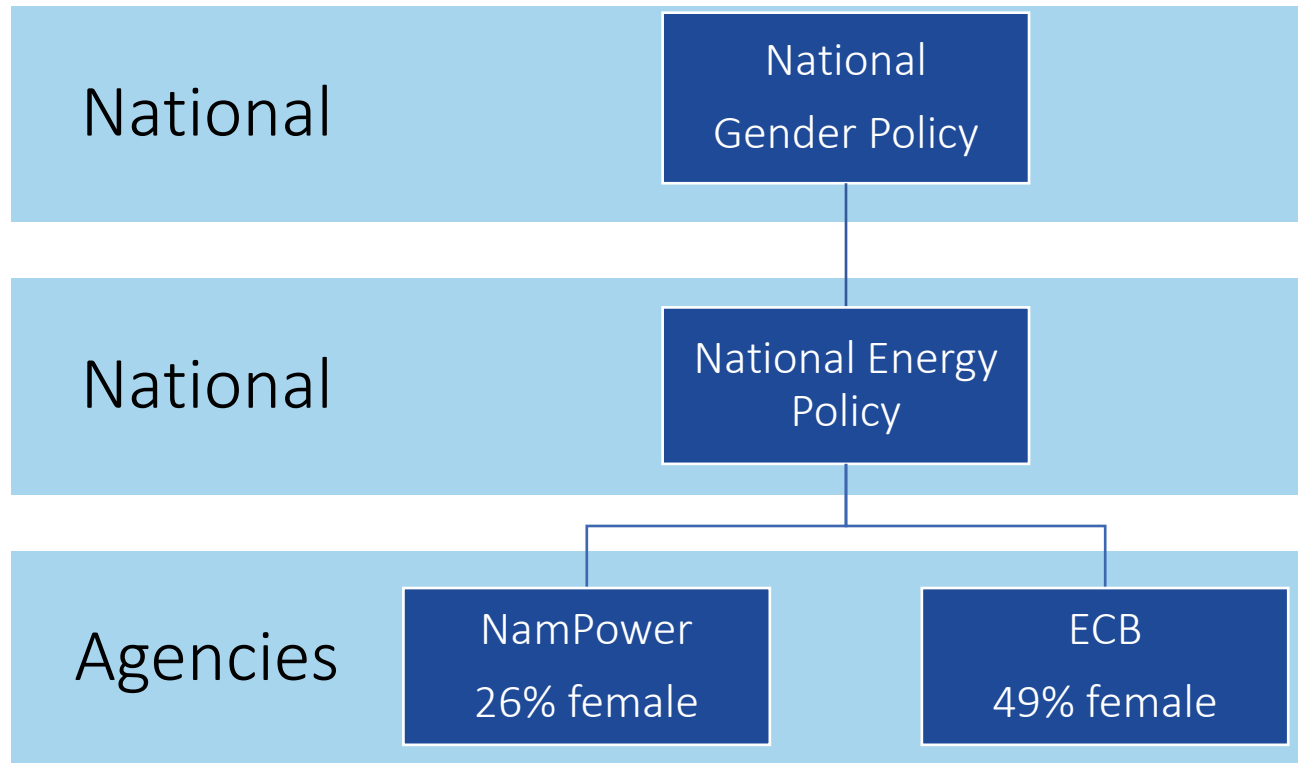


Regulation and Energy Policy Instruments

Key Takeaways

- Electricity supply in Namibia is cost reflective but with high import levels of electricity.
- Locally installed generation is skewed towards hydro and the risk factor surrounding dependency on hydro is taking a toll.
- The introduction of the Modified Single Buyer (MSB) is a step in the right direction for private sector participation.
- Namibia's electricity industry is receptive to private sector investment but has confined this to generation, off-grid and export of electricity.
- Continue developing MSB Market Rules, electrification, and off-grid regulations.

Other Policies: Gender



Key Takeaways

National Gender Policy (2010-2020) provides overarching policy direction for gender mainstreaming in all areas of national life. Aligns with International and Regional protocols.

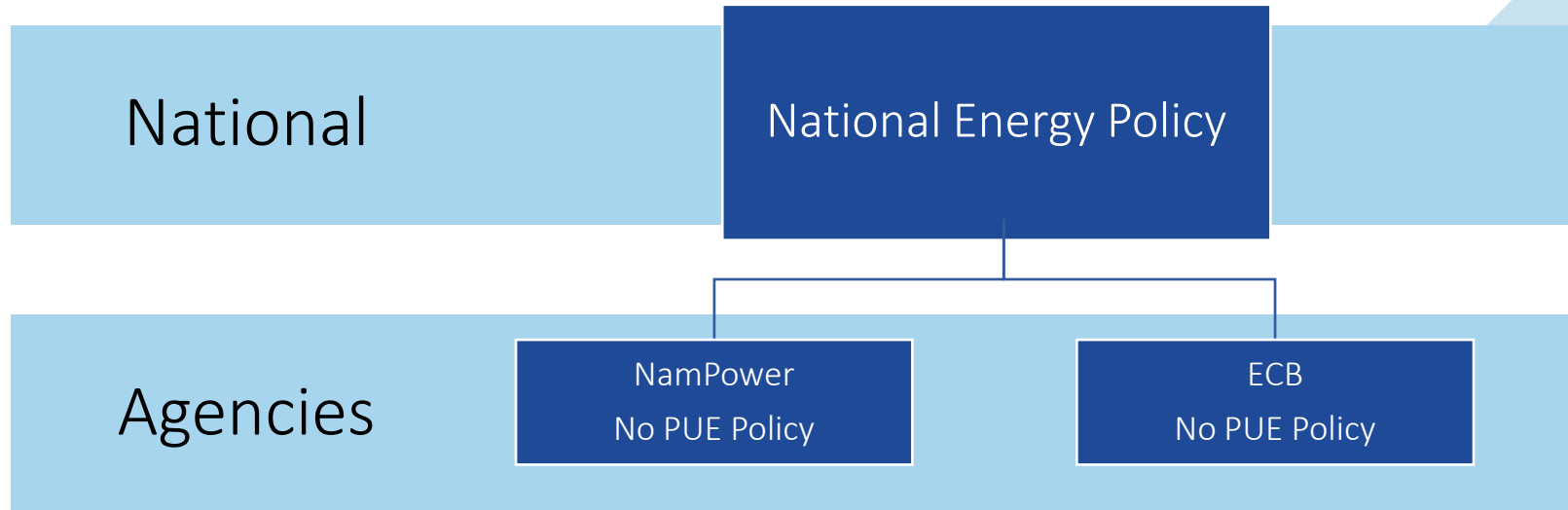
National Energy Policy seeks to mainstream Gender, promoting equality and equity across the energy sector.

NamPower is committed to equal employment opportunities and targeting females for promotions, bursaries, and scholarships.

The ECB seeks a balance of gender and age. Its gender balance is close to the national level of 50%.

Source: Annual Reports

Other Policies: Productive Use of Energy (PUE)



Key Takeaways

National Energy Policy looks at how local energy sources can be developed for productive uses (PUE).

National Energy Policy Encourages PUE to improve affordability. (Also enshrined in the National Electrification Policy).

National Energy Policy wants incentives for discovery, development and productive use.
– Bioenergy, Solar and Wind.

PUE seen as supporting job creation and narrowing inequality.

Source: Annual Reports

GET.transform Advisory Services



LONG TERM
ENERGY PLANNING



RENEWABLE ENERGY
GRID INTEGRATION



ON-GRID REGULATION &
MARKET DEVELOPMENT



OFF-GRID REGULATION &
MARKET DEVELOPMENT

Overarching
Activities

Capacity Building

Technical Assistance

Key Topics

Planning Governance

Grid Codes

Power Sector Strategy

Integrated Electrification
Planning

Scenarios and Modelling

Transmission System
Planning and Operation

Governance

Mini-Grid Framework

Adoption and Implementation

Distribution System
Planning and Operation

Market Mechanisms

Public Mini-Grid Incentives

State of Play



LONG TERM ENERGY PLANNING



RENEWABLE ENERGY GRID INTEGRATION



ON-GRID REGULATION & MARKET DEVELOPMENT



OFF-GRID REGULATION & MARKET DEVELOPMENT

Energy Planning and Research Division is a division in the Directorate of Energy at MME. It is engaged in conducting research and compiling statistics regarding power generation, transmission, import/export, and distribution of electricity as well as primary energy resource development including renewable sources of energy as the basis for policy advice.

5th National Development Plan (NDP 5)

The Development Plan noted the need to boost local generation and looked to increase it from 484 MW (2016), to 755 MW in 2022. It also introduced the “promotion” of Independent Power Producers (IPPs). The aim is to discourage monopolies and drive down costs through competition.

2017 National Integrated Resource Plan (NIRP)

The NIRP is a 20-year development plan for Namibia's Electricity Supply Industry, spanning the period between 2016 and 2035. One of the targets of the NIRP is to meet 75% of energy demand through local generation.

This NIRP provides the context for the current (2022-2023) NIRP Update which will cover the period 2022 - 2041.

- Need for an embedded adviser to support energy transition and planning topics
- Need for decision-maker training on energy planning methods and the use of model-based energy scenarios
- Support for the integration of energy planning considerations into the creation process for the 6th National Development Plan (NDP 6), which will be a review and update of NDP 5.
- Support in continuous and holistic long-term energy planning in preparation of, e.g., future updates of the NIRP

State of Play



LONG TERM
ENERGY PLANNING



RENEWABLE ENERGY
GRID INTEGRATION



ON-GRID REGULATION &
MARKET DEVELOPMENT



OFF-GRID REGULATION &
MARKET DEVELOPMENT

Identified Technical Assistance OPPORTUNITIES

- Review of the NIRP and other strategic energy planning documents.
- Reviewing and enhancing governance structures and strengthening intra- and inter-agency governance structures for energy planning.
- Reviewing and enhancing data governance and management
- Building and Strengthening of capacities for long-term energy planning for public sector partners, including the interpretation and use of model-based scenarios
- Capacity building on sustainable open-source or commercial energy and power sector modelling tools to support decision-making
- Fostering cooperation between decision-making and academia to further develop modelling and energy planning expertise through education
- Assistance with Long-term Energy Planning and NIRP implementation
- Alignment of NIRP implementation and MSB expectations
- Assessment of strategies to address energy efficiency, flexibility of electricity demand, storages and to meet the demand of residual electricity need
- Investigate Hydro / Solar / Wind balancing to increase the share of non-hydro renewables
- Support to data management and correlation of planning and implementation
- Assessment of the role of green hydrogen as an energy carrier for the energy sector and as an output product of the energy sector

State of Play



LONG TERM ENERGY PLANNING



RENEWABLE ENERGY GRID INTEGRATION

Several policies and regulations exist that support RE Grid Integration:

National Energy Policy, 2017

National Renewable Energy Policy, 2017

National Independent Power Producer Policy, 2018

Modified Single Buyer Strategy, 2019

Modified Single Buyer Rules, 2022



ON-GRID REGULATION & MARKET DEVELOPMENT



OFF-GRID REGULATION & MARKET DEVELOPMENT

- Need for mapping of renewable energy infrastructure – to be coordinated with the World Bank
- Both NAMPOWER and ECB expressed the need for technical support to assess the transmission requirements to evacuate wind, solar and excess power from green hydrogen projects from the renewable energy transmission corridor (Luderitz area)
- The Regional Electricity Distributors highlighted the need to assess hosting capacity of the distribution network and the potential impact of embedded/distributed generation on the distribution network
- The ECB highlighted the need for a study that assesses the transmission capacity requirements of large RE plants for exports under the MSB

State of Play



LONG TERM
ENERGY PLANNING



RENEWABLE ENERGY
GRID INTEGRATION



ON-GRID REGULATION &
MARKET DEVELOPMENT



OFF-GRID REGULATION &
MARKET DEVELOPMENT

Identified Technical Assistance OPPORTUNITIES

- Build capacity on Renewable Energy Integration
- Build capacity on combined demand/load forecasting with generation (aligned with Long-term Energy Planning)
- Investigate hydro/solar/wind balancing to increase the share of non-hydro renewables
- Study the necessary ancillary services relevant for different levels of RE integration
- Review Namibian grid codes for cross-border alignment, especially regarding their impact on export PPAs
- Conduct feasibility study on the Renewable Energy Transmission Corridor to evacuate wind/solar/green hydrogen
- Conduct feasibility study on the impact of the Large Scale RE Plants for export purposes on the transmission network
- Analyse hosting capacity of the distribution network expansion (REDs)
- Assess the impact of distributed/embedded generation on the distribution network

State of Play



LONG TERM ENERGY PLANNING

Energy Policy, 2017

The policy seeks diversity in the market to help with socioeconomic development. It also notes Energy Efficiency (EE) and Demand-side Management (DSM) as tools Namibia can use as buffers for electricity supplies.

Energy Storage is highlighted as support to increasing grid stability surrounding increased solar and wind generation into the grid.

Electricity Act, 2007 / Energy Bill, 2019

The ECB will be ruling on MSB PPA's and Grid Code regulations need to be harmonized.

Modified Single Buyer Market Model (MSB) Market Rules, 2023

Issued as 221219 MSB Rules Government-Gazette No-7983. Operationalizes the Modified Single Buyer and provides for the rules of bilateral transactions. The rules bring Phase 1b into effect (1 July 2021 – 30 June 2026).



RENEWABLE ENERGY GRID INTEGRATION



ON-GRID REGULATION & MARKET DEVELOPMENT

- Need for support to achieve Namibia's local generation / self-sufficiency vision of 80% by 2028
- Need for an embedded adviser to support NIRP Implementation for timely generation rollout
- Need to understand the impact of independent transmission operator
- Need for a "balancing market" to support IPPs in accessing export markets
- Need for leading practice understanding of "how other markets reformed".
- Need for automation of licensing process
- Need for an automated trading platform



OFF-GRID REGULATION & MARKET DEVELOPMENT

State of Play



LONG TERM
ENERGY PLANNING



RENEWABLE ENERGY
GRID INTEGRATION



ON-GRID REGULATION &
MARKET DEVELOPMENT



OFF-GRID REGULATION &
MARKET DEVELOPMENT

Identified Technical Assistance OPPORTUNITIES

- Support fast-tracking the implementation of NIRP generation projects:
 - Identify bottlenecks in the current procurement process
 - Develop standardised procurement/tendering process flow and framework (process chart)
- Develop synergies with GET.invest advisory support to build bankable on-grid generation projects
- Review Namibian grid codes for cross-border alignment, especially regarding their impact on export PPAs
- Defining the ancillary services market for Namibia
- Review/Assessment of the transmission connection application process: streamlining the generation license application process with grid access application process
- Support automation for establishment of:
 - the Licensing System/Process (Regulation)
 - an automated trading platform (Energy trading)
- Operationalisation of the MSB with regards to integration into new markets and new generation offerings for export into the SAPP

State of Play



LONG TERM ENERGY PLANNING



RENEWABLE ENERGY GRID INTEGRATION



ON-GRID REGULATION & MARKET DEVELOPMENT



OFF-GRID REGULATION & MARKET DEVELOPMENT

Off-Grid Electrification Policy, 2020

It covers minimum standards for households, schools, clinics and Government offices to be considered as having access but needs regulations developed

Namibia: Geospatial Least Cost Electrification Plan, 2021

Developed under World Bank support, the Geospatial Least Electrification Plan seeks to identify the state of electrification through a GIS lens. This report focuses on 2019 datasets thus stating that electrification is 50%.

Electrification Support Mechanism, 2021 - 2022

covers areas required for electrification and merges on and off-grid electrification through three routes:

National Electrification Policy

National Electrification Funding Portfolio

National Electrification Strategy

Renewable Energy Association

(Renewable Energy Industry Association of Namibia – REIAoN)

A non-governmental association composed of 80 Members, of which 20 – 25% are Off-grid Installers. Other members are IPPs, Commercial Banks, Interested Parties, and others.

- The ECB expressed the need for support to develop an off-grid regulation
- Need for mini-grid/micro-grid framework and templates for the Namibian context
- There is little understanding of how an off-grid market could unfold. There is a need to assess business cases and models for min-grid and micro-grid that fits to the Namibian context
- The Renewable Energy Association of Namibia expressed the need for support to their members in developing bankable off-grid projects

State of Play



LONG TERM
ENERGY PLANNING



RENEWABLE ENERGY
GRID INTEGRATION



ON-GRID REGULATION &
MARKET DEVELOPMENT



OFF-GRID REGULATION &
MARKET DEVELOPMENT

Identified Technical Assistance OPPORTUNITIES

- Support the development of off-grid regulation and standards - taking into account the pending approval process of the electrification support mechanisms
- Assessment of mini-grid/micro-grid business case and models for the Namibian context
- Support the mini-grid roll-out based on the Electrification Strategy through mini-grid/micro-grid auction frameworks and templates for Namibia - taking into account the pending approval process of the electrification support mechanisms
-
- Develop synergies with GET.invest advisory to support REIAoN members to build bankable off-grid generation projects
- Build capacity on legal, technical, financial and O&M aspects of mini-grid/micro-grids for the regulator and the Distributor(REDs)

Priority Projects to Be Supported by GET.transform*



LONG TERM ENERGY PLANNING

Capacity building for public partners on long-term energy planning

Reviewing and strengthening intra- and inter-agency governance structures for energy planning.



RENEWABLE ENERGY GRID INTEGRATION

Capacity Building on Renewable Energy Integration (NAMPOWER and REDs)

Feasibility study on the Renewable Energy Transmission Corridor to evacuate wind/solar/ and excess power from green hydrogen

Development of Grid Capacity allocation rules

Study the necessary ancillary services relevant for different levels of RE integration



ON-GRID REGULATION & MARKET DEVELOPMENT

Development of a market access guideline that enables IPPs to access the SAPP and local MSB Market

Support the fast-tracking of implementation of generation projects: Identify bottlenecks in the current procurement process, develop standardized procurement/tendering process flow and framework (develop a process chart)

Review/Assessment of the Tx connection application process: Streamlining the generation license application process with grid access application process



OFF-GRID REGULATION & MARKET DEVELOPMENT

Support the development of off-grid regulation and standards.

Assessment of mini-grid/micro-grid business case and models for the Namibian context

Capacity building on legal, technical financial and O&M aspects of mini-grid/microgrids for the regulator and the Distributor(REDs)

3

COUNTRY WINDOW SETUP



Country Window Setup

Country

- 1 x National Policy Advisor
- 1 x International Technical Advisor
- Country Window aligned with existing GIZ RE and Green Hydrogen projects.

GET.transform HQ

- 1 x Africa Partnerships coordinator for overarching CW strategy support.
- 1 x Advisory Services Focal Point for LTEP and RE-Integration.
- 1 x Advisory Services Focal Point for Policy and Regulation.

Technical Assistance Partners

- Expert Consulting Pool for LTEP and RE-Integration.
- Expert Consulting Pool for Policy and Regulation.

Interaction with GIZ Namibia Energy Portfolio

GLOBAL ENERGY PARTNERSHIP	GET.TRANSFORM	PTX HUB/ UNTERNEHMENSALLIANZ	GREEN PEOPLE'S ENERGY (GPE)
Green Hydrogen Policy Dialogue	Energy Transition	PtX Market Development	Rural Electrification, Productive Use and Capacity Development
Aligning political, donor and industry initiatives on green hydrogen	<p>Long-Term Energy Planning</p> <ul style="list-style-type: none"> Building capacities for long-term energy planning for public sector partners, including the use of model-based scenarios 	Hydrogen and PtX regulatory and institutional framework	Electrification of rural social institutions
Support to and monitoring of political accords and MoUs	<p>Renewable Energy Grid Integration</p> <ul style="list-style-type: none"> Capacity building on RE grid integration, Feasibility study on the impact of large-scale RE plants for export purposes on the transmission network 	Financing and Investment Schemes	SME financing and subsidy scheme
Support to industry flagship projects	<p>On- and Off-Grid Regulation and Market Development</p> <ul style="list-style-type: none"> Support fast-tracking of implementing NIRP generation projects: identify bottlenecks in current procurement process, develop standardised procurement/tendering process framework 	Skill and capacity development	Policy advisory

Alignment with Other Development Partners

EU-SUPPORTED				
GET.TRANSFORM	EU-TAF	WORLD BANK	KFW	AFDB
Renewable Energy, Rural Electrification	Sustainable Energy	Renewable Energy, Green Hydrogen, Electrification Policy Implementation	Renewable Energy, Rural Electrification	Renewable Energy, Peri-Urban Electrification
<p>Long-Term Energy Planning</p> <ul style="list-style-type: none"> Building capacities for long-term energy planning for public sector partners, incl. the use of model-based scenarios <p>Renewable Energy Grid Integration</p> <ul style="list-style-type: none"> Capacity building on RE grid integration, Feasibility study on the impact of large-scale RE plants for export purposes on the transmission network <p>On-Grid and Off-Grid Regulation and Market Development</p> <ul style="list-style-type: none"> Support fast-tracking of implementing NIRP generation projects: identify bottlenecks in current procurement process, develop standardised procurement/tendering framework 	<p>Assistance to Namibia address the regulatory requirements for the development and sustainable operation of the Renewable Hydrogen (RH2) sector</p>	<p>Support on renewables at strategic and operational level to operationalise the NIRP</p> <p>Support on energy access at strategic and operational level to operationalize the Electrification Support Mechanism</p> <p>Support on green hydrogen at strategic and operational level to operationalise the GH and Derivatives Strategy</p>	<p>Grant for support of the NamPower-GET FiT Namibia Programme for the development of a battery storage project</p> <p>Grant for support of the MME electrification mechanisms for increased electrification in rural and peri-urban areas.</p> <p>Loan facility for support of the NamPower-Renewable Energy Programme to develop Roshpinah solar PV park and DBN credit line for climate related infrastructure project</p>	<p>Grant for a study to upgrade peri-urban electrification of settlements. (targeting 40/50,000 houses)</p> <p>Grants for studies of the Baynes hydro project studies and the ZIZABONA interconnector project</p> <p>Support sustainable regional power off-take markets to enable the realization of VRE generation (Technical Assistance)</p>
TECHNICAL ASSISTANCE			GRANTS / LOANS	

Thank You for Your Attention



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