



CLEAN TECHNOLOGY MANUFACTURING

POLICY & INVESTMENT GUIDE



RENEWABLE ENERGY
MANUFACTURING INITIATIVE

SEPTEMBER 2026



To aid the private sector, investors and other stakeholders in navigating the manufacturing policy and regulatory landscape in Botswana, this Guide offers insights on the following key areas:

- » **Considerations** for Original Equipment Manufacturers (OEMs) in establishing a clean technology manufacturing company: applicable laws, processes and institutions to engage.
- » **Overview of the domestic clean technology manufacturing policy landscape:** available incentives, stakeholders and governance.
- » **Highlight the market opportunities** for the manufacture and/or assembly of various renewable energy components.

This guide is not designed to be an exhaustive resource but rather offers a preliminary understanding of the sector landscape. It forms part of a series of country-specific guides for each of the Africa Renewable Energy Manufacturing Initiative's (Africa REMI) focus countries.



LEARN MORE ABOUT THE GREEN
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OUTLINE

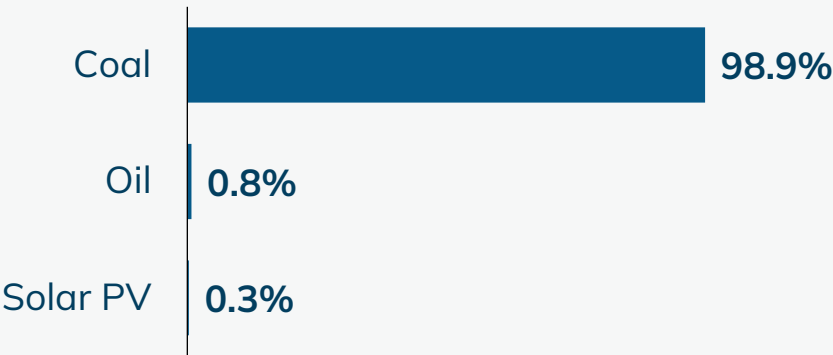
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BOTSWANA COUNTRY PROFILE

Botswana’s energy demand is expected to increase significantly, supported by Government policy including the updated National Development Plan 12 (NDP12) and the Botswana Economic Transformation Programme (BETP).

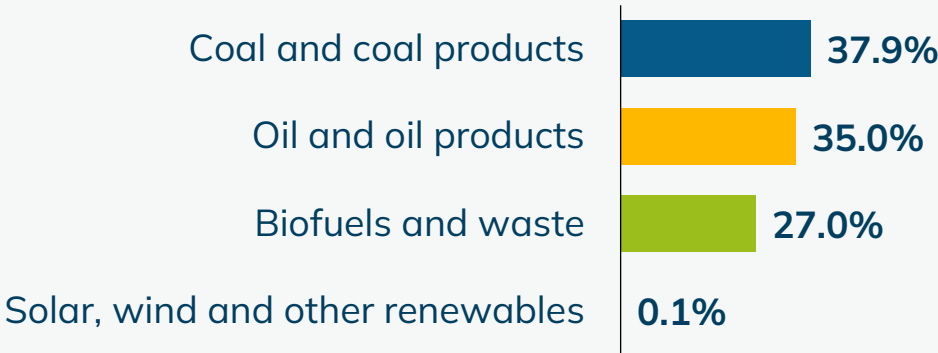
- Botswana’s demand for energy has steadily grown at around 5% per year. Demand is expected to grow significantly in the coming years from 4.93Twh currently to 6.84Twh by 2036 under baseline Integrated Resource Plan (IRP) assumptions.
- The current installed capacity is 892MW against a peak demand of 678MW, with approximately 8.2% of renewables in the generation mix. The country is however still heavily reliant on imported energy.
- The country aims to increase electricity access from the current 76% to 100% by 2030¹ and actively diversify its economy, while becoming a net exporter of electricity by 2030, backed by significant solar rollout programmes.
- The Government has increased its ambitions, to reach 1.5GW of solar PV capacity by 2030, supporting the goal of 50% renewables share in the energy generation mix by the same year.
- Coal remains the dominant energy source in the country’s power sector.

Electricity generation, Botswana, 2023



Source: IEA. Licence: CC BY 4.0

Total energy supply, Botswana, 2023



Source: International Energy Agency. Licence: CC BY 4.0



LOCATION	POPULATION 2024
Southern Africa	2.76 M
GDP 2024	GDP GROWTH 2024
USD 19.4 B	-3%
ACCESS TO ELECTRICITY 2023	UNEMPLOYMENT RATE 2024
76%	27.6%
BUSINESS LANGUAGE	SHARE OF MODERN RENEWABLES IN FINAL ENERGY CONSUMPTION 2021
English	>1%

Sources: World Bank; IEA

¹ National Energy Compact available at <https://thedocs.worldbank.org/en/doc/fa42d1c4be8b212f2371214408115fb5-0010012025/original/Botswana-National-Energy-Compact-Mission-300.pdf>; Botswana Economic Transformation Programme available at <https://betp.gov.bw/energy>



The Botswana National Renewable Energy and Power Sector Plan developed by SEforALL in close collaboration with the Botswana Department of Energy, highlights two scenarios which frame the country's energy future: the *Current Policy Scenario (CPS)* and the *Renewable Energy & Electrification Scenario (REES)*, which goes beyond current Government policy to accelerate electrification up to 2060.

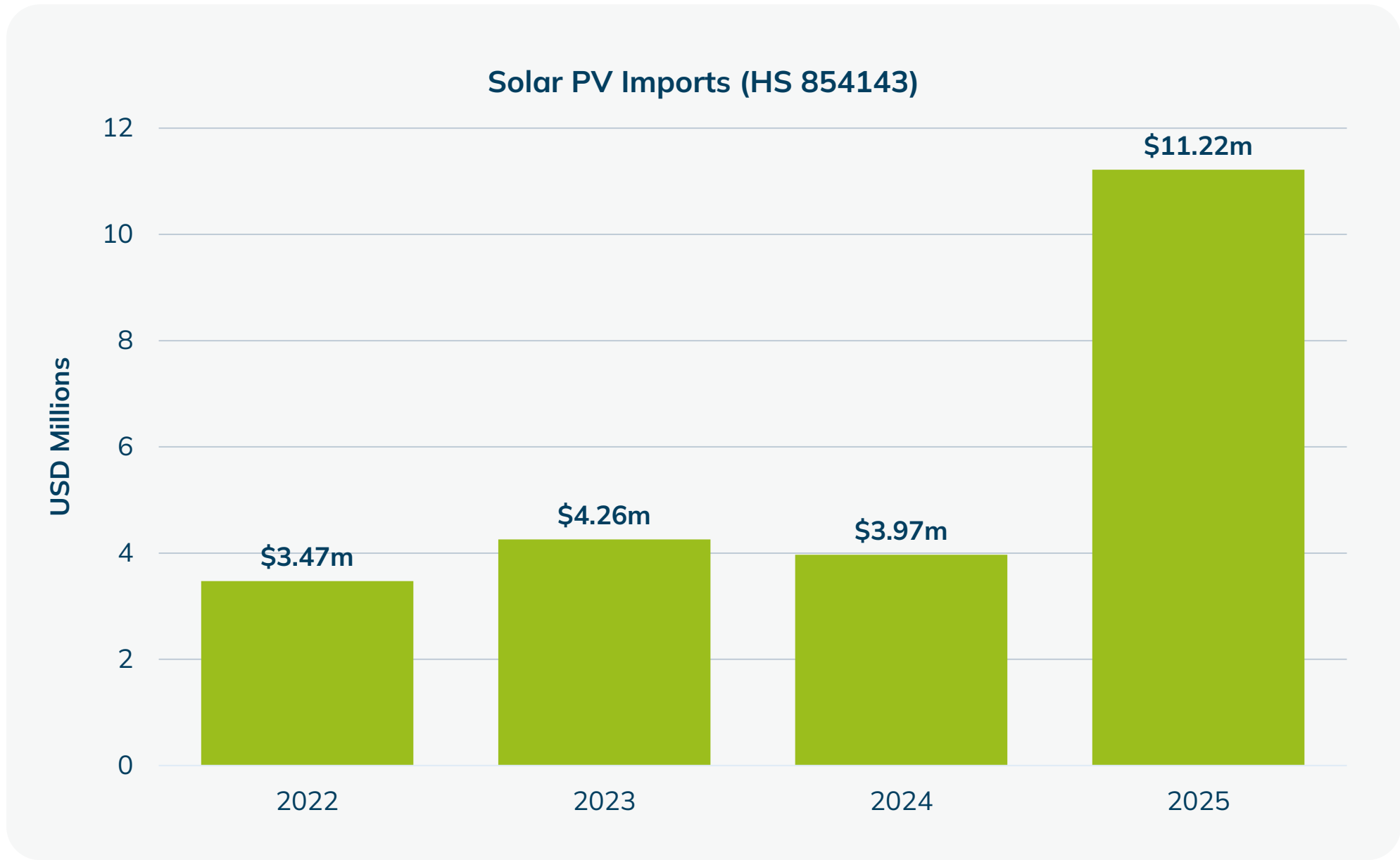
Key highlights of what the REES adds after 2030 include:

-  Botswana's dependence on **electricity imports declines** as committed domestic capacity enters operation. Imports peak at approximately 1.9 TWh in 2025 and become negligible around 2028. Modelled exports reach approximately 4.6 TWh under CPS and 6.9 TWh under REES by 2060, subject to regional demand, current interconnector capacity and commercial arrangements.
-  **Solar PV forms the backbone** of the Renewable Energy & Electrification Scenario pathway. Installed solar capacity reaches approximately **7.5 GW** and generation reaches 14.5 TWh by 2060, compared with around 3.2 GW and 6 TWh under CPS.
-  **Battery storage is essential for integrating higher solar generation.** BESS capacity reaches approximately 3.9 GW under REES by 2060, compared with around 0.5 GW under CPS, with most REES deployment occurring after 2050.
-  70% of passenger and bus mobility is electrified by 2050.
-  **REES requires a moderate additional capital investment.** Cumulative CAPEX reaches over USD 43 billion under REES between 2022 and 2050, **approximately USD 5 billion or 13.3% above CPS.**



WHY RENEWABLE ENERGY MANUFACTURING IN BOTSWANA

Local manufacturing and value chain development is a key opportunity for the government to maximize the socio-economic benefits of the energy transition.



Source: UN Comtrade for 2022-2024 (World reporting). 2025 data only for China from national customs statistics. *2025 data from January to September.

² Ember - <https://ember-energy.org/latest-insights/the-first-evidence-of-a-take-off-in-solar-in-africa/>

³ Integrated Resource Plan (2025).

⁴ National Energy Compact for the Republic of Botswana (2025). Available at https://mission300africa.org/compacts_files/botswana-national-energy-compact-cohort-2/

⁵ World Competitiveness Ranking (2025). Available at https://imd.widen.net/s/wtx5fd2ltn/booklet_wcy_2025



Imports of energy transition technologies have been largely stable over the recent past. However, in the first 9 months of 2025, Botswana imported **over \$11 million of solar panels from China**, marking a significant uptick². Indeed, between 2021 and 2024, the country imported in total over \$11 million in assembled solar PV modules and \$15 million in lithium-ion batteries.



Botswana’s revised Integrated Resource Plan 2025 creates a **basis for increasing demand**, aiming to significantly accelerate the share of renewable energy, with a target of 50% in the energy mix by 2030.³



The country’s Vision 2036 aims to **diversify the country’s energy mix**, ensure 100% access to electricity by 2036 and ensure energy security and reducing its dependence on imported energy.⁴

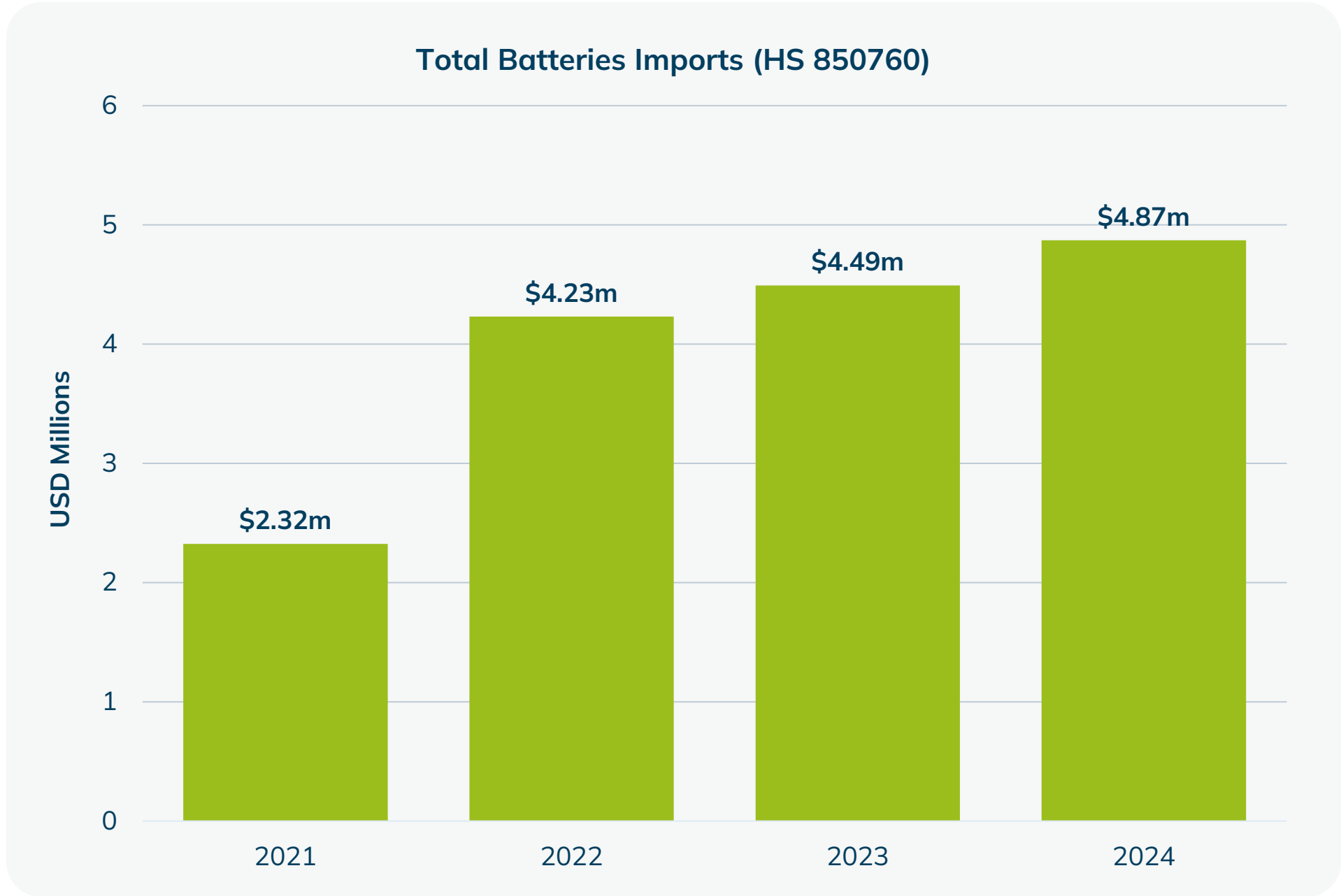


Botswana’s strategic location within the SADC region specifically, and its strong trade links within the SACU and SADC create a compelling case for regional cooperation and value chain development, based on expected increased energy demand, locally and regionally, and access to abundant natural resources.



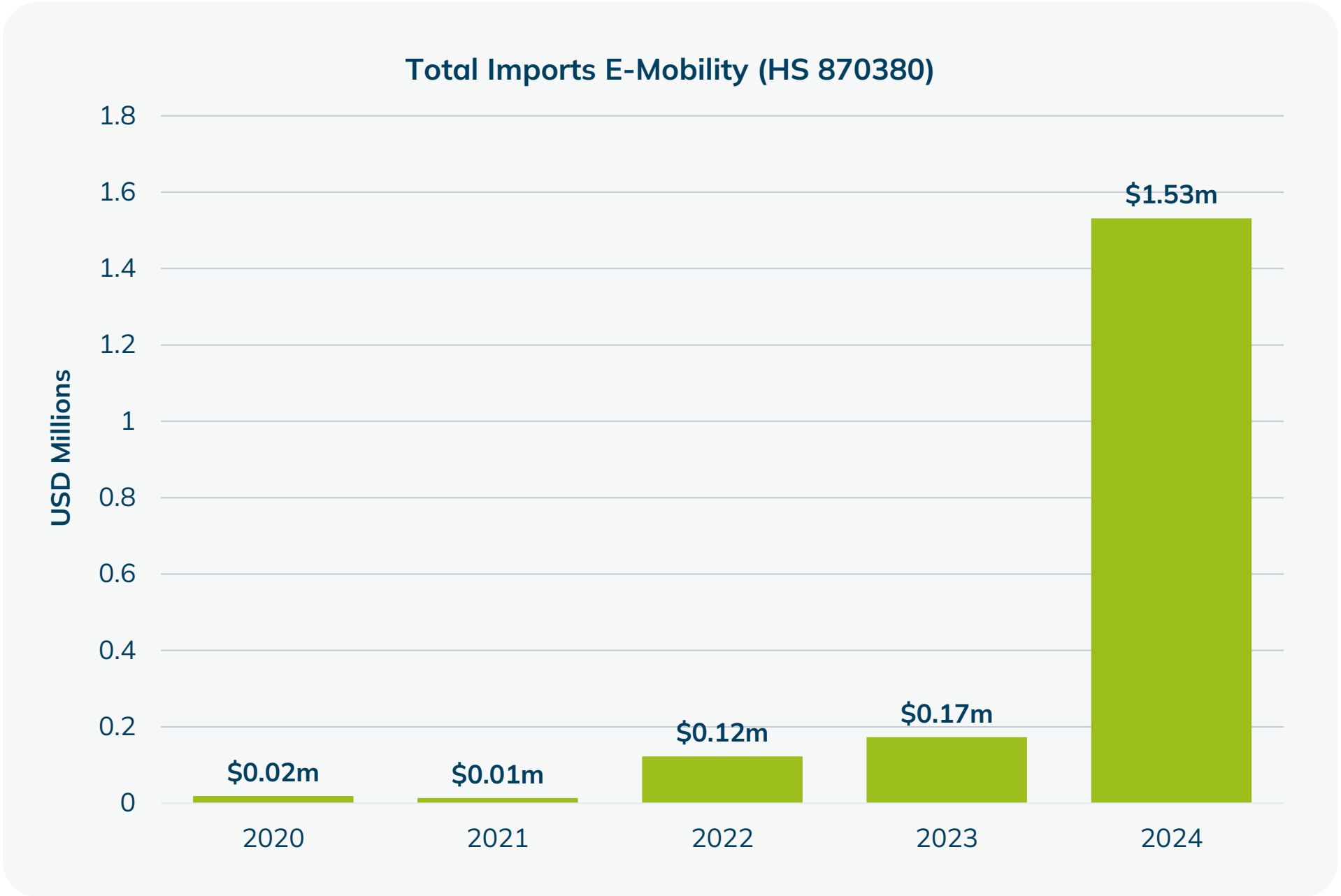
In 2025, Botswana ranked as the second most competitive country in Africa and 59th globally.⁵

Li-Ion Batteries Import Trends



Source: UN Comtrade for 2021-2024 (World reporting).

E-Mobility Import Trends



Source: UN Comtrade for 2021-2024 (World reporting).

1.5 GW of solar by 2030

USD 0.67 bn

Total system market opportunity in Botswana, based on Botswana's Revised Integrated Resource Plan (IRP 2025)



7.5 GW of solar by 2060

USD 3.36 bn

Total system market opportunity in Botswana, based on SEforALL's REES Scenario analysis



Scaling Botswana's solar target from 1.5 GW to 7.5 GW would increase the implied total system market opportunity from approximately USD 0.67 billion to USD 3.36 billion by 2060.

Note: Assumes an average of USD 0.13 per watt landed cost for solar PV modules reducing at 3% p.a. and a 25% share in total system costs between 2025 and 2030.

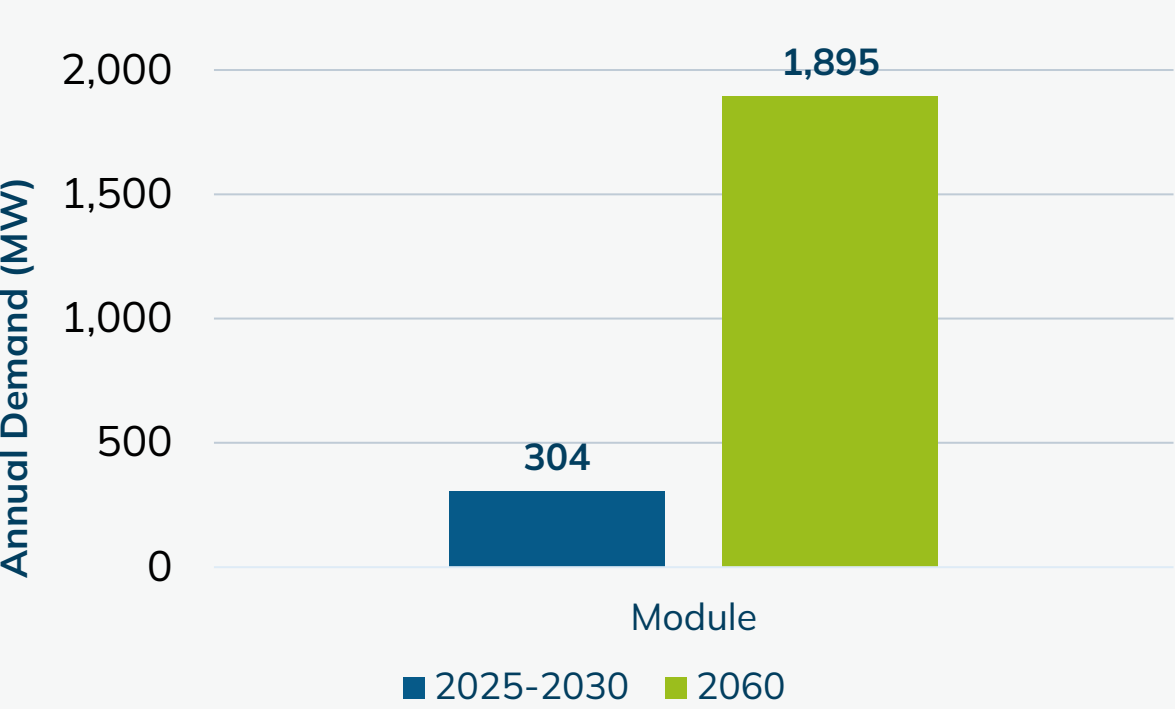


CLEAN TECHNOLOGY MARKET SIZING IN BOTSWANA

CLEAN TECHNOLOGY MARKET SIZING IN BOTSWANA - OPPORTUNITY BY SELECTED COMPONENT

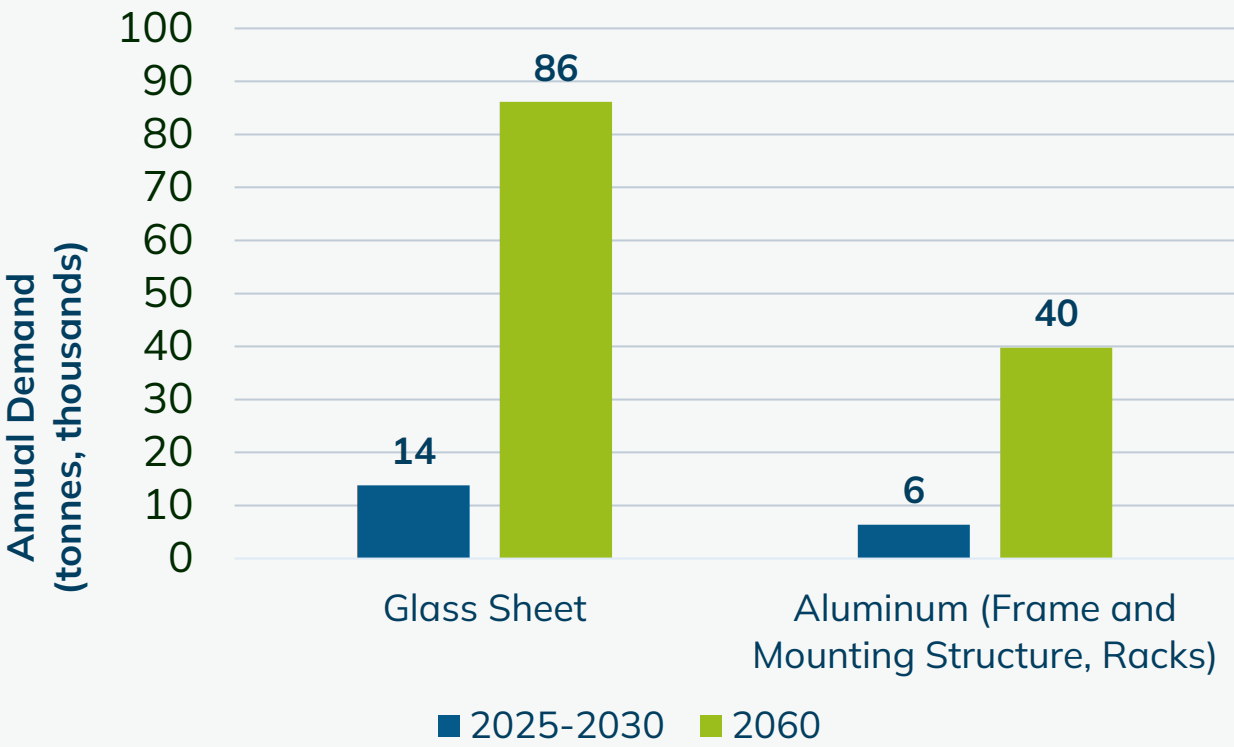
Solar PV Market Size by Component (Module)

Market Size of Modules 2025-2030 and 2060



A 1.5GW solar PV capacity by 2030 could translate into a market opportunity of around 304MW of solar PV module capacity, reaching almost 1,900MW by 2060.

Market Size of Glass Sheet and Aluminium 2025-2030 and 2060



Almost 14,000 tonnes of Glass Sheet could be required by 2030 based on current solar targets, reaching over 86,000 tonnes by 2060.

6,392 tonnes of Aluminium could be required for Frame and Mounting Structures and Racks by 2030, extending to almost 40,000 tonnes by 2060.

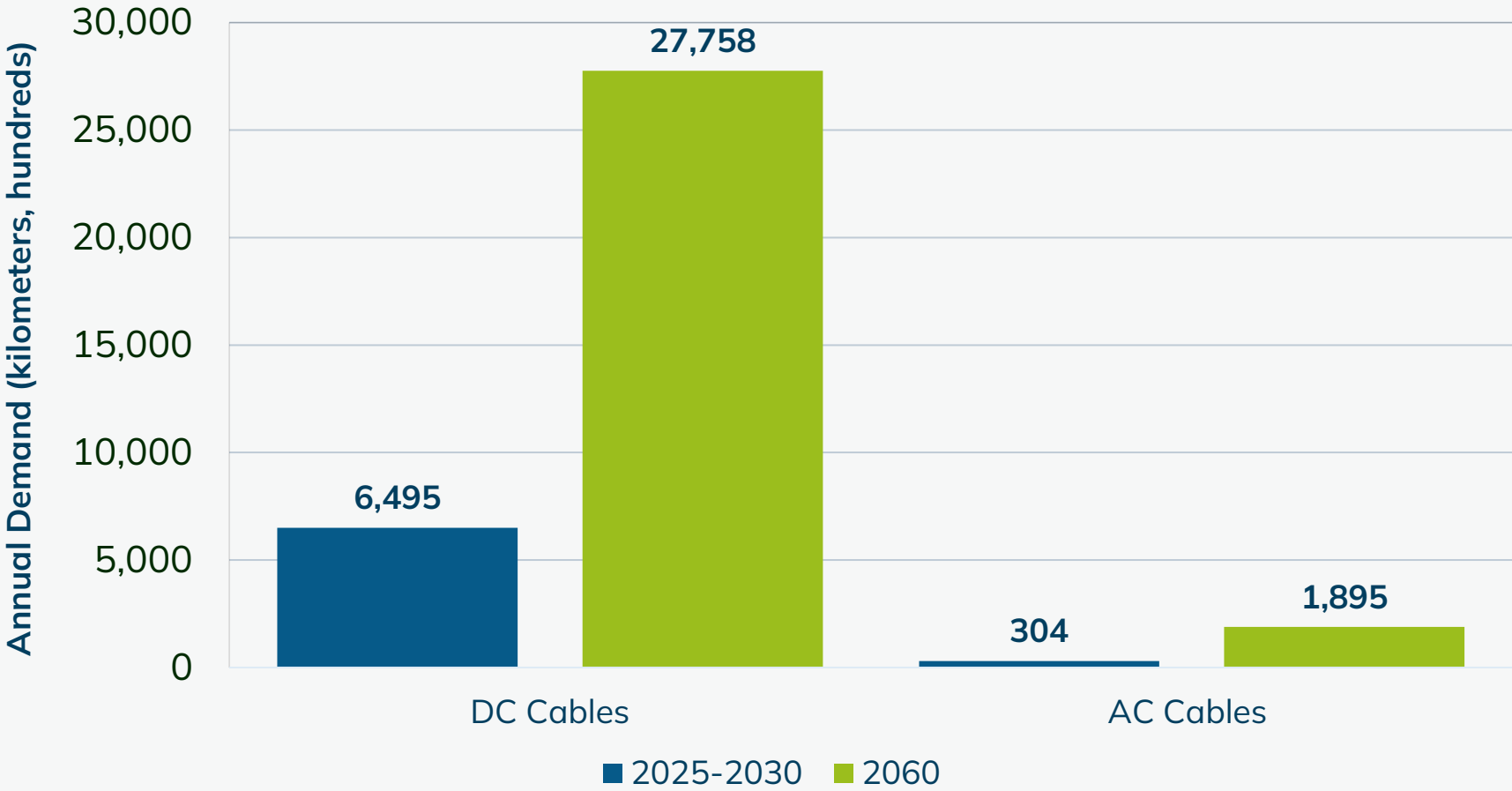
Data and market estimations in this section are based on official Botswana targets of 1.5GW of solar capacity by 2030 together with projections based on SEforALL modelling of the Botswana energy demand up to 2060 based on a Current Policy Scenario (CPS), which reflects implementation of current national targets and announced plans.

Notes: Assumes average glass weight (monofacial and bifacial) of 0.025 tonnes/550 W module; and 21tonnes/MW for aluminum (12t/MW for panel frames and 9t/MW for mounting and racking)

CLEAN TECHNOLOGY MARKET SIZING IN BOTSWANA - OPPORTUNITY BY SELECTED COMPONENT

Market Opportunity by selected component (BoS)

Market Size of DC and AC Cables 2025-2030 and 2060



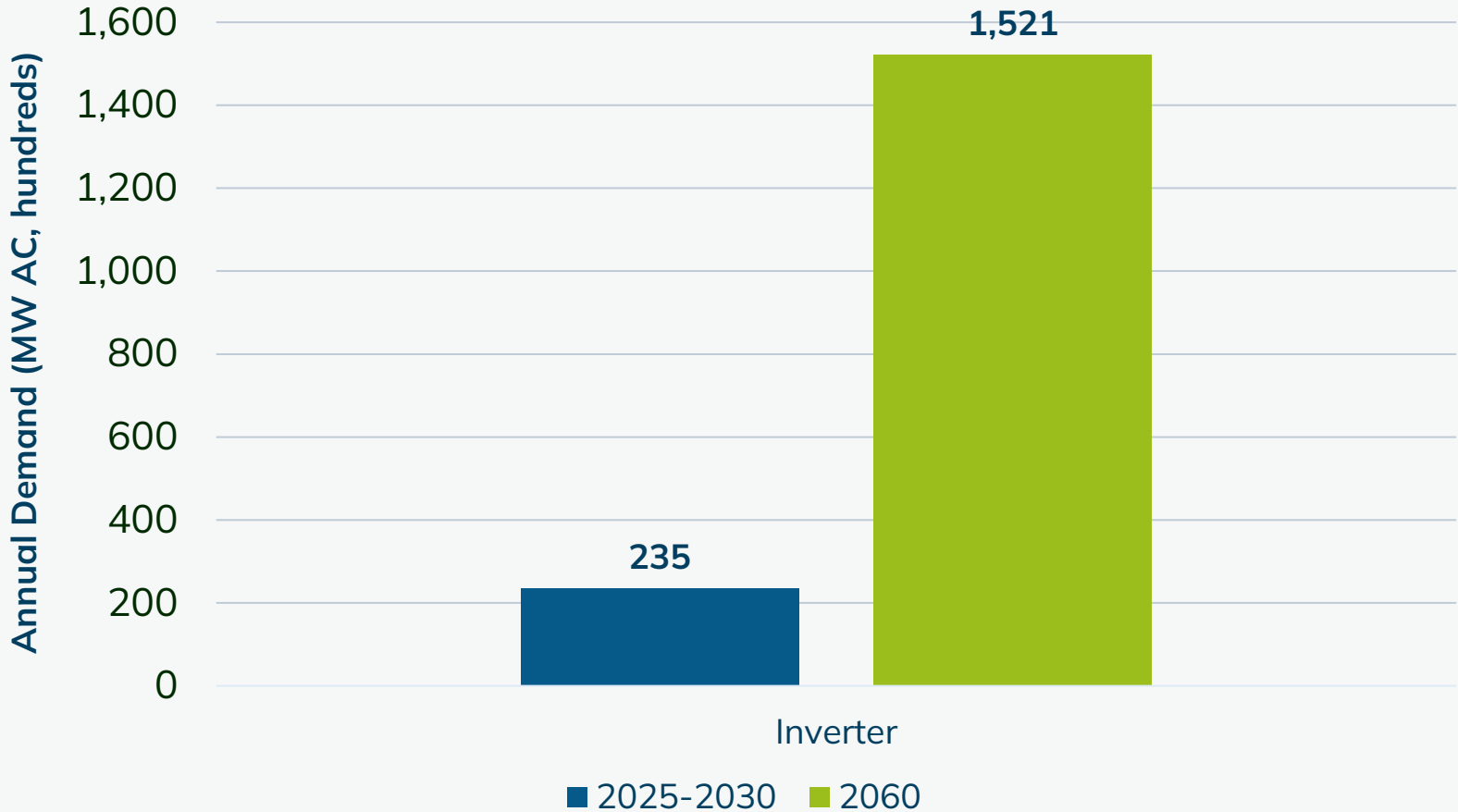
Almost 6,500 kilometers of DC cables and just over 300 kilometers of AC cables could be required to meet the 1.5GW target in 2030, while 2060 could see almost 28,000km of DC and 1,900km AC cables

This creates a compelling case, over and above the existing wire and cabling production in the country as an important component sector to focus on.

Source: SEforALL analysis.

Notes: Assumes 22 km/MW for utility-scale and 8 km/MW decentralized solutions for DC string and main feeder cables, and 1 km/MW for AC cables. Does not include transmission and distribution AC cable requirements.

Market Size for Inverters 2025-2030 and 2060



235MW of Inverter capacity will be required by 2030 and a potential 1500MW by 2060.

Source: SEforALL analysis.

Notes: Assumes inverter loading ratio of 1.3 for utility-scale projects and 1.2 for decentralized solutions.

Solar PV Value Chain Minerals and Metals Inputs for Component Manufacture and Potential Areas to Target

Main Minerals	Main Materials & Metals	Main Components	Assembly
Silica	Glass	Crystalline silicon cell	PV Module
Silver	Silver paste	Laminate	
Petroleum oil	Synthetic polymers	Super substrate glass	
Zinc	Cement	Ethylene vinyl acetate	
Indium	Aggregate	Backing sheet	
Gallium	Concrete	Copper ribbon wiring	
Selenium	Steel	Steel/ aluminium profiles	Mounting and Tracker
Cadmium	Metals	Clamps and rails	
Tellurium		Nuts and bolts	
Copper		Conductors	Cabling
Aluminium		Insulation	
Limestone		Armour	
Iron		Direct current cable connectors	
Molybdenum		Enclosures	Inverter
Chromium		Magnetics	
Manganese		Transformers	
Nickel		Electronics	
		Circuit boards	

●

Potential areas for Botswana to target

Source: Authors adaption from Rivett-Carnac, K., 2022. *Insights into the Solar PV Manufacturing Value Chain in South Africa*, Trade & Industrial Policy Strategies. South Africa. Available from <https://coilink.org/20.500.12592/xksn533>. COI: 20.500.12592/xksn533.

Botswana holds considerable geological resources beyond its diamond deposits, creating an opportunity to benefit from rising global demand for minerals critical to renewable energy technologies and advanced manufacturing.

- » Botswana’s mining sector is largely concentrated on diamonds, but the country also has active production of, or resource potential in, several minerals relevant to clean energy value chains with the most direct linkages to copper and silver which are both already in production and have direct application in solar PV manufacturing (wiring/ electrical components). Other minerals including nickel, uranium and rare earth elements remain at earlier development stages but do offer longer-term potential to expand into battery and high-tech manufacturing value chains.
- » Botswana’s copper deposits are already supporting active, expanding production positioning the country for continued and sustained extraction over the long-term. Nickel deposits meanwhile also show strong potential, though current assets remain in re-development and pre-feasibility phase, with production timelines not yet confirmed.

Mineral Resource	Development Status	Market Application	Strategic Value
Copper	Active production, major expansion underway	Electrical infrastructure	Key for energy transition
Nickel	Advanced exploration/ Redevelopment of mines ⁶	Battery technology, stainless steel	Potential EV/ battery supply chain growth
Gold	Limited production	Investment/ jewelry	Economic stability; export diversification
Silver	Active production ⁷	Industrial applications, electronics	Technology & energy transition sector demand; expanding together with increased copper output
Uranium	Assessment/ pre-feasibility stage	Nuclear energy	Clean energy transition
Rare Earth Elements	Early-stage exploration; recent discovery	High-tech manufacturing, EVs, wind turbines	Supply chain diversification; longer-term docus

Source: Based on publicly available information and insights.
⁶ NexMetals available at sec.gov/Archives/edgar/data/795800/000149315226002925/ex99-1.htm
⁷ MMG Ltd available at [Khoemacau – MMG](#)

Source: Discovery Alert

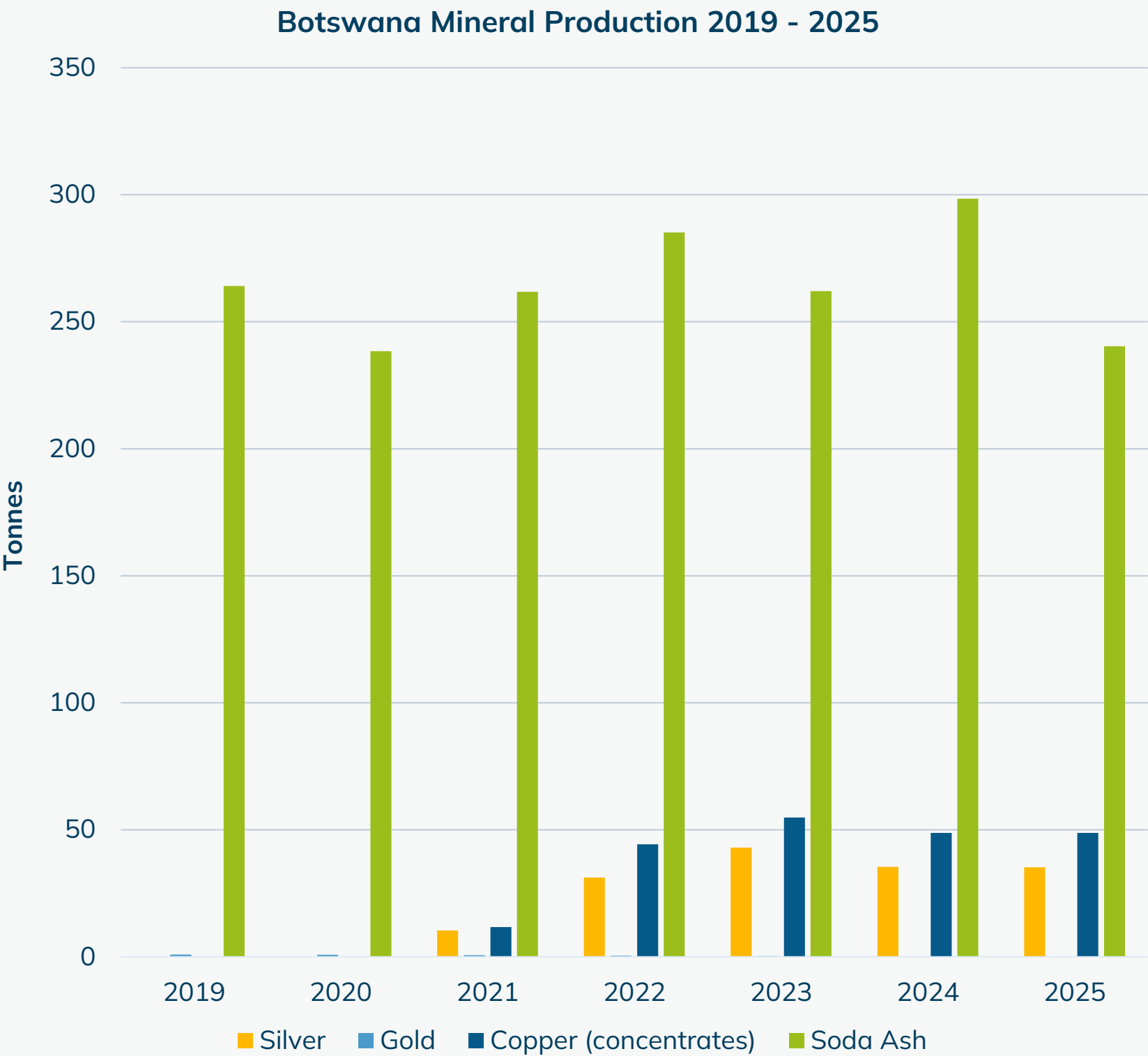
Botswana has existing deposits of minerals linked to the production of components for Solar PV and Batteries, in various stages of production.

The available data indicates some key insights:

- » The strongest opportunity for Botswana is in Solar PV manufacturing owing to the availability of minerals in production currently.
- » Diamonds not considered, soda ash is Botswana’s most consistent mineral output and could be Botswana’s comparative advantage in advancing local glass manufacturing.
- » Currently, Botswana’s soda ash is primarily used in the glass industry, with around 66% exported to large manufacturers in South Africa and an additional 20% exported to Zimbabwe⁸.
- » Based on available data, Botswana’s most likely opportunity is to enter the midstream or assembly segments of the value chain.
- » There would be a reliance on SADC neighbours, thus regional value chain integration should be a strategic focus for the country.

Solar PV		Batteries	
Mineral	Application	Mineral	Application
Silver	Conductive paste	Copper	Current collectors foil
Copper	Cables and wires	Nickel	Cathode
Soda Ash	Glass		

⁸ BITC available at <https://www.bitc.co.bw/Views/areas/main/invest/investment-areas/media/pdf/3/BITC-SODA-ASH-PRODUCTION-BENEFICIATION.pdf>



Copper-Nickel-Cobalt matte: although the country has deposits and a history of previous production, there has been no matte production in Botswana since the BCL Group of mines (BCL Limited and Tati Nickel Mining Company) was placed into provisional liquidation in Q4 2016 (9 October 2016). This refers specifically to the smelted Ni-Cu-Co matte product historically produced at the BCL smelter. Botswana's separate copper concentrate production (e.g., at Khoemacau and Motheo) has continued and expanded since BCL's closure.

Source: Statistics Botswana, Index of Physical Volume of Mining Production 2025 available [here](#).

COPPER

Existing Production							
Copper (concentrates)	2019	2020	2021	2022	2023	2024	2025
Volume (t)	0	0	11.742	44.269	54.808	48.758	48.820
SADC volume (t)	2335.226	2658.739	2828.732	3297.492	3715.959	N/A	N/A

- » **SADC is a strong player** in the copper production, with Zambia and DRC standing out as important global players.
- » **Botswana is slowly increasing** its share of copper production in the region, seeing a significant increase up to 2023, though still being a small producer.
- » **In 2021 Botswana** accounted for 0.4% of copper production in SADC; as of 2023 it accounted for almost 2% of total SADC production.
- » **Existing downstream industry:** Botswana already has a relatively small industrial base of wiring harnesses for the automotive sector, which are exported to manufacturers in South Africa.
- » **Existing infrastructure,** export logistics and expertise exist based on the successful diamond trade and established trade and logistics routes with South Africa in many other products, including for example wiring harnesses and soda ash.
- » **Global demand** for copper is expected to significantly increase over the coming years as the demand for clean energy technologies increases, and this is therefore a strategic opportunity for Botswana to actively develop.

Next Steps:

As most of the value add in the copper value chain is added further downstream, when transforming raw copper cathodes into components such as wire, cables etc., Botswana should actively focus on **developing partnerships with existing copper producers in the region**, such as neighboring Zambia, to explore opportunities in smelting and manufacturing of certain products where Botswana may have capabilities – such as wire and cabling for solar PV modules. Leverage on the planned MMG Khoemacau expansion plans and local refinery establishment to drive value-added copper production.

Source: World Mining Data, Austria; Statistics Botswana

SILVER

Existing Production					
Year	2019	2020	2021	2022	2023
Volume (t)		0	10.383	31.174	42.955
SADC volume (t)	81.118	63.747	68.777	100.645	120.959

- » As the global demand for energy transition technologies picks up speed, there is an increasing demand therefore for silver in solar PV, EV and grid technologies.
- » Botswana has again seen significant increase in production of silver up to 2023, accounting for almost 50% of all production in the SADC region and tapering down again to 2025.
- » In 2021 Botswana accounted for 15% of total SADC silver production, by 2023 the country accounted for 45% of total production and becoming an important regional producer.

Next Steps:

Globally there is an undersupply of silver without increased production this supply deficit will only widen.⁹

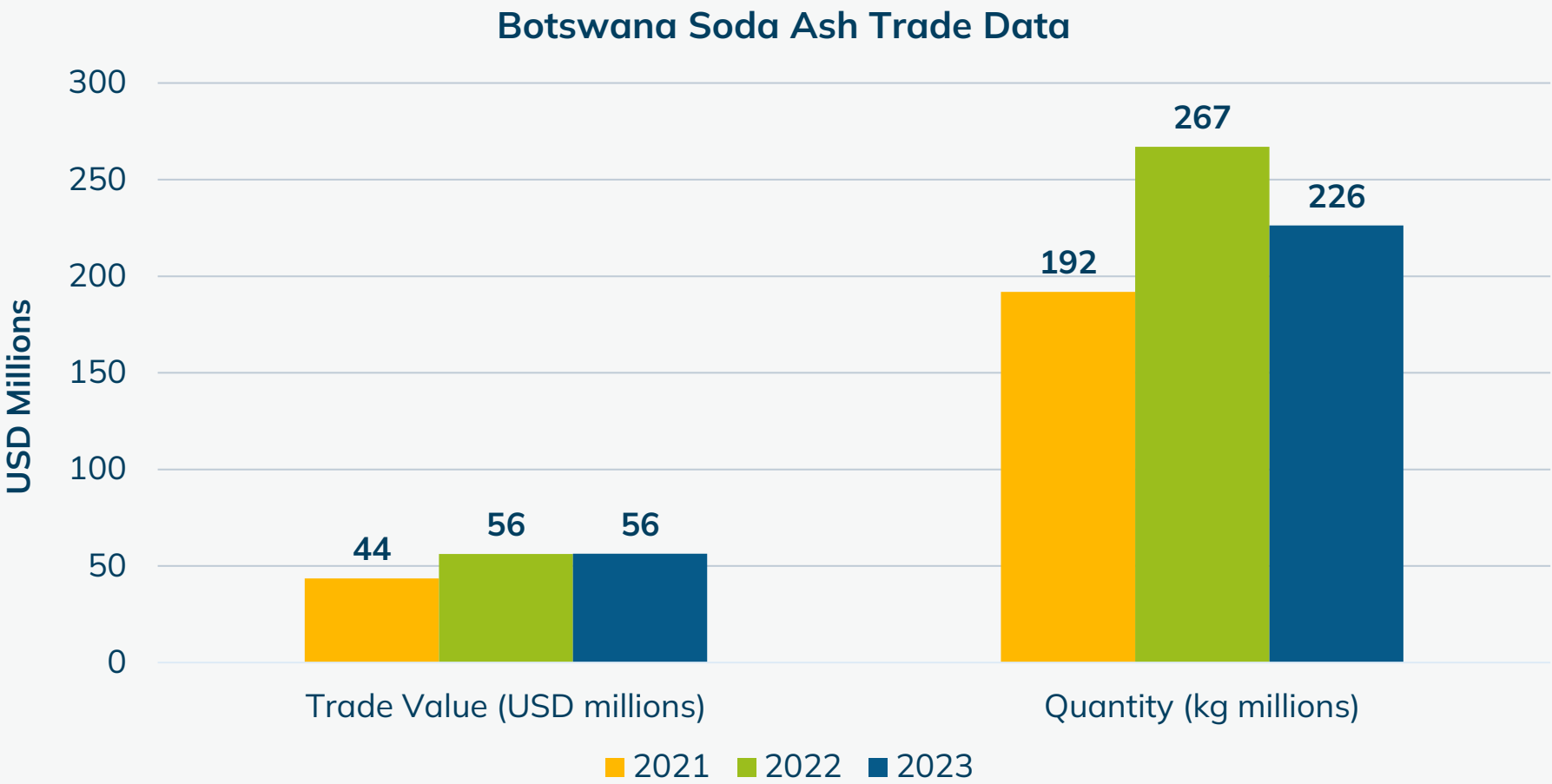
This could potentially create a **strategic opportunity for Botswana to pursue**, through increasing production and exploring partnerships for investment in local beneficiation and value addition in the silver value chain.

Source: World Mining Data, Austria; Statistics Botswana
⁹ Silver Institute available at <https://silverinstitute.org/global-silver-market-forecast-to-remain-in-a-sizeable-deficit-in-2025/>

SODA ASH

Existing Production					
Year	2019	2020	2021	2022	2023
Volume (t)	264.119	238.476	261.838	285.215	262.052

- » Soda Ash production in Botswana has remained largely stable between 240 000 – 300 000 tonnes since 2019, indicating little volatility and established extraction and operational capability.
- » It is one of the country's most consistent mineral outputs, with Botsash aiming to significantly increase production over the next 5 years.
- » Soda Ash is an underexploited industrial opportunity in Botswana.
- » Almost all of Botswana's soda ash production is exported in raw form, with no local value addition (70% exported to South Africa’s glass-making industry).



Source: World Mining Data, Austria; Statistics Botswana; UN Comtrade

Key Insights

Botswana's **strongest opportunity lies in the solar value chain**, based on levels of solar irradiation, Government policy in driving solar PV uptake and trade data together with current and future market demand.

Key pathways to pursue:

1. **Solar panel assembly** – beginning with the components best suited to local manufacture, before expanding to expanded assembly.
2. **Glass production** – leveraging Botswana's soda ash endowment and Special Economic Zone opportunities, including at Selebi-Phikwe, while drawing on lessons of previous attempts to establish domestic glass manufacturing.
3. **Cables and wiring** – building on the country's existing, while small, industrial base in this sector, using local copper inputs supplemented by imports where necessary.
4. **Regional integration** – a key enabler for scaling Botswana's clean technology manufacturing base and addressing the constraints currently facing the domestic market, including by leveraging South Africa's SAREM objectives to drive local value addition in Botswana and meet rising regional demand.

Constraints

1. **Scale** – domestic demand alone is unlikely to be sufficient to sustain local manufacturing; strategic partnerships and regional cooperation and integration are therefore key for Botswana to reach viable scale.
2. **Energy requirements** – glass production requires stable, consistent and high-energy intensity, which Botswana currently struggles provide reliably.
3. **Downstream ecosystems** (assembly, distribution, skills) – building these requires a comprehensive approach at both national and regional levels, with trade, industrial and energy policy closely aligned and holistically planned.

ANALYSIS OF COMPONENT-SPECIFIC OPPORTUNITIES IN BOTSWANA

Analysis Note:

This analysis identifies the three most feasible products for local manufacture or assembly in Botswana’s solar PV (and electric vehicle) value chains. Each candidate product is assessed against criteria derived from Botswana's actual economic endowments, infrastructure, industrial base, and forward-looking demand.

This analysis focuses on components and sub-assemblies rather than finished modules, complete EVs, or utility-scale systems, where Botswana's size, location, and resource base create genuine comparative advantages. These components are the most feasible for initial entry points in the value chain: high feasibility, lower capital intensity than full systems, direct linkage to domestic and regional demand, and strong resource anchoring.

Assessment Criterion	What Is Examined
Raw Material Endowment	Does Botswana produce a key input domestically, and Is there local resource extraction that can be directly leveraged, reducing import dependence and production cost?
Existing Industrial Capacity	Are there parallel industries, skills bases, or infrastructure already in Botswana that lower the entry cost and risk for new manufacturing? Can existing firms pivot or expand?
Logistics and Trade Connectivity	Can the product reach its end market efficiently? Does SACU/SADC market access create a viable export proposition?
Domestic Demand (Forward-Looking)	What is the size and trajectory of demand within Botswana for the finished product that this component feeds into?
Regional Demand (SADC/SACU)	What is the wider regional market opportunity? Does Botswana's geographic and trade position enable it to serve neighbouring countries?



PRODUCT 1: SOLAR PV GROUND-MOUNT RACKING & FRAMES

The Product

- » Ground-mount solar racking structures are the steel and aluminium frameworks that fix photovoltaic panels to the ground at utility-scale and commercial solar farms and are classified under HS codes 7308 (iron/steel structures) and 7610 (aluminium structures).
- » Generally, mounting systems represent approximately **8–12% of total** installed system cost for utility-scale ground-mount projects, which is a significant and entirely import-substitutable component.

Regional Solar PV Export Market Potential

Market	Solar PV Pipeline	Mounting Market est.	Botswana's Trade Position
 South Africa	11.3GW by 2030 (IRP)	~USD750m	Zero SACU tariff; strong logistics links to South Africa
 Namibia	3GW+ by 2030	~USD200m	Zero SACU tariff
 Zambia	1.5GW+	~USD100m	Short logistics connection; potential SADC preferences
 Zimbabwe	2GW+	~USD140m	Short logistics connection
 Botswana (domestic)	1.5GW by 2030	~USD100m	40% citizen shareholding as local content policy anchor
Total SADC	30GW+	~USD1.4bn	Botswana centrally positioned

Note: The pipelines are sourced from Government policy; Mounting market sizes are estimates based on 8-12% solar BOS cost; Botswana’s immediate neighbours are evaluated, not the entire SADC or SACU regions

PRODUCT 1: SOLAR PV GROUND-MOUNT RACKING & FRAMES

Why it makes sense for Botswana

Existing Steel Manufacturing and Galvanizing Capacity – Botswana has several local producers supplying the mining industry and international firms operating in-country. The galvanizing process required to manufacture racking for solar PV systems is similar to that used for mining industry products, meaning the technology transfer distance from mining steel fabrication to solar racking fabrication is rather minimal.

Domestic Demand – Botswana’s solar PV pipeline creates immediate demand:

- The 500MW Maun solar project, targeting commercial operation by 2027, represents the country’s largest single racking procurement opportunity to date.
- A minimum 40% citizen shareholding requirement for utility-scale solar projects creates a structural incentive for local content, anchoring policy support for domestic manufacturing.

Regional Export Market Potential – Botswana’s geographic location provides for an attractive export potential into the SADC market. South Africa, Africa’s largest importer of solar PV systems, is a neighbouring country with a significant solar pipeline, presenting a direct import-substitution opportunity for a regional fabricator.

Raw Material Endowment – steel and copper – Botswana benefits from:

- An **established steel import and distribution network** with the SACU Common External Tariff allowing steel to be imported once for the entire SACU zone without any further duties;
- **Direct access to South African steel producers** via existing trade corridors; and
- **Growing copper production** that could supply earthing cables and grounding systems which is a complementary component in solar balance-of-system packages. The Kalahari Copperbelt's expanding output (Khoemacau targeting 130,000 tonnes/year by 2026, Motheo operating at 3.2 Mtpa) means locally sourced copper could be processed into earthing conductors, strengthening local content across the full solar PV package.

Note: The pipelines are sourced from Government policy; Mounting market sizes are estimates based on 8-12% solar BOS cost; Botswana’s immediate neighbours are evaluated, not the entire SADC or SACU regions

PRODUCT 2: COPPER WINDING WIRE (MAGNET WIRE) FOR SOLAR INVERTERS AND EV MOTORS

The Product

- » Copper winding wire is a crucial material in every electric motor, transformer, and generator. It has various applications across the clean-tech value chain, including in:
 - Solar inverter transformers
 - EV traction motors
 - Solar tracker drive motors
 - EV charging station transformers
 - Battery Management System (BMS) inductors
- » The product is classified under HS code 854411 (winding wire, copper, insulated) and is a high-value, precision electrical component. Importantly, **its primary raw material is copper**, which Botswana produces in rapidly growing volumes and currently exports almost entirely as low-value concentrate.

Why it makes sense for Botswana

Raw Material Endowment - Botswana is a Copper Producer. Botswana has a large and growing copper resource but currently exports most of its concentrate at low or minimal value add. The country exports copper concentrate at approximately USD 6–8 per kilogram¹⁰ while importing magnet wire costs USD 12–20 per kilogram¹¹, highlighting an import-substitution opportunity with the potential for up to 200% value addition.

Accessible Manufacturing Process and Local Industry Base – The manufacture of copper winding wire is a relatively well-understood, non-advanced process, making it easier for new entrants to access the manufacturing space. The technology involved is not proprietary and is accessible through various equipment suppliers. Botswana also has an existing local industry base in automotive harness and wiring, providing a relevant skills base and a short technology transfer distance to winding wire production for solar and EV applications.

Regional Winding Wire Market is Large and Import-Dependent – Available data indicates a significant import gap across the SADC region, with Botswana almost entirely import-dependent for magnet wire, primarily from Aisa. A domestic facility in Botswana producing magnet wire could take advantage of SACU and SADC trade preferences, while supporting the objectives of the Mines and Minerals Amendment Act 2024 which requires holders of mineral concessions to *'beneficiate minerals produced in Botswana as far as economically feasible'*.

Clean-tech Demand is Accelerating – The global energy transition, and the parallel shift towards electric mobility, is driving significantly increasing demand for copper winding wire.

SEZ Opportunities – Botswana has purpose-build SEZ's for mineral processing, such as the Selebi-Phikwe SEZ, could serve as a key location to host copper winding wire manufacturing. Proximity to copper mining operations is an important cost-reduction factor: Botswana's copper belt runs through the eastern corridor, where Selebi-Phikwe sits as the closest major economic zone to the mines.

¹⁰ <https://rri.co.id/en/business/2267453/indonesias-copper-concentrate-export-price-rises-on-global-demand>

¹¹ various sources

PRODUCT 3: SOLAR PV GLASS

The Product

- » Solar PV glass is the tempered, low-iron cover glass that protects the silicon cells in every crystalline silicon solar module. More than 75% of solar modules manufactured worldwide use tempered solar glass¹².
- » Solar glass is both a critical and a logistically expensive component to import as it makes up the heaviest element of the module, over 70% of total weight.
- » Solar glass is therefore a good example of product where local production close to the point of use can create the most value.

Why it makes sense for Botswana

Raw Material Endowment

- **Existing Industrial Scale Soda Ash Production** – Botswana’s resource-to-product linkage for soda ash to glass already exists. Botash currently produces soda ash at approximately 300,000 tonnes per annum and exports it regionally, including to South Africa’s glass industry. Solar glass is not the only application for Botswana’s soda ash: it could also find application in flat glass used in automotive glass, and in glass manufacturing for the food and beverage packaging sector.
- **Availability of raw co-inputs** – Solar glass manufacturing requires silica as an input. Sand deposits in Botswana’s Kgalagadi Desert¹³ have been found to be potentially well-suited for this purpose, though further techno-financial studies would be required.

Large, growing global demand – Global demand for solar glass is growing rapidly alongside the scale-up of solar PV. Price volatility in soda ash has been identified as a key constraint by global industry players. A Botswana-based solar glass manufacturing facility could hold a significant cost advantage that import-dependent competitors in Asia, Europe, and even South Africa’s glass producers would find difficult to replicate.

Regional market demand – South Africa’s significant and growing solar PV market represents an immediate opportunity beyond Botswana’s domestic demand. Strong existing trade and logistics linkages between the two countries, combined with zero-tariff access under SACU, make regional projects an attractive proposition.

¹² <https://www.marketreportsworld.com/market-reports/solar-glass-market-14715996>

¹³ Rabasoma, Kago & Nwaigwe, Kevin & Dintwa, Edward. (2026). Exploration of Kgalagadi Sand as a High-Temperature Heat Storage Material for the Growing Renewable Energy Market in Botswana. International Sustainable Energy Conference - Proceedings. 2. 10.52825/isec.v2i.3435.

Botswana is well-integrated into regional trade, also hosting the SADC Secretariat, with some of the most rapidly growing markets in Sub-Saharan Africa, while also being strategically positioned within the region as a key logistics player.

Botswana is a member of the Southern African Development Community (SADC) along with South Africa, Eswatini, Lesotho, Namibia, Mozambique, Madagascar, Mauritius, Comoros, DR Congo, Malawi, Seychelles, Zimbabwe, Angola, Tanzania, Zambia and Zimbabwe.

Botswana is also a member of the Southern African Customs Union (SACU), the oldest functioning customs union, together with Eswatini, Lesotho, Namibia, South Africa.

According to WTO tariff data, Botswana has a simple weighted MFN score of 7.5 as of 2024 indicating a moderate tariff rate, while enjoying duty free trade in goods as a member of SACU.



Free Trade Areas (FTAs) - Key Aspects

SADC	SACU
Aims to liberalise trade and support integration across the region.	Free movement of goods among member states, which lowers trade barriers inside SACU.
Phased elimination of import duties on goods originating in SADC member states, which makes regional trade cheaper.	Support for economic development, diversification, industrialization, and competitiveness in member states.
Removal of non-tariff barriers, such as restrictive licensing or border delays, which improves the flow of goods across borders.	Equitable revenue sharing from customs, excise, and related duties, which supports smaller economies and stabilizes public finances.
Preferential access to a larger regional market, giving firms access to more consumers and buyers across the region.	A common approach to external trade negotiations, so members can act more coherently when negotiating with third parties.
Support for efficient production, industrialisation, and diversification, helping member states build stronger productive capacity.	A common external tariff on imports from outside SACU, which reduces fragmentation of the market.
Potential development of regional value chains, where countries specialize in different stages of production.	No intra-SACU customs duty, but external-border duties still exist.

Sources: SADC available at <https://www.sadc.int/>; SACU available at <https://www.sacu.int/>

ESTABLISHING A CLEAN TECHNOLOGY MANUFACTURING COMPANY IN BOTSWANA

WHAT IS AN ORIGINAL EQUIPMENT MANUFACTURER (OEM)?

An original equipment manufacturer (OEM) is a company that designs, engineers, and assembles a final product using components sourced from various suppliers. In sectors like aviation, automotive, and renewable energy, OEMs play a key role in ensuring quality, system integration, and compliance, even when they outsource most manufacturing to third parties.

OEMs have a multi-fold impact on the economy and are critical for the growth. Their contributions include:

1. **Employment Generation:** Creating diverse and high-income jobs in manufacturing, engineering, and supply chain sectors.
2. **Supply Stability:** Ensuring consistent component supply, mitigating market and price volatility risks.
3. **Value Chain Enhancement:** Significantly adding to the value chain, driving innovation, and bolstering industry competitiveness.
4. **Cost-Effective Quality:** Focusing on specialized parts, they achieve economies of scale and uphold stringent quality standards.
5. **Customization and Technological Innovation:** OEMs offer bespoke solutions with advanced technology, crucial for product functionality and integrity.





KEY STEPS IN ESTABLISHING A CLEAN TECHNOLOGY MANUFACTURING COMPANY

- 1 Incorporate a legal entity in Botswana.
- 2 Assess availability of business districts and zones that provide incentives to manufacturers.
- 3 Obtain requisite approvals and registrations for manufacturing operations with relevant regulators.
- 4 Registration of intellectual rights where applicable.
- 5 Apply for and obtain relevant tax and fiscal incentives.



Under the Botswana Land Policy¹⁴, business land is allocated to citizens and non-citizens through open, competitive tender and it falls within all three land tenure systems in the country. As of 2022, almost 4%v of business land was foreign-owned¹⁵.

Obtaining Land Rights



Three types of land tenure in Botswana:



Land Use

Category	Description	Share of Total Land
Tribal Land	Managed by Land Boards as body corporates to administer tribal land. All business uses are granted for 50 years. Licenses of up to 5 years and leases up to 25 years are also issued.	71%
State Land	Allocation is made through Fixed Period State Grant of 50 years for business uses.	26%
Freehold Land	Granted titles under the Commissioner of Land	3%

¹⁴ Botswana Land Policy 2015. Available [here](#)
¹⁵ Botswana Population and Housing Census 2022. Available [here](#)

Special Economic Zones Authority (SEZA) Botswana, is a parastatal under the Ministry of Trade and Entrepreneurship, established through the Special Economic Zones Act of 2015.

SEZA began operating in April 2018 with the mandate to Establish, Develop and Regulate Special Economic Zones (SEZs) in Botswana.

SEZA focuses on the following industry sectors of strategic national importance that have high yield potential for investors:

- » Agro-Business
- » Water Management
- » Energy
- » Financial Services
- » Applied ICT
- » Health
- » Manufacturing

As part of SEZA’s functions and responsibilities, it is required by the SEZ Act and SEZA 2019 Regulations to establish One Stop Service Centers (Investor Services Centers), one at the Head office and satellite centers at each SEZ, which accelerates business registration, licensing, and residence-permit processing for SEZ investors, in line with the SEZ Regulations and Incentives.

Special Economic Zones Scheme at a Glance

Investor services offered at the ISCs	Key SEZ Benefits for Investors & Developers
Company registration	Investors and developers in SEZs benefit from a reduced corporate-income-tax rate of 5% for the first 10 years, rising to 10% thereafter, on income derived from SEZ-licensed operations.
Building/occupancy permits	VAT exemptions apply on raw-material purchases used in manufacturing goods for export.
Assistance with obtaining visas, work and residence permits	Duty-free imports are allowed for specialist plant and machinery used in manufacturing.
Commercial and industrial licenses	Investors may receive a waiver on transfer duty on land and property within SEZs
Bank account opening	Investors can enjoy full repatriation of profits and capital with no exchange-control restrictions.
Customs duty exemption	
Land and factory allocation	
Tax registration	
Doing business in Botswana information pack	
Environment impact assessment compliance	
Assistance in establishing business connections with local enterprises	

Source: SEZA

In Botswana, locals and foreigners register companies through The Companies and Intellectual Property Authority (CIPA).

The CIPA, established by the Companies and Intellectual Property Rights Act, Cap. 42:13) 2011, is mandated by law to promote and enable full protection of the rights of investors and right holders, register business names and protect intellectual property rights primarily through the administration of four pieces of legislation:

1. Registration of Companies including incorporation and reservation of company names (The Companies Act, CAP 42:01).
2. Registration of Business Names and post registration processes (Registration of Business Names Act, CAP 42:05).
3. Protection of industrial property rights (Industrial Property Act, CAP 68:03).
4. Protection of rights of authors, artists, creators and their works (Copyright and Neighbouring Rights Act, (CAP 68:02).

Source: CIPA 2026. Available at <https://www.cipa.co.bw/>

1. **Private Company (Pty Ltd):** This is the most common structure in the country and most widely used vehicle for commercial activity. A private company is formed with the intention of making a profit and has a maximum of twenty-five (25) shareholders. It does not make any offer to the public to subscribe to its shares or debentures. The company name ends with “(Proprietary Limited)”
2. **Public Companies Limited by Shares:** A public company has an unlimited number of shareholders and is usually listed with the Botswana Stock Exchange (BSE). It must have at least two directors and a company secretary. This structure is generally used by businesses seeking public investment or a BSE listing, and a public company can later be re-registered as a private company, subject to shareholder approval and CIPA filing, if it no longer meets public-offer criteria. The company name generally ends with “Limited”.
3. **Company Limited by Guarantee:** This structure has no share capital. Instead, members commit to contributing a defined amount toward liabilities if the company is wound up. It's exempt from corporate income tax only if formally registered as a non-profit with BURS, otherwise standard corporate tax rates apply.

Structures for foreign entities operating without local incorporation.

4. **External Company / Branch Office:** Foreign companies can also operate in Botswana without incorporating a subsidiary by registering as an external company and need to register as such while maintaining a registered office within the country.
5. **Representative Office:** This structure is typically used for liaison or market-scoping activity without conducting full commercial operations locally.



STRATEGIC LOCATIONS FOR RENEWABLE ENERGY MANUFACTURING FACILITY

Available SEZs for Investments in Botswana

Sir Seretse Khama International Airport (SSKIA) SEZ

Focus industries: Mixed-use

This is the flagship of the country's Special Economic Zones, strategically located for business, adjacent to the Sir Seretse Khama International Airport.

Greater Palapye SEZ

Focus industries: Renewable Energy

The SEZ focuses on renewable energy (solar, wind, organic matter, etc.) and beneficiation of coal to oil, gas, and other products.

Francistown SEZ

Focus Industries: Mixed-use

Located in economic hub of the mineral rich northern Botswana, this mixed-use SEZ is themed as a Mining & Logistics Hub.

Selebi Phikwe SEZ

Focus Industries: Mixed-use

This mixed-use SEZ is focused on mixed use SEZ focused on base metal beneficiation.

Sowa Town SEZ

Focus Industries: Salt and Soda City

Themed as a chemical manufacturing hub, the SEZ is primarily focuses on the beneficiation of salt & soda.

Available SEZs Incentives for investors

- » 5% corporate tax for the first 10 years then 10% corporate tax thereafter (must be SEZ-licensed enterprise).
- » Duty rebates on imports of specialised plant and machinery for manufacturing purposes located in an SEZ.
- » Waiver on transfer duty on land and property.
- » Capital Gains Tax exempt on disposal of property acquired for SEZ business purposes.
- » Zero-rated VAT on raw materials for manufacturing and export.
- » Fast-tracked land allocation and long-term renewable land leases.

Learn more about SEZA's Incentives here:
<https://seza.co.bw/incentives>

STEPS FOR SECURING APPROVAL TO OPERATE IN A SEZ

- 1 Investment Proposal
- 2 Submit proposal to SEZA Botswana
- 3 Provide supporting documentation
- 4 SEZA Botswana review and approval process
- 5 Obtain Investor Licence



Key Steps in Obtaining an Industrial License in Botswana

1

Register the company with CIPA and get incorporation documents.

2

Secure premises and obtain lease/title proof plus zoning confirmation.

3

Obtain both required environmental documents: EIA Report and Environmental health clearance from the local council.

4

Submit the Industrial License application with shareholding and identity documents to the Department of Industrial Affairs (if turnover is above P5 million) or to the District/Town Council (turnover below P5 million).

5

Obtain any sector-specific clearance based on the nature of the manufacturing facility (chemicals, food, beverages, animal feeds, or plant-related products).

6

Apply for a trade license if the activity requires one.

Key permits and documents required to set up a manufacturing facility

- 1

Company Incorporation: Before anything else, you must submit your company registration documents to legally establish an entity. This is submitted to the Companies and Intellectual Property Authority (CIPA).
- 2

Land Acquisition: You must secure land for the factory or industrial facility, and obtain a zoning validation report from a physical planner at the relevant District Council, confirming the plot is zoned for the intended industrial use.
- 3

Register for a TIN: Botswana Unified Revenue Service (BURS) manages tax matters. Before operating you must register with BURS for a TIN number. For more detailed information on the process, consult the [Botswana Unified Revenue Service \(BURS\)](#) website.
- 4

VAT Registration: Once you have obtained your TIN number, you need to register for a VAT number with BURS, if your company meets the requirements/ thresholds for such. Once approved, BURS will issue a VAT certificate and registration number which needs to be displayed at your business premises.
- 5

Environmental Impact Assessment (EIA) License: For any industrial estate or manufacturing facility, an Environmental Impact Assessment report or authorisation letter from the Department of Environmental Affairs is required to support a new industrial license application.
- 6

Environmental Health Clearance: In addition to the EIA, a separate approval is required from the Environmental Health division of the local authority/council where the facility is located.
- 7

Trade License: This is a certification required to sell goods and services in Botswana, issued through District Councils; some manufacturing-related activities may fall under reserved or council-administered licensing categories.
- 8

Industrial License: This is a mandatory license required for all manufacturing enterprises before commencement of operations, issued by the Industrial Licensing Authority or the relevant Regional Licensing Committee (depending on company turnover: above or below P5 million).
- 9

Import/Export Licenses: If your business involves international trade (importing raw materials or exporting finished solar panels), you will need to register as an importer/exporter and based on the products you trade, import/export permits may be required.
- 10

Product Quality Certifications: Your products must meet national standards. You must obtain the "Standards Mark of Quality" certification from the Botswana Bureau of Standards (BoBS). For solar panels, this typically involves compliance with standards such as IEC 61215 for performance and IEC 61730 for safety.
- 11

Workplace Safety Registration: Depending on what you manufacture, you may also need clearance from the Environmental & Occupational Health Division for chemicals, the Ministry of Agriculture and Food Security for animal and plant-related products and feeds, and Nutrition and Food Control for food and beverages. These are specifically listed as additional approvals for industrial license applicants in the government guidance.

ENVIRONMENTAL PERMITS

KEY STEPS IN THE EIA PROCESS:

- 1 Screening & Project Brief
- 2 Scoping
- 3 Impact Identification and Analysis
- 4 Environmental and Monitoring Plans
- 5 EIA Review
- 6 Post-EIA Monitoring

For more information on environmental permits in Botswana visit the [Government of Botswana](#) website.



Environmental Impact Regulations

Botswana's environment-regulatory framework is designed to ensure that economic development goes together with environmental protection, sustainable use of resources and responsible business operations. Developers and investors must adhere to the law when planning, implementing or expanding projects, particularly those with significant environmental impacts.

The Department of Environmental Affairs (DEA) in the Ministry of Environment is the Competent Authority under the Environmental Assessment Act, No. 10 of 2011, supported by the Environmental Assessment Regulations of 2012.

The Environmental Authorization (EA) process is a mandatory which predicts and evaluates environmental consequences of projects, plans, programmes and policies to mitigate negative impacts thus also to enhance positive impacts.

Developers must coordinate with local authorities, land boards, and licensing agencies to ensure environmental compliance before proceeding.

To access the full details on the EA application process and list of required documents you can visit [Government of Botswana's Environmental Management](#) page.

Botswana has several important organizations protecting intellectual property (IP) rights, copyright and ensuring fair economic competition in the country – the 3 key organisations are CIPA, ARIPO and CCA.

The Companies and Intellectual Property Authority, manages the registration and protection of patents, trademarks, industrial designs as well as business and industrial licenses in Botswana.

Regional protection of IP rights is facilitated through the African Regional Intellectual Property Organization (ARIPO).

The CCA is responsible for the protection of the interests of consumers through the control of unfair business practices and the prevention and redress of uncompetitive practices through the implementation of the Consumer Protection Act, 2018, and the Competition Act, 2018.



Patents: The Industrial Property Act, 2010 governs patents in Botswana and provides for patentable inventions, filing, examination, grant, maintenance, and infringement. A patent is granted for a period of 20 years from the filing date, subject to payment of maintenance fees, and the Act also allows for international patent routes under the PCT and ARIPO Harare Protocol.



Trademarks: The Industrial Property Act, 2010 also governs marks in Botswana, including trademarks, collective marks, trade names, and geographical indications. A registered mark is protected for 7 years from the filing date of the application and may then be renewed for further 14-year periods.



Copyright: Copyright in Botswana is governed by the Copyright and Neighbouring Rights Act, 2000. The law protects original literary and artistic works, and the Copyright Office in Gaborone handles copyright administration, supervision of the Copyright Society, public awareness, and related government advisory functions. Economic and moral rights are protected for the life of the author plus 50 years, with specific rules for joint works, collective works, audiovisual works, anonymous works, and works of applied art.



Industrial Designs: Industrial designs are directly regulated in Botswana under the Industrial Property Act, 2010. The Act covers the registration of industrial designs, the rights conferred by registration, infringement, and renewal. A registered industrial design is protected for 5 years from the filing date, and the registration may be renewed for two further 5-year periods, for a total maximum of 15 years.



Utility Model: Botswana's Industrial Property Act, 2010 expressly provides for utility model certificates as a separate form of protection and includes conversion between patent and utility model applications. A utility model certificate is protected for 7 years from the filing date and is not renewable beyond that term.



Protection Against Unfair Competition: Botswana addresses anti-competitive conduct through the Competition Act, 2018, administered by the Competition and Consumer Authority (CCA). The Industrial Property Act also contains a specific chapter on acts of unfair competition, which complements the competition framework.

The Ministry of Trade and Entrepreneurship (MTE) is the primary Ministry responsible for regulating and promoting trade and industry in Botswana.

The Ministry of Trade and Entrepreneurship provides leadership and overall policy direction, strategy and standards on business development.

The Ministry also hosts several important parastatals including:

- » Botswana Bureau of Standards (BOBS)
- » Botswana Development Corporation (BDC)
- » Botswana Investment and Trade Centre (BITC)
- » Botswana Trade Commission (BOTC)
- » Companies and Intellectual Property Authority (CIPA)
- » Competition and Consumer Authority (CCA)
- » Competition and Consumer Tribunal (CCT)
- » Gambling Authority (GA)
- » Special Economic Zones Authority (SEZA)
- » Selebi Phikwe Economic Diversification Unit (SPEDU)
- » Citizen Entrepreneurial Development Agency (CEDA)
- » Local Enterprise Authority (LEA)

The Ministry of Trade & Entrepreneurship's areas of responsibilities relevant to Clean Technology manufacturing include:

- » Coordinate implementation of Botswana Investment Policy
- » Deliver Industrial Policy and Programmes
- » Develop and grow International trade
- » Investment promotion and facilitation
- » Import and export control, facilitation and promotion
- » Administration and enforcement of Trading Laws
- » Intellectual Property Management
- » Registration of Companies
- » Trade and Industrial Licensing
- » Trade and Investment Incentives
- » Enterprise development and coordination
- » Implementation of Small business development policy
- » Coordination of value chains
- » Support of innovative projects

Source: <https://www.gov.bw/ministries/ministry-trade-and-entrepreneurship>



BITC operates a One-Stop-Shop Service Centre (BOSSC) facilitation service, allowing to investors to apply for all the necessary permits and approvals in one place, and providing advice and information for investors.

BOSSC has made available shortened and simple administrative procedures and guidelines for issuance of business approvals, permits and licenses, thereby removing bottlenecks faced by investors in establishing and running businesses in Botswana.

Facilitation services through BOSSC are made available to:

- » New Investors
- » Existing Investors
- » Local Investors
- » Foreign Investors

BOSSC Services	
Company and Business Registration	Allocation to BITC factory space (subject to availability)
Trade and Business License Applications	Environmental Impact Assessment (EIA) compliance
Entry visas, Work and Residence Permits	Business Advisory Services
Work Permit Exemptions	Income Tax and VAT Registrations
Connection of Utilities	Access to land
General information of doing business in Botswana	

BOSSC Priority Sectors for Facilitation	
Agriculture	Health
Automotive	ICT
Cargo, Freight and Logistics	Manufacturing
Education	Mining
Financial and business Services	Tourism

Source: <https://www.bitc.co.bw/bossc>

INVESTMENT CLIMATE AND INCENTIVES FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA

Overview

Botswana maintains an investment grade credit rating (*Baa1* from Moody's and *BBB-* from S&P both with a negative outlook), and a track record of political continuity and good governance, with a generally business-friendly policy framework.

The country continues to position itself as a reliable destination for capital in Southern Africa, with a focus on economic diversification, industrial development, and value addition.

Botswana Investment and Trade Centre (BITC), the country's integrated trade and investment promotion authority, promotes Botswana as an investment destination and facilitates investor engagement, weighting support towards investments that actively diversify the economy, create jobs and transfer skills to Botswana citizens.

Botswana provides a concrete package of incentives to support productive investment, lowering operational costs, and encouraging long-term business growth.

These incentives are designed to strengthen the country's attractiveness for manufacturing, processing, and export-oriented activity, while also supporting local enterprise development and job creation.



POLICY LANDSCAPE AND INCENTIVES FOR CLEAN TECHNOLOGY MANUFACTURING

Botswana's regulatory environment for clean-tech manufacturing sits at the intersection of energy law, investment law, environmental regulation, industrial policy, and corporate governance.

Over the past decade, Botswana has implemented several reforms that have strengthened the enabling environment for industrial and energy-sector investment. Some key developments include the establishment of Botswana Energy Regulatory Authority (BERA), the introduction of the SEZ regime, the adoption of the National Energy Policy (2021), ongoing reforms to the mining and minerals regime to support value addition and beneficiation, and amendments to corporate legislation aimed at enhancing the business environment and improving regulatory efficiency.

Clean technology manufacturing investors and projects typically engage with a selection of government institutions and agencies. Depending on the nature of the project or investment these may include:

- » **Botswana Investment and Trade Centre (BITC)** for investment facilitation and investor support services;
- » **Companies and Intellectual Property Authority (CIPA)** for company registration and corporate compliance;
- » **Special Economic Zones Authority (SEZA)** Botswana for investors seeking SEZ licensing and associated incentives;
- » **Botswana Energy Regulatory Authority (BERA)** where projects involve regulated energy activities such as electricity generation, supply, storage, or renewable energy infrastructure;

- » **Department of Environmental Affairs (DEA)** or relevant environmental authorities responsible for environmental assessment and permitting requirements;
- » **Botswana Unified Revenue Service (BURS)** for tax registration and fiscal compliance;
- » **Labour and immigration authorities** for employment, visa and work permit matters; and
- » **Land Boards, local authorities, or SEZA**, depending on the proposed project location and land tenure arrangements.

For most foreign investors, BITC's investor facilitation services and the Botswana One-Stop Service Centre (BOSSC) provide the most effective entry point for coordinating interactions across multiple regulatory agencies.

Early engagement with BITC and, if applicable, SEZA, is strongly recommended. Investors considering export-oriented manufacturing, renewable energy equipment production, battery assembly, solar component manufacturing, green industrial development, or other clean technology activities may benefit substantially from understanding site availability, land tenure arrangements, incentive eligibility, environmental requirements, and licensing obligations during the earliest stages of project planning.

Local Manufacturing Incentives

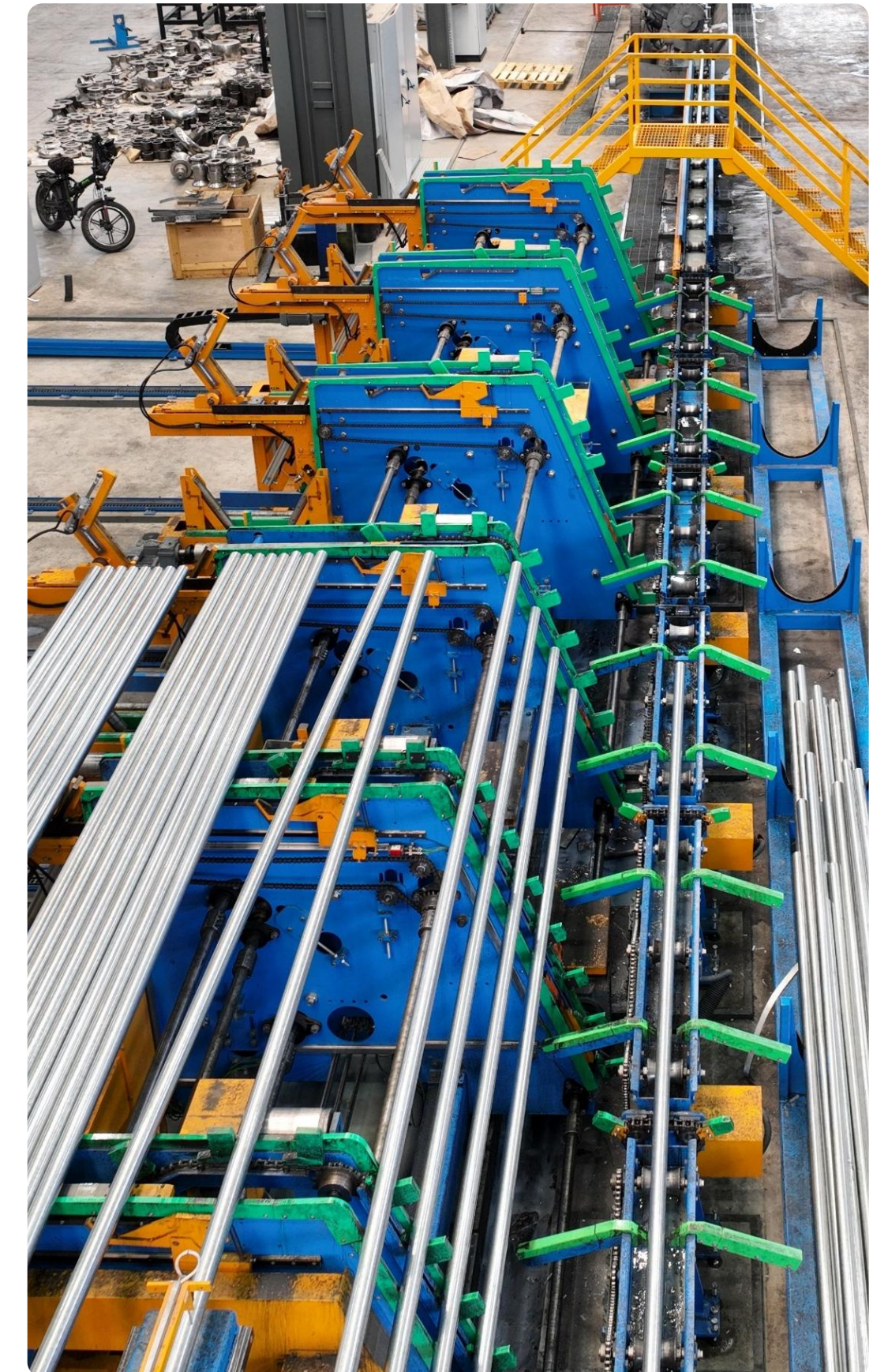
Botswana provides a competitive incentive framework aimed at supporting industrial development, local value addition, and export-oriented production in line with Government policy positions. Manufacturing firms may benefit from several specific incentives, including preferential corporate tax treatment, customs duty rebates on qualifying machinery and production equipment, and duty relief on imported raw materials used in manufacturing processes.

For clean technology manufacturers, these incentives can contribute to reducing capital expenditure during project establishment and lowering operational costs associated with importing specialised production inputs and equipment. Botswana's industrial policy places increasing emphasis on sustainable production, renewable energy development, and industrial diversification, creating opportunities for manufacturers operating in environmentally sustainable value chains.

Export-oriented Incentives

Botswana actively encourages investment in businesses that produce goods and services for regional and international markets. Export-oriented manufacturers may qualify for customs and VAT relief on imported production inputs, duty rebates on machinery, and other incentives intended to enhance export competitiveness and reduce the cost of accessing external markets. Botswana's membership in the Southern African Customs Union (SACU), Southern African Development Community (SADC), and African Continental Free Trade Area (AfCFTA) provides manufacturers with preferential access to regional and continental markets. This supports the country's objective of establishing itself as a regional manufacturing and logistics hub for value-added products, including renewable energy technologies and industrial equipment.

For clean technology manufacturers, Botswana's strategic location and regional trade linkages can provide access to growing African demand for solar components, energy storage technologies, electric mobility solutions, water treatment systems, and other low-carbon industrial products.



Source: BITC Botswana Investment and Trade Centre (BITC), *Investment Incentives*. Available at: <https://www.bitc.co.bw/invest/investment-incentives/>
UNCTAD, *Investment Policy Review of Botswana* <https://investmentpolicy.unctad.org/publications/77/investment-policy-review-of-botswana>
BITC Government of Botswana, *Vision 2036: Achieving Prosperity for All*.
UNCTAD <https://investmentpolicy.unctad.org/country-navigator/29/botswana>

Special Economic Zones (SEZ) Incentives

Botswana's Special Economic Zone (SEZ) programme is designed to attract strategic, capital-intensive, and export-oriented investments. Investors undertaking qualifying activities within licensed SEZs may benefit from one of the most competitive tax regimes in Africa, including a corporate income tax rate of 5% for the first ten years of operation and 10% thereafter, subject to meeting SEZ licensing requirements.

SEZ incentives are particularly relevant to clean technology manufacturers requiring significant upfront investment in specialised production equipment, advanced manufacturing facilities, and export-oriented operations.

International Financial Services Centre (IFSC)-accredited companies Incentives

Botswana continues to offer a competitive framework for qualifying international business and financial services activities. Companies accredited under the International Financial Services Centre (IFSC) framework may qualify for a preferential corporate tax rate and a range of fiscal benefits intended to facilitate cross-border business operations and regional investment activities.

Benefits available to qualifying IFSC companies may include:

- » A preferential corporate income tax rate of 15%.
- » Access to Botswana's network of Double Taxation Avoidance Agreements (DTAAs).
- » Exemption from certain withholding taxes and capital gains taxes, subject to applicable legislation and qualification requirements.
- » Flexibility regarding foreign currency-denominated transactions and cross-border business structures.

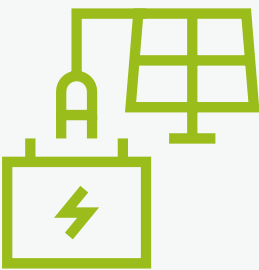
For clean technology investors establishing regional headquarters, treasury functions, project finance vehicles, investment holding companies, or cross-border renewable energy platforms, the IFSC framework may provide additional operational and tax efficiencies.



Source: U.S. Department of State, 2025 Investment Climate Statement: Botswana available at <https://www.state.gov/reports/2025-investment-climate-statements/botswana/>
Botswana Investment and Trade Centre (BITC), Investment Incentives – IFSC Accredited Companies available at <https://www.bitc.co.bw/invest/investment-incentives/>
RSM Botswana, How to Pivot Botswana? Available at <https://www.rsm.global/botswana/industry/how-pivot-botswana>

Botswana does not yet have a dedicated, fully articulated local manufacturing roadmap for solar PV manufacturing. However, policy signals from the government and utilities indicate a gradual shift toward increased localization:

- » The Revised Integrated Resource Plan (IRP) 2025 and national energy strategies emphasize scaling solar capacity (targeting several hundred MW in the coming decade), which creates a foundation for downstream manufacturing opportunities.
- » The government has expressed interest in local participation requirements in energy tenders, including assembly, installation, and services, as a precursor to deeper manufacturing.
- » Through institutions such as the Botswana Investment and Trade Centre (BITC), Botswana promotes industrial diversification, including renewable energy equipment manufacturing as part of reducing reliance on diamond exports.
- » While no fixed numerical targets (e.g., number of manufacturers) have been formalized, local assembly of components (mounting structures, cables, balance-of-system parts) is viewed as an entry point before full module manufacturing.

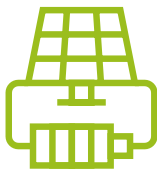


Key incentives applicable for solar PV manufacturers:

While no specific or dedicated solar PV manufacturing incentives exist yet in Botswana, the following more general incentives for the manufacturing industry are however applicable:



Manufacturing companies can benefit from reduced corporate tax rate of 15%.

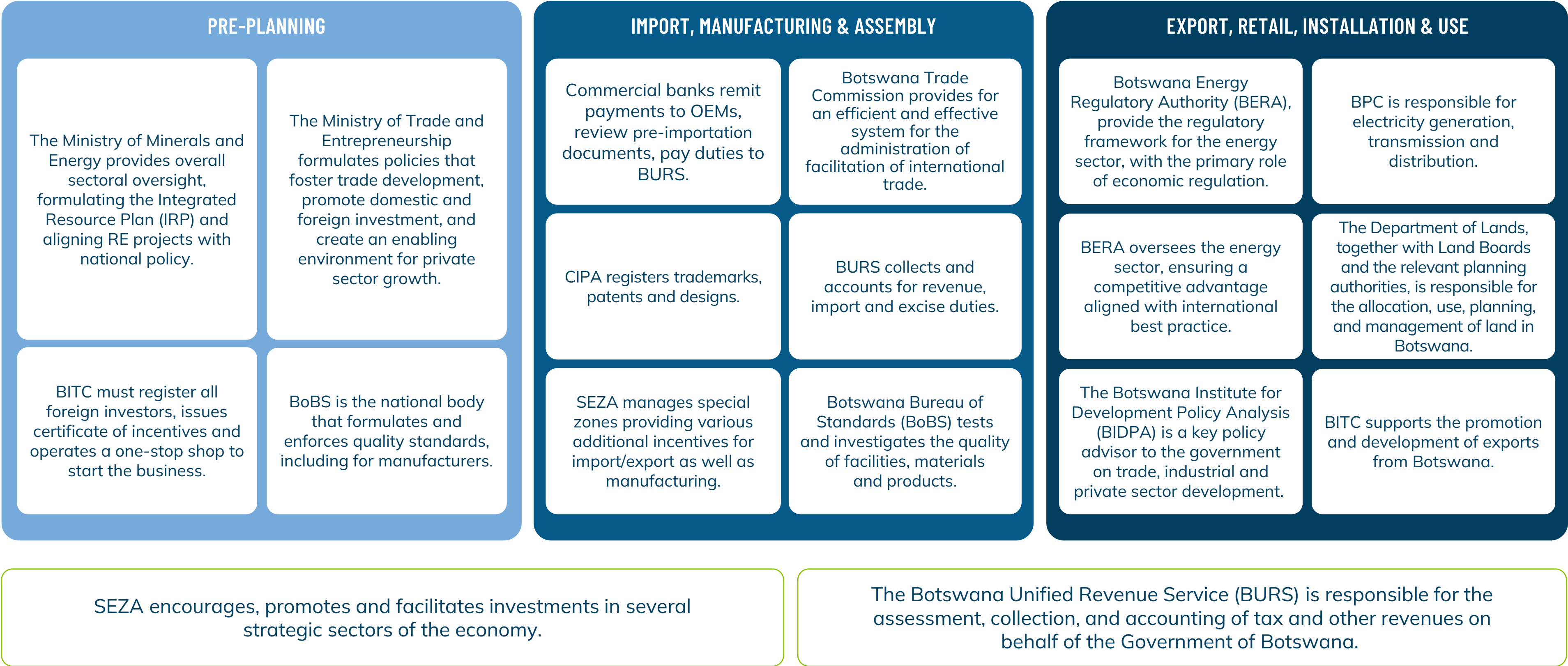


Machinery and equipment used for manufacturing can often be imported duty-free.



Broader SEZ and SPEDU incentives for manufacturing industries.

STAKEHOLDER LANDSCAPE FOR CLEAN TECHNOLOGY MANUFACTURERS



- » **Sector-specific incentive schemes** should be implemented as a matter of urgency, as a mechanism to support developing and infant industries locally. A review of existing and parallel industries (racking and mounting for solar PV, wiring harnesses, soda ash for glass application etc.) that could contribute to broader clean technology value chains should be prioritised in accurately developing incentives that will truly benefit and drive this sector forward in support of national plans and policies such as NDP 12, Botswana Economic Transformation Programme (BETP) and others.
- » Leveraging the Botswana Economic Transformation Programme projects (BETP), **establish dedicated funding facilities to support clean technology manufacturing** by engaging local financing institutions to deliver concessional loans, blended finance, and investment incentives, to de-risk and attract capital for local manufacturing, while exploring partnerships with African financiers to deploy dedicated funding mechanisms to support the **mobilization and development of early-stage funding for project preparation** through the development of prefeasibility studies and up-to-date market data to support early-stage projects related to local assembly of clean technologies.
- » **Develop dedicated demand-side measures** – such as sector-specific Clean Technology Manufacturing Local Content Regulations for IPP procurement to support and develop the local clean technology manufacturing and/or assembly industry.
- » Explore the feasibility of **dedicated, ring-fenced Government Guarantee schemes** off the back of successful demand-side tools for local manufacturers of clean technologies and/or their associated parallel industries, to better support and de-risk local infant industry development.
- » **Clean technology value chains and identified products** for local manufacturing and/or assembly should be inextricably **linked with the country's Research & Development Policy** priorities to ensure a harmonized, and holistic approach to value chain development and support.
- » To address high operational costs that erode manufacturing and value-add competitiveness, Botswana should place an emphasis on **developing the fundamental critical enablers and supporting infrastructure** to support local beneficiation and manufacturing including a reliable and stable energy supply, and well-developed transport infrastructure connecting the country to regional trade hubs.
- » **Assess regional opportunities for value chain development** – leverage the SADC, SACU and AfCFTA frameworks to assess opportunities in developing regional value chains, including the harmonization of standards and developing strategic trade arrangements dedicated to clean technology manufacturing and/or assembly of products.
- » Focus should be placed on **integrated policy-making and implementation**, across energy planning, industrial planning and trade policy. An important first step in achieving this is the establishment of an Inter-ministerial Task Team focused on Clean Technology Value Chain development in Botswana led by the Ministries of Minerals and Energy, Trade and Entrepreneurship and Finance respectively.

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ANNEX: INSTITUTIONS AND AGENCIES

MINISTRIES AND AGENCIES FOR GREEN MANUFACTURING IN BOTSWANA



Ministry of Minerals and Energy

The Ministry of Minerals and Energy oversees and enables the development of the mining sector thereby contributing significantly to the nation's Gross Domestic Product (GDP). The Ministry also drives policy development and provides regulatory oversight for the energy sector (including green technology) which is key contributor and enabler to the success of the economy.

More information:

<https://www.gov.bw/ministries/ministry-minerals-and-energy>

The core functions of the Ministry:

- » The portfolio responsibilities of the Ministry are as follows:
- » Formulation, implementation and monitoring of minerals and energy policies
- » Sustainable energy generation
- » Renewable energy and Green technology
- » Regulation of minerals and energy
- » Mining, licensing and administration
- » Minerals revenue collection
- » Assessment of national energy requirements
- » Control of import and Export of minerals
- » Geo-science research and information management
- » Minerals investment promotion
- » Minerals prospecting and resource management
- » Explosives licensing and administration
- » Negotiation of mineral agreements
- » Petroleum regulation
- » Petroleum strategic reserves management
- » Minerals economic analysis and research
- » Security of supply margin account

Source: Available at <https://www.gov.bw/ministries/ministry-minerals-and-energy>

MINISTRIES AND AGENCIES FOR GREEN MANUFACTURING IN BOTSWANA



Ministry of Trade & Entrepreneurship

The Ministry is responsible for trade policy formulation, implementation, and international trade agreements.

As its mandate, the Ministry aims to create a conducive environment for the promotion of Investment and development of Sustainable Industries and Trade, with a view to diversifying and growing the economy, creating wealth and employment, so that there is prosperity for all.

More information:

<https://www.gov.bw/ministries/ministry-trade-and-entrepreneurship>

Its core deliverables include:

- » Creation of Sustainable Industries and Trade;
- » Economic Diversification: Export development, Foreign Direct Investment (FDI); and Expansions and Domestic Investment.
- » Wealth and Employment Creation;
- » Citizen Economic Empowerment;
- » Entrepreneurship Development;
- » Poverty Eradication; and
- » Facilitating Investment through ease of doing business.

Source: Available at <https://www.gov.bw/ministries/ministry-trade-and-entrepreneurship>



Botswana Investment and Trade Centre (BITC)

Established by an Act of Parliament in 2011, the Botswana Investment and Trade Centre Act, 2011, the organization plays a critical role in driving Botswana's economic growth through the attraction of foreign direct investment (FDI), domestic investment, and facilitation of expansions and further spearheads the growth of exports by promoting locally manufactured goods to regional and international markets. It also manages the Nation Brand – Brand Botswana.

More information:

<https://www.bitc.co.bw>

Botswana One Stop Service Centre (BOSSC)

BOSSC is an investment facilitation centre housed by BITC, in turn houses relevant government agencies as a single cohesive structure that provides prompt, efficient and transparent services to investors.

BOSSC has made available shortened and simple administrative procedures and guidelines for issuance of business approvals, permits and licenses, thereby removing bottlenecks faced by investors in establishing and running businesses in Botswana.

More information:

<https://www.bitc.co.bw>

MINISTRIES AND AGENCIES FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA



Botswana Bureau of Standards
National Standards Body of Botswana

The Botswana Bureau of Standards (BOBS)

BOBS is the national standards body of Botswana, formed with the primary objectives of formulating Botswana standards and coordinating quality assurance activities in Botswana with mission to improve the quality of life of the citizens of Botswana.

A robust quality infrastructure ensures that goods and services meet acceptable standards, thereby stimulating industrial growth.

More information:

<https://bobstandards.bw/>

The Authority is legally mandated to undertake:

- » Development and review of national standards;
- » Provision of conformity testing;
- » Certification of quality products, processes, systems and services;
- » Calibration and verification of instruments used in industry and trade;
- » Provision of training; and
- » Enforcement and implementation of compulsory standards

MINISTRIES AND AGENCIES FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA



Botswana Institute for Technology Research and Innovation (BITRI)

The Botswana Institute for Technology Research and Innovation (BITRI) is a national research centre, established in 2012 under the Ministry of Communications and Innovation.

Its mission is to conduct needs-based technology research that provides sustainable and innovative solutions to advance the economy of Botswana. From concept to delivery, they work hand-in-hand with communities, industry, and research partners to ensure every solution we develop is relevant, affordable, and transformative.

More information:
<https://bitri.co.bw>



Source: Available at <https://bitri.co.bw/about-us/>

MINISTRIES AND AGENCIES

FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA



Botswana Unified Revenue Service (BURS)

The mandate of the BURS is to perform tax assessment and collection functions on behalf of the Government and to take appropriate measures to counteract tax evasion on the one hand, and to improve taxpayer service to a much higher level on the other. In fulfilment of its mandate the BURS Act has empowered the BURS to:

- » Administer and enforce the revenue laws;
- » Promote compliance with the revenue laws;
- » Take such measures as may be required to improve service given to taxpayers with view to improving efficiency and maximizing revenue collection;
- » Take such measures such as may be required to counteract tax fraud and other forms of tax evasion;
- » Advise the Minister on matters relating to the administration and collection of tax;
- » and Perform such other functions in relation to tax as the Minister of Finance may direct.

More information:
<https://www.burs.org.bw>

Source: Available at <https://www.burs.org.bw/index.php/about-us/mandate>



Botswana Geoscience Institute (BGI)

Botswana Geoscience Institute (BGI) was established through the Botswana Geoscience Institute Act No. 29 of 2014, to undertake research in the field of geosciences and provide specialised geoscientific services, be a custodian of geoscience information, promote the search for and exploration of any mineral in Botswana and to act as an advisory body in respect to of geosciences and geohazards.

BGI's strategic priorities include:

- » Undertake High-quality Geoscience research for Mineral Exploration, promotion of sustainable development and geohazards management;
- » Provide quality Geoscience Information;
- » Promote Awareness and public Education;
- » Build a sustainable Botswana Geoscience Institute;
- » Uphold Operational and Services excellence;
- » Promote Talent Management.

More information:
<https://www.bgi.org.bw>

Source: Available at <https://www.bgi.org.bw/our-mandate>

MINISTRIES AND AGENCIES FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA

Commercial Banks

Commercial banks in Botswana play an important role in facilitating the importation process by providing trade finance services. Their responsibilities include remitting payments to the original equipment manufacturers (OEM) or exporting parties, processing Letters of Credit, trade guarantees and handling other international payments. Banks may assist in reviewing pre-importation documents for compliance with payment terms and regulations, but they do not directly liaise with the Botswana Unified Revenue Service (BURS) for customs clearance. However, they facilitate the payment of duties and taxes to BURS on behalf of importers. Additionally, commercial banks participate in regional payment systems such as the SADC-RTGS to facilitate smooth cross-border payments. They also offer financial advisory services to manufacturing companies to support their trade and importation activities.



Botswana Development Corporation (BDC)

Botswana Development Corporation Limited (BDC) is a Development Finance Institution formed in 1970 as a private company, wholly owned by the Government of Botswana through the Ministry of Trade and Entrepreneurship. It is the main investment arm of the Government. BDC's mandate is to provide and facilitate funding of commercially viable projects and/or enterprises that contribute towards industrialisation, economic development, and diversification, thus developing the commercial and industrial sectors and significantly contributing to the diversification of the economy.

More information:

<https://www.botswanadevelopmentcorporation.com>

MINISTRIES AND AGENCIES

FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA



Export Credit Insurance and Guarantee Company Botswana (BECI)

Founded in 1996, BECI (Export Credit Insurance and Guarantee Company Botswana) is the only credit insurer in Botswana, and is a private company – wholly owned by Botswana Development Corporation Limited (BDCL).

BECI's primary function is to develop and equip businesses with Trade Credit Insurance policies to protect them from the danger of non-payment by credit customers. In addition, the company now offers a selection of business growth tools, such as Construction Bonds and Guarantees.

Available at <https://www.beci.co.bw/page/what-beci>



Citizen Entrepreneurial Development Agency (CEDA)

The Citizen Entrepreneurial Development Agency (CEDA) was established by the Government of the Republic of Botswana to provide financial and technical support for business development with a view to promote viable and sustainable citizen owned business enterprises. CEDA was incorporated as a company limited by guarantee on the April 12th, 2001 and commenced operations in June 2001.

CEDA offers funding for capital expenditure, stock or working capital in new and existing business ventures. It also offers training and mentoring for new and seasoned entrepreneurs and business advisory services to entrepreneurs in various skills as identified through the needs assessment that is conducted during project monitoring.

Available at <https://www.ceda.co.bw/>



Special Economic Zones Authority (SEZA) Botswana

SEZA Botswana began operating in April 2018 with the mandate to establish, develop and regulate Special Economic Zones (SEZs) in Botswana through the Special Economic Zones Act of 2015.

(SEZA) Botswana, is a parastatal under the Ministry of Trade and Entrepreneurship.

SEZA Botswana offers various financial and non-financial incentives to SEZA licensed investors in the Manufacturing, Agrobusiness, Warehousing, Distribution or Logistics, and Internationally Traded Services sectors.

More information:

<https://www.seza.co.bw/>



MINISTRIES AND AGENCIES

FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA



Botswana Energy Regulatory Authority (BERA)

BERA was established by the Botswana Energy Regulatory Act 2016 and started its operations on 1 September 2017. It exists to regulate the energy sector by ensuring a competitive environment in accordance with International Best Practice.

BERA is responsible for providing an efficient energy regulatory framework for Electricity, Gas, Coal, Petroleum products, Solar and all forms of renewable energy with the primary mandate of providing the economic regulation of the sectors.

The Botswana Energy Regulatory Act has a multi-sector focus and has tasked BERA with oversight over the electricity, petroleum products, coal, natural gas, bio-energy, solar energy, renewable energy resources and other energy sectors. In terms of the Act, BERA shall be responsible for setting and maintaining service standards; ensuring sustainable and secure supplies in the energy sector; protecting and preserving the environment; and maintaining best international regulatory practice.

More information:
<https://www.bera.co.bw/>



BOTSWANA POWER CORPORATION

Botswana Power Company (BPC)

Botswana Power Corporation is a parastatal corporate body established through an act of parliament, the Botswana Power Corporation Act. Its functions and duties include:

1. Generation, transmission, supply, and distribution of electricity in areas approved by the Minister of Finance,
2. Acquisition of electricity, and
3. Enter into agreements/contracts as necessary for the performance of its functions.

BPC is aimed at being a regional benchmark in electricity supply, aiming for self-sufficiency while supporting the nation's economic growth.

More information:
<https://www.bpc.bw/>

MINISTRIES AND AGENCIES FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA



Botswana Chamber of Mines (BCM)

The Botswana Chamber of Mines is an organisation established to serve the interests of the mining and exploration companies together with associated industries and to influence policy decisions and strategic intents within the government, non-governmental organizations and related bodies.

More information:

<https://www.bcm.org.bw>



Solar Industries Association of Botswana (SIAB)

The Solar Industries Association of Botswana was established by a group of solar companies in Botswana to bring structure and cohesion to the 'growing' sector, formed and registered under Societies Act of Botswana in December 2005.

The Aim of the Association is to facilitate wide scale use of solar in Botswana.

More information:

<https://www.bcm.org.bw>

INDUSTRY ASSOCIATIONS FOR CLEAN TECHNOLOGY MANUFACTURING IN BOTSWANA



Botswana Exporters and Manufacturers Association (BEMA)

Established in 1995, Botswana Exporters and Manufacturers Association (BEMA) is a business membership organization, representing the private sector business in Botswana.

BEMA aims to improve the competitiveness of Botswana's manufacturing and export sectors into the region and internationally through various activities and initiatives, including:

- » Advocacy / representation
- » Market awareness
- » Promoting joint ventures
- » Supporting the creation of sustainable employment opportunities
- » Engaging with local, regional and international stakeholders.

More information:
<https://bema.odoo.com>

Source: Available at <https://bema.odoo.com/>



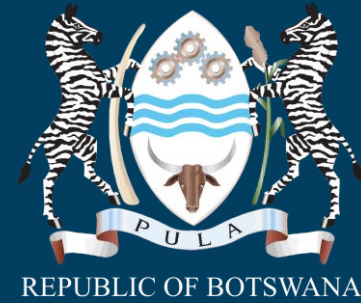
Business Botswana

Business Botswana is a private sector organisation functioning as a Chamber of Commerce, Employer Organisation and Business representative body. The organization was formed in 1971.

In 1988 the organisation changed to Botswana Confederation of Commerce, Industry and Manpower (BOCCIM) in an effort to embrace Chamber activities due to changes in the business environment. BB has been the vanguard and main voice of the private sector in Botswana. The organisation has protected the economic interests of the business community and through its philosophy of constructive policy dialogue, BB has won the confidence and respect of Government and other stakeholders in Botswana. On the 9th of July 2015, BOCCIM changed its name to Business Botswana.

More information:
<https://www.bb.org.bw/>

Source: Available at <https://www.bb.org.bw/>



REPUBLIC OF BOTSWANA



**RENEWABLE ENERGY
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ABOUT SEforALL

Sustainable Energy for All has a global mandate to accelerate progress on the energy transition in emerging and developing countries. Hosted by UNOPS, we work at the intersection of energy, climate and development, partnering with governments and organizations worldwide to end energy poverty, double energy efficiency, significantly expand renewable energy and combat climate change.



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