



SADC Secretariat- Energy Division

SADC SUB-REGIONAL WORKSHOP ON HARMONIZATION OF LOW SULPHUR FUELS STANDARDS AND USED VEHICLES REGULATION

Johannesburg, South Africa

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Presentation Outline

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2. Energy Programme Objectives
3. SADC Energy sector Priorities
4. Energy Sector Instruments
5. Energy Reporting Structure
6. SADC Oil and Gas Infrastructure Projects
7. Roadmap on Cleaner Fuels approved by Ministers - July 2017
8. Progress and Ongoing Activities Observed as Dec. 2023
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SADC Member States



- ❖ SADC was established as a development coordinating conference (SADCC) in 1980 and transformed into Southern African Development Community (SADC) in 1992.
- ❖ It is an inter-governmental organization 16 Southern African Member States as at August 2017.
- ❖ Combined Population of close to 390 million Inhabitants



VISION 2050 AND RISDP 2020-2030



SADC | VISION 2050

A peaceful, inclusive, competitive, middle- to high-income industrialised region, where all citizens enjoy sustainable economic well-being, justice and freedom

Cross Cutting Issues

Gender, Youth, Environment and Climate Change, and Disaster Risk Management



**Industrial
Development
and Market
Integration**



**Infrastructure
Development
in Support
of Regional
Integration**



**Social and
Human Capital
Development**



Peace, Security, and Good Governance



SADC Energy Sector Plan Conceptual Framework



ENERGISING SADC
REGIONAL INTEGRATION, ECONOMIC DEVELOPMENT AND POVERTY ALLEVIATION
BY 2027

Achieving adequate, reliable, least-cost, environmentally sustainable energy service

Energy Security

Energy Access

Tapping Energy Resources

Sustainability

Policy, Strategy and Regulatory Frameworks
Institutions, Capacity Building and Finance




SADC Energy Programme



SADC Energy Programme Objective - to facilitate and coordinate and achieve availability of sufficient, reliable, least cost energy services that will assist in the attainment of economic growth, industrialisation and the eradication of poverty whilst ensuring environmentally sustainable use of energy resources in the SADC Region




SADC Energy Specific objectives

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- The logo of the Southern African Development Community (SADC) is circular, featuring the acronym 'SADC' in the center. The text 'SOUTHERN AFRICAN DEVELOPMENT COMMUNITY' is written around the top inner edge, and 'TOWARDS A COMMON FUTURE' is written around the bottom inner edge.
- Ensure that all Mainland Member States are interconnected energy infrastructure network to ensure regional integration;
 - The Region has sufficient generation capacity and reserves to meet increasing demand to ensure security of energy supply;
 - Increase the number of primary energy resources in the regional energy mix;
 - To ensure at least 85% access to electricity by 2030;
 - Ensure that energy plays a significant role in the industrialization of the region;
 - Ensure energy markets are sustainably regulated and promote investment in the energy sector while protecting the end-users;



SADC Energy Specific objectives

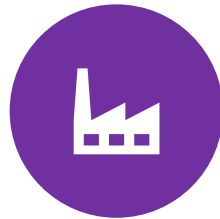
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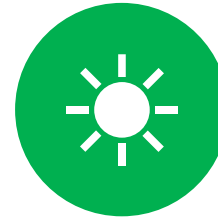
SADC Energy Sector Plan Priority Areas



**DEVELOPING
REGIONAL
POWER
GENERATION
AND
TRANSMISSION
PROJECTS**



**DEVELOPING
OIL AND GAS
PRODUCTION;
REFINERIES;
PIPELINES; AND
STORAGE
CAPACITY**



**DEVELOPING
RENEWABLE
ENERGY
RESOURCES
AND ENERGY
EFFICIENCY SUB-
PROGRAMMES**



**ENERGY AND
CLIMATE
CHANGE**



SADC Energy Sector Instruments

- SADC Protocol on Energy – 1996 (signing of Agreement Amending Protocol is ongoing);
- Regional Indicative Strategic Development Plan 2020-30;
- Energy Sector Plan of the Regional Infrastructure Development Master Plan (RIDMP) 2012- 2027;
- The Guidelines for Regulating Cross-border Power Trading in Southern Africa 2010;
- Renewable Energy and Energy Efficiency Strategy and Action Plan 2016;
- SAPP (*Generation and Transmission*) Pool Plan 2017;
- Regional Energy Access Strategy and Action Plan 2020;
- SADC Regional Gas Master Plan 2023-2038

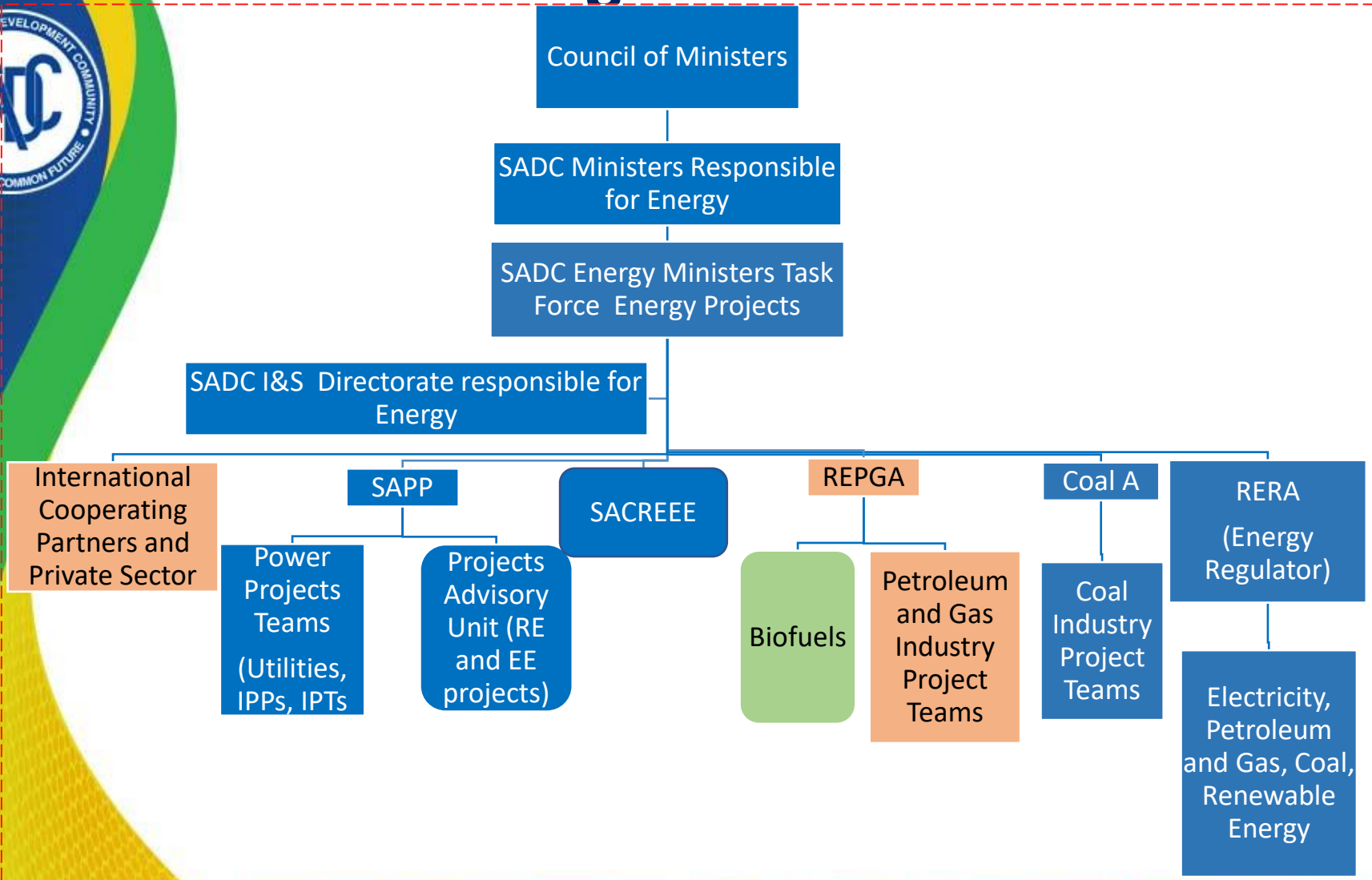


SADC Strategic Development Plan

- 1) Regional Indicative Strategic Development Plan (RISDP) 2020-2030 has a Vision up to 2050, Foundation, three (03) main Pillars, cross-cutting issues:
- 2) PILLAR 2 of RISDP is on Infrastructure Development in Support of Regional Integration focusing on three (3) strategic objectives on
 - Quality, Interconnected, integrated and seamless infrastructure and networks;
 - Improved capacity for conceptualizing, design construction, maintenance and operation of regional infrastructure and services;
 - Increased access to affordable infrastructure and services.



The Key Institutions and Decision-Making structure

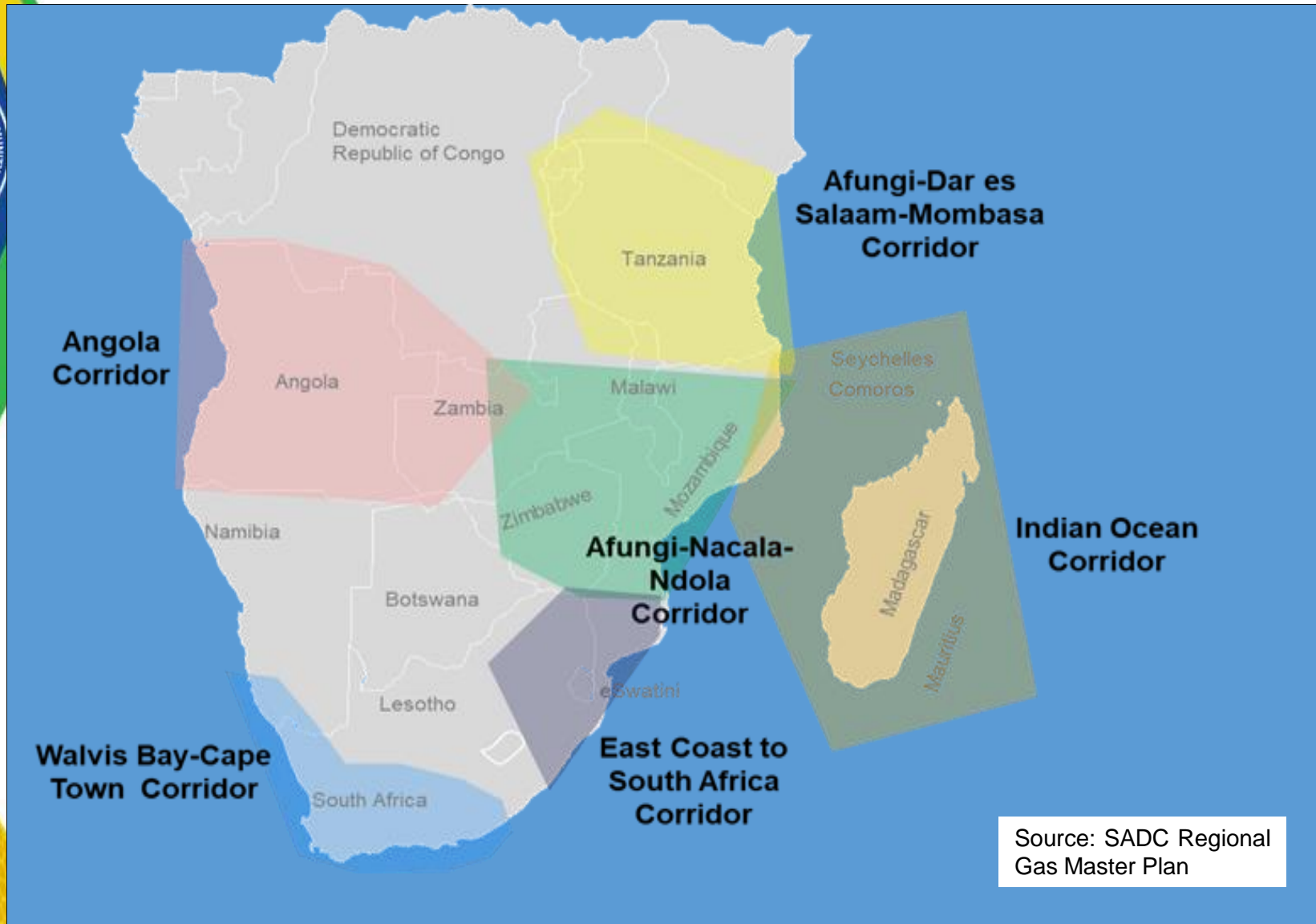


Regional Oil and Gas Infrastructure Investments

- 1) The Angolan national oil company **Sonangal** has been constructing of a new Sonaref refinery in Lobito;
- 2) Zambia is looking for restructuring and ownership of the **Indeni Oil Refinery** located in copper-producing region of Ndola, to support future enhancement of the plant;
- 3) Zimbabwe conceptualising of a regional study on Development of Petroleum Pipelines in the Region;
- 4) South African based refineries Infrastructure situation:
 - **ENREF** (Engen Oil) with capacity the 120,000 barrel per day plant was shut down due to major maintenance;
 - **SAPREF** with capacity of refining 180,000 barrels/stream per day (co-owned by Shell 50% and BP 50%) was undergoing major maintenance and were shut down;
 - **NATREF** (co-owned by SASOL 63,6% and Total Energy 36.4%) was shut down first half of 2022. However, there are ongoing refurbishment aimed to increase production to 108 500 b/d barrels/stream per day
 - **Sasol** increasing number of outlets selling of **10 ppm** sulphur content diesel
 - **Astron Energy** – former CALREF and Chevron restarted operations around May 2023



Proposed Regional Gas Infrastructure Projects



Source: SADC Regional Gas Master Plan



Roadmap on Cleaner Fuels approved by Ministers - July 2017 (1)

SADC Ministers urged Member States to:

- phase out high sulphur content diesel and migrate to 50 ppm sulphur content diesel by 2022;
- mobilise resources required to upgrade their refinery facilities to enable them to produce and migrate to 50 ppm sulphur content diesel by 2022;
- further migrate to ultra-low-sulphur diesel (10 ppm) by 2030;
- use the SADC Framework for Sustainable Biofuels as the common minimum guide for blending of biofuels;



Roadmap on Cleaner Fuels approved by Ministers - July 2017 (2)

SADC Ministers responsible for Energy also:

- encouraged Member States to facilitate cross-border movement of biofuels;
- urged Member States that are at advanced stages of blending fossil fuels with biofuels to share knowledge on best practices with others;
- urged Member States to exploit both conventional and non-conventional natural gas as alternative source of energy for power generation, domestic, commercial, industrial and other uses;
- encouraged Member States to undertake joint coordination and planning in the development of cross-border petroleum and gas infrastructure at regional or on bilateral basis;



Roadmap on Cleaner Fuels approved by Ministers - July 2017 (3)

SADC Energy Ministers further:

- urged Member States to develop liquefied natural gas (LNG) transportation facilities and gas pipelines in order to facilitate gas transmission and distribution throughout the Region to enhance security of energy supply as a catalyst for industrialisation and economic development; and
- directed the Secretariat through the Energy Subcommittees to review the issues refinery facilities and storage capacity in the Region to encourage intra-regional trade especially between the landlocked and coastal Member States;



Progress Observed - Dec. 2023 (1)

- out of 16 SADC Member States, 11 namely Botswana, Eswatini, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Tanzania, Zambia (latest) and Zimbabwe have completed phasing out high sulphur content diesel and fully migrated to 50 ppm sulphur content diesel;
- South Africa has started rolling out of ultra-low-sulphur (10 ppm) content diesel;
- remaining Member States are gradually phasing out high sulphur content diesel and migrating to 50 ppm sulphur content diesel though there are some challenges



Progress Observed - Dec. 2023 (2)

- There is a shift towards decarbonisation of the Transport sector globally which is characterised by migration towards hybrid and electric vehicles which will impact on the fuel quality and demand in the future.
- There is an increasing demand for cleaner and quality fuels globally due to introduction of more efficient vehicles and imported vehicles from Asia and demand for high specificities in Europe which have influence on fuel markets in the Region;
- Some Member States such as the Republic of Zimbabwe are at an advanced stage in terms of preparations for decarbonisation of the transport sector and has developed a policy for adopting hybrid and electric vehicles and standards for charging stations for electric vehicles;
- Motor manufacturing industry such as National Association of Automobile Manufacturers of South Africa (NAAMSA) are also developing programmes aimed at encouraging and supporting the adoption of electric vehicles (EVs), combined with the use of renewable energy technologies hydrogen in line with the global aspirations.



Progress Observed - Dec. 2023 (3)

- Diesel exported from South Africa to neighbouring Member States sourced from NATREF (co-owned by SASOL and Total Energy) is at 50 ppm while products from ENREF (Engen Oil) and SAPREF (Shell and BP) are 50 ppm and 500 ppm sulphur content;
- due high investment/ capital costs required to upgrade the refineries to be able to produce cleaner products, some Oil companies decided to shut down their facilities and are sourcing refined products from international markets/ refineries in Europe (Netherlands), Asia (Singapore) and other parts of the world
- Secretariat in collaboration with SADCSTAN, UNEP, nominated focal persons and the designated Regional and National Standards Bodies (R/NSBs) developed draft text of the fuel (petrol/gasoline and diesel/gasoil) standards and vehicle emission standards in the SADC region



Summary of Progress To-date



Ministers approved to phase out high sulphur content diesel by 2022 and urged Member States with Oil Refinery facilities to upgrade their facilities in July 2017

Technical Workshop held with UNEP in Johannesburg, South Africa in June 2019 to discuss regional harmonisation of cleaner fuels and vehicle emission standards within the SADC

Ministers issued a directive to engage UNEP and SADCSTAN on modalities of migrating to cleaner fuels and harmonisation of vehicle emission standards. Follow- Up High-Level African Petroleum Ministers Meeting on Cleaner Fuels Nairobi, Kenya Nov 2022

Further engagements and UNEP offered grant to support the initiative through SADCSTAN and New Work Item Proposal were issued.

Follow-up of April 2023 - Zero Draft Specifications for Low Sulphur Automotive Diesel circulated to Committee for comments and Consultations are ongoing



Alignment with the Continental Initiatives

SADC Secretariat observed that:

- 1) The extraordinary STC-TTIIE of June 2022 resolved that:
 - In short to medium term, fossil fuels will play a crucial role to meet energy demand;
 - In long term, RECs and Member States are to develop national energy transition masterplans and strategies based on clean sources of energy.
- 2) the 4th Ordinary Session of the Specialized Technical Committee on Transport, Transcontinental and Interregional Infrastructure, and Energy (STC-TTIIE) in September 2023 adopted the continental Sustainable Aviation Fuels (SAF) development and deployment action plan as well as strengthening of partnerships and collaboration to attract financial resources to address the concerns on the cost of SAF which is higher than the conventional fuels



Recommendations and the Way forward

- 1) There is an urgent need for development of Nexus Approach between Energy Sector, Transport Sector and Environment sectors to ensure synergy on migration to cleaner fuels and adoption of vehicle emission standards;
- 2) SADC to develop and implement Regional Strategies on Hydrocarbon Resources especially on Cleaner Liquid Fuels by 2025/ 2026 in line with the RISDP 2020-30;
- 3) Complete the exercise on harmonisation of text on:
 - Low Sulphur Automotive Diesel — Specification; and
 - Automotive Gasoline — Specification
- 4) Accelerate ongoing collaboration with UNEP in a form of Technical Assistance to:
 - replicate of the best practices from other parts of the World and benchmark with other RECs and lessons from global South-to-South engagements; and
 - address challenges from Member States that are unable to migrate towards cleaner fuels and facilitate domestication of fuel standards.





**Thank You
Obrigado
Merci
Asante Sana!**

