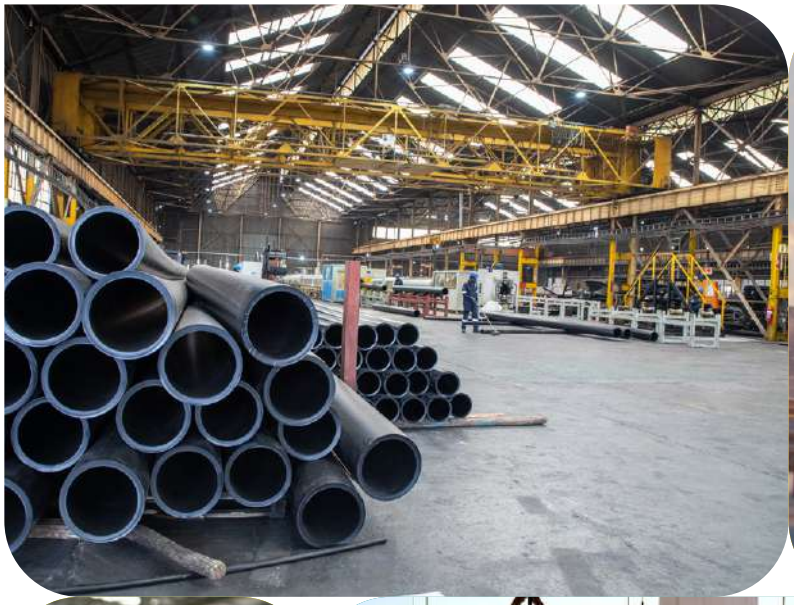








The Industrial Development Corporation's

Sustainable Industrial Development Pathways

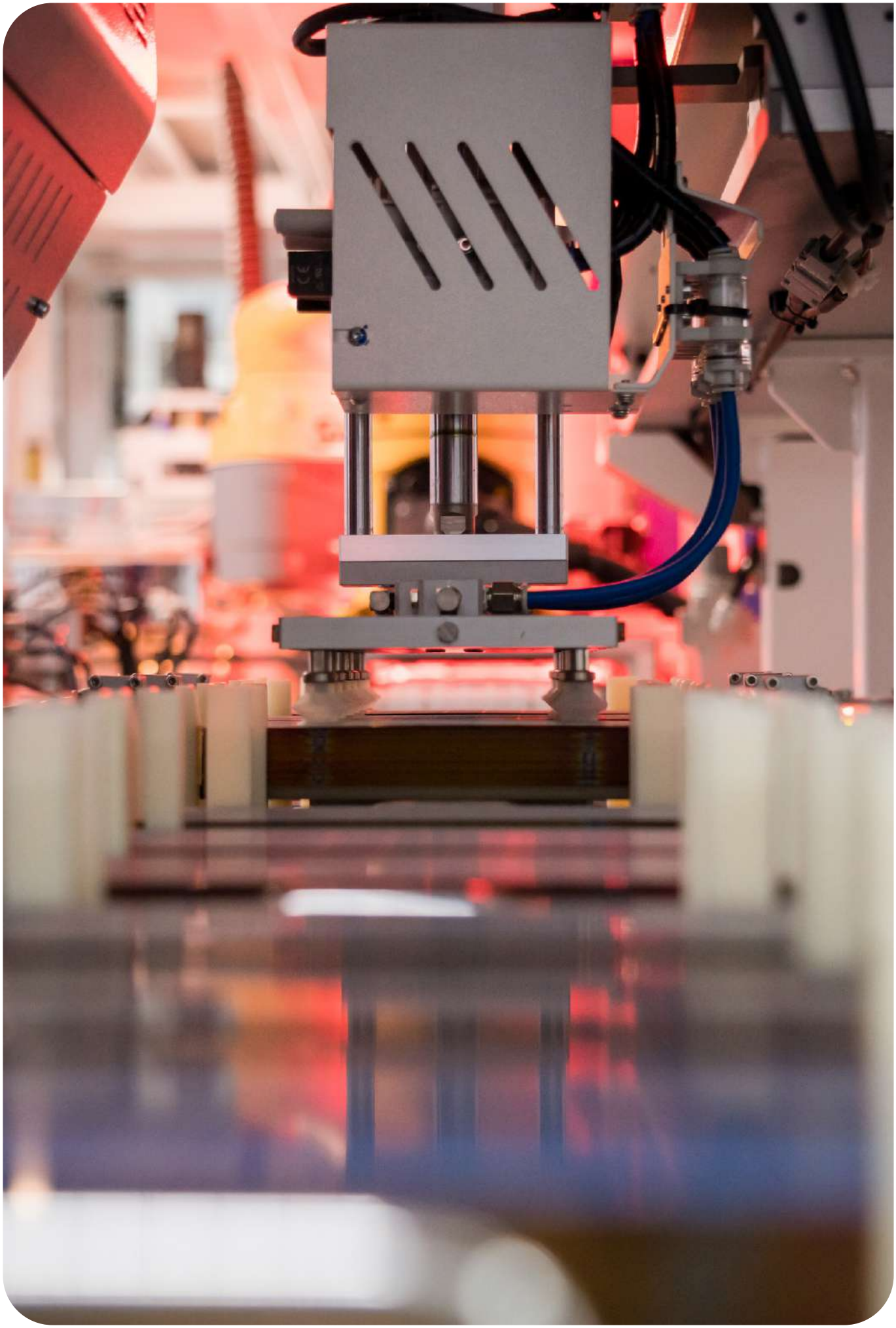


85 YEARS

IDC
Industrial Development Corporation

24 November 2025

Partnering you. Growing the economy. Developing Africa.



Contents

1 Navigating Sustainable Industrialisation for Developing Economies 4

2 IDC's Pathways Towards Sustainable Industrialisation 7

3 Financing South Africa's Sustainable Industrialisation 10

3.1 Catalysing Low Carbon Transitions and Green Growth 14

3.1.1 Catalysing Investment in Renewable Energy 15

3.1.2 Developing South Africa's Green Hydrogen Ecosystem 18

3.1.3 Championing Early Adopters in the Electric Vehicle Ecosystem. 21

3.1.4 Supporting the Development of Alternative Uses of Hemp Including as a Carbon Sink. 23

3.2 Diversification and Jobs-Rich Industrialisation 24

3.2.1 Medium and High Technology Manufacturing 24

3.2.2 IDC Supporting Jobs-Rich Industrialisation 25

3.3 Supporting Climate Resilience 28

3.3.1 Responses to the Physical Risks of Climate Change 28

3.3.2 Supporting Climate Resilience of Agricultural Production in South Africa and the Rest of Africa 29

3.4 Regional Value Chains 33

3.4.1 Critical Minerals: An African Industrialisation and Global Value Chain Participation Opportunity 33

4 Linking Sustainable Industrialisation and Inclusion Outcomes 36

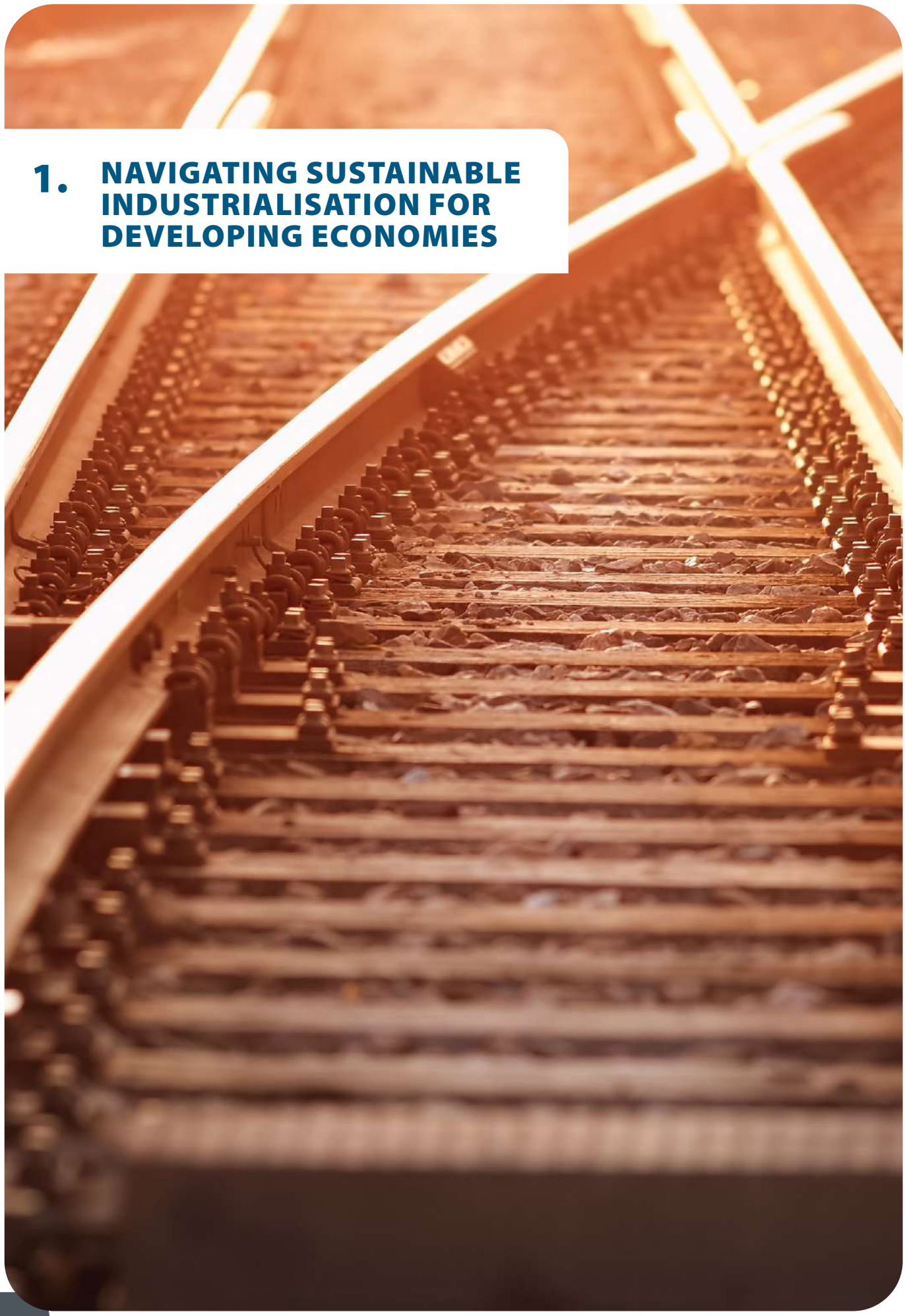
4.1 Delivering Impactful Socio-economic Outcomes Through Sustainable Industrialisation 38

4.2 Social and Solidarity Economy Funding 39

5 IDC, the Sustainable Investment Partner of Choice in South Africa and Rest of Africa 40

5.1 The IDC's ESRG Programme 41

1. NAVIGATING SUSTAINABLE INDUSTRIALISATION FOR DEVELOPING ECONOMIES



The Industrial Development Corporation (IDC)[1] has a strategic imperative to promote inclusive and sustainable industrialisation that creates employment in South Africa and the rest of Africa.[2] In line with economic theory and practice, the IDC considers industrialisation to be a key driver of long-term economic progress[3] and is critical to addressing South Africa's triple challenges of unemployment, poverty and inequality.[4]

However traditional models of industrialisation through increased productivity, trade and market integration have historically relied on fossil fuels, the exploitation of scarce resources and unregulated globalisation are proving to be inherently vulnerable and unsustainable, which result in greenhouse gas (GHG) emissions linked to climate change. In turn, climate change and the efforts to counter it are having a significant impact on agricultural and industrial production, as well as the organisation of global value chains. As a result, it is essential to identify new pathways for economic development that can leverage the positive effects of industrialisation on economic progress, promote inclusive prosperity, and decouple this prosperity from environmental damage.

The new pathways must also support countries to achieve commitments to reduce GHG emissions. South Africa is a party to the Conferences of the Parties to the United Nations Framework Convention on Climate Change (COP), which has enabled significant advances in models of global cooperation to face climate change and its effects. The Paris Climate Agreement aims to hold global warming to well below 2.0°C and to "pursue efforts" to limit it to 1.5°C. To accomplish this, countries have submitted Nationally Determined Contributions (NDCs) outlining their post-2020 climate actions.

South Africa has committed to mitigation targets of between 398 and 510 Mt CO2 equivalent (CO2-eq) by 2025, between 350 and 420 Mt CO2-eq in 2030, and achieving net-zero by 2050.[5] The country has articulated its approach to reducing emissions in the Low Emission Development Strategy 2050 and the Climate Change Bill passed in October 2023. The short-term priorities are detailed in the Just-Energy Transition Implementation Plan[6] (JET-IP). The emission reduction strategies prioritise electricity (45%), synthetic fuels (largely from coal, 12%) and transport (11%) as the highest sources of emissions.

As a development finance institution (DFI) the IDC is supporting the JET-IP. The Corporation has been actively supporting the country's energy transition for over a decade through catalysing investments in renewable energy projects from about 2011. The Corporation continues to lead the green hydrogen (GH_2) and new energy vehicles (NEV) aspects of the JET-IP.

Importantly, the IDC's response to climate change goes beyond its role in the JET. To fulfil its industrial development mandate in the context of climate change, the Corporation has adopted an integrated sustainable industrialisation model that allows it to design enabling solutions that are able to transform productive sectors of the economy in a manner that promotes socially inclusive growth for low carbon transitions. This integrated model allows the IDC to internally coordinate its decisions and facilitate partnerships with investors, technology owners and other stakeholders to drive sustainable industrial development in South Africa and the rest of Africa. The IDC recognises that an energy transition on its own may lead to a negative net impact on the economy and thus seeks to align the energy transition with a transition of production sectors.

[1] The Corporation was formed as an Act of the South African Parliament and it prescribes the IDC "…to proactively maximise its development impact through effective and sustainable industrial development, not only in South Africa but across the continent".

[2] Though the IDC has a mandate to support industrialisation in South Africa and the rest of Africa, the paper focuses on South Africa to manage the nuances between country industrialisation paths and therefore required for climate change responses.

[3] Prebisch, R. (1950). The economic development of Latin America and its principal problems Economic Bulletin for Latin America, No. 7. New York: United Nations Department of Economic Affairs; Hirschman, A. (1958). The Strategy of Economic Development. New Haven: Yale University Press; Kaldor, N. (1966). Causes of the Slow Rate of Economic Growth of the United Kingdom: An Inaugural Lecture. Cambridge: Cambridge University Press; Altenburg, T., & Rodrik, D. (2017). Green industrial policy: Accelerating structural change towards wealthy green economies. Green Industrial Policy; United Nations Industrial Development Organization [UNIDO], 2016

[4] Goga, S., & Mondliwa, P. (2021). Structural transformation, economic power, and inequality in South Africa. Structural transformation in South Africa, 165-188.

[5] South African Cabinet, 2021

[6] South Africa's Just Energy Transition Investment Plan 2023 -2027

The IDC has set an ambitious strategy to support South Africa's transition to a sustainable industrialisation model that seeks to:

1. Go beyond mitigating harm, focusing on creating long-run inclusive growth and employment through low carbon transitions. South Africa is pre-maturely de-industrialising, with the manufacturing sector's contribution to GDP having declined from 21% in 1994 to 14.2% in 2024[7]. The country's de-industrialisation has been accompanied by employment losses across manufacturing and within manufacturing there has been a decline in light and medium manufacturing, both of which are relatively more important for employment creation and have relatively lower GHG emissions. This is harming the country's long-term growth trajectory and contributing to poor socio-economic outcomes. A low carbon transition that exacerbates this de-industrialisation trend would worsen the country's triple challenges of unemployment, poverty and inequality and therefore be unjust and socially unsustainable.

2. Leverage South Africa's abundant renewable energy sources and Southern Africa's critical minerals to foster international competitiveness of industry, in the same way that energy from cheap coal drove the country's initial industrialisation phase. Resource-based and energy intensive sectors including minerals; wood, pulp, paper & printing; basic and refined chemicals; and basic metals account for approximately 60% of South Africa's merchandise export basket, making the country's exports vulnerable to carbon taxes and climate related non-tariff barriers. Historically, industry competitiveness was in part fostered by cheap electricity (primarily produced from coal) leading to a pattern of industrialisation which is capital and energy intensive (heavy manufacturing), landing South Africa in the top 15 largest per capita carbon dioxide emitters in the world.[8] Renewable energy, green hydrogen and critical minerals are the key to maintaining the existing industries and taking up opportunities created by the transition.

3. Support collective transformation and ecosystem development to maximise shared benefits. The transition implies significant changes in supply chains and thus linkages within the economy. For example, the required automotive transition is accompanied by a change in the components used. It entails a discontinuation of over 100 internal combustion engine vehicle parts and introduction of 40 electric vehicle parts, representing a net loss in the supply chain. The biggest value-added item, the battery, does not require the same capabilities as the highest value item in an internal combustion engine (ICE) vehicle, the engine. As such it is important to invest in building production capabilities in new industries and supply chains.

4. Support the climate resilience of sectors that are vulnerable to the physical risks of climate change, including through the development of regional value chains. The 6th Assessment Report of the Inter-governmental Panel on Climate Change (IPCC)[9] predicts that global warming and its effects will proceed twice as fast on the African continent, with rapid desertification, bush encroachment, extreme seaboard storms and more frequent and intense fires and floods. These changes in climate and shifts in weather patterns will disrupt agricultural production, food systems and damage to infrastructure may disrupt the movement of goods. Supporting the resilience of the vulnerable sectors is critical for social sustainability of the economy.

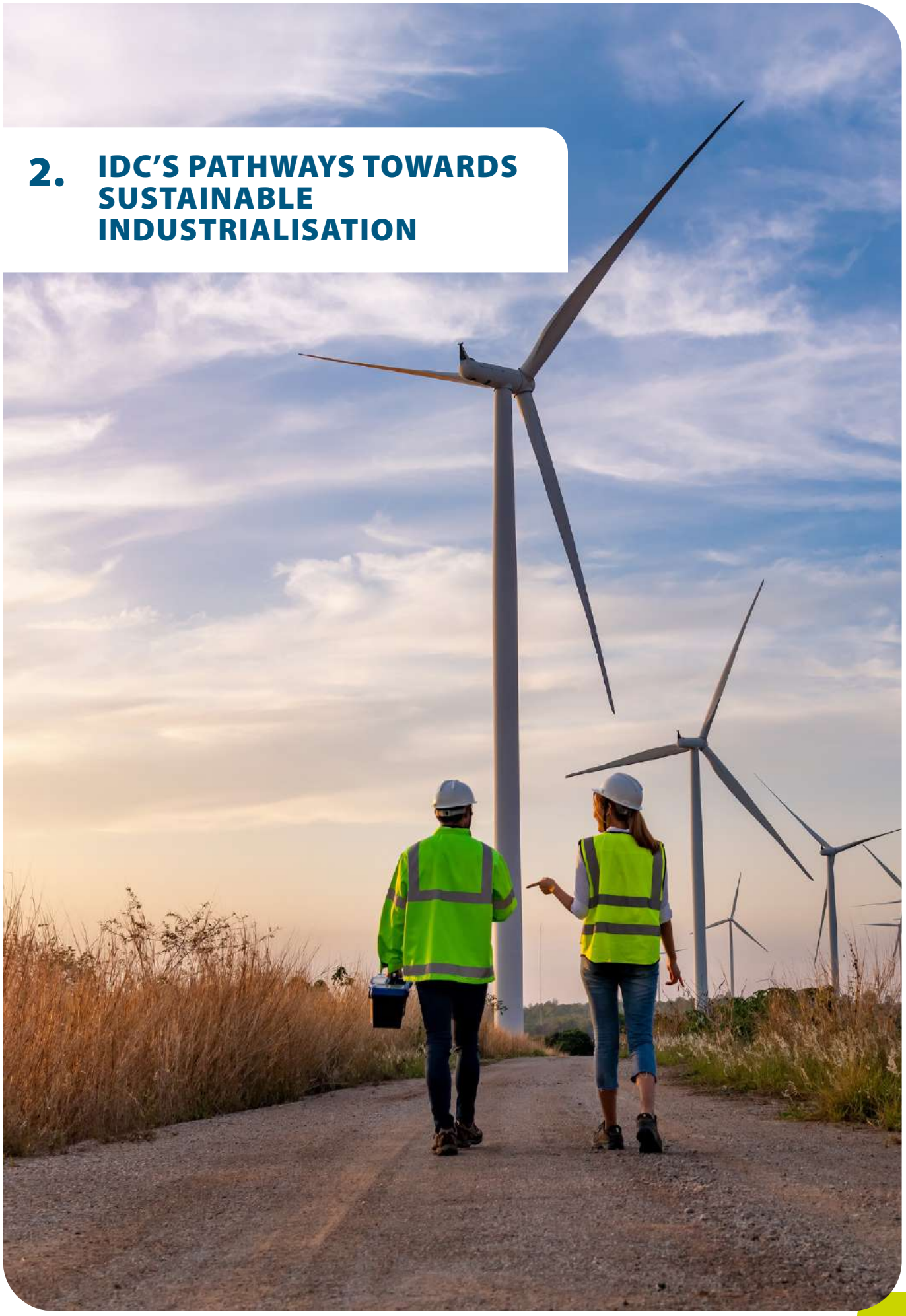
IDC's sustainable industrial development pathways sets out the Corporation's approach to navigating the tensions between industrial development and climate change. It highlights the progress made to-date and shares the priorities going forward. The IDC recognises the importance of partnerships with funders, industry, technology owners, policy makers and other stakeholders in achieving a successful transition for the South African economy that fosters shared economic prosperity at lower GHG emissions. Consequently, the IDC is sharing its approach as a foundation for fostering partnerships.

[7] Statistics South Africa.

[8] South Africa generated 405 million metric tons of carbon dioxide ($MtCO_2$) emissions from fossil fuel combustion and industrial purposes in 2022. This was a decrease of roughly three percent compared with 2021 levels (Statistica, 2023).

[9] Chapter 9: Africa | Climate Change 2022: Impacts, Adaptation and Vulnerability (ipcc.ch)

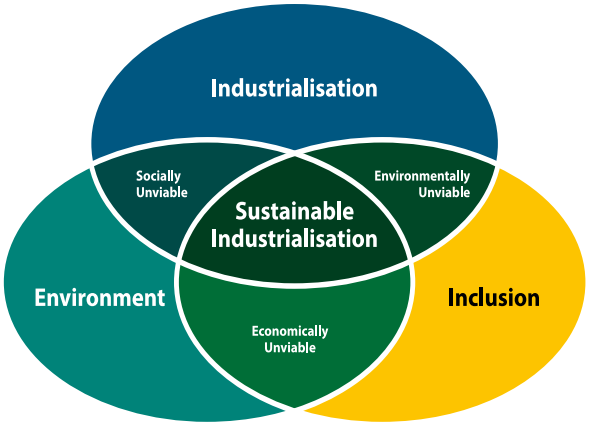
2. IDC'S PATHWAYS TOWARDS SUSTAINABLE INDUSTRIALISATION



IDC has framed sustainable industrialisation as the maintenance and expansion of industrial capacity in a manner that is socially inclusive and environmentally responsible. In other words, long-term industrialisation that drives development by creating shared prosperity and equitable distribution of benefits; advancing economic competitiveness; and safeguarding the environment by decoupling the prosperity generated by industrial activities from excessive natural resource use and negative environmental impacts.

The framing recognises that industrialisation continues to be an important driver of economic development as different sectors have different characteristics that are relevant for growth. For example, manufacturing has been accorded a special role in driving economic growth because it is characterised by dynamic increasing returns to scale; a high propensity for learning-by-doing; greater scope for technological and organisational capabilities development; tradability and hence importance for balance of payments; strong growth-pulling intersectoral (especially backward) linkages; and its importance as the locale for economy-wide technological progress.[10] In addition, the evolving nature of sectors has given rise to new activities at the interfaces of agriculture and manufacturing, dubbed the *"industrialisation of freshness"* and manufacturing and services, dubbed the *"servification of production"* that are increasingly showing some of the traditional properties associated with manufacturing that are critical for structural transformation. The IDC's approach to sustainable industrialisation is thus not only focused on the manufacturing sector but rather the structural transformation and the low carbon transition of the broader economy towards higher value-adding, productivity and employment creating activities. Where structural transformation can be understood as a complex, long-term historical process entailing both structural change in the sectoral composition of an economy and broader societal changes in the productive organisations, institutions and political economy of a country.

This approach acknowledges that industrial development and structural transformation are intimately linked and a productive transformation of the economy as a critical driver of inclusive and sustainable structural transformation.[11]



Sustainable industrialisation is being pursued through four main pillars:

- **Catalysing low carbon transitions and green growth,** whereby the IDC is supporting firms to adopt and adapt cleaner technologies, fuels and processes in the transition to higher productivity sectors like manufacturing, including supporting existing hard-to-abate sectors to transition. This is in recognition that an energy transition that is not accompanied by a production transition will have net negative impact on the economy and socioeconomic outcomes.
- **Facilitating economic diversification and jobs-rich industrialisation,** whereby the IDC is supporting investments in higher value-adding and productivity activities that are labour absorbing within sectors (sectoral deepening). The South African industrial structure is dominated by minerals and minerals-related activities that are energy intensive. A transition towards medium and high-technology manufacturing is associated with increases in value added, higher employment and lower levels of GHG emissions.[12]
- **Supporting resilience to physical climate risks:** Including supporting firms to adopt and adapt technologies and processes to support climate resilience, particularly in the agricultural sector.

[10] This approach aligns with Sustainable Development Goal 9 and the framing of sustainable industrialisation by the United Nations Conference on Trade and Development and the United Nations Industrial Development Organisation.

[11] Andreoni, A., Mondliwa, P., Roberts, S., & Tregenna, F. (2021). Framing structural transformation in South Africa and beyond. Structural Transformation in South Africa. The Challenges of Inclusive Industrial Development in a Middle-Income Country, 1-27.

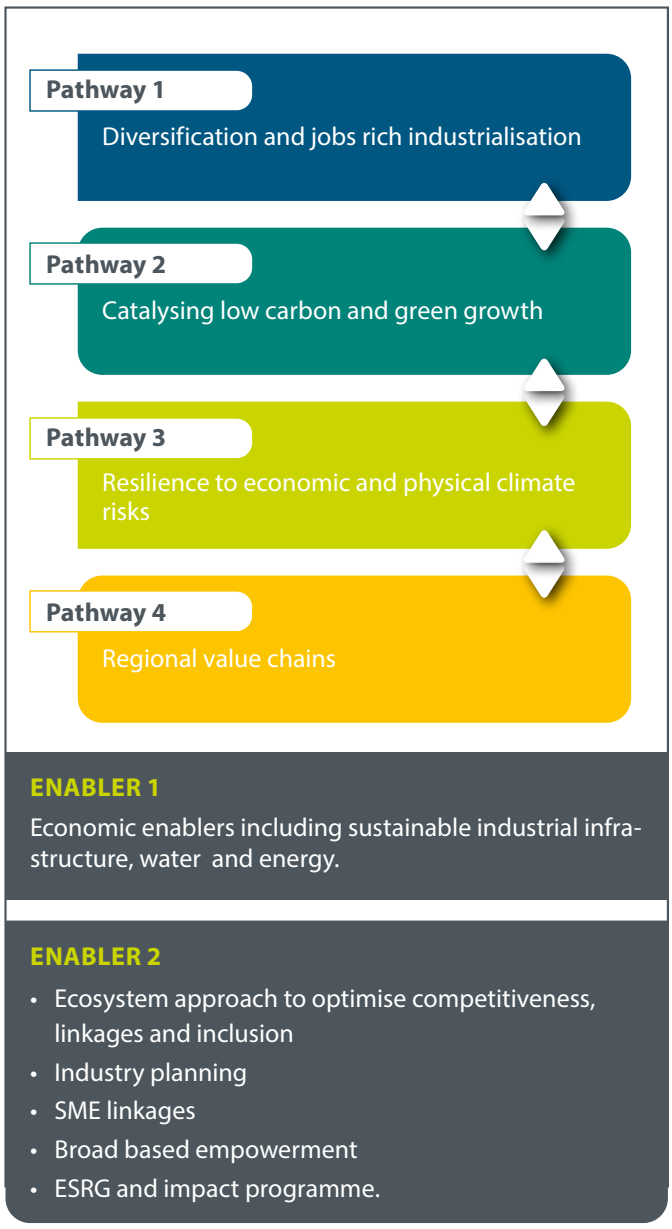
[12] Avenyo, E. K., & Tregenna, F. (2022). Greening manufacturing: Technology intensity and carbon dioxide emissions in developing countries. Applied energy, 324, 119726.

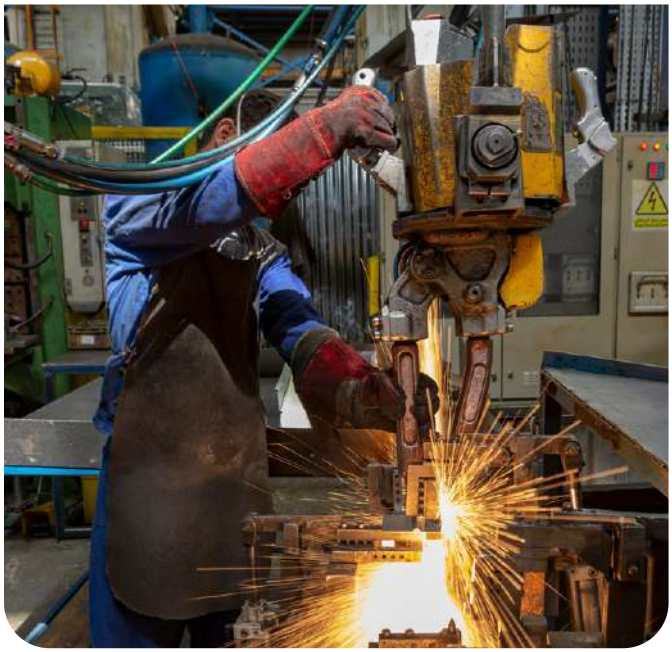
- **Supporting the development of regional value chains** to optimise the industrialisation opportunity offered by the SADC region's critical minerals endowments and adapt against extreme weather changes for food security.

The pillars are not mutually exclusive and reinforce each other. For example, diversification is also being pursued through the low carbon transitions and green growth, whereby the IDC supports backward integration into diversified manufacturing production of components for new green industries. The pillars are supported by the cross-cutting ecosystem approach to optimise competitiveness, linkage development and inclusion; and supporting economic enablers such as sustainable industrial infrastructure and energy.

Source: IDC

Figure 1: IDC Sustainable Industrialisation Approach





This approach to sustainable industrialisation and structural transformation supports the maintenance and expansion of South Africa's industrial capacity; facilitates shifts to more sophisticated activities with scope for cumulative productivity while enabling the country's low carbon transition and thus supports a more equitable distribution of income, quality employment, and environmental protection.[13]

The IDC acknowledges the environment within which the DFI operate. As such, the Corporation has adopted additional interventions over above its mandate so it could effectively assist in addressing South Africa's socio-economic challenges of unemployment, poverty and inequality. These are discussed in section 4.

[13] Sectoral deepening typically triggers increased employment and wages, creating the conditions for more equitable income distribution.

3. FINANCING SOUTH AFRICA'S SUSTAINABLE INDUSTRIALISATION



Funding thus has a significant role to play in promoting South Africa's sustainable industrialisation. There is a need for 'patient capital' because of the time needed to build the scale required to be competitive in new economic activities and the requirements of learning and capabilities development. This is particularly important in the new green industries, some of which require a level of de-risking. This de-risking role is traditionally played by DFIs such as the IDC.

IDC is a state-owned DFI, established in 1940 to promote industrial development. The Corporation has an asset base of R144 billion (USD 8.4 billion) and approved funding of R13.4 billion (USD 0.8 billion) in the financial year ending March 2025. In addition to its on-balance sheet funding, the Corporation manages 11 funds on behalf of the South African government and international DFIs.

To support the effective execution of the sustainable industrialisation model, the IDC has adopted a proactive approach that maximises the development impact of its activities, encompassing:

- **Integrated Industry Planning** - this supports the creation of conducive ecosystems and value propositions and aligns all IDC competencies towards specific value chain plans.
- **Project Development** – the support and funding of needle moving and catalytic projects that are not yet bankable.
- **Business Development** – the pro-active engagement with and support to industry operators to build a pipeline of potential strategic investments.
- **Programme and Fund Management** – the management of specialised and off-balance sheet funds with partners in all operational dimensions.
- **Investments and financing** – the ability to perform comprehensive in-house due diligences and the solutioning around risk-mitigants and optimal financial structuring.
- **Portfolio value creation** – the support provided to portfolio investments to grow and enhance their potential and impact.



The IDC was instrumental in the development of some of South Africa's industrial giants including Sasol, Arcelor Mittal South Africa (formerly Iscor), Mozal Aluminium Smelter, Kumba Iron Ore and BHP Billiton. The Corporation supported the establishment of these companies and the various local industry value chains such as chemicals, steel, aluminium, paper and various others. Drawing on this experience gained over 83 years in operation (see table 1) as well as the role played in de-risking and helping establish the local renewable energy industry, the Corporation is poised to play a prominent role in supporting South Africa's new path to sustainable industrialisation in the context of low carbon transitions.



Table 1: Driving South Africa's Industrial Development through the decades

1940s

Theme
Expansion of industrial capacity and meeting basic supply shortages.

Example of some initiatives
Establishment of domestic textile, wood/timber, animal feed & processed food industries and the ship repair industry. Some of the companies incl: Pinetown Woolwashery (Pty) Ltd; Fine Wool Products of SA Ltd; Masonite (Africa) Ltd; powdered milk factories; Felt and Textiles of SA; Hex River Textile Mills; Ouma's Rusks.

1950s

Theme
Securing energy resources for SA, increasing natural resource beneficiation.

Example of some initiatives
Funding of Sasol, Foskor, Phillips Carbon Black, SAICCOR; and acquisition of equity stakes in Sappi and Safmarine - contributing to development of SA's petro-chemicals, fertiliser, rubber, rayon, kraft paper, shipping industries.

Revival of cotton textiles industry - Good Hope Textiles (through IDC partnership).

1960s

Theme
Increasing beneficiation, value addition.

Example of some initiatives
Funding of large projects such as Alusaf, Automotive Components Plant, Palabora Mining, Synthetic Rubber Co, Soeker (oil), Huguenot Porcelain (Pty) Ltd (crockery) .

Consolidation of textile interests into Da Gama Textile Company (Pty) Ltd .

Submarine telecommunications cable between Europe and Cape Town.

1970s

Theme
Import replacement, resource-intensive industries to bolster export earnings in non-gold sectors, initiation of high-tech industries.

Example of some initiatives
Richards Bay Minerals - reclamation of titanium minerals from beach sand.

Financing scheme for exporters.

Construction of Atlantis Diesel Engines with Daimler Benz and Perkins.

SA Micro-Electronic Centre – collaboration with SAPO, CSIR and Siemens.

1980s

Theme
Continued import replacement, high-tech industries, agriculture as a forex earner (particularly non-traditional crops), industrial real estate development.

Example of some initiatives
Alusaf expansion completed; minority shareholding in ISCOR; Mossgas project.

Sapekoe tea estates; essential oils & ole-resins; mushrooms; asparagus; dates.

Foskor acquisition of Indian Ocean Fertiliser (formerly Triomf).

Venture capital scheme for high technology products.

Studies on electronics, processing of wool, prawn production, jewellery, cotton etc.

Table 1: Driving South Africa's Industrial Development through the decades **(Cont.)**

1990s

Theme
Competitiveness to sustain industrial capacity, export promotion, BEE, support regional (SADC) integration, services-related industries.

Example of some initiatives
Saldanha Steel; Columbus Stainless Steel/Highveld Steel/ Vanad. & Samancor JV.

Algorax automotive catalytic converters; Duferco cold-rolled & galvanised steel.

Warehousing of Metropolitan shares for NAIL BEE group; BEE funding of 1st cellular/mobile phone operators in SA.

Extension of mandate to SADC region – funding of MOZAL I in Mozambique.

2000s

Theme
Continued import replacement, high-tech industries, agriculture as a forex earner (particularly non-traditional crops), industrial real estate development.

Example of some initiatives
Funding of Mozal II in Mozambique - doubling aluminium smelter's production capacity .

Umicore Autocat SA (automotive emission control catalysts).

SA Chrome & Alloys (later named Merafe Resources).

Financing of media and motion pictures (Academy Award winning Tsotsi; Hotel Rwanda; Skin; Drum Stories of Sophiatown).

Incwala Resources (funding of community stake in the platinum sector).

Funding for Gautrain, Neotel, CNBC Africa, Tzaneen Wood Plastic Composite (fencing & decking material), blueberry projects (high-value agricultural crop).

4-star Freedom Square Hotel (Kliptown cultural & heritage precinct) .

Singisi Forest Products project through Hans Merensky Holdings (1st model of empowerment within forestry – communities with shareholding).

2010s

Theme
Focus: Alignment with objectives of NGP, IPAP, NDP, NIP; green economy, infrastructure; localisation; consolidation of SME sector support.

Example of some initiatives
Roll out of Clothing and Textiles Competitiveness Programme starts stabilising sector.

Catalytic role in REIPPPP projects (1 408 MW expected): incl. KaXu Solar One (CSP); Sunrise Energy etc.; funding for communities' shareholding in RE projects.

LPG terminal & storage facility in Saldanha, Egoli Gas, SEMONA ECO (biomass).

Sedibelo Platinum Mine.

Small Enterprise Finance Agency (sefa) established to fund SMMEs.

The IDC continues to make progress in each of its four pillars of the sustainable industrialisation pathways. In the rest of this section, the Corporation reflects on progress it has recorded to date while also highlighting future priorities.

3.1 Catalysing Low Carbon Transitions and Green Growth

As a DFI, the IDC is playing a leading role in catalysing low carbon transitions and green growth more so in the context of spearheading initiatives and investing in projects that seek to help the country achieve its net zero ambition in a manner that drives jobs-rich industrialisation.

The integrated approach to low carbon transitions and green growth acknowledges that the low carbon transition and structural transformation within and across sectors and industries will depend on this new integrated approach for sustainable industrial transformation as illustrated in figure 2:

a. Renewable energy will fuel the transition to a lower-emissions economy;

b. Transition fuels (supported by extended transmission grid, improved distribution networks and battery storage) will be critical for managing cost competitiveness during the transition and intermittency of renewable energy overall;

c. Industries will adopt new business models, powered by renewable energy with energy storage infrastructure, extended grid transmission, improved and resilient distribution networks as well as new products and solutions addressing societal needs, such as mobility;

d. Green hydrogen is critical for the transition of hard-to-abate or greening root industries;

e. The economy will need to diversify and build capabilities in the supply chains of new industries to support employment and better pay to ensure a socially viable and, to a certain extent, a just transition.

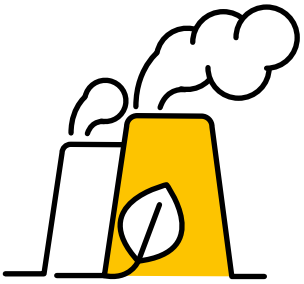
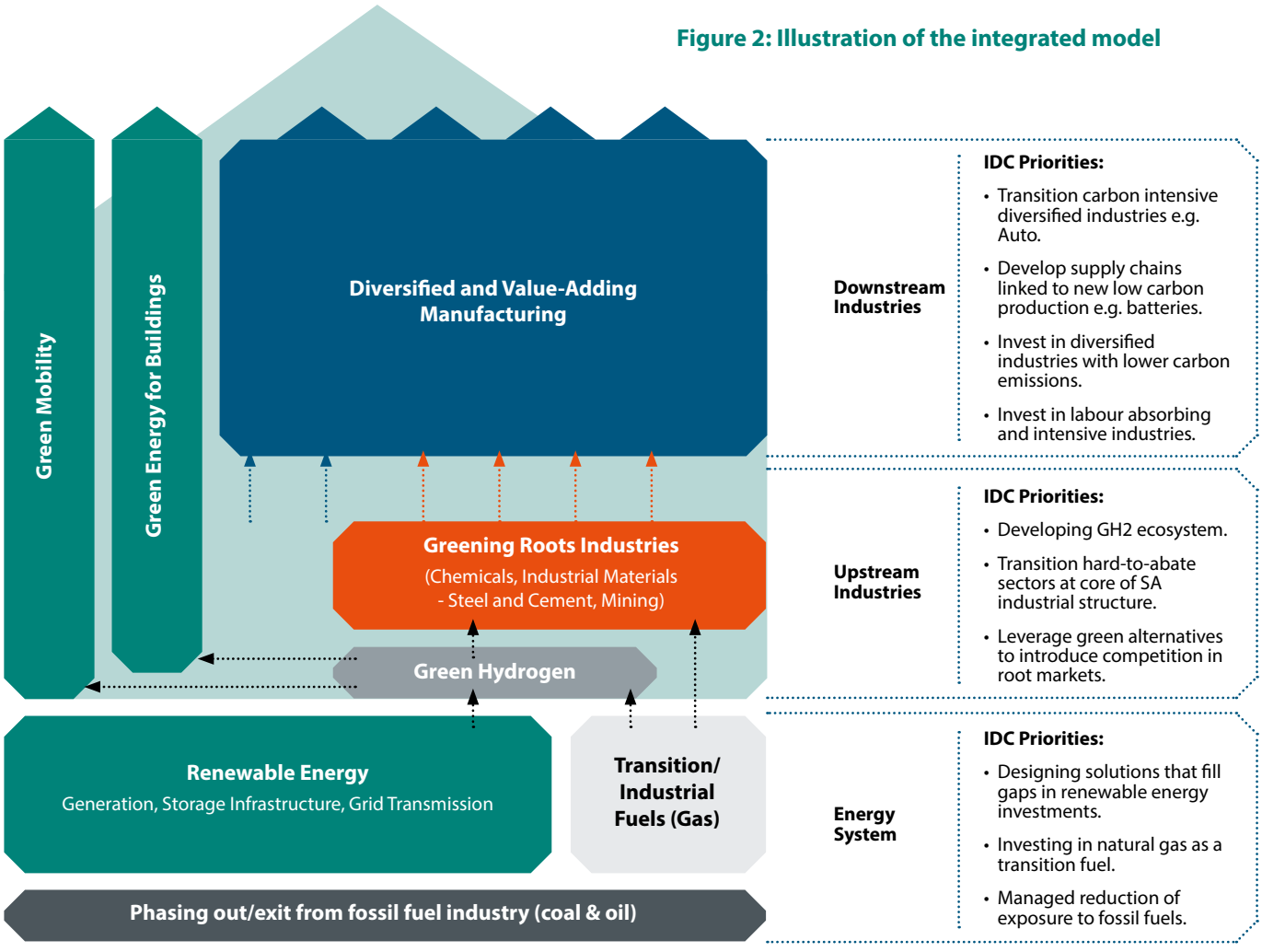


Figure 2: Illustration of the integrated model



Source: Adapted from Andreoni, Bell and Roberts (2023)

3.1.1 Catalysing Investment in Renewable Energy

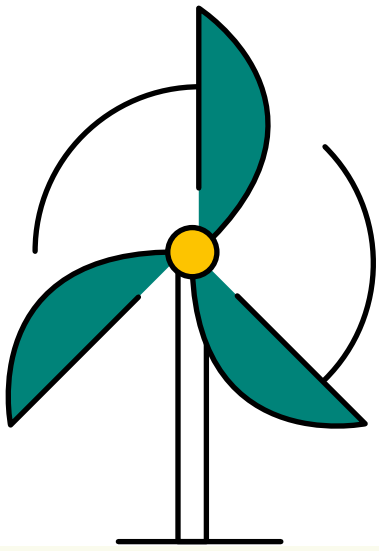
The IDC successfully catalysed investments in renewable energy, which have been important to addressing the country's energy challenges while supporting decarbonisation, transitioning and transformation of the industrial economy. SA's Renewable Energy Independent Power Producer Purchasing Programme (REIPPPP) kicked off in 2011, comprising mainly solar PV and wind energy projects, and added much needed clean additional capacity to the grid with speed and negligible capital outlay from a strained fiscus.

IDC 's role among others included de-risking the sector through early investments and facilitating participation of South African investors and businesses, particularly those owned by historically disadvantaged persons and communities. This approach has helped to foster inclusive economic participation in a sector that places onerous capital requirements for new entrants.

To date, the Corporation has invested approximately R16,5 billion (USD 880 million) in renewable energy and crowded in investments of approximately R65 billion (USD 3,5 billion). These investments catalysed a significant portion of the total of R228 billion (USD 12,1 billion) invested in the programme thus far.

	Achieved outcomes to date
Benefits to the economy	• The 99 TWh clean solar and wind energy delivered to date.
Socio-economic outcomes	• Directly facilitated 2 991 jobs. • An estimated 74 000 job years catalysed.
Environmental benefits	• 102 Mt of CO2 offset. • 120 gigalitres of water saved.

Improving competitiveness of renewable energy and the commercial case for private investments: Since the inception of REIPPPP, the contracted costs of energy declined from R4.60/kWh (USD 0,25) for solar PV and R1.90/kWh (USD 0,10) for wind energy in 2011 to below R0.50/kWh (USD 0,027) for both by 2021. The declining costs, in addition to the risk funding of early rounds, have improved the commercial case for these projects and commercial banks are now the main funders. The December 2022 policy change to introduce uncapped electricity self-generation has created a thriving market for commercial and industrial (C&I) renewable energy projects in the country. Looking ahead, the Integrated Resource Plan of 2025 (IRP 2025) indicates a minimum of 71.7 GW of wind and solar PV generation is to be added to the grid as coal generation reduces to 9% by 2042 (from 80% in 2023).[14] SA's domestic demand is estimated to grow by 15-20 Terra Watt Hours (TWh) per annum.



[14] An update of the IRP is imminent and expected to have a more ambitious target for renewable energy contribution to SA's energy.

Box 1: H1 Kenhardt - Lighting up SA

Through its Energy strategic business unit, IDC seeks to contribute meaningfully towards SA's Just Transition and to help improve the country's precarious energy supply. IDC is playing a key facilitation role in the Government's power procurement programmes.

Accordingly, the Corporation provided funding support to H1's participation in Kenhardt for construction of three 183 MW Solar PV with Battery Energy Storage System (BESS) plants, with a total output of 549MW contracted capacity. These projects are based in Kenhardt, Northern Cape. The combination and integration of Solar PV and BESS at utility scale will be the first of its kind in SA.

This project is a joint venture between H1 and Scatec. H1 is a black-owned investment company founded in 2000. H1's experience extends to construction and operating smaller-scale IPPs with private sector C&I off-takers and utility scale projects. Scatec is an experienced Norwegian renewable energy project developer with 3.5 GW installed capacity. It operates across four continents using varying technologies. The company established its operations in the SA market in 2013 and has since participated in government's Renewable Energy Independent Power Producer Procurement Programme ("REIPPP) Bid Window 3 and 4. Both H1 and Scatec have a track record of working together in developing and successfully implementing renewable energy projects in the local market.

Box 2: Ishwati - Boosting transformation in energy sector

The IDC approved funding to a BEE consortium to facilitate the equity participation of Reatile Renewables Ishwati in the Ishwati Emoyeni Wind Farm (Ishwati). Reatile Renewables Ishwati is 100% South African-owned, with 100% black- and 30% black women shareholders. Ishwati is a 140MW project located north of Sutherland, co-located with the Umsinde Emoyeni (Umsinde) and Khangela Emoyeni (Khangela) Wind Farms. These projects have been led and developed by African Clean Energy Developments (ACED) - the renewable energy project development, delivery and asset management platform of African Infrastructure Investment Managers (AIIM). Reatile Renewables and AIIM, through its IDEAS Fund, are shareholders in the consortium.

Together, these wind farms form part of ACED's Northern Cluster Projects. IDC's funding to Ishwati continues the Corporation's support to Reatile Renewables with prior projects: Castle (89MW), Msenge (69MW), Umsinde (140MW) and Khangela (140MW). The Northern Cluster Projects are strategically located along the border of the Western Cape and Northern Cape Provinces within the Beaufort West and Ubuntu Local Municipalities. The new 400/132kV Gamma MTS substation will connect these projects, ensuring efficient energy distribution. Ishwati will supply renewable energy to the NOA Group, a private energy trader off-taker, on a 25-year take-or-pay power purchase agreement and on a wheeling basis. NOA will on-sell this renewable energy to the Netcare Hospital Group (Netcare) as well as Tronox SA Operations, a mining and manufacturing company. Netcare is a prominent healthcare provider, and this collaboration will help them achieve their goal of 100% reliance on renewable energy by 2030. Ishwati will provide six of Netcare's hospitals with their electricity needs, replacing 11% of their current fossil fuel-based supply from Eskom. Similarly, for Tronox, this agreement aligns with their roadmap to net zero carbon emissions, helping them offset over 500 kilotons of carbon annually. IDC's funding to Ishwati has resulted in the Corporation achieving many critical development outcomes such as the creation of 192 jobs, transformation in terms of ownership and participation of a black-owned independent power producer, local content, as well as supplier and community development.

Some of the energy priorities going forward:

a. **Energy Security:** With the advent of liberalisation in South Africa's private energy self-generation market, the IDC's focus has broadened to renewable energy solutions for C&I markets, including providing funding for the transmission grid and the localisation of essential inputs. The objective is to support the development of private energy generation for C&I for business continuity; aggregate local renewable energy demand to support investment in the local supply chains; and assist local manufacturers to be sustainably competitive.

b. **Backward integration in the renewable energy value chains:** It is imperative to develop local capabilities in designing, producing key components, constructing, operating and maintaining renewable electrification plants.[17] This will contribute to positive structural transformation and ensure that the transition to renewable energy has a positive net impact on the economy. The IDC is committed to identifying and funding localised aspects of the value chain to ensure success in the renewable energy sector.

The IDC has also developed product solutions and initiatives that allow it to effectively pursue its priorities. Some examples are included in Box 3.

Box 3: IDC funds/initiatives to support energy efficiency and resilience to loadshedding

- **Commercial & Industrial Portfolio Offtake Model (C&I POM):** IDC is assisting in the alleviation of the energy crisis in South Africa by offering risk capital for shovel-ready renewable energy IPP projects that are unable to attract debt funding due to insufficient and/or un-bankable off-take agreements. This is supported by R5 billion (USD 270 million) the C&I POM that mitigates off-take risk of renewable energy projects through a portfolio approach that collectively consumes more (i.e. over-subscription) than what the IPP generates and thereby offers substitution options. This is done by aggregating C&I customers in a portfolio and matching them with IPP generation capacity.
- **Energy Resilience Transition Scheme:** A R2 billion (USD 110 million) fund administered by the IDC to support rapid deployment of embedded generation (and storage) solutions to small, micro and medium enterprises to address loadshedding issues (also targeted in vulnerable entities such as townships and rural areas.
- **Township Energy Fund:** R200 million (USD 10,7 million) of grant funding for small and medium enterprises in townships and rural communities directly affected by energy shortage, primarily aimed at the purchase of energy back-up equipment.
- **Black Economic Empowerment Energy Companies:** Provide HoldCo funding to local transformed energy companies to facilitate their growth to enable them to compete with foreign IPPs.
- **REIPPPP and C&I single off-taker:** IDC continues to participate in utility-scale REIPPPP projects and C&I single off-taker IPP projects but is now focusing on filling the gap instead of competing with other funders / banks.

3.1.2 Developing South Africa's Green Hydrogen Ecosystem

Given that there is now a commercial market for renewable energy in South Africa, the IDC is working towards establishing the linkages from renewable energy to the production of green hydrogen to facilitate the low carbon transitions of hard-to-abate industries.

Green hydrogen will play an important role in building resilience and sustainability into existing fossil fuel enabled industrial and agricultural sectors while developing new value chains. This will ultimately contribute to driving growth and development, employment and improving energy security, enabling the country to transition to a lower carbon economy. South Africa has multiple structural and strategic advantages in the development of the green hydrogen value chain, including abundant renewable energy resources, land availability and technology which will support projected GH_2 costs of **USD 2,5/kg by 2030 and USD 1/kg by 2045.** South African green hydrogen is expected to achieve price parity with low-cost fossil fuel alternatives before **2050.**

Figure 3: Green Hydrogen Opportunity

Key facts:

Ambition

Long term growth aspirations could exceed 7mtpa of production by 2050

Demand

- Exports - EU (2030: 20mtpa); Japan (2040: 12mtpa; South Korea (2050: 1.2 mtpa), the United Kingdom (2050: 0.7 mtpa).
- Domestic decarbonisation – hard-to-abate sectors & mobility

Multiplier

Fuel cells, electrolysers, renewable energy, balance-of-plant, steel, petrochemicals, transport, manufacturing, pipelines

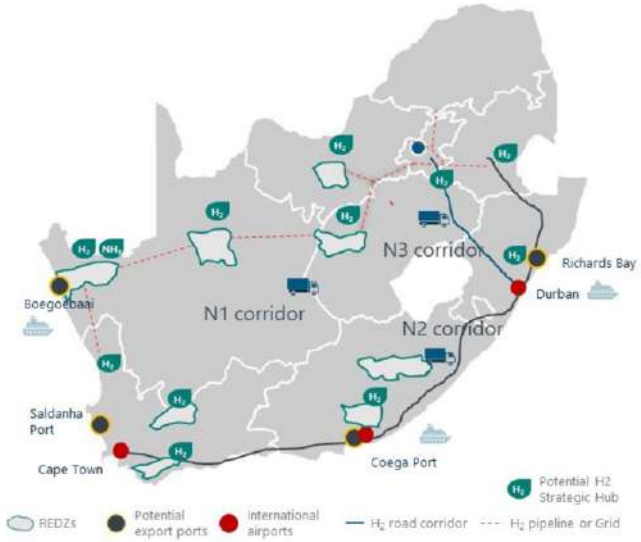
Impact

GDP Increase of R100-R250bn, 1-3% & 650,000 to 1m new jobs

Funding

The target of 3.8 mtpa by 2040 will require total investment of $164 bn by 2040.

Spatial dimension:



IDCs role:

1. Planning, co-ordination, policy support
2. Develop risk-sharing partnerships
3. Develop catalytic projects
4. Develop blended finance solutions

Developing the Green Hydrogen Ecosystem

IDC is driving the development of the green hydrogen ecosystem by financing and coordinating critical activities for the success of the industry. The Corporation has been instrumental in the development of the green hydrogen chapter (8) of SA's JET-IP. The implementation plan estimates funding requirements to the value of R319 billion (USD 21.2 billion) over the 5 years 2023-2027. South Africa has a pipeline of 24 projects under development in the short- and medium-term, with the main projects having already been granted Strategic Integrated Project (SIP) status. To date the IDC has invested over R100 million (USD 5,3 million) in a strong pipeline of projects that are under development.

Full implementation of these projects would potentially lead to investment into the economy to the value of R24 billion (USD 1,2 billion). Outcomes of these projects will, in the long-run, contribute to:

- Decarbonising hard-to-abate industries, petrochemicals and steel, to support continued value addition, employment and export competitiveness.
- Expansion of South Africa's ammonia production capacity in a manner that introduces competition to the existing monopoly; supports decarbonisation of fertilisers (important for the carbon footprint of the country's agriculture) and explosives used by the mining sector.
- Reducing freight and public transport emissions, while developing domestic supply chains.
- Support the cost competitiveness of locally produced GH_2 by developing appropriate infrastructure.
- Transitioning South Africa's current coal to liquids and gas to liquids petroleum production to green synthetic fuel.

Figure 4: IDC activities in the green hydrogen ecosystem

Over R200m has been approved in project development funding with first GH_2 already being produced

INDUSTRY LEADERSHIP

- Chair & Secretariat of the **GREEN HYDROGEN PANEL** - obtained Cabinet approval of the GH commercialisation strategy (GHCS) on 18 October 2023
- Drafted the **JET-IP INVESTMENT CASE** for Green Hydrogen for COP28
- Participation in various **CONFERENCES** and Panels promoting the commercialising action plan, notably the South African Green Hydrogen Summit (SAGHS) arranged by the Presidency
- Drafted Chapter 8 of the JET-IP on GH_2

PARTNERSHIPS

- Collaboration with GIZ and UKPACT on studies to develop the industry
- Regional Integration and working with African Green Hydrogen Alliance

POLICY AND REGULATIONS

- All government approach
- Full mobilisation of the GH_2, JET-IP PMO at IDC to implement the GHCS and JET-IP actions
- Working with SABS to draft a standard for GH_2

INFRASTRUCTURE

- IDC initiating the development of a national green hydrogen **infrastructure masterplan**
- Pipeline study with **NCEDA and Namibia Government**
- 3 Capes Consortium working on a **transmission infrastructure study**

GH AND DERIVATIVE PRODUCTION

- IDC co-owned **SASOLBURG GH_2 PROJECT** implementation phase completed and GH_2 being produced
- Feasibility funding of R50m approved and disbursed for **PRIESKA POWER RESERVE** - green ammonia exports
- **HIVE COEGA Green Ammonia Project - term sheet issued**
- **Green Steel** project in **Saldanha Bay** (IDC approved funding for feasibility work)

FUNDING

- Managing EUR23m grant from **KFW** to assist Green Hydrogen commercialisation projects engaging other funders
- IDC has approved investment of $10m in the $1bn SAH2 green hydrogen blended finance facility together with Climate Fund Managers, DBSA, Sanlam and Invest International.
- Secured EUR 5m grant funding from Invest International, a Dutch DFI, towards the SAH2 fund

EQUIPMENT MANUFACTURING

- Project Phoenix Fuel Cell Manufacturing - **VAAL SEZ** (BFS phase completed)
- Isondo Precious Metals fuel cell and electrolysers manufacturing - **OR TAMBO SEZ** - application under review

Box 4: Prieska Power Reserve project is taking shape

Prieska Power Reserve Project is a green hydrogen and ammonia project that aims to produce green hydrogen and ammonia through a combination of high yielding renewable solar and wind energy resources, along with the other natural resources of water and air. The estimated capital cost of the project is R11-R12 billion (for the first phase) (USD 590-640 million) and it will be located in Prieska in the Northern Cape, South Africa. The Project will produce approximately 80 000 tons/annum of green ammonia and 14 000 tons/annum of Hydrogen from renewable energy sources consisting of 180MWp Solar PV, fixed tilt and single axis tracking and 138MW of Wind. The carbon emission reduction for the Project is estimated at 168,000 million tons of CO2 per annum.

The project promoters comprising Central Energy Corporation (Pty) Ltd and Mahlako a Phala Investments (Pty) Ltd completed a concept and viability study and subsequently approached IDC to provide project development funding to the amount of R50 million (USD 2,6 million) to finalise the pre-feasibility study for the project. The pre-feasibility study was completed in March 2025.

The feasibility study phase is currently underway with completion thereof targeted for March 2026. A financial investment decision is expected towards the end of 2026 with production to commence in 2029.

The development impact of the project entails participation by BEE and women in the ownership structure with potential involvement by local communities, creation of 100 permanent jobs and export of a portion of the Green Ammonia product.

Opportunities for partnering with the IDC in Green Hydrogen:

1. Project partnerships – IDC co-develops and co-funds projects with industry partners which entails providing much needed equity-based project development funding. There is an urgent need to secure strategic equity partnerships for the catalytic projects that are being developed.

2. Funding partnerships – IDC is also involved in sourcing funding instruments and this entails, amongst other activities, our involvement in various capacities including the development of the $1bn SA-H2 hydrogen fund and managing of 23m euros grant funds from KfW.

3. Manufacturing partnerships – Building local manufacturing capability is a key enabler and IDC is seeking partnerships to manufacture equipment including fuel cells and electrolysers.

4. Industry development partnerships – IDC is also seeking partners that can assist with industry development activities which entail various industry development studies and influencing policy and regulatory changes.



3.1.3 Championing Early Adopters in the Electric Vehicle Ecosystem

New Energy Vehicles Transition: Challenges and Opportunities Created

The South African automotive manufacturing sector is a major contributor towards GDP (3.2%)[15] employment (120 468) and export revenue (R281.7 billion) accounting for 13.8% of South Africa's merchandise exports and has been in existence for close to 100 years. South Africa has a world-class automotive assembly industry consisting of 7 OEMs and with 2 OEMs with advanced plans to produce in SA. The value chain includes close to 500 component suppliers, making a significant contribution to the almost 40% industry average local value addition.[16]

The combination of assembly and component supplier gives the industry its breath and depth to compete on a global level. This is despite South Africa's geographic disadvantage in relation to major export markets; the domestic industry capabilities, free trade agreements and policy incentives make it competitive including in EU and UK Markets, which together account for 46% of total domestic production.

Transition risks:

- SA's main export markets have committed to zero-emission vehicles by 2035 (accounting for 46% of cars produced in SA); however domestic demand will likely have a slower transition. This undermines economies of scale.
- Potential loss of ICE-specific component manufacturing including catalytic convertors, accounting for 50% of component exports, approximately R34 billion (USD 1,9 billion).

IDC's approach to leveraging the transition opportunities and mitigating the challenges:

- Support existing OEMs and Component suppliers to transition including value chain deepening through battery production.
- Attract new OEMs to SA for localisation. IDC is a shareholder in BAICSA and is considering co-funding Stellantis 's entry in SA.
- Support diversification towards mobility/logistics and public transport projects and infrastructure.
- Support the development of regional automotive value chains to achieve shared value addition from the market access created by AfCFTA.

Financing e-mobility business

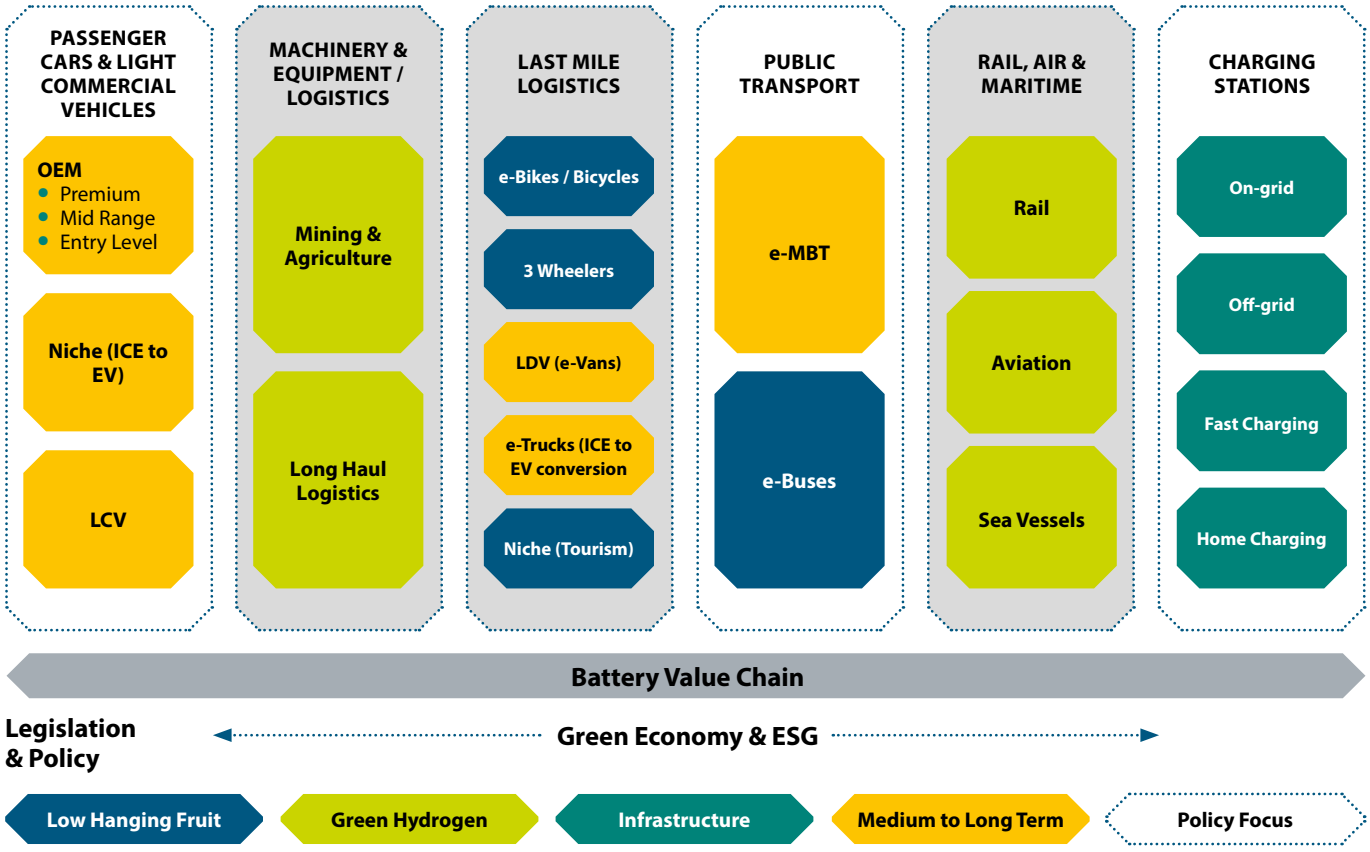
IDC, through its value chain approach, was quick to identify that South Africa's NEV transition be viewed as segments of manufacturing, transportation and various demand pathways (Figure 5). These pathways are passenger cars, public transport, e-mobility and logistics, public transport, mining and agriculture and other (maritime, aviation, rail). Each of these pathways has to transition towards low-carbon mobility due to legislation, climate mitigation or value creation drivers and each requires a different combination of solutions for the transition. Although passenger cars are the highest in terms of volume consumption, other pathways present opportunities that are perhaps less fiscally burdensome and rely on other demand levers such as ESG, shareholder value and total cost of ownership.



[15] https://naamsa.net/wp-content/uploads/2025/10/20251001-State-of-the-Auto-Presentation-FINAL-VERSION.pdf"20251001-State-of-the-Auto-Presentation-FINAL-VERSION.pdf

[16] DTIC (2019) South Africa Automotive Masterplan: Post 2020 Policy Framework

Figure 5: NEV Segmentation and Opportunities



Source: IDC

Financing the transition for mobility entails a risk appetite for pre-revenue projects and businesses as entrepreneurs need to test new technology under local conditions and various business models which may rely on subscription rather than asset sale-based revenue. This necessitates a partnership approach amongst government, development finance and commercial lenders to support the transition; in some cases, utilising social economy funds where there are clear demonstrable linkages to communities, women, youth and social upliftment.

The IDC approach includes providing the appropriate funding solutions for the SMEs business life cycle and allowing these projects and business to achieve scale economies and thereby the linkage between SMEs and industrial base, such as automotive. However, the financing ecosystem still requires early adoption funding, and this is where the JET-IP NEV implementation plan can play a vital role.

Policy Support for the NEV Transition:

The IDC was instrumental in the development of the NEV sections of the JET-IP and will be responsible for coordinating the automotive, battery value chain and e-mobility/logistics workstreams. The JET-IP makes the important link between industrialisation, SMEs, job creation and South Africa's climate mitigation commitments. The transport sector contributes close to 10% of South Africa's total emissions, with 90% of that coming from road transport.[17] The transport sector is also a key enabler for economic activity. The JET NEV implementation plan focuses on supply-side areas such as the automotive manufacturing supply chain, investments by existing and new OEMs and the battery value chain; and demand-side areas such as public transport, e-mobility/logistics and associated charging and utility infrastructure[18] to stimulate adoption of NEVs.

3.1.4 Supporting the Development of Alternative Uses of Hemp Including as a Carbon Sink

Industrial Hemp (Cannabis Sativa) has significant carbon sink and carbon sequestration properties. The plant also has significant mine and agricultural land rehabilitation and remedial properties. Its cultivation and use in multiple demand pathways can significantly contribute to the decarbonisation of global supply chains and in carbon markets. Hemp Biochar has unique soil rehabilitation and sequestration properties.

Hemp has multiple industrial applications with whole plant (flower, seeds and stalks) usage depending on defined and different products and demand pathways that the IDC is working towards industrialising. These include:

- Hemp for biofuels, paints and distillates with multiple demand applications. For example, the global marine fleet is pivoting away from bunker fuel to hydrogen and biofuel propulsion. Although hemp biomass is marginally less productive than other agricultural crops such as sugar or sugar beet, its propensity to act as a carbon sink and sequestrator outweigh this consideration. Developing countries, SA included, have a crisis of rural poverty. Hemp cultivation and value-added processing for end user demand can significantly address employment creation and sustainable rural livelihoods.
- Hemp bioplastics and derivatives represent a significant opportunity for applications in paper, pulp and packaging, automotive and construction industry panels, alternatives to fibreglass in hemp composites with numerous applications, and for woven and technical textiles.
- Hemp biomass can be used to produce hemp oil, hemp seedcake for novel foods, as a dietary protein rich additive for protein poor diets in human food products and for animal feed.
- Hemp oil and derivatives can be used in cosmetics and wellness products and complementary medicines.

Supporting the industrialisation of hemp also facilitates the inclusion of rural communities who have established capabilities in the cultivation of cannabis, including with respect to unique landrace strains and indigenous knowledge practices, which should be protected and supported under the Nagoya Protocols and related indigenous knowledge protection mechanisms.

[17] **South Africa's Just Energy Transition Investment Plan 2023 -2027**

[18] **Through a demand pathway approach, the implementation plan proposes two programmes link projects to appropriate funding. The programmes cover transport decarbonisation projects in public transport and logistics whilst supporting local manufacturing to automotive and battery value chain investments from OEMS to SMEs. Other priority areas also include support for policy and regulations, entrepreneurial-led innovations and technology development, enhancements of existing conformity standards and capacity development for municipalities.**

3.2 Diversification and Jobs-Rich Industrialisation

The IDC acknowledges that what a country produces and exports matters for growth, inclusion and its energy intensity levels related to climate change and its impacts.[23] South Africa's industrial structure is dominated by mineral resources and resource-related manufacturing goods, which contributes to economic vulnerability arising from commodity cycles and other external shocks. This is evidenced by country's merchandise export basket, where resources and resources-related manufacturing goods account for over 60% of total exports. The implication has been start-stop growth patterns linked to the commodity cycles, with implications for the balance of payments, corporate tax revenue collection and employment. The capital-intensive nature of these activities has also meant that gains from industrialisation accrue to a small group of equity owners and employed citizens leading to the country recording the highest levels of inequality in the world. The energy intensity of these goods is also linked to the country's relatively higher emissions per capita. Though manufacturing drives growth and is generally inequality-reducing, the structure of manufacturing determines the levels and sustainability of growth as well as the distribution of the gains from growth.[19]

Consequently, part of the IDC's sustainable industrialisation strategy is to target financing activities that contribute to diversifying the country's industrial structure. This includes supporting the development of sustainable and inclusive value chains and enabling ecosystems. This includes targeting medium and high technology manufacturing as well as labour-absorbing and labour-intensive manufacturing.

3.2.1 Medium and High Technology Manufacturing

Medium and high technology manufacturing is associated with higher levels and more sustained growth at lower levels of GHG emissions and is also labour-absorbing.[20] Technological upgrading linked to medium and high technology manufacturing has been found to be critical for driving sustained growth, thereby avoiding or overcoming premature de-industrialisation.[21-22] In addition, emerging evidence indicates that the technological intensity of manufacturing activities matters for the intensity of GHG emissions, where goods with a higher technological intensity are typically associated with lower GHG emissions.[23]



[19] Baymul, C. and K. Sen (2019). 'Kuznets revisited: what do we know about the relationship between structural transformation and inequality?' Asian Development Review 36(1): 136–67.

[20] Avenyo, E. K., & Tregenna, F. (2022). Greening manufacturing: Technology intensity and carbon dioxide emissions in developing countries. Applied energy, 324, 119726.

[21] Ocampo, J. A., & Parra-Lancourt, M. (2010). The terms of trade for commodities since the mid-19th century. Revista de Historia Económica-Journal of Iberian and Latin American Economic History, 28(1), 11-43.

[22] Andreoni, A., & Tregenna, F. 11.2 The Middle-Income Trap, the Middle-Income Technology Trap, and Industrialization Challenges. Structural transformation in South Africa: The challenges of inclusive industrial development in a middle-income country.

[23] See for example, UNIDO (2020). 'Industrialization as the driver of sustained prosperity.' Vienna: UNIDO, https://www.unido.org/industrialization-driver-sustained-prosperity.

Box 5: Diversifying towards medium and high technology industries, the case of machinery and equipment

IDC is supporting the diversification of the South African economy towards higher value-adding and employment-absorbing industries. The machinery and equipment industry is one of the IDC's priorities for diversification. It is a medium technology industry with scope for productivity gains and increasing South Africa's manufacturing value addition and established capabilities in niches such as mining machinery and equipment, which can be leveraged for lateral migration. The challenge is to build on these capabilities to realise export opportunities including in the continent.

The IDC has increased investment in this value chain with funding approvals of R273 million reaching financial close and disbursements R493 million in FY2024/25. These investments – primarily in mining equipment, electronics, renewable energy and energy efficiency systems – are expected to create and/or save 242 jobs. In one of the projects, the IDC facilitated local investment by a tier 1 original equipment manufacturer in the production of M12 bifacial photovoltaic modules with a capacity of 325MW. The IDC is also jointly developing a utility scale inverter project and funding was provided to certify and construct a reference plant to industrialise the production of 200MW capacity a year.

The localisation of electrical equipment for the transmission grid remains a priority. In the energy transmission system funding was provided for new manufacturing capacity in high-voltage transformer bushings and mini substations. The Corporation supported the manufacture of smart metering systems and funded the manufacture of smart sensors and platforms for residential application, including smart geysers, alarm sensors, automated plugs and lights, and leak and fire detection sensors. We are optimistic that the liberalisation of renewable energy in South Africa will provide a stable growth trajectory for component localisation.

Our focus will be on a continental demand stimulation strategy for end-user facilities and export driving lines of credit. In this regard, the IDC has partnered with the Export Credit Insurance Corporation of South Africa (ECIC) to develop an Intra-Africa Trade Facility – which is financed by the IDC and will benefit from 85% Commercial Risk and 100% Political Risk Cover from the ECIC. The Facility aims to facilitate and increase the expansion of South Africa's trade and investment with the rest of Africa and beyond. The facility is assisting South African manufacturers in the expansion into regional export markets for capital goods, consumable products and related services; promoting further integration and value chain linkages between South African exporters and firms in the rest of Africa; and providing funding to foreign buyers (importers) of South African goods and related services.

3.2.2 IDC Supporting Jobs-Rich Industrialisation

Labour absorbing and labour-intensive activities: South Africa has high unemployment, at 31.9% and job creation has not been keeping up with the working population growth. Unemployment contributes to the levels of poverty and inequality, together considered as the country's triple challenges. Thus the IDC is targeting the development of value chains with scope for employment creation and generating entrepreneurial opportunities.

Our funding in industrial value chains was supported by the Manufacturing Competitiveness Enhancement Fund Programme, which is managed by the IDC on behalf of the Department of Trade, Industry and Competition **(the dtic)**. This fund provides concessionary working capital for both existing (expansions) and start-up companies in the manufacturing sector and plant and equipment funding for black industrialists across manufacturing industries.

The value chains that are prioritised for supporting diversification and jobs rich industrialisation include Agriculture & Agro-processing; CTFL; Wood, Paper & Furniture; Downstream Chemicals; Automotive; Machinery & Equipment; Tradable Services (incl. tourism).

Box 6: Fostering Jobs Rich Industrialisation, the case of Clothing, Textiles, Leather and Footwear (CTFL)

IDC is cognisant of the importance of coordinating industrial policy interventions for value chain and ecosystem development. This has proven to be successful in the CTFL value chains in South Africa and the SADC region. In South Africa, coordination has been fostered through the IDC's support for the development and implementation of the Retail-CTFL Masterplan – the Department of Trade, Industry and Competition's industrial policy strategy for the value chain. The IDC's implementation role includes managing the **Clothing, Textiles, Footwear and Leather Growth Programme**, which provides grants and concessionary loans to operating entities to increase employment, improve competitiveness, grow and localise various nodes of the CTFL value chain. In FY2024/2025 the programme supported 9 businesses to the value of R470m creating and sustaining 1 201 jobs.

The IDC then coordinates its internal investment strategy with the Masterplan and proactively drives the development of the value chain by addressing gaps often neglected by the market. Part of this includes the Corporation's business development activities that have fostered relationships between firms in South Africa and other countries within SADC. The IDC is leveraging commitments from South African retailers (which operate in most countries in the region) to increase locally manufactured products to 65% by 2030 for developing the domestic and regional value chains. The short-term priorities include denim manufacturing capacity for mid- to low-value retailers, seamless garment manufacturing, commission dyeing and finishing facilities for knitted fabrics, increased woven mill capacity and stabilisation and growth of current spinning capacity.

Box 7: Illima - Empowering a rural based community

Illima is a 100% black-owned entity that was established in 2013. This entity is a large operation with 303 hectares of planted citrus orchards, 20 hectares of newly planted mangoes and an existing 865 hectares of sugarcane in Mpumalanga near Komatipoort. The land on which this project operates is leased from the Mahlalelala Community under the Bambanani Mlambo Trust, which was acquired through the Restitution of Land Rights Act 22 of 1994. IDC funding will enable Illima to acquire another 30.8 hectares of land for high-income potential citrus cultivars and develop a further 90 hectares of sugarcane making a total area under cane of 955 hectares. IDC funding will also enable for purchasing of additional equipment including computer hardware and software, irrigation pump and pipes, tractors, new tractor loader backhoe, vehicles and trucks. Part of this funding is also earmarked for infrastructure development including construction of a new holding dam, building a new pumphouse and fencing. Over the next three years Illima envisages to commence with a continuous 90 hectares of annual replacement or redevelopment of existing sugarcane to improve performance, which is in line with the industry norm of replacing 10% of existing hectarage for efficiency purposes.

The company has actively contributed towards socioeconomic activities in the communities in which it operates. It currently employs a total of 70 permanent employees, the majority of whom are black. During the harvesting period, the operation employs an additional 655 employees annually.

When the operation is at full production during 2027 season, the number of seasonal jobs will rise to 1 210 while permanent jobs remain at 70. The total annualised jobs will stand at 278 comprising of 45 new jobs created and 233 maintained jobs. Illima considers skills development and training of employees. In this regard, an in-house skills development programme is in place to train staff in their respective functions including supervising, operators and forklift and tractor drivers, safe handling and application of chemicals, first aid and general (field and pickers) before assuming such roles.

Box 8: VSL Group - Supporting a black industrialist to expand operations

A combination of domestic capabilities such as free-trade agreements including policy incentives have helped to create a local world class automotive assembly industry. South Africa's auto industry boasts a local presence of seven international original equipment manufacturers (OEMs).

Remarkably, this sector's value chain includes close to 500 component suppliers contributing significantly to the almost 40% industry average local value addition. Locally produced cars have been able to penetrate the highly competitive US and EU markets, illustrating the competitiveness of domestic manufacturing. As part of its mandate, the IDC is focussed on transforming this sector through funding black industrialists that have contracts to supply components to OEMs or want to gain a foothold into this highly competitive sector. Accordingly, the IDC provided funding to VSL Group (Pty) Ltd, trading as VSL Manufacturing (VSL) – a company that operates two manufacturing facilities: one in Queenstown and the other housing laser cutting operations in the Coega SEZ in Gqeberha. VSL is 51% owned by Ms Vuyokazi Skweyiya - a female black industrialist, and Mr Deon van Zyl who holds the remaining 49% equity in the business. Specialising in medium to large cold stampings, including deep draw and skin panels, VSL is uniquely positioned to handle shorter production runs, making it an ideal partner for aftermarket parts manufacturing. Currently supplying Isuzu and Gibela Rail Consortium with pressed parts (metal stampings), VSL sources mild steel from Trident Steel Africa and Macsteel.

VSL is poised to expand its operational footprint following IDC funding. The funding will support the manufacturing, installation and commissioning of a new advanced press line at a newly established production facility in Gqeberha, strategically located adjacent to Isuzu Motors South Africa, VSL's primary customer. This expansion forms part of a broader growth strategy, with full operations continuing at the existing Queenstown plant. The newly constructed manufacturing facility is set to begin operations later in the year, with the commissioning of the press line scheduled for September 2025 to align with the production of Isuzu's new D-Max vehicle model. This strategic move not only enhances VSL's capacity and capability but also positions the company to support Isuzu's localisation initiatives for Africa, further advancing the manufacture of import-replacement components.

This expansion and investment underline VSL's commitment to providing high-quality pressed parts to both automotive and non-automotive sectors, including current partners Isuzu and Gibela Rail Consortium. IDC funding to VSL yet again demonstrates the Corporation's commitment to enhancing local manufacturing while transforming South Africa's economy. Importantly, IDC funding will lead to creation of approximately 123 production jobs.

Box 9: SEN LI DA chemical fibre - Increasing revenue for locally manufactured goods

Established in 2008, Sen Li Da Chemical Fibre (Pty) Ltd is based in Newcastle, KZN. This company is one of the leading PET bottle recyclers and is the largest producer of polyester staple fibre in South Africa. The company supplies mainly to local retail and manufacturing companies; however, their export market has also grown significantly since 2014. Currently, over 20 different types of fibres are produced and sold to the public.

It is also a proud supplier of fibre to the local geotextile, home textile, furniture, hospitality and other industries. Sen Li Da's products are 100% polyester regenerated and recycled polyester staple fibres. The hollow fibres are created from recycled waste plastics, which are collected by members of the community. The majority of the raw materials are obtained from local companies; however, most of the chemicals used in production are still being imported. In the year in review, the company received working capital funding through the IDC's Partnership Programmes CTFLGP fund for the expansion of manufacturing capacity. Increased production capacity has not only created local employment but helped to reduce turnaround times for clients.

3.3 Supporting Climate Resilience

3.3.1 Responses to the Physical Risks of Climate Change Impacts and Extreme Weather Events.

IDC recognises that extreme weather events and shifts in weather patterns due to the changes in climate may cause disruptions to various production systems and ecosystems. IDC's focus is not only on supporting firms and industries to have the capacity to withstand climate disasters, shifts in weather events and extreme weather events but also supporting them to recover quickly from weather, seasonal and climate related shocks.

Investments and funding interventions are designed to mitigate the economic and social impacts of climate-related actions, such as response to disasters or regulations (e.g. border carbon adjustments) which impact sustainability and operations of key sectors, industries and businesses generally (including social enterprises). This includes initiatives undertaken by industries and enterprises take to sustain themselves and achieve long term sustainability or sometimes react to a stimulus/change. These often require reporting on incidents, exercises or planned events.

Key components for resilience to climate change are to:

- Anticipate & prepare,
- withstand & absorb,
- adapt,
- transform
- transition through various contextualised pathways (i.e. consider sustainable industrial pathways emerging and developing economies) and
- recover & respond.

Examples of the IDC's work in supporting recovery from weather related disasters include:

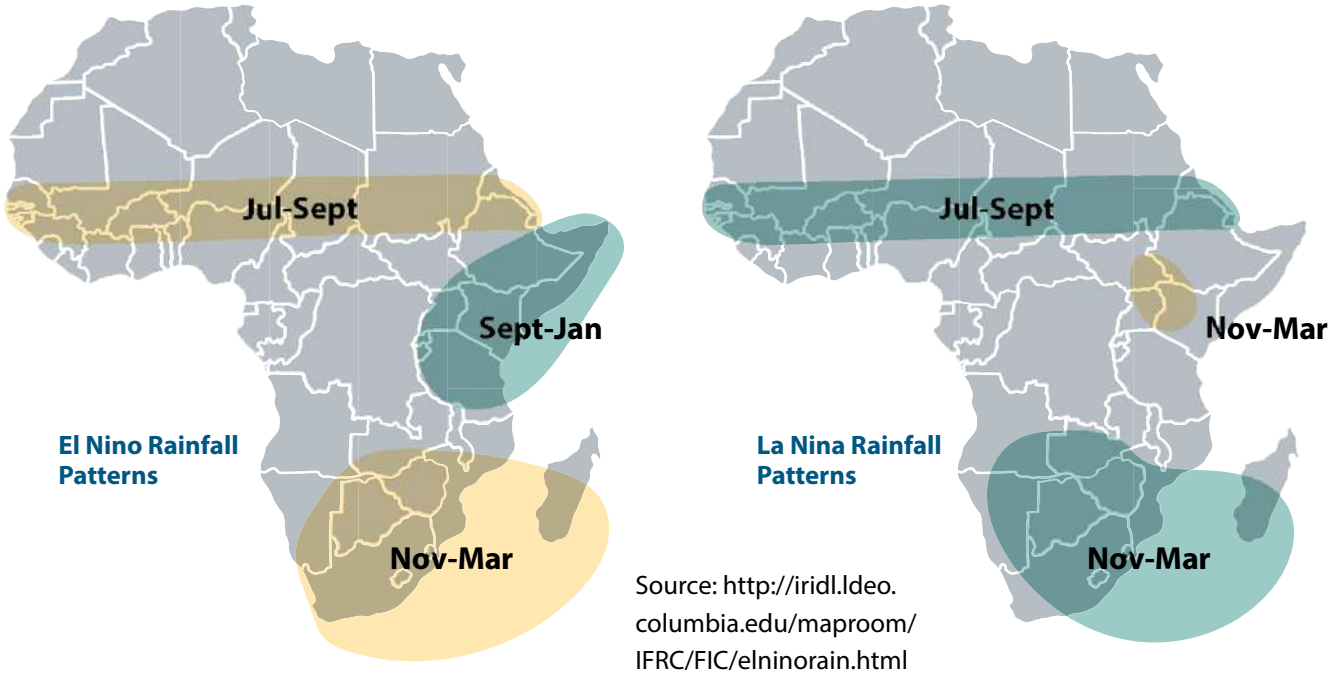
- The creation of a Flood Relief Fund following the floods that hit South Africa in 2022. On 11 April 2022, parts of the country experienced severe flooding, resulting in significant loss of life and widescale destruction. KwaZulu-Natal province was the epicentre of the disaster, with parts of Eastern Cape and Northern Cape also affected. The IDC responded with its Flood Relief Fund in partnership with the Department of Trade Industry and Competition's Manufacturing Competitiveness Enhancement Programme fund. The fund was a combination of concessionary loans, grant funding for humanitarian relief and for affected formal and informal township businesses. Total funding of to the value of R1.25 billion was disbursed, safeguarding more than 8 500 jobs from the shock of the floods. In addition to the funding to businesses, humanitarian aid was provided to more than 48 000 affected people.
- Responses to power and water cuts e.g. Township Energy Resilience Fund in South Africa by the IDC - value 200 million Rands all disbursed.
- Efficiency programmes (excluding energy efficiency as this covered by mitigation funding mechanisms) to fund water re-use facilities for industrial clients that will reduce the risk from water shortages/cuts and also reduce costs and improve efficiencies.
- In disaster and emergency management: Activities immediately following a disaster: These include rescue, evacuation, providing basic needs (shelter, food, water), restoring critical infrastructure and business support (IDC responses to Unrest and Floods).
- Actions after an industrial accident: Reasonable measures to prevent, minimise, or mitigate damage, such as environmental cleanup.
- Response to the introduction of new regulations and policies: Border carbon adjustments, subsidies for low-carbon development, and carbon labelling e.g. Interventions currently being undertaken by the IDC in South Africa for the Steel Sector and Sugar Industry.
- Response to de-industrialisation and closure of mines, power stations and anchor industries (Arcelor Mittal South Africa, Komati Power Station, mines).

3.3.2 Supporting Climate Resilience of Agricultural Production in South Africa and the Rest of Africa

The Challenge and Opportunity

The frequency of extreme events – such as droughts, heat waves, and floods – is increasing.[24] Extended El Nino and La Nina[25] cycles are creating challenging environments for agricultural production on the continent; however, these affect different parts of the continent at any given time (Figure 7). In the El Nino cycle that is forecasted to start towards the end of 2023, the expectation is that South Africa, Mozambique, Botswana and the southern parts of Zambia will experience droughts while the Eastern part of the country will experience good rains. The last El Nino cycle resulted in the 2015/2016 droughts in South Africa and, in the event that the coming cycle is as bad, then the country ought to be positioning itself to source more crops from the parts of the continent that will have good rains during the planting season.

Figure 7: El Nino and La Nina rainfall patterns on the African continent



Source: http://iridl.ldeo.columbia.edu/maproom/IFRC/FIC/elninorain.html

The African continent and particularly sub-Saharan Africa is vulnerable to the physical risks of climate change including droughts and flooding. The Intergovernmental Panel on Climate Change (IPCC) worst-case climate change scenario predicts a reduction in mean agricultural yields by 13% in West and Central Africa, 11% in North Africa and 8% in East and Southern Africa. This will likely exacerbate the existing food security challenges.[26] Furthermore, the price levels of food and non-alcoholic beverages consumed by households are up to 35 percent higher in Sub-Saharan Africa than in other low- and middle-income countries, relative to their income levels.[27] The high food prices across Africa are the outcomes of broken food markets which fail to address the impacts of climate change and deliver increasingly unhealthy results for households and communities.[28] There are investment opportunities in solving the supply chain inefficiencies.

[24] (WMO, 2020; IPCC, 2021).

[25] East Africa has been suffering from droughts associated with the extended La Nina cycle, which meant low availability of key agricultural commodities such as maize putting upward pricing pressure on the basic food basket. This resulted in countries such as Tanzania and Zambia introducing trade restrictions for maize to ensure domestic food security, placing Kenya under significant pressures. Maize prices more than doubled between March 2022 and August 2022 and far above the price levels of other countries in Southern and East Africa.

[26] According to the Food and Agriculture Organization of the United Nations (FAO), the number of undernourished people in drought prone sub-Saharan African has increased by 45.6% since 2012.

[27] Nakamura, S., Harati, R., Lall, S. V., Dikhanov, Y. M., Hamadeh, N., Oliver, W. V., ... & Yamanaka, M. (2019). Is living in African cities expensive? Applied Economics Letters, 26(12), 1007-1012.

[28] Roberts, S. and Tshabalala, N. (2022). High Food Prices In Africa: Causes, Consequences And Agenda For Action. African Competition Forum Position Paper 01, 2022.

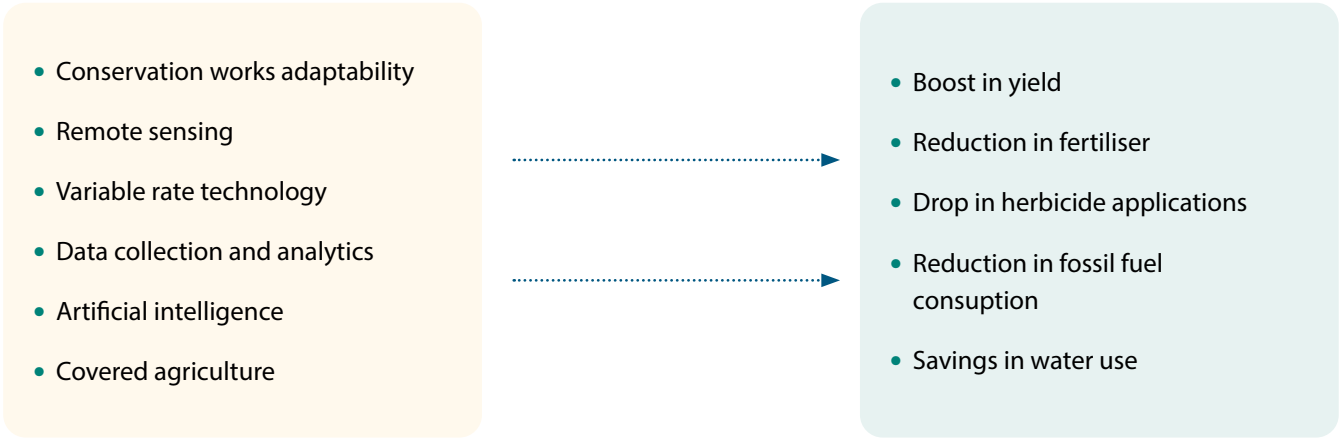
IDC's Approach to supporting climate resilience and productivity increases in food production

Investments in agriculture and food systems contributes to sustainable development by generating value addition, positive socio-economic and environmental impacts, enhancing food security and nutrition.

1. Supporting the development and growth of regional food value chains: Key to adapting and management of the El Nino and La Nina risks for the continent are better organised regional value chains. Improved intra-regional trade through broader and deeper markets are therefore an essential part of mitigating the risks associated with climate change, as when one part of the region experiences poor weather impacting negatively on production, other areas continue to have good conditions for production. Realising the potential gains from better-working agricultural markets also entails supporting smaller farmers and producers and enabling climate-smart agriculture that adapts to the effects of climate change and severe weather patterns.[29]

2. Financing activities including technology adoption that supports climate and economic resilience of the agricultural sector: This includes: production and/or supply of drought-tolerant crop varieties; supply of efficient irrigation systems[30]; production and supply of technologies related to 'precision' and 'smart' agriculture techniques, where improved data analytics are combined with analysis of soil and weather conditions, and irrigation patterns where possible, can improve the management of water and the effectiveness of the application of nutrients and agrochemicals; production and supply of fertilisers to improve yields; and production and supply of agro-chemicals such as pesticides.[31] Support investments for upstream activities (e.g. genetics or plant material or feed material) of the agricultural value chains to impact their strength and independence from major suppliers.

Figure 8: Outcomes linked to changes in production techniques and technological adoption



[29] AGRA. (2021). Africa agriculture status report. A decade of action: Building sustainable and resilient food systems in Africa (Issue 9). Nairobi, Kenya: Alliance for a Green Revolution in Africa (AGRA).

[30] Solar-powered, efficient micro-irrigation is increasing farm-level incomes by improving yields by up to 300% and reducing water usage by up to 90%;

[31] For examples, drought stressed maize plants are more susceptible to pests and increase the demand for pesticides.

3. Supporting investments efficient transportation/ logistics systems, and adequate infrastructure: A key to enabling the Africa Continental Free Trade Area (AfCFTA) is improving trade logistics on the continent starting with the SADC region. The SADC Industrialisation Strategy and Roadmap recognises high transport costs, gaps in cold storage and inefficient logistics systems as constraints on the development of regional value chains.[32] The IDC's approach to investments in the continent seeks address the key underlying factors driving high road freight rates and value chain inefficiencies. This includes addressing the identified challenges such as imbalances in production and trade within the region which leads to empty backhauls.[33] In agricultural value chains, cold storage has been identified as limiting markets for farmers and undermining growth. So far, the IDC supported the development of the ARCH Cold Chain Solutions East Africa Fund to address gaps in cold chain storage (discussed in Box 11). Going forward IDC will focus on solving transport inefficiencies in priority regional value chains.

4. Support diversification strategies with focus on sustainable new products (new industries): e.g. diversion and/or processing of sugarcane into new sustainable chemicals instead of sugar.

Box 10: Solutions for value chain inefficiencies in East Africa

IDC contributed USD 10 million to the USD 100 million ARCH Cold Chain Solutions East Africa Fund for the development, construction and operation of multiple cold chain projects. The fund aims to be an enabler of economic growth and development while limiting GHG emissions by utilising renewable energy solutions and energy-efficient cooling technologies.

The fund intends to develop circa 6-8 cold storage facilities in East Africa over four to five years covering Kenya, Tanzania, Uganda, Ethiopia and Rwanda. Its first facility was completed in Nairobi, Kenya in **October 2023** and consists of a 15,000 square metre grade 'A' cold storage complex that caters for multiple products such as **fresh fruit and vegetables, pharmaceuticals and vaccines, meat, poultry and frozen foods.**

By facilitating the development of cold chain projects in these countries, IDC's participation in this fund will contribute to the removal of existing non-tariff barriers to intra-Africa trade in the targeted countries and thus open new and improve existing export markets for South African perishables and pharmaceuticals. This contributes to food security and greater access to pharmaceuticals, and ultimately improving livelihoods of smallholder farmers.

Box 11: Diversification of the Sugar Value Chains

In support of developing new sustainable value chains and diversification, IDC and the South African sugar industry are conducting a joint scoping study to determine the viability of producing sustainable aviation fuel from molasses/sugar syrup. Significant research/analytical work (market, raw material, technical and financial) has been undertaken to assess the development of new sustainable value chains. The IDC and the industry are further considering conducting joint scoping to divert sugarcane from a sugar value to a sustainable chemical (polylactic acid) value chain which will support the manufacture of biodegradable and compostable bioplastics products.

[32] SADC, (2015).

[33] Vilakazi, T. S. (2018). The causes of high intra-regional road freight rates for food and commodities in Southern Africa. Development Southern Africa, 35(3), 388-403.

Box 12: Nafasi Technologies production of fertiliser

Nafasi Technologies (Pty) Ltd is a strategic joint venture between Nafasi Water Technologies (Nafasi) and the IDC. The company focuses on transforming waste products from wastewater treatment plants, particularly mining impacted wastewaters (MIW) into a basket of high value chemicals, reducing waste production and unlocking economic potential. The company will construct a state of the art commercial fertiliser production facility at the historical Highveld Industrial Park in Witbank. This facility will use existing technology and waste stock from Nafasi's current operating plants in Mpumalanga. Concurrently, the parties are investing in the development of innovative new process technology that integrates beneficiation into the core saline water and wastewater treatment process at scale. The phased technical and commercial development approach focuses on establishing the first full scale facility producing a high value fertiliser product. Looking ahead, the vision includes scaling up to multiple production trains, enabling the creation of a diverse basket of goods to meet varied market demands.

Nafasi is a leading water technology, project development and operations company operating in Southern and East Africa. Nafasi's track record in mining services includes the design, build and operation of the largest water treatment and desalination projects in the sector. Its proprietary HiPRO plants, deployed across Mpumalanga's coal mining region, have been pivotal in the ongoing restoration of the Olifants River catchment's water source.

To date, over 400 billion litres of MIW have been reclaimed and reused directly through Nafasi operations. The Nafasi Technologies venture's approach to creating value from waste is integral to reducing the costs of water treatment and improving overall resilience of the catchment and bankability of investments that support the Just Energy Transition in South Africa. This strategy enhances local manufacturing, creates jobs and reduces dependence on imported chemicals, promoting economic and environmental sustainability. Nafasi Water collaborates with industry, government and local communities to deliver sustainable solutions to water security challenges. By integrating cutting-edge technology with project funding and execution, the company ensures the sustainable reclamation of MIW, contributing to long-term environmental and economic benefits.

Resilience to climate change will form the basis of the farmers and/or specific industries' financial sustainability in the long run and such resilience requires either a change in production techniques or change in technology usage/ adoption or a combination of the two.



3.4 Regional Value Chains

Africa's economic potential is vast and holds significant opportunities for sustainable development. This is not based only on its abundance of natural mineral and agricultural resources but its young and growing population, vast urbanisation and rising middle class, increasing intra-African trade boosted by AfCFTA, advancements in technology and digitisation and investment in infrastructure. The IDC is mandated to support sustainable industrial development in SA and the rest of the African continent.

3.4.1 Critical Minerals: An African Industrialisation and Global Value Chain Participation Opportunity

The Opportunity

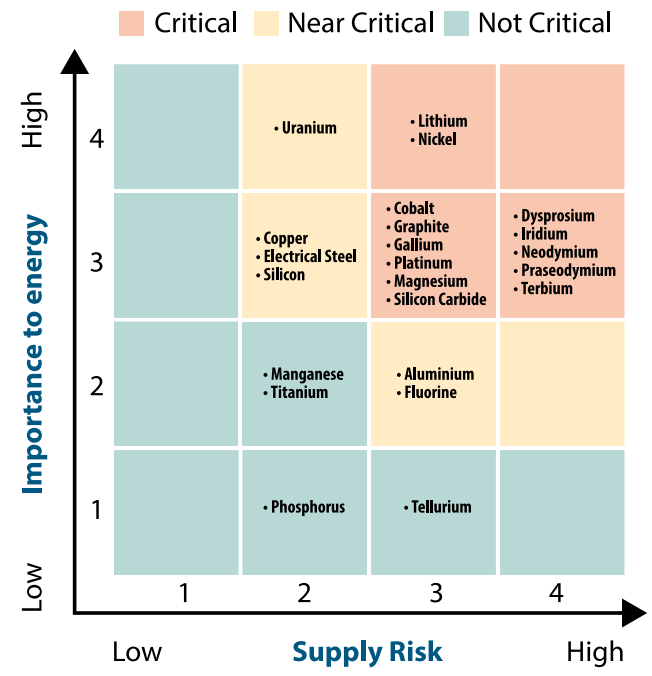
a. Critical minerals underpin clean energy systems but are also key inputs into modern technology and communications systems.

b. Global demand for critical minerals is growing and forecasted **increase by 500% to 2050**. The increasing pressure to diversify critical mineral supply chains is also supporting large investments in multiple geographies.

c. The African continent is endowed with a wide range of critical mineral resources with mining and processing capability.

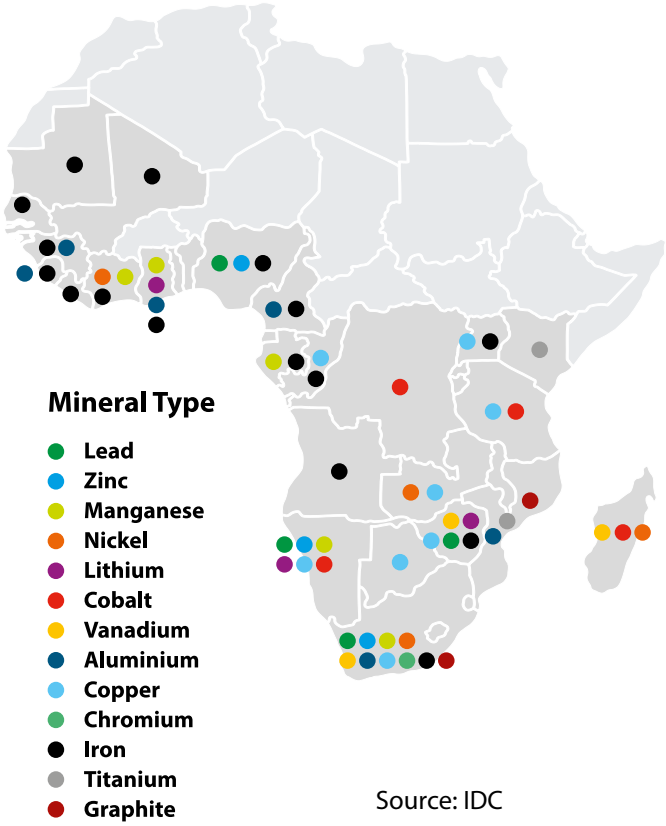
d. The energy transition can catalyse growth for the continent by through investments in the supply chains. For example, in the battery industry, the market value of the precursor is 25 times more than the mining of minerals. Developing opportunities closer to the mineral source can reduce the cost of renewable energy for consumers globally, reduce emissions and create jobs and economic opportunities for local communities and countries.

Critical minerals



Source: Critical Materials Assessment
U.S. Department of Energy

Africa's endowment of critical minerals



Source: IDC

IDC's Approach to Critical Minerals Value Chain Development

a. **Maximise the beneficiation of regional mineral resources** through the development and support for globally competitive operations leveraging our relatively strong manufacturing and industrial base, refining and technical expertise in mining and chemicals. As such the IDC has and is continuing to support several companies in the up, mid and downstream mining and metals value chains.

b. **Collaboration with current business partners** but also on proactive and targeted investments and projects with the intention to add value locally and regionally. The focus is on:

i. Seventeen (17) Minerals that are critical for the global transition to renewables, electric vehicles, hydrogen and battery storage.

ii. Parts of the value chain where there is a competitive advantage and existing production capability in Mining, Refining and Manufacturing.

iii. Proactive partnerships with countries in the region based on specific minerals to target mutually beneficial value chain developments.

The IDC is actively involved across the mining and metals value chain with key projects and investments underway to support beneficiation. The intention is to proactively target investments and projects.

IDC Approach and progress to date

- Adopting an ecosystem approach to the value chain including mining and manufacturing.
- Unlocking increased exploration activity, to add new sources of mineral production and secure future production through a Junior Mining Exploration Fund.
- Engaging with OEMs to develop a regional value chain that would be directly integrated into their specific supply chains.
- Within the Lithium-Ion and Vanadium Redox Flow Batteries value chains IDC is already invested or in the process of investing in the up-, mid and downstream parts of the value chain.
- Investments and projects in iron-ore and steel are being supported. As part of the Steel Masterplan, the IDC is implementing supply, demand and financing interventions to enable the industry to become resilient, competitive and transition to green steel production as well as localise production of advanced products into downstream industries like automotives, renewables, mining and grid infrastructure.

Box 13: Menzi Battery Minerals/Giyani Metals – battery grade manganese production

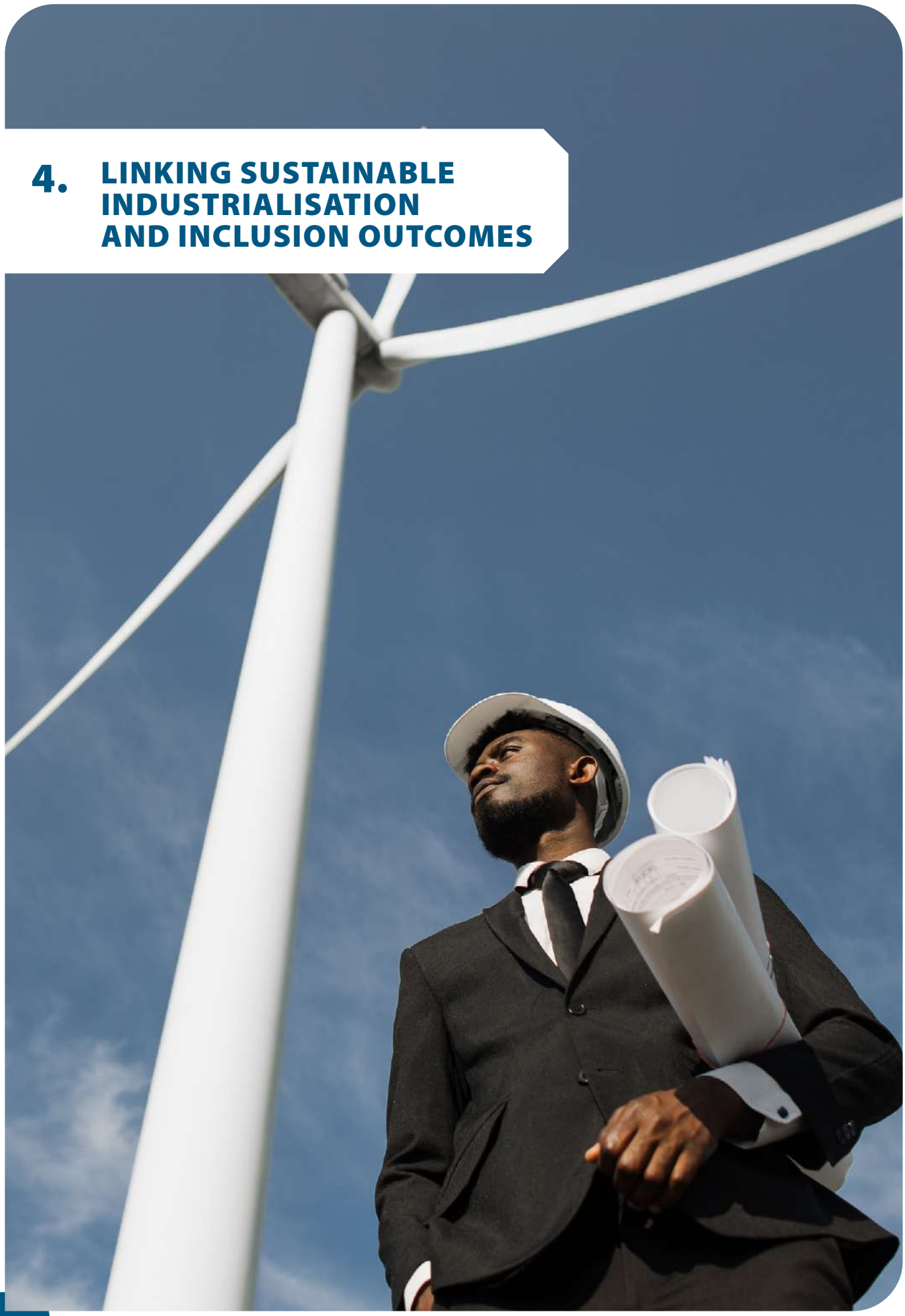
Menzi Battery Minerals, in partnership with Giyani Metals, is advancing a major battery-grade manganese project in the Kanye region of Botswana. The project is focused on establishing a high-purity manganese sulphate monohydrate (HPMSM) processing plant with a planned capacity of 115,000 tonnes per annum. HPMSM is a critical input for the electric vehicle (EV) battery market, and global demand is expected to rise sharply as battery manufacturers increasingly adopt manganese-rich chemistries to replace more expensive elements such as cobalt. The project's mining and beneficiation operations are centered at the K.Hill site, which is recognised for its high-grade, low-impurity manganese ore. This ore type allows for efficient, low-carbon hydrometallurgical processing, making the project well-suited to meet the environmental, social and governance (ESG) requirements of international battery and automotive manufacturers.

The IDC is playing a catalytic role in the project's development by supporting the funding and operation of the demonstration (pilot) plant in South Africa. IDC's participation is structured to ensure that its funding is dedicated to the demonstration phase, with a pathway for future equity participation as the project advances. This involvement aligns with IDC's mandate to foster globally competitive mining and beneficiation industries in South Africa, the SADC region and across Africa. The project's shareholder and key funding partners include Giyani Metals Corp, the IDC and other institutional investors.

The project has successfully delivered several key milestones that demonstrate its technical maturity and readiness for commercial development. It has secured a mining right and obtained a Special Economic Zone (SEZ) permit for the processing facility, ensuring a favorable regulatory environment for operations. The Environmental and Social Impact Assessment (ESIA) has been completed, and the demonstration plant—recognised as the largest of its kind outside China—has been commissioned, placing the project at a level of technical advancement achieved by few others globally. The team has produced battery-grade High-Purity Manganese Oxide (HPMO) to specification as a by-product and secured land rights for both the solar plant and mining area. The geological resource has been defined and the process of offtake and product qualification for HPMO has been initiated with potential customers. Additionally, ammonium sulphate has been incorporated as a by-product in the commercial plant flowsheet, further enhancing the project's value proposition.

With its high-grade resource, advanced development status and strong alignment with global trends in battery technology and sustainability, Menzi Battery Minerals/Giyani Metals is well-positioned to become a leading supplier of battery-grade manganese to the international market.

4. LINKING SUSTAINABLE INDUSTRIALISATION AND INCLUSION OUTCOMES



The IDC acknowledges that marginalised and vulnerable workers, poor communities and small and informal businesses will likely bear the brunt of climate change, and the transition to a low-carbon future has the potential to exacerbate inequality, unemployment and poverty, if not managed adequately.[34]

Climate change and its impacts affects everyone, but those most impacted are the most vulnerable. Existing inequities, due to factors such as gender, race and income, exacerbate the risks to people's lives and livelihoods. Inequity also impacts on people's capacity and opportunity to participate meaningfully in the transition to a low-carbon future.

To limit the losses to these groups arising from existing socioeconomic challenges, physical and transition climate risks, the IDC adopts a two-pronged approach:

- **Delivering positive socio-economic outcomes through sustainable industrialisation; and**
- **Social and Solidarity Economy funding.**



[34] South Africa remains one of the most unequal countries in the world, with high levels of poverty and joblessness as well as inequality in wages and asset ownership.

4.1 Delivering Impactful Socio-economic Outcomes through Sustainable Industrialisation

The IDC's sustainable industrialisation approach is informed by positive structural transformation dynamics with one of the objectives including reducing unemployment, supporting increased participation in the economy and reducing inequality. The approach supports:

1. **Sectoral transitioning towards the manufacturing sector**, which has been shown to have the highest indirect employment multipliers.

2. **Sectoral deepening towards higher productivity activities including downstream industries**, as they have relatively higher employment multipliers.[35] Sectoral transitioning and deepening from the current capital and energy-intensive industrial structure means that there are greater opportunities for people to accumulate, including through better participation of smaller firms and higher prospects of earning an income from employment.

3. **Production transitions including in hard-to-abate industries** to limit job losses and maintain/grow value addition and employment opportunities arising from green growth.

4. **Climate resilience of food systems** to reduce food insecurity and economic losses from physical risk of climate change to agricultural production.

In addition to sustainable industrialisation development and low carbon transitions, the IDC considers increased participation in the economy that addresses historical race, gender and spatial inequalities. Inclusion of marginalised communities, groups and individuals (such as youth, women, workers, Black Industrialists and previously disadvantaged people in general) in the economy and addressing spatial disparities[36] in relation to poor provinces, townships and rural areas, is embedded in the IDC's decision making including through the investment framework and development scorecard.

The IDC ensures that its funding yields positive economic and social outcomes that contribute measurably to sustainable industrial development and achieve an inclusive economy.



[35] Tregenna, F. (2012). Sources of subsectoral growth in South Africa. Oxford Development Studies, 40(2), 162-189.

[36] Innovative spatial interventions include providing support to existing initiatives including clustering, SEZs industrial parks etc.



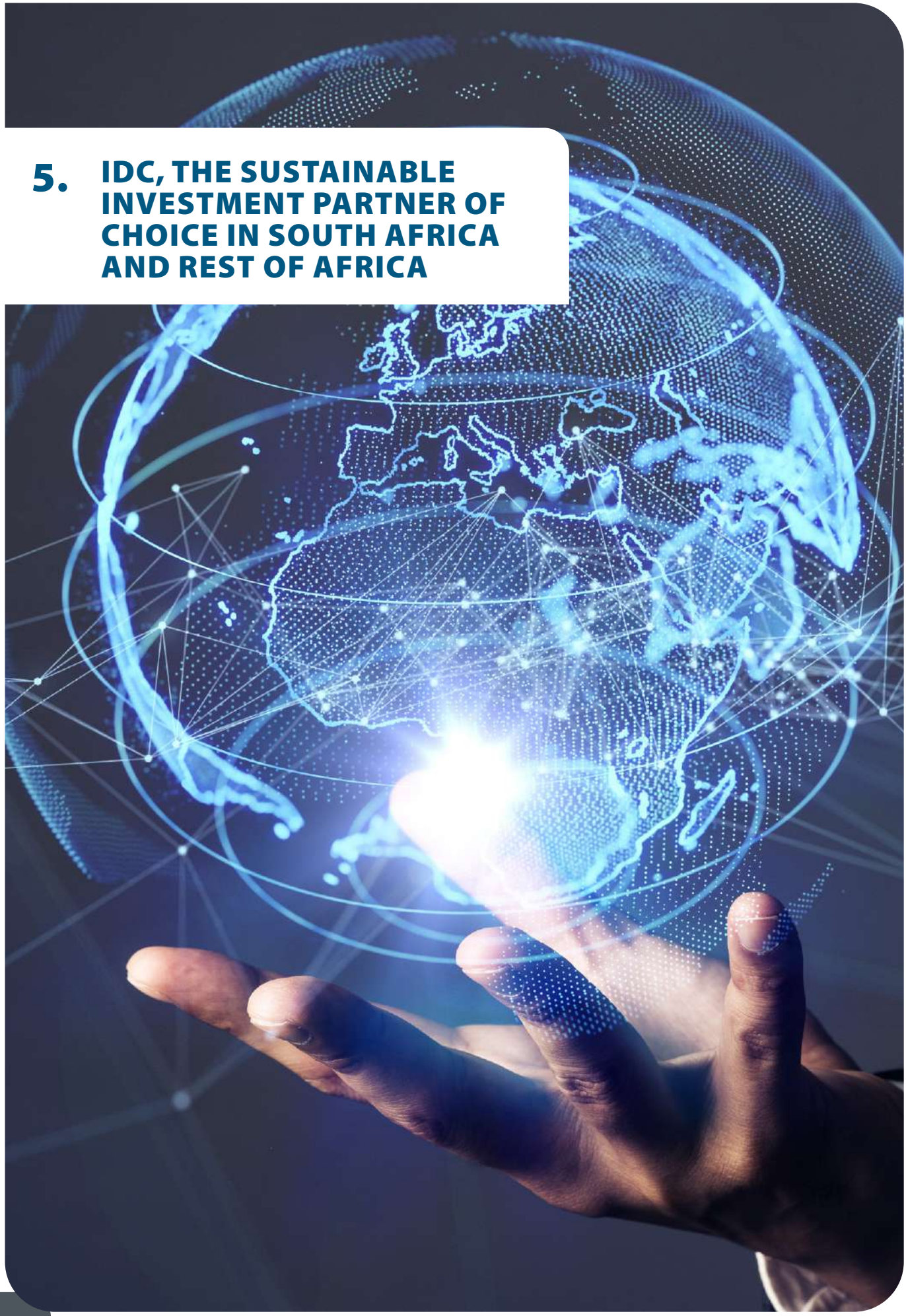
4.2 Social and Solidarity Economy Funding

The IDC is committed to South Africa's transformation agenda and drives targeted interventions to achieve more inclusive growth. The Social and Solidarity Economy is recognised by the IDC as an important sector to rebalance economic, social and environmental objectives and is key in the formulation of developmental paradigms and pathways, across economic sectors, which prioritise people and the planet. The support provided is premised on the acknowledgement that community-led and socially-owned ventures have the potential to deliver benefits over and above economic and financial outcomes as they are closely engaged with people with shared interests. They have the potential to revitalise communities by meeting local needs, developing the capacity of a community to be independent, build resilience and generate social capital.

The IDC is supporting the Social and Solidarity Economy through:

- **Managing the R2.4 billion (USD 130 million) Social Employment Fund (SEF)**, on behalf of the South African government: The SEF is designed to facilitate part-time work opportunities to 50 00 unemployed people per annum. Between June 2022 and September 2023, the fund has created 89,000 unique work opportunities. The fund creates R2 in social value for every R1 deployed. The fund contributes to the development of the social and solidarity economy and its ecosystem.
- **Social and Solidarity Economy Fund.** The IDC-created fund seeks to support innovative and effective activities that focus strategically on resolving social market failures and creating new opportunities to add social value systematically. This is done to maximise social impact and bring about positive, lasting (sustainable) change through promoting entrepreneurial endeavour and sustainable livelihoods to address economic, spatial (rural, townships) and social (race, gender etc.) inequality. Over the period 2018 to 2023, R440 million of funding – including R148 million in townships and R150 million in rural areas – has been approved for 116 projects/initiatives reaching 46 692 beneficiaries. Through these projects 4 982 jobs were created and/or saved.

5. IDC, THE SUSTAINABLE INVESTMENT PARTNER OF CHOICE IN SOUTH AFRICA AND REST OF AFRICA



The IDC is primed to partner with local and international funders, technology owners and businesses on the journey to support South Africa and the rest of Africa's sustainable industrialisation. The Corporation has built capabilities in developing projects – particularly in South Africa, with strong relationships in industry and government. This is evidenced by its project pipeline in each of the pillars of its sustainable industrialisation model. We also have a strong record in supporting industrialisation in South Africa and are making headway with our continental strategy for supporting the same in the rest of Africa. We are leveraging this experience and learning by doing in terms of the new challenges associated with industrialising new clean technologies.

Our commitment to sustainable industrialisation and development more broadly aligns with the United Nations Sustainable Development Goals (SDGs) as well as South Africa's National Development Plan (NDP). We report annually on our contribution to the achievement of the SDGs and NDP targets. We subscribe to the principles of good governance of the King Report on Corporate Governance for South Africa, 2016 (King IV) and apply the Greenhouse Gas Protocol to categorise and calculate CO2e (carbon dioxide equivalent) emissions. We also use certain Global Report Initiative standards.

In the last few years, the Corporation has prioritised the enhancement of our monitoring, evaluation and reporting capabilities and is embedding climate-related risk and opportunity identification and analysis across the organisation. The IDC stays up to date with new developments in sustainability reporting and integrates appropriate standards to underpin sustainable business. We elaborate on the recent developments on the IDC's sustainability impact plan.



5.1 The IDC's ESRG Programme

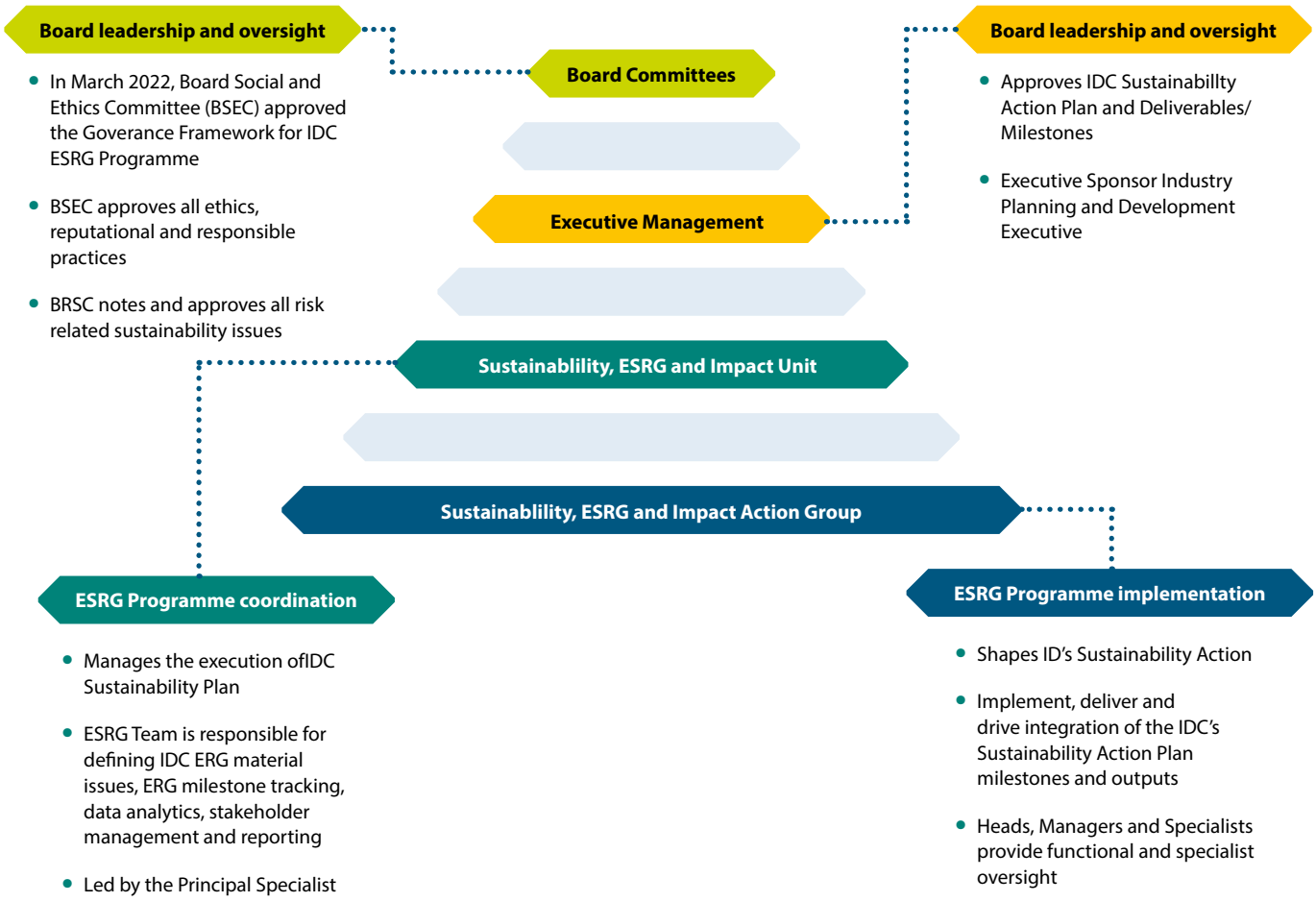
IDC launched its long-term sustainability plan in 2020 with strategic priorities aimed at reducing South Africa's carbon intensity; embedding sustainability impact and Environmental, Social, Resilience and Governance (ESRG) practices to attract further sustainable finance for impact investing, while ensuring and balancing its financial performance. These impact practices are aligned with our commitment to good corporate citizenship, responsible impact investing and long-term sustainability.

In 2022, we developed the framework for these practices (see **Figure 10**) supported by our responsible investment policy and an action plan. The action plan sets out the IDC's strategic objectives and strategic initiatives supported by annual strategic activities, key performance indicators, deliverables, and lead functions.

ESRG and sustainability impact considerations are integrated into our due diligence and post-monitoring processes to assist clients with statutory compliance throughout the investment cycle. The aim of integrating ESRG and sustainability impact practices into investment activities is to allow the IDC governance processes to make an informed decision about the relevance, significance and nature of ESRG risks, opportunities and impacts. The IDC screens and assesses each proposed transaction from pre-investment and due diligence stages to determine ESRG impacts, risk categorisation, environmental and social action plans to address identified gaps and monitoring/ reporting measures.

Figure 10: IDC ESRG Governance Framework

Our **ESRG governance framework** is reviewed and updated annually. Additionally, our annual Sustainability Action Plan is approved by the IDC Executive Committee (ExCo), while all progress on the ESRG programme is noted annually by both the ExCo and by the Board Risk and Sustainability Committee (BRSC) The diagram below provides detailed overview of the ES Programme governance across the Corporation.







IDC's ESRG governance structure has been overseeing the development and implementation of the Corporation's ESRG and sustainability impact initiatives including the:

- Adoption of the South African Green Finance Taxonomy[37] in the Corporation's classification of green assets, projects, activities and sectors for value creation and industrial development purposes.
- Development of the Sustainable Bond Framework to govern the issuance of IDC sustainable bonds.
- The development of the IDC Environment & Social Policy (with ESRG Risk Rating) and Development Score Card (DSC), both of which influence pricing.
- Development of House Views to govern the IDC's participation in carbon-intensive sectors such as liquid fuels, coal and natural gas. The House Views are informed by a balanced approach towards energy security, industrialisation and the energy transition in the context of sustainable development.

Measuring the Corporation's emissions. We have been tracking our Scope 1 and 2 emissions and making progress in their reduction. All GHG emissions data collated and accounted for FY 2024/25 was audited by IDC external auditors. The IDC's Scope 1 emissions decreased to 209 tCO2eq (-49.6%) whilst Scope 2 emissions slightly increased to 3 720 tCO2eq (+9.7%) as compared to the FY 2023/24.

In the FY 2024/25, the IDC accounted for its financed emissions and to note due to the varying /different annual reporting financial years of the Business Partners in the IDC portfolio, a majority of the Scope 3 emissions were aligned to the January to December 2024 reporting year. Also, in terms of data quality utilised for scope 3 emissions accounting, the IDC, utilising the PCAF standard, scored 2a as both the loan amounts and physical activity data to quantify emissions are known.

The IDC financed emissions results are as follows:

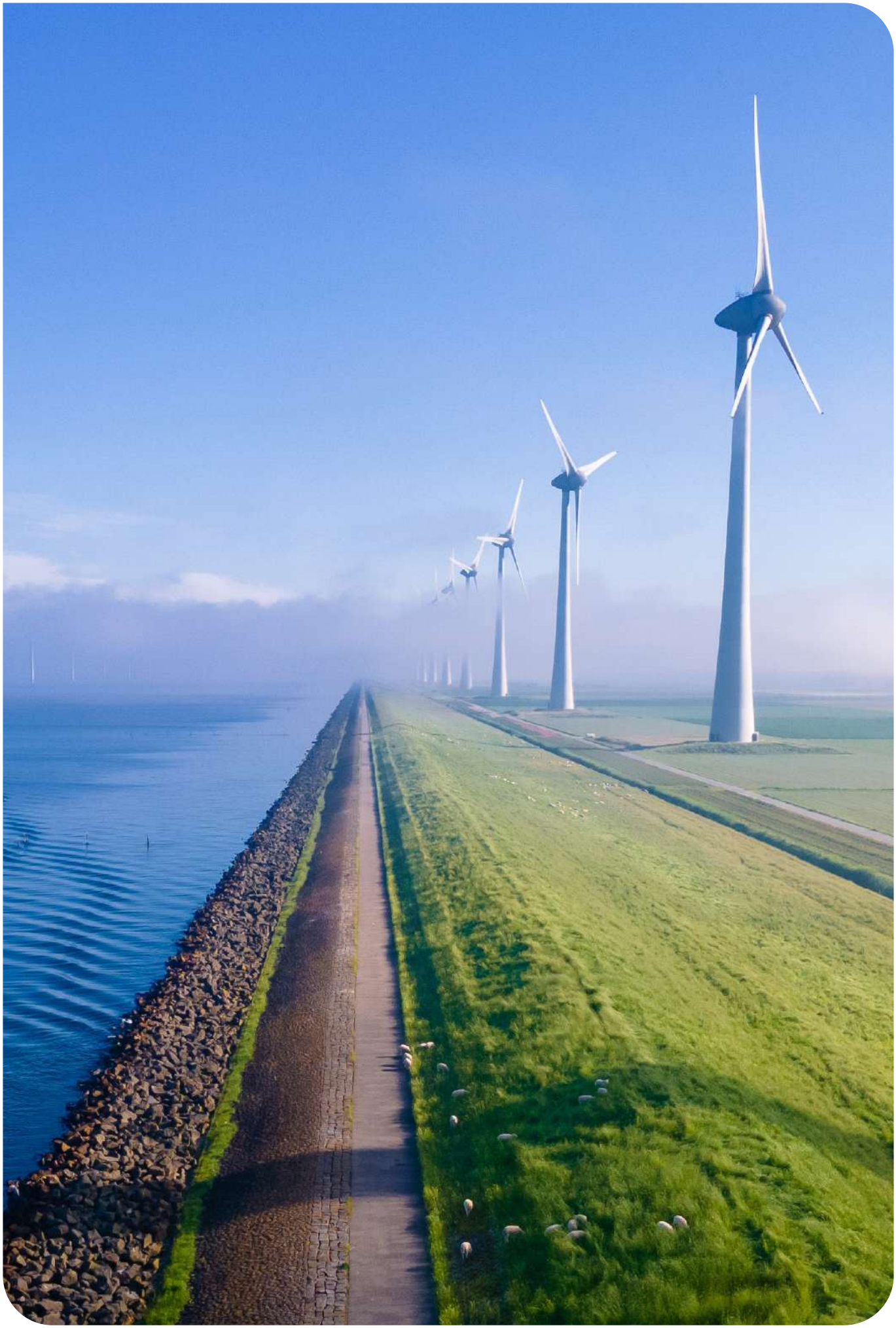
- 927 KtCO2eq can be attributed to 68 larger business partners (BP) (with above R50 million exposure).
- 718 KtCO2eq can be attributed to 12 listed entities only.
- 425 KtCO2eq can be attributed to eight IDC subsidiaries only.
- 16 070 KtCO2eq can be attributed to the total of 88 BPs which account for 53% of the IDC's overall exposure. These BPs are inclusive of listed entities and subsidiaries.

[37] **https://www.treasury.gov.za/comm_media/press/2022/SA%20Green%20Finance%20Taxonomy%20-%201st%20Edition.pdf**

6. LOOKING AHEAD

South Africa stands at the threshold of one of the most significant economic transitions in its modern history. The sustainable industrialisation pathways outlined in this document reflect the IDC's conviction that the country can simultaneously strengthen its industrial base, drive inclusive growth, and meet its climate commitments. The decade ahead will require deliberate coordination, bold investment, and long-term partnerships across the public, private, and development finance sectors. What distinguishes the IDC's approach is the commitment to integrating low-carbon transitions with structural transformation—ensuring that South Africa does not merely adapt to global shifts, but actively shapes a competitive, resilient and future-ready industrial economy.







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