

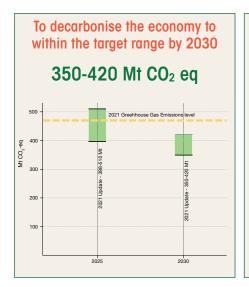
# SOUTH AFRICA'S JUST ENERGY TRANSITION INVESTMENT PLAN (JET IP) 2023-2027





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

# Building a pathway towards a low carbon and climate resilient society



requires initial funding of

~ ZAR 1.5 trillion over five years 2023-2027

# from multiple sources

- Developed countries
- Private sector investors
- Development Finance Institutions
- Government
- Philanthropies
- Multilateral Development Banks

in three priority sectors

Electricity

New Energy Vehicles

Green Hydrogen

and two cross-cutting areas

Skills development

Municipalities

# through a Just Energy Transition that



Protects vulnerable workers and communities



**Builds energy security** 



**Expands energy access** 



Promotes industrial development



**Drives innovation** 



**Develops sustainable livelihoods** 



**Enables economic diversification** 



Spurs inclusive economic growth

# in alignment with South Africa's



National Development Plan



**Just Transition Framework** 

Funding requirements 2023–2027	ZAR billion (US\$ billion)	
Electricity Sector	711.4	(47.2)
New Energy Vehicle (NEV) Sector	128.1	(8.5)
Green Hydrogen (GH <sub>2</sub> ) Sector	319.0	(21.2)
Skills development	2.7	(0.18)
Municipal capacity	319.1	(21.3)
TOTAL	1 480	(98.7)

Achieving the JET IP outcomes is dependent on the scale and nature of financial support that South Africa can secure from the international community to complement domestic resources. At the 26th Conference of the Parties (COP) in 2021, a Just Energy Transition Partnership (JETP) was forged with France, Germany, United Kingdom, the European Union, and the United States (forming the International Partners Group [IPG]) in which the IPG undertook to mobilise US\$8.5 billion over five years to support South Africa's just energy transition. The initial IPG offer of US\$8.5 billion is thus a catalytic contribution towards addressing the JET IP priorities.

# SOUTH AFRICA'S JUST ENERGY TRANSITION IN CONTEXT

South Africa's dependence on fossil fuels gives rise to a range of climate, energy and transition risks, especially for affected workers, communities, businesses and exporters. But embracing new economic opportunities in green technologies can drive industrial development and innovation, leading to a sustainable and resilient future with decent work, social inclusion and lower levels of poverty. The JET IP represents the initial building blocks of managing South Africa's just energy transition and climate response.

### High levels of poverty 55% of people live in poverty

# Untenable levels of unemployment 30% of the population is unemployed, and youth unemployed exceeds 65%

#### Most unequal country in the world

Alongside the highest GINI coefficient, the top 10% of the population owns 86% of the aggregate wealth



#### Low economic growth

Growth rates have declined over the last decade, and the optimal debt-to-GDP is under strain

### Insecure electricity supply

The power utility is unable to sustain reliable electricity generation to meet demand

#### Vulnerable to physical climate risk

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

#### Most carbon-intensive economy in the world

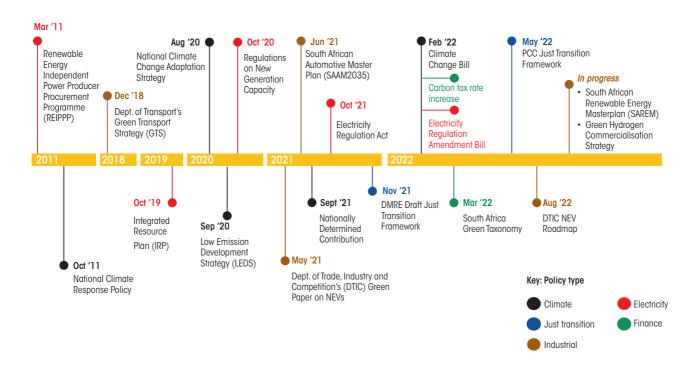
Emitting 0.6kg CO2 per dollar of Gross Domestic Product (GDP), and the largest carbon emitter in Africa, driving 40% of the continent's total emissions

#### **Vulnerable to transition risk**

Trade systems are vulnerable to the degree of carbon embedded in commodities and products. Where trading partners are accelerating decarbonisation, it directly affects demand for South African exports, impacting balance of payments and competitiveness

# SOUTH AFRICA'S ENABLING POLICY ENVIRONMENT FOR THE JET IP

The enabling policy, institutional, and regulatory framework for climate-related investments in mitigation, adaptation and a just energy transition demonstrates South Africa's resolve to fundamentally restructure the electricity sector, address energy insecruity and energy poverty, and build human capital for a new energy economy.



# JET IP PRIORIT



National electricity sector's infrastructure investment needs	ZAR billion
Coal plant decommissioning	4.1
Transmission	131.8
Distribution	13.8
New solar photovoltaic (PV)	233.2
New wind	241.7
New batteries	23.1
TOTAL	647.7



Electricity sector's just transition investment needs	ZAR billion
Manufacturing and localising the clean energy value chain	1.60
Piloting social ownership models	1.65
TOTAL	3.25



Municipal investment needs	ZAR billion
Infrastructure: Distribution maintenance	200
Infrastructure: Distribution modernisation for NEVs	73
Infrastructure: Electrification backlog	45
Operational: Demand-side management	0.5
Operational: Energy access design	0.1
Capability and capacity	0.23
Collective planning	0.03
Municipal revenue modelling	0.2
TOTAL	319.1

NEV sector's investment needs	ZAR billion
Industrial development and innovation	41.4
Public transport	6.1
Mobility emissions abatement	6.8
Early adoption and innovation	1.8
Technical assistance	1.6
NEV deployment support	70.4
TOTAL	128.1

# IES 2023-2027

Mpumalanga's just transition investment needs	ZAR billion
Repurposing coal plants	3.4
Repurposing coal mining land	13
Improving infrastructure for development	12.3
Diversifying local economies	24
Caring for the coal workforce	5.6
Investing in youth and preparing future generations for the transition	0.75
Planning for success	0.3
Instituting policies for post-mining redevelopment	0.05
Building capacity for success	1
TOTAL	60.4

GH <sub>2</sub> Sector investment needs	ZAR billion
Project Feasibility costs	
Aviation Fuel	0.10
e-methanol	0.12
Fuel Cell	0.16
GH and Green Ammonia	3.70
Green Steel	0.20
Hydrogen Mobility	0.10
Infrastructure	0.13
Subtotal	4.51
Capital costs (for above projects)	
Aviation Fuel	8.00
e-methanol	12.00
Fuel Cell	1.40
GH and Green Ammonia	109.30
Green Steel	13.20
Hydrogen Mobility	6.60
Infrastructure	13.00
Subtotal	163.50
Port project development	1
Port infrastructure capital	150
TOTAL	319.01

Skills development investment needs	ZAR billion	
Skills hub/platform for JET and the Future of Work (high-level coordination)	0.05	
Pilot Skills Development Zones in Mpumalanga, Eastern Cape, Northern Cape	1.6	
Mobilise allocations to JET from existing public and private post-school education and training (PSET) funding per annum	1	
TOTAL	2.65	







# FINANCING THE JET IP

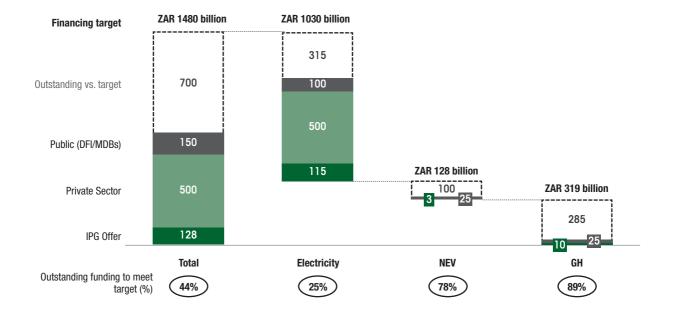
The following principles guide the quality of finance that South Africa is seeking for the JET IP:

- Finance should follow UNFCCC principles for developed countries support to developing countries
- Finance should be additional to existing climate and development commitments
- Financing instruments should reflect South Africa's unique needs as reflected in the JET IP
- Financing of the just transition components should be mainstreamed
- Sovereign debt terms should be more attractive than could be secured in the capital markets
- Finance flows from partner countries should be **predictable and certain**
- Finance should be **channelled through institutions best placed** to manage them
- Partnerships with the private sector should foster appropriate risk sharing
- Governance and safeguards must be in place.

The success of the JET IP will depend on the scale and availability of concessional finance, including grants. Limited public finance must be strategically deployed to mobilise larger volumes of financing, particularly from the private sector and institutional investors. The overall indicative funding gap for the JET IP over five years is approximately ZAR 700 billion (44%).



Projected JET IP funding needs and estimated availability per source, 2023-2027



The IPG US\$8.5bn offer comprises grants, concessional and commercial loans, and guarantee instruments, contributing to approximately 12% of South Africa's JET IP funding needs for the period.

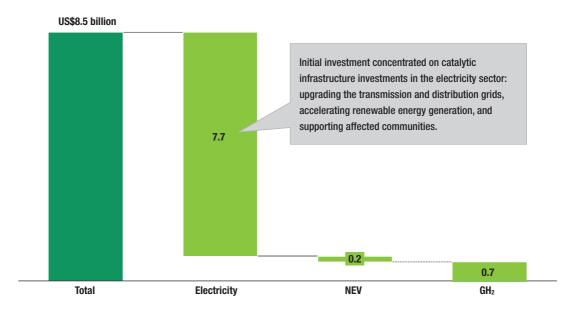
# Sources and financing instruments of the IPG offer

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 <sup>141</sup>	20.15	0	1 000	0	1 020.15
Total (instrument)	329.7	5 325	1 500	1 300	8 455

The IPG funds will be primarily directed towards the electricity sector for:

- 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

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





# **IMPLEMENTING THE JET IP**

South Africa's just energy transition will be a managed, phased, long-term process of economic, social, and environmental change. It will involve multi-year, multi-sectoral, and multi-jurisdictional initiatives with many stakeholders, including significant capacity building to manage the scale of the just energy transition.

Implementation must be based on solid foundations for a sustained, focused, and visible effort across government, civil society, trade unions and the private sector that can adapt as needed over time. It will be grounded in existing South African institutions and systems and will adopt both local and global best practice.

### Features of the JET IP implementation



Ministerial oversight, governance and political coordination.



National government oversight, coordination of the country-wide JET IP to update national plans, mobilise ongoing financing, and monitor and report national results.



Institution-specific funding agreements between the providers of finance and implementing institutions.



National Treasury-managed sovereign loan agreements with providers of finance.



National intermediary institutions (for example DBSA, IDC) managing disbursements of capital from providers of finance to municipalities, private companies, and non-governmental organisations.



Community-level governance and trade union structures for ongoing needs identification, visibility of projects progress, monitoring, and learning; and social partner organisations playing intermediary roles in social support investments.



Private sector investors in renewable energy infrastructure, just energy transition social support, NEVs, and GH2 will also contribute to national results monitoring.

# Strong governance arrangements



to ensure leadership, oversight, transparency, safeguards, and accountability

# Robust management arrangements



for planning,
performance, reporting,
and communications, at
various locations of the
JET IP delivery

# Monitoring, Evaluation & Learning Framework



for the measurement of success and continuous improvement

# Risk Management Framework



for identifying potential risks and implementing mitigation measures to reduce material risks to the JET IP