

Green Economy Sector Report

January 2026



Western Cape
Government
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1 Executive Summary and Key Insights

This report outlines the scale of the green economy opportunity and the investment cycle underway globally, across Africa and South Africa, and in the Western Cape. Moreover, this report is intended to provide businesses and investors with a clear sense of where opportunities are emerging, how large they are, and why the Western Cape is well-positioned to capture them.

The global economy is undergoing a significant shift toward low-carbon, resource-efficient growth, which has triggered one of the largest investment cycles of the 21st century. By the first quarter of 2025, the global green economy accounted for approximately 8.6% of listed equities, with a market capitalisation of US\$7.9 trillion, having grown at a compound annual growth rate (CAGR) of 15% over the past decade. In 2024, renewable energy installations reached another record, with 585 gigawatts (GW) added globally, while investment in the energy transition totalled US\$2.4 trillion.

In Africa, this transition is accelerating from a low starting point. Increasing electricity demand, water scarcity, rapid urbanisation and pressures on food systems are driving investments in renewable energy, water infrastructure, circular systems, electric mobility and sustainable agriculture. The continent will require substantial investment in green infrastructure, including at least US\$30 billion more per year for water, over US\$60 billion in green hydrogen by 2035 and a doubling of power capacity by 2050.

South Africa is at the forefront of this continental shift. Installed capacity is currently 7.7GW, with an expected 32GW by 2030.¹ Moreover, systemic challenges such as energy insecurity, water shortages, landfill saturation, drought exposure, and climate risk are driving the rapid adoption of clean energy solutions, circularity, water reuse, and climate-smart agriculture. The country needs to increase climate finance flows from US\$7.15 billion per year to US\$18.37 billion per year to fulfil its climate commitments by 2030, while ensuring economic growth.

Within this national context, the Western Cape has emerged as South Africa's leading hub for the green economy. The province boasts excellent natural resources, advanced logistics, stable governance, robust institutions and a mature ecosystem of financiers, developers, innovators and specialised service providers. The province is now a preferred destination for green-economy investments across renewable energy, water, green hydrogen, electric mobility, the circular economy and sustainable agriculture.

The Western Cape is South Africa's Premier Green-Economy Hub

The Western Cape combines competitive advantages that few African regions can replicate. These include:

1. Globally competitive wind and solar resources
2. Three ports and advanced logistics networks
3. Stable governance and efficient municipal systems
4. Four leading universities supplying engineering and technical talent
5. Labour costs are 40–50% lower than in the US/EU for similarly skilled professionals

The province has a maturing ecosystem anchored by the Atlantis Special Economic Zone, Freeport Saldanha, GreenCape specialised consultancies, developers, financiers, and innovation hubs.



Solar Panel Installation, Cape Town

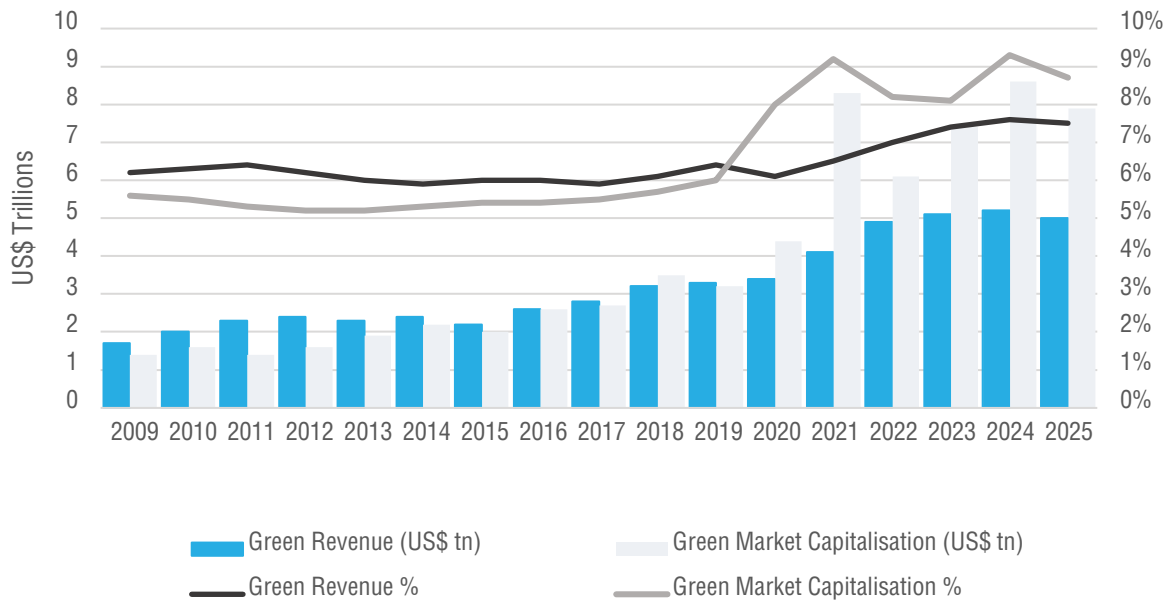
2 Overview

This section of the report provides a high-level outlook on the global green economy and positions the Western Cape within this evolving landscape. It moves from global trends to key thematic segments: renewable energy, water, green hydrogen, electric mobility, the circular economy and sustainable agriculture. The report highlights the current and projected scale of each segment and the implications for future investment. This macro framing underlines the more detailed, sector-specific analysis that follows in the report.

2.1 Global Trends

The global response to climate change, resource depletion and environmental degradation has catalysed rapid growth in the green economy. As of Q1 2025, if treated as a standalone sector, the global green economy would account for 8.6% of listed equities, with a combined green revenue-weighted market capitalisation of US\$7.9 trillion. This would make it the fourth-largest sector globally, after technology, industrial goods and services, and health care (Green Economy Market Report, 2025).²

Figure 1: Green Economy 2009- 2025



Source: Green Economy Market Report 2025³

2.1.1 Renewable Energy

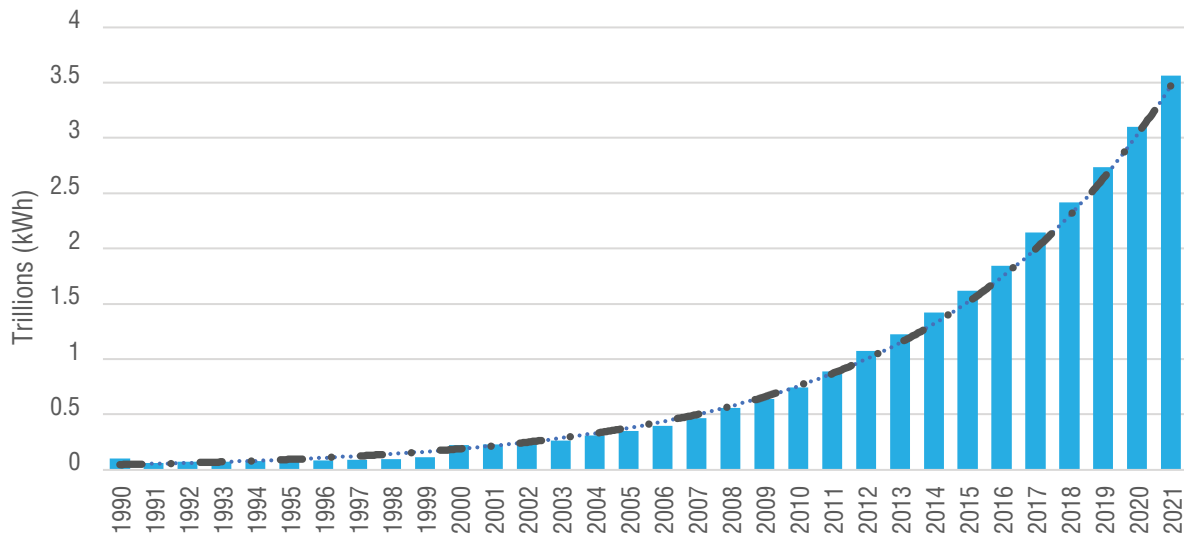
Global energy demand is expected to continue rising in the coming decades, driven by population growth, urbanisation, and increased middle-class consumption. Within this, electricity is the fastest-growing energy carrier as transport, industry, and buildings electrify, and digital infrastructure expands. This reinforces the strategic role of renewable energy in the global energy system.

Electricity generation from non-hydro renewables (such as wind and solar) grew at a CAGR of 15.4% between 2004 and 2021 (World Bank Database, 2025). By the end of 2024, renewables accounted for 46% of global installed power capacity.⁴ The year 2024 marked a new record, with 585 GW of renewable capacity added, expanding the global stock of renewable power by 15.1%. China, the United States and the European Union together accounted for 489 GW, or 83.6% of these additions. Solar alone accounted for more than three-quarters of new capacity, with a record 452 GW installed, while wind additions reached 113 GW.⁵

Despite this exceptional growth, current trajectories still fall short of the target of tripling global renewable capacity to 11 TW by 2030. This gap highlights both the urgency and the investment opportunity, particularly in markets that can offer bankable projects, grid access and predictable policy. Figure 2 provides an overview of long-term trends in non-hydro renewable generation.

2 https://www.lseg.com/content/dam/lseg/en_us/documents/sustainability/investing-in-green-economy-2025.pdf
 3 https://www.lseg.com/content/dam/lseg/en_us/documents/sustainability/investing-in-green-economy-2025.pdf
 4 IRENA, 2025. Renewable Capacity Statistics 2025. Abu Dhabi: International Renewable Energy Agency.
 5 IRENA, 2025. Renewable Capacity Statistics 2025. Abu Dhabi: International Renewable Energy Agency.

Figure 2: Electricity Production from Renewable Sources, excluding Hydroelectric (kWh)



Source: World Bank Database 2025⁶

Battery Energy Storage Systems (BESS) are critical enabling technologies that mitigate the intermittency of solar and wind. In 2023, battery storage remained the fastest-growing energy storage technology, supported by rising investment and policy attention.⁷ Global battery storage capacity grew by 120% in 2023, from 25.32 GW to 55.7 GW.⁸ Lithium-based technologies continue to dominate, though other chemistries, such as flow batteries, are now being commissioned.⁹

Overall investment in the energy transition reached US\$2.4 trillion in 2024 – a new record and a 20% increase on the average annual levels for 2022–2023.¹⁰ Approximately one-third (35%) of this went to renewable energy technologies, amounting to US\$807 billion. Investment in EVs and charging infrastructure rose sharply, from 13.6% of the energy-transition total in 2019 to 31.6% in 2024, while the combined share for power grids and energy efficiency declined from 46% to 29% over the same period. Although annual investment in renewables in 2024 still grew by 7.3%, this was significantly slower than the 32% growth recorded in 2023, emphasising both the diversification of the transition and the ongoing need to scale renewables, grids, storage and efficiency in parallel.¹¹

2.1.2 Water Economy

Water is emerging as a defining constraint and investment theme, a trend that will persist for the next several decades. The World Bank (2025) estimates that the world loses 324 billion cubic metres of freshwater each year, enough to meet the needs of 280 million people.¹² Worsening droughts, unsustainable land and water practices, weak pricing and governance, deforestation, wetland degradation and inefficient irrigation drive losses.

Commercial estimates suggest that the global water and wastewater treatment market is valued at US\$300–370 billion in 2025, depending on the scope of activities included. While these figures provide a useful benchmark, the broader “water economy” is substantially larger and more complex to quantify. It encompasses public utilities, private treatment systems, industrial reuse, desalination, irrigation, stormwater management, and water-related environmental services, each governed by distinct regulatory and accounting frameworks.^{13 14}

Annual investment in water supply and sanitation remains significantly below what is required to meet global targets. Current public funding is approximately half of the US\$131–140 billion needed each year to achieve the water and sanitation Sustainable Development Goal.¹⁵ Figure 3 illustrates the current spending patterns and the scale of the financing gap.

6 World Bank Database 2025
 7 REN21, 2024. Energy Systems Infrastructure: Energy Storage. [online] Available at: https://www.ren21.net/gsr-2024/modules/energy_systems_infrastructure/02_energy_storage/
 8 Energy Institute, 2024. Statistical Review of World Energy. [online] Available at: https://www.energyinst.org/_data/assets/pdf_file/0006/1542714/EI_Stats_Review_2024.pdf
 9 REN21, 2024. Energy Systems Infrastructure: Energy Storage. [online] Available at: https://www.ren21.net/gsr-2024/modules/energy_systems_infrastructure/02_energy_storage/ [Accessed 18 July 2025].
 10 https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2025/Nov/IRENA_CPI_FIN_Global_Landscape_Energy_Transition_Finance_2025.pdf
 11 https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2025/Nov/IRENA_CPI_FIN_Global_Landscape_Energy_Transition_Finance_2025.pdf
 12 <https://www.worldbank.org/en/news/press-release/2025/11/04/world-annual-fresh-water-losses-could-supply-280-million-people>
 13 <https://www.fortunebusinessinsights.com/water-and-wastewater-treatment-market-102632>
 14 <https://www.marketgrowthreports.com/market-reports/water-wastewater-treatment-market-105276>
 15 <https://www.worldbank.org/en/topic/water/overview>

Figure 3: Annual Spending in the Water Sector

Global Spending on Water	
Category	Share of Total Annual Water Spending
Private	1.7%
SOE (State-Owned Entities)	5.9%
ODA (Official Development Assistance)	6.9%
Government Spending	85.5%
Total Annual Spending	+, - US\$165 billion

Source: [World Bank Water Topic Overview 2022](#)

Looking ahead, water risks, from scarcity and quality constraints to flood damage, are expected to play an increasingly central role in shaping economic activity, infrastructure investment and geopolitical dynamics. For investors, this implies growing opportunities in technologies, services and business models that reduce losses, improve efficiency, secure alternative supplies and improve the resilience of water systems.

2.1.3 Green Hydrogen

Green hydrogen (GH₂) and its derivatives (such as green ammonia and methanol) are emerging as important pillars of decarbonisation strategies in hard-to-abate sectors. International trade in green hydrogen provides consuming regions with access to low-carbon feedstocks and energy carriers, while producing regions with high-quality renewable resources can leverage it for industrial development and export diversification.

Global hydrogen demand reached almost 100 million tonnes (Mt) in 2024, up 2% from 2023 and broadly aligned with overall energy demand growth.¹⁶ Most of this demand remains concentrated in established sectors such as oil refining, chemicals (ammonia and methanol) and steelmaking via direct reduced iron (DRI) processes using fossil-based synthesis gas. New hydrogen applications, such as biofuels production, currently account for less than 1% of total demand. By 2050, most scenarios suggest that clean hydrogen will dominate the market, supplying anywhere from roughly three-quarters to the entire global demand, equivalent to about 125 - 585 Mtpa.¹⁷

Supply remains overwhelmingly fossil-based. In 2024, hydrogen production used around 290 billion cubic metres (bcm) of natural gas and 90 million tonnes of coal equivalent (Mtce). The production of low-emissions hydrogen increased by 10% in 2024 and is on track to reach approximately 1 Mt in 2025, but it still accounts for less than 1% of global supply (IEA, 2025).¹⁸ This highlights both a challenge and a potential upside: significant volumes of existing demand will need to shift to low-carbon production pathways. At the same time, new uses will expand the overall market.

Market forecasts underscore the scale of growth expected for green hydrogen. The Green Hydrogen Market Report 2025 (Research and Markets) projects the GH₂ market to expand from US\$3.83 billion in 2025 to US\$16.65 billion by 2029.¹⁹ Grand View Research (2024) estimates the market at US\$7.98 billion in 2024, rising to US\$60.96 billion by 2030.²⁰ While methodologies differ, both sources point to rapid, exponential growth over the next five to six years, reinforcing green hydrogen's status as a high-growth investment sector.

2.1.4 Electric Mobility

Electric mobility is moving from an early-adopter phase into a more mainstream growth cycle. Under stated policies, the global EV fleet (excluding two- and three-wheelers) is projected to reach approximately 250 million vehicles by 2030, roughly four times the stock at the end of 2024, with electric cars accounting for more than 90% of this total (IEA, Global EV Outlook 2025).²¹ Two- and three-wheelers remain an important segment, projected to reach approximately 170 million vehicles by 2030, but electric cars are expected to overtake them in total numbers. By 2030, EVs across all modes are projected to account for approximately 15% of the global vehicle fleet.²²

China will remain the largest single market, but its share of global EV stock is expected to decline from over 70% in 2024 to about 55% in 2030 as adoption accelerates in Europe, North America and other regions. In 2024, EVs already accounted for a higher share of new light-duty vehicle (LDV) sales than two- and three-wheelers, reversing the previous pattern. By 2030, the EV share of new sales is projected to reach approximately 40% across both LDVs and two- and three-wheelers, although the latter will remain the most electrified segment overall (IEA, 2025).²³

Heavier vehicles are electrifying more slowly, but momentum is building. Electric buses and LDVs held similar market shares in 2024; however, electric bus sales are expected to remain below 20% globally by 2030, leaving just over 10% of the global bus fleet electric. Electric trucks are projected to account for approximately 13% of new truck sales by 2030 yet will still represent only about 3% of the on-road truck fleet at that time.

¹⁶ <https://www.iea.org/reports/global-hydrogen-review-2025>

¹⁷ <https://iea.blob.core.windows.net/assets/a6c466dd-b6f0-44bd-a60a-6940eccfb1c3/GlobalHydrogenReview2025.pdf>

¹⁸ <https://iea.blob.core.windows.net/assets/a6c466dd-b6f0-44bd-a60a-6940eccfb1c3/GlobalHydrogenReview2025.pdf>

¹⁹ Research and Markets, 2025. Green Hydrogen Market Report. [online] Available at: <https://www.researchandmarkets.com/reports/5939268/green-hydrogen-market-report>

²⁰ FR Grand View Research, 2025. Green Hydrogen Market. [online] Available at: <https://www.grandviewresearch.com/industry-analysis/green-hydrogen-market>

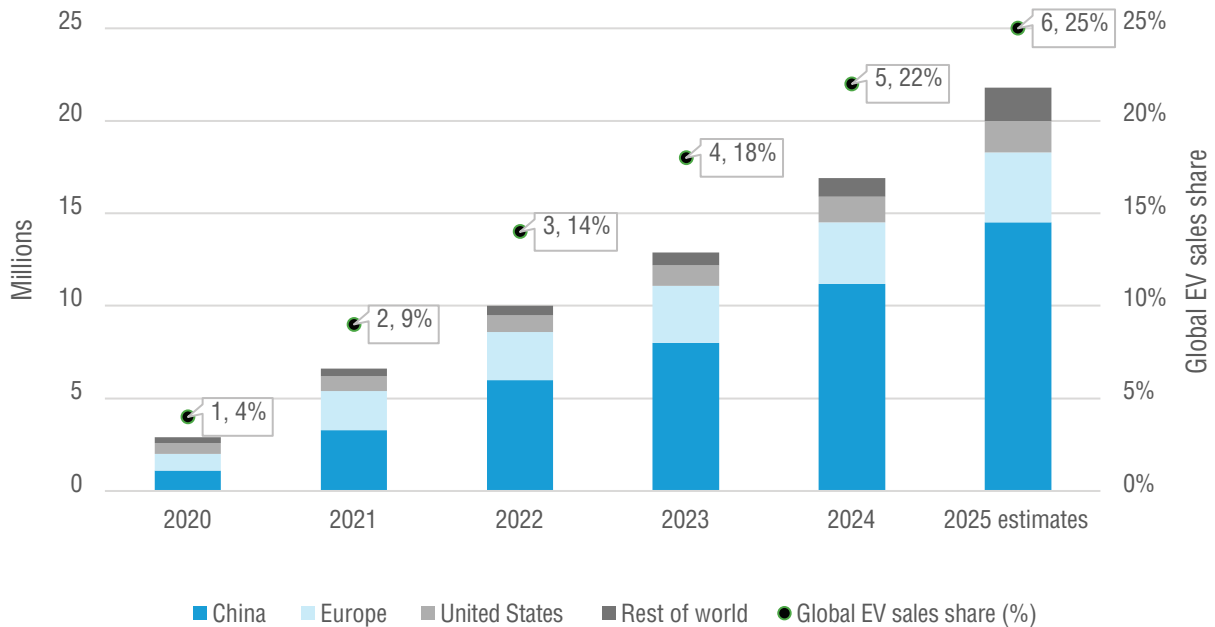
²¹ Global EV Outlook 2025: International Energy Agency

²² Global EV Outlook 2025: International Energy Agency

²³ Global EV Outlook 2025: International Energy Agency

Short-term sales dynamics reinforce this outlook. Global EV sales have risen steadily since 2020 and are projected to reach a new record in 2025, with EVs accounting for approximately one-quarter of global new-car sales (IEA, 2025). While China still drives volumes, uptake in Europe, the United States and other markets is becoming more material. Importantly, this growth is increasingly underpinned by market fundamentals rather than incentives alone. In China, for example, around two-thirds of battery-electric cars are now reported to be cheaper than comparable internal-combustion models, signalling a structural shift in competitiveness. Figure 4 charts the trajectory of global EV sales and market share.²⁴

Figure 4: Electric Car Sales and Share in Total Car Sales



Source: [Global EV Outlook 2025 - International Energy Agency Launch Presentation](#)

2.1.5 Circular Economy

The circular economy aims to keep products, materials and resources in use for as long as possible while minimising waste and environmental impacts. It moves beyond the traditional linear “take-make-consume-dispose” model and considers the full product life cycle – from design and production to use, reuse, repair and end-of-life management.

The circular economy is increasingly recognised as a core pillar of the green transition, with implications across the built environment, food systems, waste, water and energy. It can reduce pressure on natural resources, cut emissions, and improve resilience to supply-chain shocks, while opening new markets in services such as repair, remanufacturing, recycling and product-as-a-service models.²⁵

The global market value of circular economy activities was estimated at US\$556 billion in 2023 and could generate up to US\$1.8 trillion in additional economic output by 2030, implying a CAGR of 13.1% (various market analyses, 2023–2024).^{26 27 28 29}

Key levers shaping this market include:

- Circular design and biomimicry, focusing on products that are modular, repairable and regenerative
- Product-as-a-service models, where users pay for access or performance rather than owning assets
- Advanced resource recovery and “urban mining” of materials from buildings, infrastructure and waste streams
- Smart waste management, using data and sensors to optimise collection, sorting and processing
- Policy instruments such as extended producer responsibility (EPR), eco-design standards and take-back requirements, which are increasingly used to drive circular behaviour.

Other emerging enablers include bio-based materials and biofabrication, the use of blockchain and digital tools for supply chain transparency, and growing consumer awareness and behaviour change in favour of reuse, repair, and refurbishment. Table A sets out 10 leading circular economy trends and examples.

²⁴ Global EV Outlook 2025: International Energy Agency

²⁵ https://www.oecd.org/en/publications/the-circular-economy-in-cities-and-regions-of-the-european-union_e09c21e2-en.html

²⁶ <https://www.nextmsc.com/report/circular-economy-market>

²⁷ <https://www.sphericalinsights.com/reports/circular-economy-market>

²⁸ <https://www.weforum.org/impact/helping-the-circular-economy-become-a-reality/>

²⁹ [https://www.globenewswire.com/news-release/2024/09/06/2941963/0/en/Global-Circular-Economy-Market-Size-To-Worth-US\\$-1898-50-Billion-By-2033-CAGR-Of-13-10.html](https://www.globenewswire.com/news-release/2024/09/06/2941963/0/en/Global-Circular-Economy-Market-Size-To-Worth-US$-1898-50-Billion-By-2033-CAGR-Of-13-10.html)

Table A: Top 10 Trends in the Circular Economy Market

Circular economy lever	What it means	Typical applications/examples
Circular design & biomimicry	Design products/systems to prevent waste and enable repair, reuse and regeneration; use nature-inspired principles.	Modular products, design-for-disassembly, self-repair concepts, regenerative systems.
Product-as-a-Service (PaaS)	Sell access/performance via subscription or lease rather than ownership.	Leasing equipment, pay-per-use appliances, and managed lighting/IT services.
Blockchain for supply-chain transparency	Tamper-resistant tracking of materials and products across the value chain.	Provenance tracking, recycled-content verification, compliance reporting.
Bio-based materials & bio fabrication	Use renewable biological inputs and/or living processes to make materials.	Mycelium packaging, algae-based materials, bio-textiles, bio-based construction inputs.
Urban mining & resource recovery	Recover valuable materials from existing buildings, infrastructure and waste streams.	E-waste metals, construction materials recovery, and landfill mining.
Sharing & collaborative consumption	Increase utilisation by sharing assets instead of owning them individually.	Car/bike sharing, tool libraries, shared workspaces.
Remanufacturing & upcycling	Restore products/components to like-new condition and/or upgrade waste into higher-value outputs.	Remanufactured engines, refurbished electronics, upcycled textiles.
Smart waste management (“Internet of Waste”)	Use sensors/data to optimise collection, sorting and processing.	Smart bins, route optimisation, AI sorting, contamination monitoring.
Policy support & EPR	Regulations that require or incentivise producers to fund/manage end-of-life impacts.	Packaging EPR schemes, take-back mandates, and eco-design standards.
Consumer awareness & behaviour change	Shift choices and habits toward circular options.	Repair culture, correct sorting, buying reused/refurbished, return programmes.

Source: <https://www.sphericalinsights.com/blogs/top-25-industries-in-circular-economy-market-2025-2035-expert-view-by-spherical-insights>

2.1.6 Sustainable Agriculture

Sustainable agriculture, encompassing practices that protect soil health, conserve water, reduce emissions and enhance resilience, is a critical component of the broader green economy. The global sustainable agriculture market has expanded rapidly in recent years, growing from an estimated US\$15.07 billion in 2024 to US\$16.75 billion in 2025, and is projected to reach US\$28.36 billion by 2030. This implies a CAGR of 11.2% over the forecast period.^{30 31 32}

Key growth drivers include:

- Consumer demand for organic and sustainably produced food, particularly in higher-income and export markets
- Environmental and climate concerns, including a stronger focus on soil health, water conservation and biodiversity
- Government incentives and policy frameworks that promote climate-smart and regenerative practices
- Technological advances in precision agriculture, artificial intelligence and data platforms that improve input efficiency and yields.

The market spans several segments:

Food production is expected to be the fastest-growing sector, driven by population growth and the emphasis on food security. Soil management is currently the dominant application segment, while fertilisers and soil amendments lead on the product side. From a technology perspective, data platforms and analytics tools are emerging as the largest category, reflecting the growing importance of decision-support systems in farm management. Precision agriculture, which uses GPS, sensors, drones, and variable-rate technologies to optimise input use and reduce waste, is a core underpinning trend.

This global backdrop of rapid, investment-driven growth across multiple green-economy segments provides the context for understanding the Western Cape’s positioning and potential. Subsequent sections of the report examine how these global dynamics translate into specific opportunities, risks and strategic priorities for the province.

30 <https://www.openpr.com/news/3511105/sustainable-agriculture-market-report-analysis-trends>

31 https://www.researchandmarkets.com/report/sustainable-agriculture?srsId=AfmB0or9Ze6Bt_lbd15JlQil7c8Yp-IFJd9GE9x7V_QuCrqNzfPBPFxg

32 <https://www.nextmsc.com/report/sustainable-agriculture-market-ag3069>



Tractor Sewing New Seeds

2.2 African Trends

Africa's green economy is at an early but accelerating stage of growth. Rising energy demand, water stress, urbanisation, and food-security pressures are creating strong structural demand for climate-aligned infrastructure and technologies across the power, water, mobility, waste, and agriculture sectors. The continent's opportunity lies in turning these pressures into investable pipelines, supported by policy reform, de-risking instruments and regional value-chain development.

Key Insights:

Africa's Transition is Accelerating, and Under-Capitalised

Africa's opportunity lies in turning structural pressures into investable markets, which include these factors:

- Electricity demand is expected to more than double to 2 291 TWh by 2050.
- Renewable investment (2000–2020): this amounts to US\$60 billion, with Southern Africa receiving nearly two-thirds
- Water investment is needed: US\$50 billion/year by 2030 (current spending: US\$10–19 billion)
- Green hydrogen production costs could fall to ~US\$1.80/kg by 2030
- EV adoption is growing 38–44% year-on-year across key segments
- Urban waste is expected to rise from 124 million tonnes (2015) to 368 million tonnes (2040)
- Regenerative agriculture could add US\$70 billion in GVA and 5 million jobs annually by 2040.

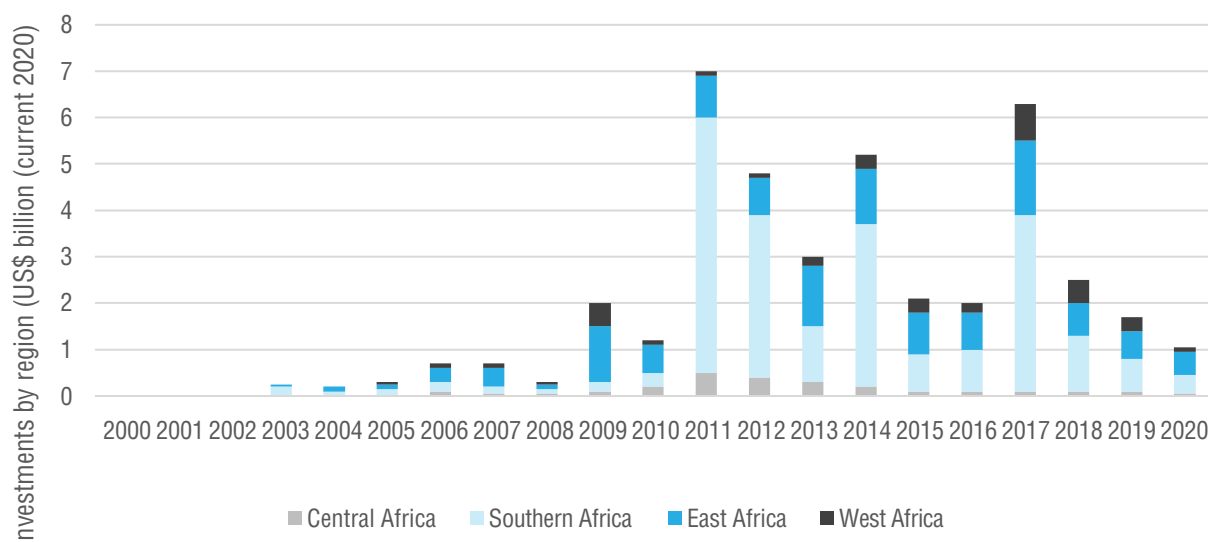
Africa presents a multi-decade, multi-sector investment pipeline, with concentrated opportunities in South Africa, Kenya, Egypt, Morocco and Namibia.

2.2.1 Renewable Energy

Africa's power transition is increasingly driven by renewables, with electricity demand projected to more than double from around 1 028 TWh in 2025 to 2 291 TWh by 2050. Governments have already procured roughly 25 GW of renewable capacity, with a further ~11 GW secured through private offtake agreements. Between 2020 and 2025, approximately US\$34 billion was invested in clean power technologies, led by solar PV (52%) and onshore wind (25%).³³

Between 2000 and 2020, Africa attracted almost US\$60 billion in renewable investment (excluding large hydro), over 90% of which flowed in the 2010s and was heavily concentrated in a small set of countries.³⁴ This is illustrated in Figure 5. In Sub-Saharan Africa, nearly two-thirds of renewable energy investment went to Southern Africa, mainly South Africa, with East Africa (especially Kenya) accounting for about a quarter.³⁵ Natural gas is expected to remain important (around 45% of generation by 2050), but renewables are clearly the main driver of new capacity and innovation.³⁶

Figure 5. Annual investments in renewable energy in Sub-Saharan Africa by region (current US\$billion), 2000–2020



Source: [Sub-Saharan Africa: Policies & Finance for Renewable Energy Deployment- International Renewable Energy Agency](#)

33 African Energy Chamber: The State of African Energy Outlook

34 Sub-Saharan Africa: Policies & Finance for Renewable Energy Deployment- International Renewable Energy Agency

35 Sub-Saharan Africa: Policies & Finance for Renewable Energy Deployment- International Renewable Energy Agency

36 Sub-Saharan Africa: Policies & Finance for Renewable Energy Deployment- International Renewable Energy Agency

2.2.2 Water Economy

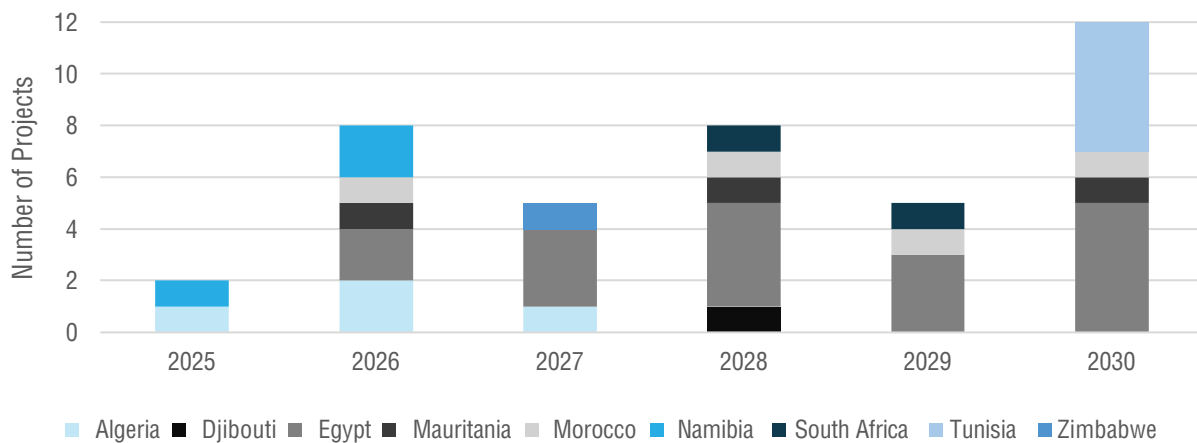
Climate-resilient water and sanitation investment in Africa offers an estimated economic return of US\$7 for every US\$1 invested, yet current spending is far below need. Annual investment is in the range of US\$10–19 billion, compared with a requirement of about US\$50 billion per year (roughly US\$40 per African) to achieve water security and sustainable sanitation by 2030. This implies that at least an additional US\$30 billion per year must be mobilised this decade, indicating a significant pipeline for treatment plants, bulk and reticulation infrastructure, non-revenue-water reduction, and utility efficiency programmes.³⁷

2.2.3 Green Hydrogen

Africa is emerging as a competitive production base for green hydrogen (GH₂), underpinned by more than 60% of the world’s best solar resources and strong wind potential. This resource endowment could enable production costs as low as ~US\$1.80/kg by 2030 (IEA). GH₂ is being positioned as both a decarbonisation lever for hard-to-abate sectors and an export opportunity to markets such as Europe and Asia, where hydrogen demand could exceed 600 Mt per year by 2050.

Early momentum is concentrated among a small group of frontrunners, including South Africa, Namibia, Egypt, and Morocco. Namibia’s planned hydrogen hubs alone are expected to attract around US\$9.4 billion in investment and create roughly 15 000 direct jobs over the next decade. Project pipelines are expected to ramp up from 2025 onward: only two projects are expected to be online in 2025 (Algeria and Namibia), but by 2030, around 13 projects are expected to be operating across nine countries (African Green Hydrogen Report 2025; EIC, 2025).^{38 39}

Figure 6. Annual Projection of Hydrogen Projects coming Online in Africa, by year



Source: African Green Hydrogen Report 2025

Cumulatively, more than US\$60 billion in GH₂-related investment could be mobilised in Africa by 2035, with spillovers into the ammonia, fertiliser, shipping, and green steel value chains.⁴⁰

2.2.4 Electric Mobility

Africa’s e-mobility market remains small in absolute terms but is growing quickly from a low base. As of May 2025, at least 30 000 EVs are in active use across the continent, spanning two- and three-wheelers, light-duty vehicles and buses. Growth is rapid across all segments: electric buses at 44% year-on-year, two- and three-wheelers at 38%, and four-wheelers at 28% (AfEMA Data Portal, 2025).⁴¹

Adoption is concentrated in a few markets: Tanzania, Kenya, Togo and Uganda lead in two- and three-wheelers; Egypt and Senegal are early leaders in electric buses; and South Africa holds the largest stock of electric light-duty vehicles. In parallel, at least 208 e-mobility companies are active across the continent, with East Africa hosting 98 firms, Southern Africa 46, West Africa 39, North Africa 19 and Central Africa 6 (Africa E-Mobility Report 2025).⁴²

37 African Union: International High-Level Panel on Water Investments for Africa 2023
 38 <https://africaenergyindaba.com/unlocking-africas-green-hydrogen-potential-to-power-global-energy-transition/>
 39 African Green Hydrogen Report 2025
 40 <https://africaenergyindaba.com/unlocking-africas-green-hydrogen-potential-to-power-global-energy-transition/>
 41 African E-Mobility Alliance: Africa E-Mobility Report 2025
 42 African E-Mobility Alliance: Africa E-Mobility Report 2025

Table B. Regional Vehicle Distribution (2025)

Country	Electric 2&3-wheelers (stock)	Electric buses (stock)	Electric LDVs (stock)	Notes
Tanzania	10,000	-	-	Majority reported as lead-acid scooters
Kenya	8,421	54	326	Strong uptake across 2&3W, and early growth in buses and LDVs
Togo	4,000	-	-	High 2&3W adoption
Uganda	3,200	-	-	High 2&3W adoption
Egypt	-	200	380	Leads in buses, strong LDV presence
Senegal	-	155	-	Notable bus uptake
South Africa	-	-	1,559	Largest LDV stock, reflecting a stronger automotive market
Total recorded (selected countries)	30,077	545	4,778	Totals reflect recorded stock across selected countries (May 2025)

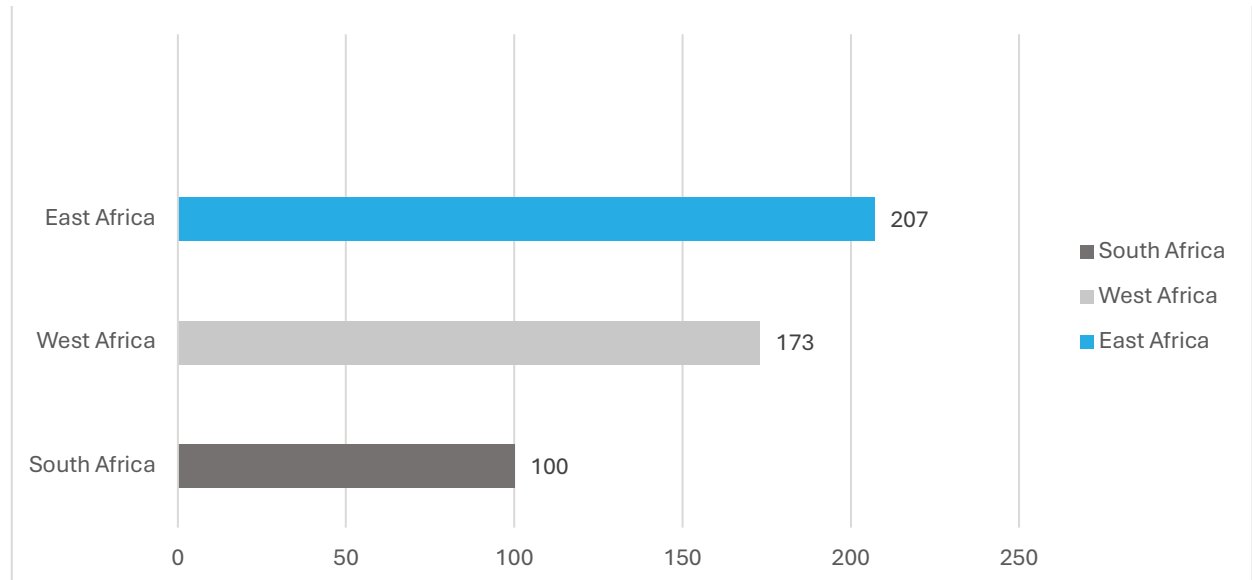
Source: African E-Mobility Alliance: Africa E-Mobility Report 2025

Table C. Active E-Mobility Companies (2025)

Region	Number of e-mobility companies	Key countries mentioned
East Africa	98	Kenya, Rwanda, Uganda
Southern Africa	46	South Africa, Zambia, Zimbabwe
West Africa	39	Nigeria, Ghana
North Africa	19	Egypt, Morocco
Central Africa	6	– (early-stage market)
Total	208	

Source: African E-Mobility Alliance: Africa E-Mobility Report 2025

Figure 7. E-mobility Investments by African Regions, Million US\$



Source: African E-Mobility Alliance: Africa E-Mobility Report 2025

2.2.5 Circular Economy

Rapid population growth, urbanisation and low baseline service levels are driving a sharp rise in waste volumes across Africa. The continent's population is projected to increase from about 1.2 billion in 2015 to nearly 2 billion by 2040, while the urban population more than doubles from an estimated 470 million to over 1 billion (UNDESA, 2017a; 2017b). On current trajectories, urban municipal solid waste is projected to increase from approximately 124 million tonnes in 2015 to 368 million tonnes by 2040.⁴³

Table D. Estimated African Urban Waste Generation (2015 -2040)⁴⁴

Year	Urban waste generation (million tonnes per year)
2015	123.7
2020	165.1
2025	210.9
2030	258.1
2035	309.4
2040	367.7

Source: [United Nations African Waste Management Outlook](#)

Despite relatively low per-capita waste generation by global standards, service provision is lagging. In 2012, only about 55% of waste generated in Africa – around 68 million tonnes – was collected, with Sub-Saharan Africa averaging a 44% collection rate and wide variation between cities. Collection rates are expected to improve to approximately 69% by 2025, but recycling remains nascent, accounting for an estimated 4% of MSW, driven largely by private operators and the informal sector.⁴⁵

This combination of rising volumes, low collection and minimal recycling highlights both the risk and the opportunity. Investment is needed in basic collection and disposal, as well as in higher-value circular solutions such as sorting, materials recovery, secondary materials markets, and the integration of informal recyclers into formal value chains.

2.2.6 Sustainable Agriculture

Sustainable and regenerative agriculture is increasingly central to Africa's food security and climate agenda. Agriculture already accounts for around 22% of Sub-Saharan Africa's GDP, and shifting to more sustainable practices offer significant upside. Scenario analysis suggests that greater adoption of regenerative agriculture could support approximately 5 million additional full-time-equivalent jobs by 2040 and add more than US\$70 billion per year in gross value (2020 dollars).⁴⁶

Under this scenario, a 13% yield uplift in 2040 relative to business-as-usual would generate roughly 62 million additional dry-matter tonnes of crops annually. Regenerative and sustainable farming could add over US\$15 billion in GVA per year by 2030, rising to about US\$70 billion by 2040, split roughly as follows: nearly US\$40 billion in Western Africa, ~US\$20 billion in Eastern Africa, ~US\$8 billion in Middle Africa and ~US\$5 billion in Southern Africa. The largest gains are expected where processing and value-addition capacity can grow alongside primary production, reducing reliance on imports and strengthening regional food systems.⁴⁷

⁴³ United Nations African Waste Management Outlook

⁴⁴ United Nations African Waste Management Outlook

⁴⁵ United Nations African Waste Management Outlook

⁴⁶ International Union for Conservation of Nature: Regenerative Agriculture Report 2021

⁴⁷ International Union for Conservation of Nature: Regenerative Agriculture Report 2021

2.3 South African Context

South Africa is accelerating its transition to a green economy as a pathway to more inclusive, equitable and resilient growth. This transition is unfolding along two mutually reinforcing streams:

1. Building new green industries, and
2. Decarbonising and modernising traditional sectors, such as energy, transport, manufacturing and agriculture.

The result is a structural realignment of market demand, investment flows and industrial strategy.

Key Insights

South Africa's Green Investment Case is Strengthening

Three national transitions dominate investment momentum:

1. Clean energy and energy services
 - Corporate demand for private generation, rooftop PV, storage and wheeling is surging.
2. Circular waste economy
 - The sector already contributes ZAR24.3billion to GDP, supports 116 000 jobs, and is being transformed by EPR regulation.
3. Water security
 - Demand projected to exceed supply by 17% by 2030; sector requires ZAR900billion over 10 years.

The main national constraints: policy uncertainty, grid congestion, and industrial capacity gaps, are gradually being addressed through market reform, ERA Act implementation, investment in transmission, and localisation initiatives.

2.3.1 Market Trends and Demand Signals

South Africa's green economy is now entering a scale-up phase, driven by three powerful transitions: clean energy and energy services, the circular waste economy, and water security. Demand is being pulled by binding system constraints, electricity supply risk, water scarcity, and landfill dependence, while policy and market reforms are steadily improving the investment case.

2.3.2 Clean energy and energy services

Demand is driven by electricity supply risk and a growing corporate appetite for private generation, rooftop solar, embedded energy, and storage. Renewable procurement pipelines continue to expand, and energy-efficiency solutions are becoming mainstream for commercial and industrial customers.

Key Market Segments

Category	Private Procurement	Public Procurement
Procurement Model	Corporate-led energy shift; negotiated PPAs	REIPPPP-driven; structured bidding
Pricing Structure	Flexible pricing	Fixed tariffs; competitive bidding
Market Size (2030)	ZAR214billion	ZAR212billion
Technology Breakdown	Solar PV: ZAR116billion Wind: ZAR79billion	Solar PV: ZAR50billion Wind: ZAR79billion BESS: ZAR83billion
Annual Growth	ZAR36billion	ZAR35billion
Key Growth Drivers	Corporates + mining driving demand, ESG targets and cost stability regulation enabling private generation	Large-scale capacity needs grid stabilisation requirements Government procurement programmes
Pricing Signal	-	Solar PV bid prices increased from ZAR413/MWh to ZAR502/MWh (BW5 to BW6)
Return Profile	High – customised PPAs enable margin optimisation	Moderate – fixed tariffs and competitive bidding

Source: Green Cape: Large-scale Renewable Energy Market Intelligence Report 2024



Table E. How Segments Differ

Private Market	Public Market
Demand from corporates, mining, and manufacturing	Demand from government programmes
Pricing negotiated, flexible	Pricing standardised, bid-driven
Higher returns due to tailored structures	Lower returns due to fixed tariffs
PPA flexibility supports energy-intensive users	Timelines shaped by grid + regulatory processes

2.3.3 Circular Waste Economy

Regulatory shifts, particularly extended producer responsibility (EPR), are creating investment opportunities in recycling, beneficiation, and waste-to-energy. The sector already contributes ZAR24.3 billion to GDP (1%) and supports 36,000 formal and 80,000 informal jobs (2017). Yet 75% of the 111 million tonnes of waste generated in 2016 was still landfilled.⁴⁸

2.3.4 Water Security and Infrastructure

Demand is expected to exceed supply by 17% by 2030, requiring ZAR900 billion in capital investment over the next decade and addressing an ageing asset base valued at ~ZAR1.4 trillion. Distribution losses amount to 37% and halving them could save approximately ZAR6 billion per year. This creates a substantial market for treatment technologies, reuse, industrial recovery, and efficiency solutions.⁴⁹

2.3.5 Investment Opportunities and Barriers

Many of the barriers constraining green capital allocation in South Africa are receiving direct policy and institutional attention. Reforms in the electricity sector, including the unbundling of Eskom and the establishment of a dedicated transmission entity, are intended to accelerate grid expansion, strengthen system planning, and crowd in private-sector funding for new transmission infrastructure. In parallel, government and regulators are working to improve procurement certainty, clarify key rules (e.g., wheeling, tariffs and local content), and expand skills pipelines, steps that, over time, should reduce risk, improve bankability, and unlock faster project delivery.

What is currently preventing capital allocation?

Barrier	In short	Why it matters for green investment	SA examples
Policy & regulatory uncertainty	Changing or unclear rules on tariffs, procurement, carbon pricing, local content and slow implementation.	Hard to price long-term risk, raises the cost of capital, weakens investor confidence and disrupts the project pipeline.	REIPPPP delays and changing bid rules; 2015–2019 hesitation to sign IPP PPAs; uncertainty on local content; no standardised “green jobs” reporting framework.
Grid & distribution constraints	Congested/underdeveloped transmission and distribution networks; weak municipal distribution and wheeling capability.	Even bankable projects can’t proceed without grid access; congestion raises development risk; wheeling and off-taker confidence are undermined.	Grid capacity largely booked to 2030 in key RE zones (NC, WC, EC, parts of FS); competition for substation capacity; big funding gap for new lines while Eskom is debt-constrained; unreliable municipal networks make take-or-pay PPAs unattractive.
Skills & industrial capacity gaps	Shortages of technical, operational, ESG, and management skills; a weak local manufacturing base and dependence on imports.	Slower delivery and O&M; fewer local jobs and multipliers; higher exposure to global supply-chain and price shocks.	Lack of skilled electricians, engineers and technicians for RE, GH ₂ and EVs; limited ESG/reporting capacity; declining manufacturing competitiveness; heavy reliance on imported panels, batteries and inverters, increasing FX and shipping risk.

What opportunities are actionable?

Opportunity cluster	Examples	Why now?
Renewable energy buildouts	Utility-scale wind/solar, C&I rooftop, storage	Bankable, scalable assets; strong project pipeline.
Grid modernisation	Transmission lines, substations, digital grids, wheeling upgrades	Grid is the main bottleneck to scaling clean power.
Clean transport	EV charging, fleet electrification, V2G	Links decarbonisation with air-quality and fuel-cost benefits.

⁴⁸ Department of Trade, Industry & Competition

⁴⁹ Department of Trade, Industry & Competition

Climate-smart agriculture	Resilient irrigation, climate-resilient farming systems	Rising food-security and climate-risk pressures.
Circular economy & waste	Recycling, waste-to-energy, organics valorisation	Growing waste streams, high jobs and local value-add.
Water recycling & reuse	Industrial and municipal reuse, decentralised treatment	Practical response to growing water scarcity and unreliability.
Ecosystem restoration & NbS	Watershed protection, land rehabilitation	Monetisable through verified outcomes and payments.
Green manufacturing	RE/storage components, battery value chains	Moves SA up the value chain; reduces import dependence.
Frontier green tech	Green hydrogen pilots, new storage, and advanced mobility	Strategic long-term edge; needs catalytic, risk-tolerant capital.
Disaster-risk & adaptation finance	Climate-risk insurance, resilience infrastructure	Large protection gap; under-insured climate losses.
Sustainable finance (GSS+)	Green/social/sustainability bonds, SLBs	Broadens investor base; can reduce funding costs and extend tenors.

2.4 Western Cape Context

The Western Cape is increasingly positioning itself as South Africa's leading green-economy hub and a strategic springboard into the wider African market, a role that is central to the province's Growth for Jobs (G4J) strategy. The green economy directly supports G4J's core objectives of unlocking private investment, driving export-led growth, and creating sustainable, future-facing jobs.

The Green-Economy subsectors of the Western Cape

<p style="text-align: center;">Renewable Energy</p> <ul style="list-style-type: none"> • Development & operation of Utility-scale and Commercial & Industrial wind and solar projects • Distributed generation, battery energy storage systems and related energy services offering (trading, wheeling and energy management) 	<p style="text-align: center;">Water Infrastructure / Water Economy</p> <ul style="list-style-type: none"> • Planning, construction and upgrading of bulk and reticulation infrastructure. • Wastewater treatment, water re-use and desalination, alongside technologies and services that improve water efficiency and security. 	<p style="text-align: center;">Electric Mobility</p> <ul style="list-style-type: none"> • Electric passenger vehicles and public transport fleets. • Electrification of freight and logistics operations, micro-mobility solutions, and the rollout of charging and refuelling infrastructure.
<p style="text-align: center;">Circular Economy</p> <ul style="list-style-type: none"> • Recycling and upcycling of plastics, organics, e-waste, textiles and other material streams. • Waste-to-energy and other resource-recovery initiatives that reduce landfill dependence and create new value chains. 	<p style="text-align: center;">Green Hydrogen</p> <ul style="list-style-type: none"> • Production of green hydrogen using renewable energy resources. • Storage, distribution and end-use applications, with a particular focus on export potential and hard-to-abate sectors. 	<p style="text-align: center;">Sustainable Agriculture</p> <ul style="list-style-type: none"> • Integration of renewable energy, efficient water use, smart-farming technologies and low-carbon practices in agricultural production.

Key Insights

Renewable Energy

- 2 680 MW potential unlocked via curtailment
- Embedded solar: ZAR6billion installed → ZAR20billion potential
- Large-scale renewables: ZAR21billion installed → ZAR63billion potential
- Battery storage: 170 MWh → 540 MWh by 2030
- Rooftop solar market: ZAR14.7billion annually

Water Infrastructure

- System deficit: 590m³ allocation vs 547m³ yield
- Municipal pipeline: ZAR30billion+ (2024–2027)
- Wastewater (ZAR2.17billion), Distribution (ZAR1.5billion), Sewer (ZAR1.3billion)

Green Hydrogen

- GDP: ZAR57billion (2030) → ZAR87billion (2050)
- Investment: ZAR238billion → ZAR464billion
- Jobs: 125k+; Export corridor via Saldanha

Electric Mobility

- Passenger EVs: ZAR13.9billion by 2030
- E-Buses: ZAR2.9billion; Freight EVs: ZAR1.18billion
- Last-mile EVs: ZAR1.2billion
- WC focus: charging + fleet electrification

Circular Economy

- US\$366m annual untapped value
- Organics: up to US\$213m potential
- Plastics: up to US\$146m
- High-value e-waste recovery

Sustainable Agriculture

- Sector size: ZAR25.6billion
- Smart farming: ZAR156m grains; ZAR50.9m tree crops
- Undercover farming: ZAR5.4–ZAR8.6billion potential

2.4.1 Renewable Energy

The Western Cape is at the forefront of South Africa's electricity-market reform. As of early December 2025, South Africa has had 168 consecutive days without load shedding, supported in part by the growth of private generation and municipal innovation. The City of Cape Town and George have launched wheeling pilots to open their grids to private power. At the same time, the Electricity Regulation Amendment Act 38 of 2024 sets the stage for a more open, competitive national market.

Grid congestion remains a constraint, but targeted interventions are reopening space for new build. The introduction of curtailment could unlock an estimated 2 680 MW of additional grid capacity in the province, creating room for new solar PV and wind projects. Energy aggregators and wheeling frameworks are gradually improving market access for private off takers.⁵⁰

The investment case is underpinned by three main opportunity areas:

- **Embedded solar PV for agricultural, commercial and industrial users: about ZAR6 billion invested to date (±420 MW installed), with upside to around ZAR20 billion (±1 500 MW).** Demand is driven by cheaper, more stable power, attractive PPA and leasing options, supportive SSEG regulations and a strong push for energy security. Key constraints are municipal approval bottlenecks, limited technical skills and weak distribution networks in some areas.
- **Large-scale renewable energy: currently about ZAR21 billion invested (±1.4 GW installed) with a further ±ZAR63 billion (±3.8 GW) growth potential over the next decade.** Falling technology costs, emerging wheeling and trading frameworks, corporate decarbonisation commitments and planned grid expansion support the pipeline. Barriers include grid capacity constraints, policy uncertainty and uneven municipal wheeling capabilities.
- **Behind-the-meter battery storage (C&I): an estimated ZAR750 million (±170 MWh) market today, expected to grow to around ZAR2.3 billion (±540 MWh) by 2030.** Improving economics, tariff optimisation, peak-opping, and quality-of-supply requirements are driving uptake, although the market still relies heavily on imported components and operates in an evolving regulatory environment.

Source: [Green Cape Market Intelligence Report - Renewable Energy 2025](#)

More broadly, the province is a national leader in manufacturing, accounting for approximately 70% of South Africa's renewable energy component manufacturing. The rooftop solar PV segment has more than doubled since 2020 and is projected to reach about ZAR14.7 billion in annual market value, while the large-scale pipeline is estimated at around ZAR468 billion. Coupled with labour costs 40–50% lower than in the US and EU for similarly qualified professionals, and top-ranked engineering faculties at UCT and Stellenbosch, this positions the Western Cape as a competitive base for both project development and localisation.

2.4.2 Water Economy

The Western Cape operates under structurally tight water conditions, with its economy more directly exposed to water risk than many other parts of South Africa.

In response, the province has adopted a 10-year Water Resilience Strategy (2025–2035) that aims to:

- Secure an additional 310 million m³ of water per year.
- Save a further 40 million m³ annually through efficiency and demand management.
- Reduce non-revenue water to below 25%.
- Achieve Blue Drop and Green Drop scores of 95%+ in at least 80% of municipalities.
- Support the ambition of a ZAR1 trillion provincial economy by 2035.

Source: [Western Cape Government Water 10 Year Water Resilience Strategy \(2025 - 2035\)](#)

The Western Cape Water Supply System currently has an annual allocation of roughly 590 million m³, about two-thirds of which is reserved for urban users and one-third for agriculture. Even before accounting for the ecological reserve, these allocations exceed the revised 2018 system yield of 547 million m³, highlighting systemic pressure and the need for new sources, efficiency and reuse.⁵¹

For investors, the public water and wastewater market presents significant opportunities:

- Metropolitan municipalities are planning around ZAR54.6 billion in water and sanitation capital spending over 2024/25–2026/27, including ZAR22.4 billion by the City of Cape Town alone, with other Western Cape municipalities adding about ZAR7.7 billion.
- Localisation potential is strongest in mechanical hardware for wastewater treatment works and pumps, as well as HDPE pipes, as municipalities replace ageing asbestos networks.
- Innovative financing models (including blended finance) are needed to complement limited grant funding (WSIG and RBIG allocations in the province are under ZAR2 billion over three years), with growing project-preparation support from programmes such as SIDAFF and WPO.

Source: [Green Cape Market Intelligence Report-Water 2025](#)

Within municipal budgets, the largest Western Cape opportunities are in wastewater treatment works (approximately 28% of total capex, ZAR2.17 billion), water distribution (19.6%; ZAR1.5 billion), and sewer reticulation (16%; ZAR1.3 billion), offering a clear pipeline for core infrastructure.⁵²

2.4.3 Green Hydrogen

Green hydrogen is a strategic pillar of the Western Cape's energy resilience and growth agenda. The Western Cape Green Hydrogen Strategy and Roadmap (approved May 2024) set two key objectives:

- Enable about 15 GW of new generation capacity for GH₂ production in the province, including projects with their own dedicated renewable supply.
- Ensure that surplus capacity contributes to the 1 800–5 700 MW energy target under the Growth for Jobs Strategy, reducing reliance on Eskom.

Source: [Western Cape Green Hydrogen Strategy and Roadmap | Cabinet Approved May 2024](#)

Table F. Potential of Green Hydrogen in the Western Cape

Indicator	2030	2040	2050
GDP (billion)	ZAR57	ZAR79	ZAR87
Employment (number of jobs)	125 586	118 053	83 397
Fixed investment (billion)	ZAR238	ZAR388	ZAR464
Balance of payment effect (billion)	-ZAR2	ZAR9	ZAR16
Tax revenue (billion)	ZAR9	ZAR5	ZAR6
Accumulated CO₂ reduction (Mt)	6	43	103

Source: [Western Cape Green Hydrogen Strategy and Roadmap | Cabinet Approved May 2024](#)

⁵¹ Green Cape Market Intelligence Report-Water 2025

⁵² Source: Green Cape Market Intelligence Report 2025

Priority opportunity areas include:

- Large-scale renewable generation and GH₂ production to serve export offtake, green steel and domestic hard-to-abate sectors.
- Development of the Western SADC Hydrogen Corridor as a globally recognised region, aligned with South Africa’s Green Hydrogen Commercialisation Strategy.
- Logistics, manufacturing and innovation along the hydrogen value chain.
- Saldanha-based export of green ammonia and green DRI/steel, potentially underpinned by feedstock from the Northern Cape.
- Low-carbon bunker fuels and sustainable aviation fuel for maritime and aviation.
- Domestic offtake in transport, mobility and selected industrial processes.

Source: [Western Cape Government Energy Factsheet](#)

2.4.4 Electric Mobility

The Western Cape shares in South Africa’s broader EV opportunity across four main segments: passenger cars, buses, freight and logistics, and last-mile delivery. By 2030, these are expected to command the highest investment value, with the province well positioned as both a demand centre and a gateway for regional EV ecosystems.

Table G. Investment opportunities in the EV value chain in South Africa

Opportunity	Market Growth by 2030	Main Drivers	Main Barriers	Term
Electric passenger vehicles	21 900 vehicles; ZAR13.9 billion	Innovative finance; Cheaper EV models	Policy/regulatory uncertainty. power constraints	Medium (3–10 yrs)
Electric buses	420 vehicles; ZAR2.9 billion	Lower running costs vs diesel	Policy/regulatory uncertainty. power constraints	Short (current)
Freight & logistics electrification	828 vehicles; ZAR1.18 billion	Decarbonisation goals; less range anxiety	Policy/regulatory uncertainty. power constraints	Medium (3–10 yrs)
Last-mile delivery electrification	17 900 vehicles; ZAR1.2 billion	Decarbonisation; short, predictable routes	Policy/regulatory uncertainty; power constraints	Short (current)

Source: [Green Cape Electric Vehicles Market Intelligence Report 2025](#)

However, several barriers currently limit adoption:

- Policy and regulatory uncertainty: absence of a cohesive national EV roadmap and buyer/manufacturer incentives; outdated tax and import structures that make EVs expensive; slow progress on charging, standards and grid-readiness; and evolving rules affecting e-bikes, three-wheelers and extra-heavy vehicles.
- Affordability constraints: import duties of around 25% and luxury tax of 18–30% push many EVs above ZAR600 000; electric buses remain two to three times more expensive than diesel equivalents; and there is still a limited range of fit-for-purpose models for municipalities and logistics.
- Electricity supply constraints: distribution networks require significant upgrades to accommodate depot and fleet charging; large operators estimate 80–100 MW of additional renewable capacity would be needed to electrify a single major bus fleet; households often need rooftop solar and storage to charge reliably.

For investors, the near-term plays are likely to centre on fleet and depot charging, logistics and last-mile applications, and service/financing models that aggregate demand and manage affordability.

2.4.5 Circular Economy

The Western Cape is positioning the circular economy as a core pillar of its resource-efficient, low-carbon growth path. With an estimated US\$366 million in untapped circular value each year, the province offers sizeable opportunities in recycling, remanufacturing and regenerative design.

Key opportunity areas include:

- Organics: over 385 000 tonnes of organic waste were landfilled by Cape Town in 2020. Composting, biogas, and other organics valorisation solutions could unlock between US\$1.1 million and US\$213 million in annual value.
- Plastics: The province generated around 245 000 tonnes of plastic waste in 2020, with an estimated value of up to US\$146 million. Cape Town's scale makes it a prime location for plastics recycling and circular packaging solutions.
- E-waste: growing digitalisation is driving e-waste volumes, creating high-value opportunities in repair, refurbishment and materials recovery.

Source: [Green Cape Circular Economy Market Intelligence Report 2022](#)

These segments can deliver strong employment multipliers, support industrial diversification and contribute directly to Growth for Jobs objectives. In addition to conventional recycling streams, there is a growing market opportunity for the recovery, refurbishment, and recycling of energy-transition components, such as end-of-life solar PV panels, lithium-ion batteries, and inverters, creating new circular value chains linked to the build-out of renewables and e-mobility.

2.4.6 Sustainable Agriculture

The Western Cape's agricultural economy has grown steadily, with average annual growth of 2.5% over the past five years and 2.7% over the past decade, reaching ZAR25.6 billion in 2023. The province accounts for about 16% of South Africa's total agricultural output and 21% of agri-processing value added. Within the province, agricultural income is concentrated in the Cape Winelands (33.4%), West Coast (24.8%), City of Cape Town (18.1%), Garden Route (10.6%), Overberg (10.4%) and Central Karoo (2.8%).⁵³

Looking ahead, expansion depends on the adoption of more sustainable, climate-smart systems that manage water scarcity, reduce input use, and improve soil health. This is increasingly urgent as input prices outpace consumer inflation, squeezing margins.

Two promising opportunity areas (Sustainable Agriculture MIR, 2025) illustrate the scale:

- Smart farming (remote sensing and variable-rate technologies): precision-spraying via drones represents a market of about ZAR156 million per season in grain and ZAR50.9 million per season in tree crops, driven by rising input costs and a stronger focus on worker safety and reduced chemical exposure. The main barrier is low digital literacy among users, but the opportunity is medium-term and scalable (1–5 years).
- Undercover farming (shade netting and tunnels): estimated market size of ZAR5.4–ZAR8.6 billion, driven by the need to stay competitive in global markets, more extreme weather and tightening water allocations. High upfront and maintenance costs are key barriers, but near-term upside (1–3 years) is substantial.

Source: [Sustainable Agriculture Market Intelligence Report 2025](#)

3 Conclusion

The transition to a low-carbon, resource-efficient economy is no longer a future aspiration, it is a defining economic shift underway. As global capital, policy frameworks, and market demand converge around sustainability and resilience, regions that offer credible project pipelines, enabling regulation, and execution capability are emerging as preferred investment destinations.

Cape Town and the Western Cape are uniquely positioned within this context. With a diversified and future-oriented economy, world-class infrastructure, strong institutions, and a proven track record of public-private collaboration, the region offers a compelling platform for investment across renewable energy, green hydrogen, electric mobility, water infrastructure, the circular economy, and sustainable agriculture. These sectors are not only aligned with global decarbonisation imperatives but also present scalable opportunities for inclusive growth, job creation, and long-term competitiveness.

Wesgro plays a central role in translating this potential into realised investment. Through targeted investor facilitation, market intelligence, and end-to-end support across the investment lifecycle, Wesgro works with partners to reduce risk, unlock opportunities, and accelerate project implementation. The focus is not only on attracting capital, but on building durable value chains that strengthen the regional economy.

As the green economy continues to expand, the Western Cape stands ready to partner with investors, innovators, and institutions seeking a stable, connected, and forward-looking base from which to grow. The opportunity is clear, the pipeline is emerging, and the moment to invest is now.

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