SOUTH AFRICA'S JUST ENERGY TRANSITION INVESTMENT PLAN (2023-2027)

Building a pathway towards a low carbon and climate resilient society

Briefing to Portfolio Committee on Mineral Resources and Energy

November 2022

A five-year initial Just Energy Transition Investment Plan (JET IP)

Aimed at supporting South Africa's goal of establishing a low carbon and climate resilient society

Key features

1. JET IP recognises that **fossil fuel dependent countries such as South Africa require significant support to transition** – which aligns with developed country obligations to support developing countries under the UNFCCC and its Paris Climate Agreement
2. **Contributes to building resilience to transition risks and fostering social preparedness** as South Africa shifts its energy system and grows new green industries
3. JET IP is a South African **needs-driven five-year initial plan,** with clear financing principles and preferred terms and conditions, which promotes a "whole of society" approach
4. The **JETP is a funding partnership** making a contribution to the JET IP
5. **Portfolio of investments and other interventions** in the JET IP reflect an intersectoral and just transition approach, showing need to move beyond a programmatic funding track
6. **Just transition focus** recognises location and sector-specific vulnerabilities (care, preparation, social infrastructure), intergenerational effects.
7. **Emphasises the sequence of investments and interventions** to achieve outcomes (order, pace of investments relative to priorities within the JET IP portfolio)

Goal to decarbonise SA's economy to within the NDC target range of 350-420 Mt CO_2 eq by 2030 in a just manner

~ ZAR 1.5 trillion*

With estimated funding gap of 44% (ZAR 700 billion*)

3 priority sectors
(Electricity, New Energy Vehicles and Green Hydrogen)

Cross cutting measures
Addressing skills development, and municipal readiness

*Funding gap and scale of need is indicative, and assumes the commitments and pledges of the funded portions materialise.

Core focus to enable a Just Transition

The JET IP draws on the Just Transition Framework to develop a portfolio that embeds just interventions in the three priority sectors

JET IP definition of a just energy transition[1]:

A just energy transition in South Africa builds resilient economies and people to meet the NDC targets. It does so through:

- *Accelerating affordable, decentralised, diversely owned **renewable energy systems***
- ***Restoring previous and future ecosystems** and natural resources impacted by coal mining and energy production*
- ***Reskilling present workforces and educating future ones** in green and other new and viable development pathways*
- ***Building new productive models** for comprehensive economic transitions*
- ***Supporting various impacted constituencies** to play an active role in decisions and implementation of energy transition programs (be it government or non-government actors)*

Three arenas of action for a just transition

1

Interventions within **coal-producing and coal-reliant** areas focused on workers, communities and municipalities

2

Interventions within communities negatively affected by the **shift away from ICE vehicles**

3

Interventions across a multitude of **sectors** in multiple localities to **advance regional economic diversification**

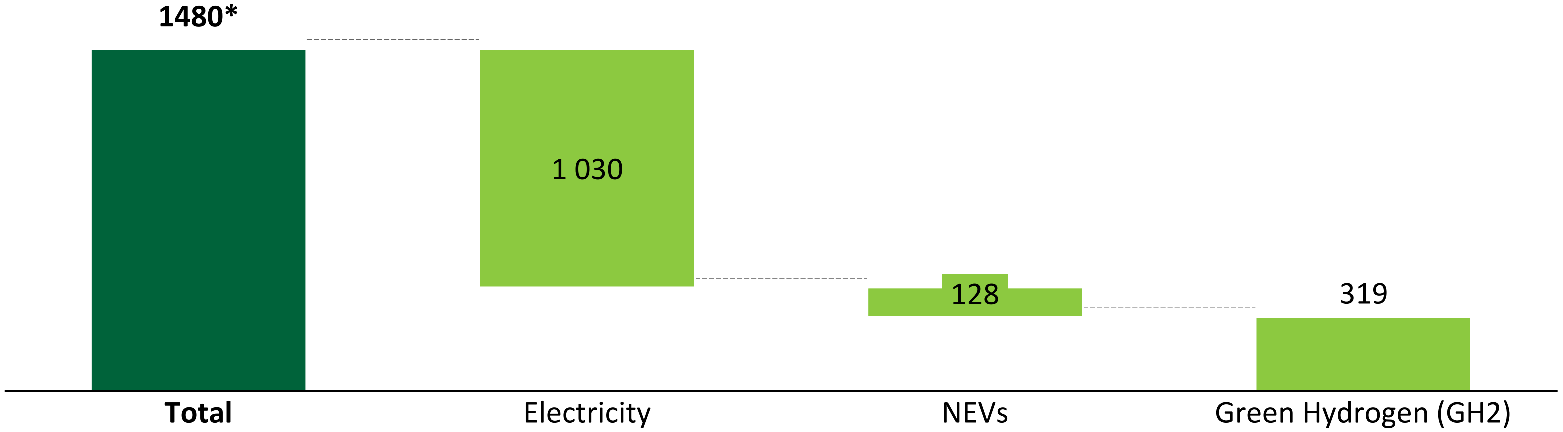
1. The JET IP definition of a just energy transition is in line with the Cabinet-approved National Just Transition Framework, which builds on he 2011 White Paper, chapter 5 of the National Development Plan, previous work by the NPC on Just Transition pathways , and extensive work on the topic by other governmental and non-governmental institutions.

Total investment requirements ~ ZAR1.5 trillion over 5 years

Priority Sector Portfolio: Electricity, New Energy Vehicles (NEV) and Green Hydrogen

South Africa's Just Energy Transition: Total investment requirements

ZAR billion, 2023 - 2027



- Electricity sector to receive majority of funding
- Single biggest contributor to South Africa's carbon emissions
- Significant investment into Just Transition initiatives

- The transport sector is the second biggest contributor to South Africa's carbon emissions after electricity
- Supports ~500k jobs, and is a major contributor to SA's GDP and balance of payments

- The GH_2 sector is still nascent
- Enables green industrialisation, addresses decarbonisation in hard to abate sectors with potential for export to global markets to drive long-term economic growth

The key investments include:

- **Electricity**: Primarily focused on Eskom decommissioning, expanding and strengthening transmission grid and distribution, new renewable energy and Just Transition needs
- **NEVs**: Investment focused on decarbonising the automotive sector and supporting supply chain transition towards green sustainable manufacturing
- **GH_2**: Investment focus on incubating local ecosystems, essential planning, and feasibilities - critical for enabling post 2030 reductions. Investment required for port infrastructure
- **Cross-cutting**: Investment in skills development and municipalities

*Includes ZAR 2.7 BN of cross-cutting investments in skills development, the GH2 includes ZAR150bn towards port infrastructure development.

Targeted portfolio outcomes and prioritisation criteria

The portfolio in the JET IP has been prioritised and sequenced to contribute towards the following outcomes

Desired outcomes for JET IP investments are focused around decarbonisation, social justice, economic growth and inclusivity and governance:

Environment

- Reduced GHG to within the NDC target range of 350-420 Mt CO_2 eq by 2030
- Improved air quality and positive health and well-being impacts

Social

- Inclusive, direct access to finance and equitable ownership structures
- Skills development and re-training for future fit employment

Economic

- Contribution to South Africa's NDP goals – reduce fiscal burden
- Growth in innovative sectors and economic diversification, job creation

Governance

Sound and robust implementation and accountability measures

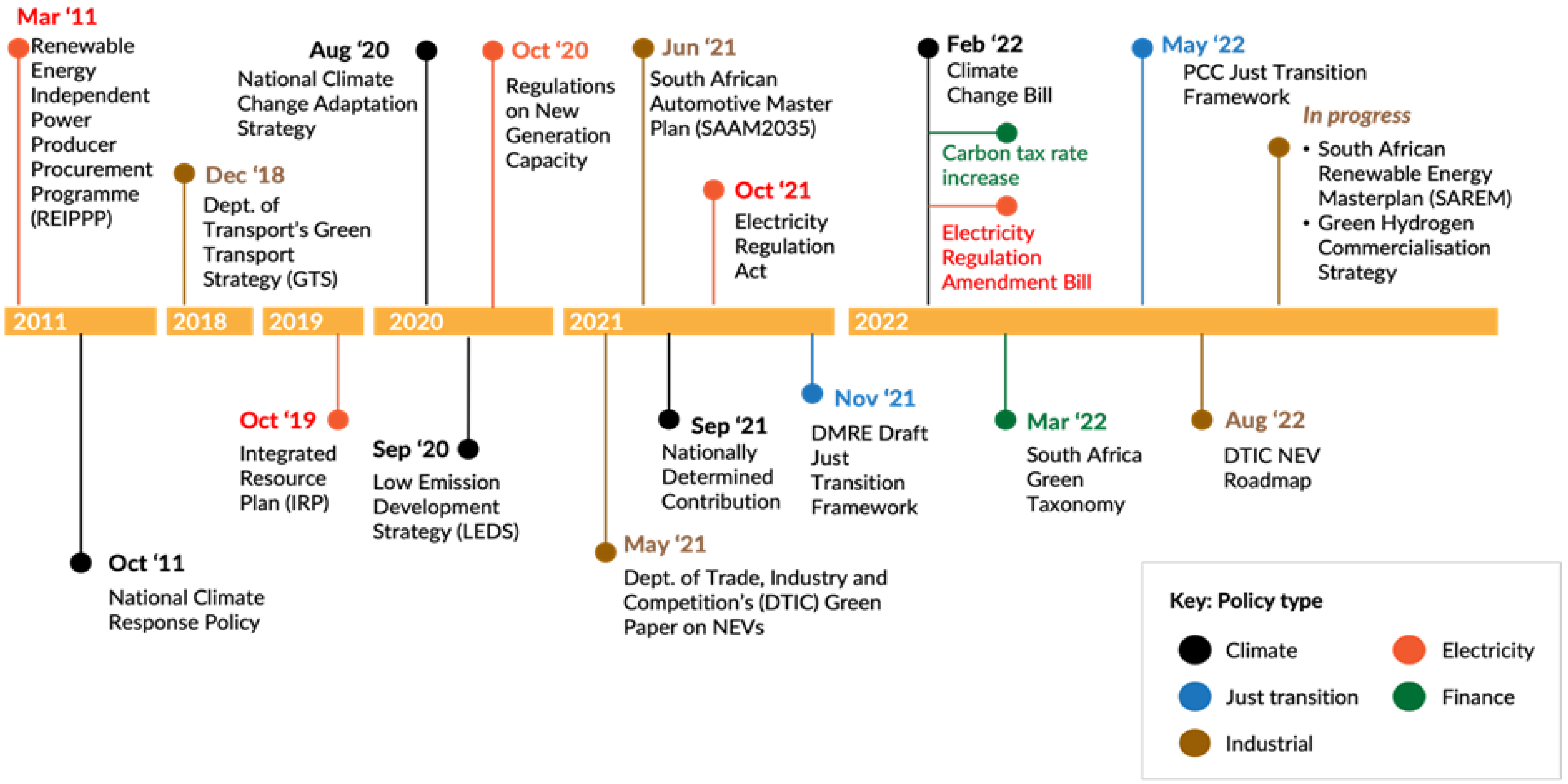
Prioritisation criteria for the investment portfolio

- Lead to a **reduction in GHG emissions**
- Deliver **just transition** outcomes
- Be **catalytic** in nature
- Be **ready to implement**

The JET IP requires expedited investments to build strong foundations for these outcomes in the long term

Strong policy and regulatory frameworks and foundations

The JET IP builds on from the National Development Plan, the Nationally Determined Contribution (NDC), the Just Transition Framework and the enabling policies under development and in implementation



Priority sector 1: Electricity ~ ZAR 1 030 billion over 5 years

Portfolio comprises infrastructure, just transition measures in Mpumalanga and sector-wide, and municipal support measures

Electricity sector: infrastructure (ZAR 648 billion)

- **Decommissioning** of the retiring coal generation fleet, in line with a revised Integrated Resource Plan
- Development of **renewable energy** generation at scale and pace
- Strengthening of the **transmission grid** infrastructure to accommodate the shift to renewable energy
- Modernisation of the electricity **distribution system**

Electricity sector: just transition (ZAR 3.3 billion)

- Manufacturing and localisation of clean energy value chain
- Piloting social ownership of electricity generation

Mpumalanga just transition (ZAR 60.4 billion)

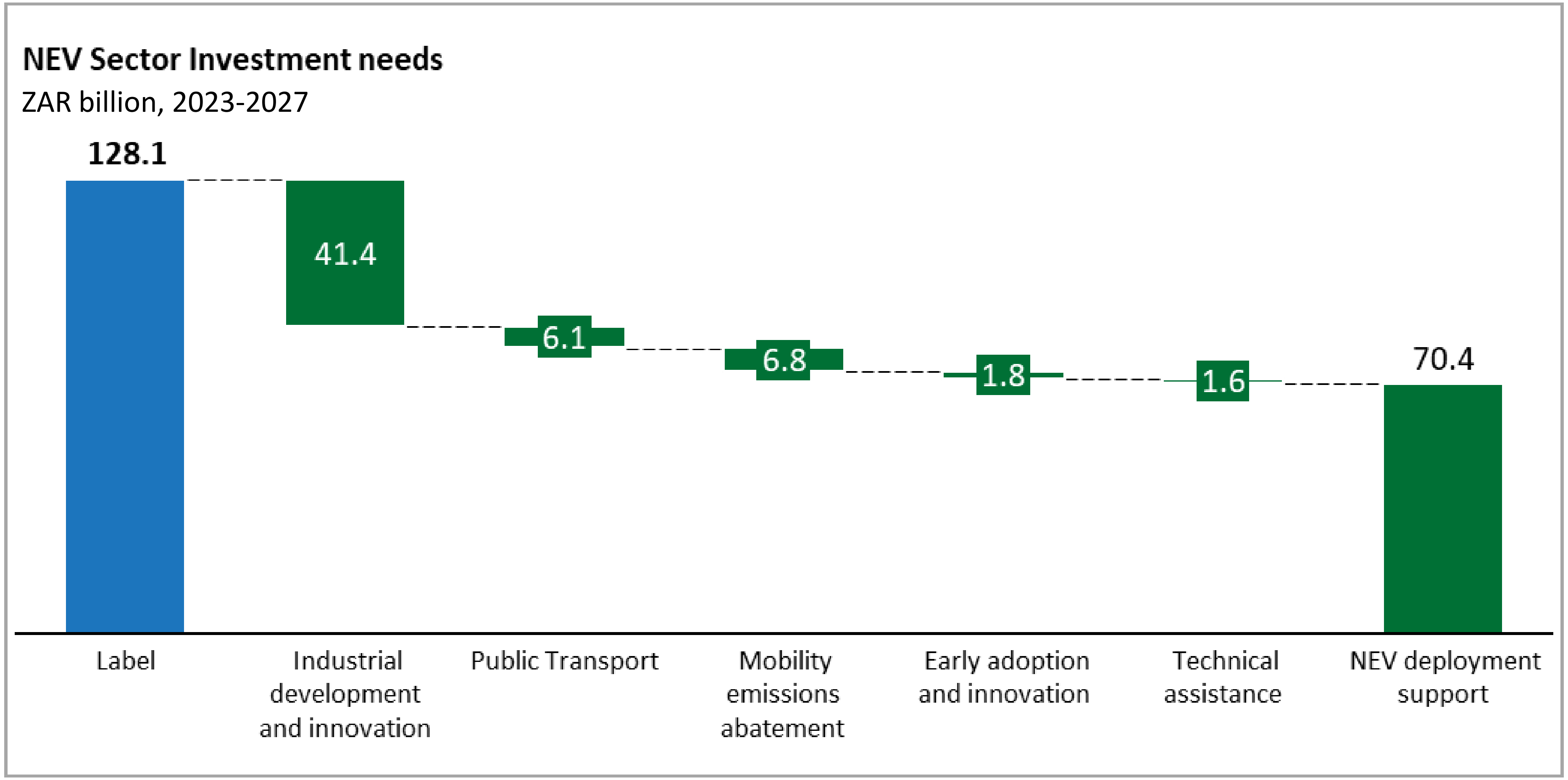
- Repowering (with clean technologies) and repurposing **coal plants**
- Restoring and repurposing **coal mining land**
- Local **infrastructure** development
- Promotion of **economic diversification** to support local livelihoods, enterprises, and job crea
- Supporting **workers** to transition out of coal
- Investing in **training, placements, and career opportunities** for youth and workers currently value chain

Municipal electricity support (ZAR 319 billion)

- Infrastructure investment in distribution maintenance, modernisation, electrification backlogs
- Demand side management efforts, energy access design
- Modelling, planning, capabilities and capacities

Priority sector 2: New Energy Vehicles ~ ZAR 128.1 billion over 5 years

Aim is to transition the automotive sector value chain to protect sector employment and promote sustainable manufacturing

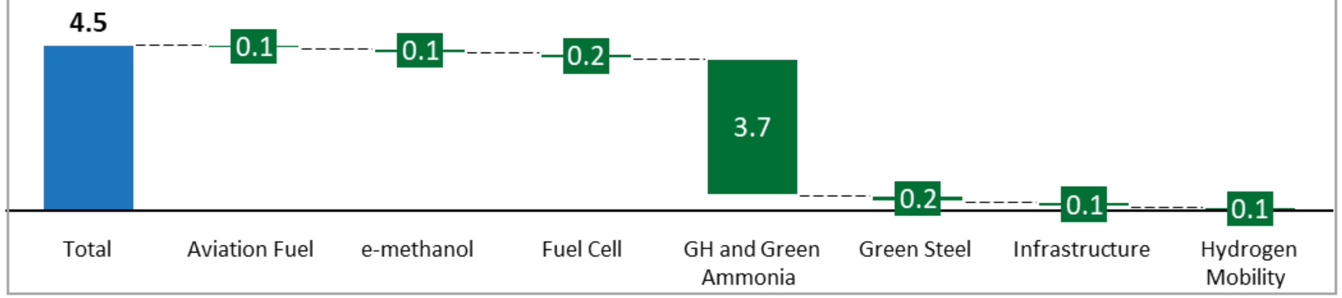


Priority sector 3: Green hydrogen ~ ZAR 319 billion

Aimed at positioning South Africa to be a leading exporter and to utilise domestically for hard to abate sectors, includes provision for port infrastructure

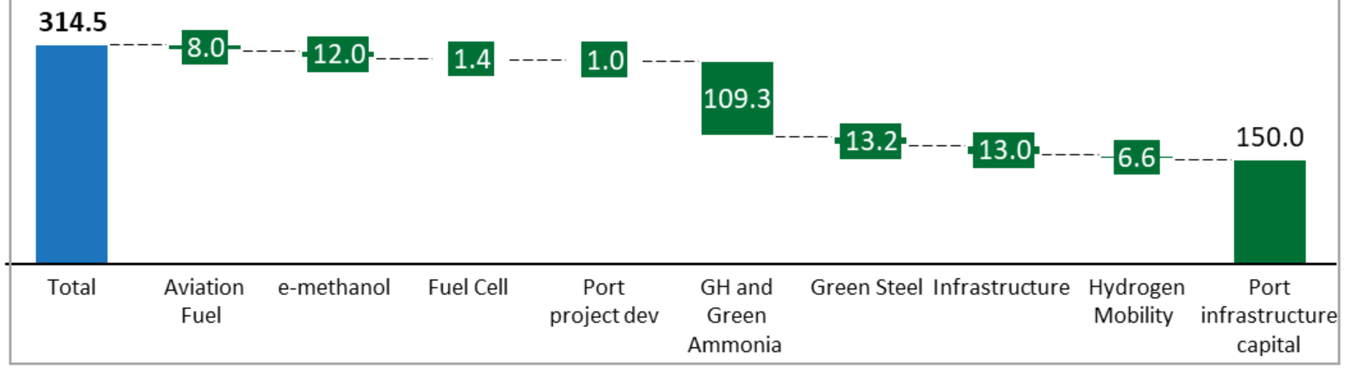
GH_2 Sector investment needs: Project Feasibility costs

ZAR billion, 2023-2027



GH_2 Sector investment needs: Capital costs

ZAR billion, 2023-2027



Creating new opportunities for South Africa

- Enablling the **transition** of key carbon-based and trade-exposed sectors
- Protecting the competitiveness of **downstream industries**
- Enhancing **exports**
- Boosting **GDP**
- Supporting domestic **decarbonization**
- Creating **jobs**

Guiding principles for financing the JET IP

Financing South Africa's JET IP must be done in the context of our country's fiscal realities and development priorities

FINANCING SHOULD…

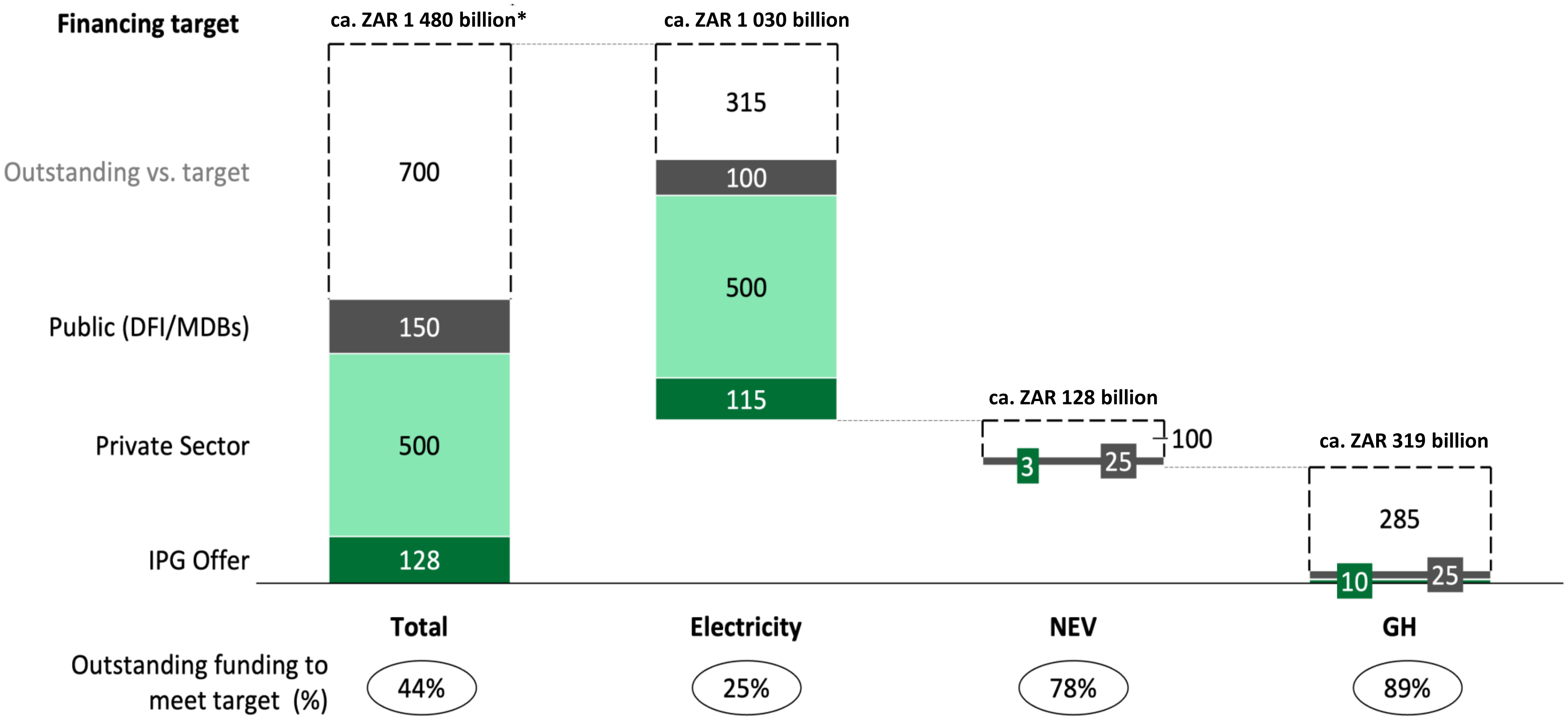
follow UNFCCC principles	Finance should follow the principles for support to developing countries established under the UNFCCC whereby developed countries commit to provide finance to developing countries to advance their climate response
be additional	Finance should be additional to existing climate and development commitments, and not divert critical development assistance away from existing development funding
reflect South Africa's unique needs	The composition of financing instruments should reflect South Africa's unique needs as reflected in the JET IP, taking account of the need for fiscal sustainability, and incorporate appropriate risk-sharing arrangements
mainstream the 'just' component	Financing of the just transition components should be mainstreamed into the design of all JET IP projects and programmes
be on attractive terms vs. capital markets	Any debt-related terms for the sovereign should be more attractive than South Africa's National Treasury could secure in the capital markets without unduly onerous reporting requirements
be predictable and certain	Finance flows from partner countries should be predictable and certain, to avoid delays and enable a sustained momentum of the broader investment plan
be channelled through most effective institutions	Finance flows should be channelled through the institutions which are best placed to manage them for the intended outcomes and in the most cost-efficient manner
foster risk sharing	Partnerships with the private sector should be supported to foster appropriate risk sharing arrangements
be properly governed	Governance and safeguards must be in place to manage risks

Financing the JET IP (2023 – 2027)

The overall indicative funding gap is ~ZAR 700 billion (44%) which requires an ongoing resource mobilisation effort drawing on various sources such as IPG, other countries, MDBs, DFIs, private sector, philanthropies, and government.

Projected funding needs and estimated availability by source

ZAR billion, 2023-2027



Sources and financing instruments of the IPG Offer

US$8.5bn offer comprises grants, concessional and commercial loans, and guarantee instruments - contributing to ca. 12% of South Africa's JET IP funding needs for initial 5-year period

US$ millions	Grants / TA	Concessional Loans	Commercial Loans	Guarantees	Total (source)
CIF/ACT ($500m to leverage an additional $2.1bn)	50	2 555	0	0	**2 605**
European Union – EIB	35	1 000	0	0	**1 035**
France	2.5	1 000	0	0	**1 002.5**
Germany	198	770	0	0	**968**
United Kingdom	24	0	500	1 300	**1 824**
United States[1]	20.15	0	1 000	0	**1 020.15**
Total (instrument)	**329.7**	**5 325**	**1 500**	**1 300**	**8 455**

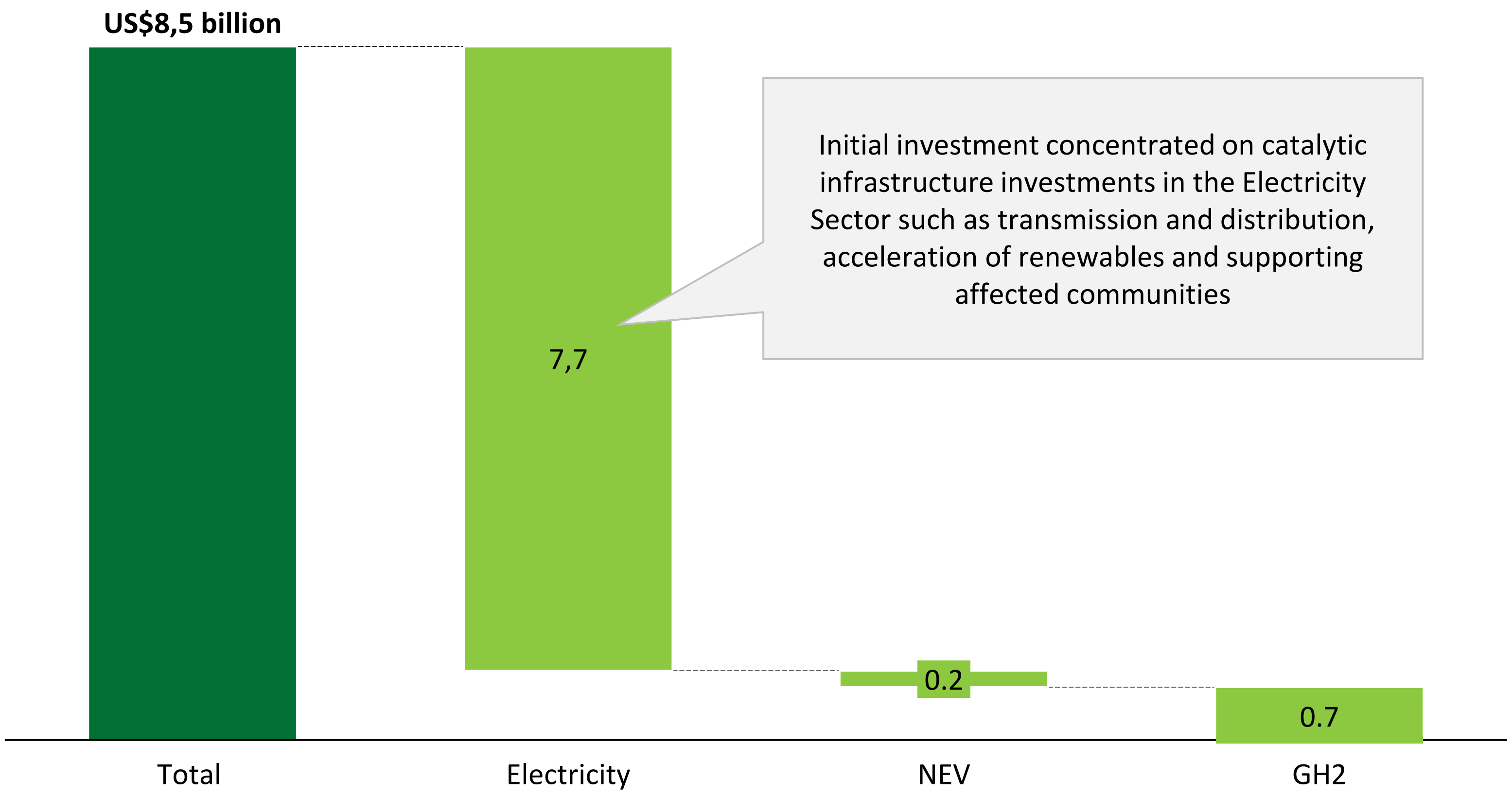
[1] U.S. International Development Finance Corporation (DFC) is able to finance eligible private sector-led opportunities – providing up to USD1 billion in debt, guarantees, and or/political risk insurance per project, as well as equity investments of up to 30 percent of a direct equity or a fund transaction in companies and funds. DFC's ability to project investments ultimately remains a function of the volume of private sector-led projects that meet DFC's financing, environmental, and social standards, and that seek financing from DFC.

Indicative use of initial US$ 8.5 billion from IPG (~ ZAR 128 billion)

The IPG offer is an important first contribution towards enabling South Africa's JET

Indicative allocation of the IPG offer of US$ 8.5 billion

USD billion, 2023-2027



Total indicative allocation to JET IP

The US$8.5 billion package comprising of **grants, concessional and commercial funding as well as guarantees** from the individual IPG countries aligns with the financing principles to varying degrees and is primarily geared towards:

- the **decommissioning** of coal plants
- the expansion and strengthening of the **transmission grid and distribution** infrastructure
- Supporting **economic diversification** in affected coal mining areas
- deployment of **renewable energy**

Implementing the JET IP

The JET IP is the first step in the journey and the next stages the critical next stages of implementation and execution

Priority sectors implementing entities:

to assess capability and institutional needs of possible implementing entities

Monitoring and evaluation:

to define metrics that track progress at priority sector level and across JET IP outcomes

Governance and accountability:

to implement accountability mechanisms and align mandates

Access to finance:

to mobilise additional finance

Ongoing engagements:

to enhance ongoing engagement with social partners

THE PRESIDENCY
REPUBLIC OF SOUTH AFRICA