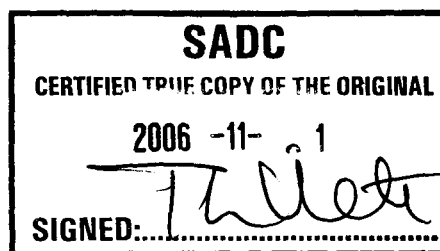


**PROTOCOL
ON
ENERGY**

**IN THE SOUTHERN AFRICAN
DEVELOPMENT COMMUNITY
(SADC) REGION**



PREAMBLE

WE, the Representatives of the Governments of:

The Republic of Angola
The Republic of Botswana
The Kingdom of Lesotho
The Republic of Malawi
The Republic of Mauritius
The Republic of Mozambique
The Republic of Namibia
The Republic of South Africa
The Kingdom of Swaziland
The United Republic of Tanzania
The Republic of Zambia
The Republic of Zimbabwe

GUIDED and **BOUND** by the principles set forth hereinafter, do hereby state that:

RECOGNISING the objectives and principles set forth in previous declarations, agreements and treaties governing the region including but not limited to:

- The Declaration titled "Southern Africa: Towards Economic Liberation - A Declaration by the Governments of Southern Africa", 1 April 1980 in Lusaka, Zambia;
- "The Lagos Plan of Action and the Final Act of Lagos" of April 1980, and the "Treaty Establishing the African Economic Community" signed at Abuja, Nigeria, on 3 June, 1991;

- The Declaration and Treaty establishing the Southern African Development Community (SADC) signed by Heads of State or Government on 17 August 1992, in Windhoek, Republic of Namibia;
- and, such other agreements in the SADC Region regarding the development and use of energy.

TAKING COGNISANCE of the recommendations contained in the 1982 Document "SADCC: Towards an Energy Policy for Southern Africa" and the "Proceedings of the Workshop on Community Building Programme: SADC Energy Sector", held in Windhoek, Namibia, 11-15 April 1994;

RECOGNISING the need for the co-ordinated approach to energy strategy formulation and planning for the SADC Region;

INTENDING to promote the harmonious development of our national energy policies and matters of common interest for the balanced and equitable development of energy throughout the SADC Region;

RECOGNISING the diversity of energy resources and the different endowments of these resources among Member States of the SADC Region;

RECOGNISING the multi-sectoral nature and character of issues related to energy development and use in the SADC Region;

DETERMINED to ensure, through collective action, the progress and well-being of the people of the SADC region through the provision and use of energy for people throughout the SADC Region, particularly ensuring that low income residents have access to energy;

DETERMINED FURTHER to promote the economic and social development and integration of our economies with a view towards achieving an increased measure of regional energy self-sufficiency and self-sustainment;

RECOGNISING the necessity for co-operation in energy development and use between SADC Member States and non-SADC States;

COGNISANT of the principles of International Law governing relations between the Member States;

HAVE DECIDED to establish a Protocol of energy co-operation in the Region (hereinafter referred to as the "Protocol"), in accordance with Article 22 of the Treaty establishing SADC based on the following rules:

ARTICLE 1

Definitions

In this Protocol, unless the context indicates otherwise, the following terms shall mean:

"Committee" the Committee of Ministers of Member States responsible for energy matters and as established under Article 11 (2) (g) of the Treaty or existing under Article 38 of the Treaty;

"Community" the Southern Africa Development Community;

"Council" the Council of Ministers of SADC established by Articles 9 and 11 of the Treaty;

"Director" the Head of the Technical Unit of the Commission;

"Energy Commission" the body duly constituted hereunder, as set in Articles 1, 9 and 12 of the Treaty, to guid

(hereinafter and co-ordinate co-operation and harmonisation of") energy policies and programmes;

"Energy Pooling" co-operation among parties or entities in development, transmission, conveyance and storage of energy in order to obtain optimum reliability of

service, economy of operation, and equitable sharing of costs and benefits;

- "International Law"** those laws governing the legal relations between States: rules and principles of general application dealing with the conduct of States and of international organisations and with some of their relations with persons, whether natural or legal;
- "Member State"** a State which is a member of SADC, which ratifies or accedes to this Protocol;
- "Organisation"** a corporation, governmental subdivision or agency, or any other legal or commercial entity having a joint or common interest in furtherance of the specific or broad objectives of the Protocol;
- "Region"** the geographic area of the Member States of SADC;
- "SADC"** the international organisation of Southern African States established by the Treaty of the Southern African Development Community;
- "Secretariat of SADC"** the principal executive institution of SADC that, among other things, is responsible for financial and general administration, strategic planning and management of programmes and other duties set forth in Article 14 of the Treaty;
- "Senior Officials"** Member appointed senior representatives by States to officially represent the Member States in the Committee of Senior Officials as set forth in Article 4 (3) of this Protocol;
- "Signatory"** a State which is a member of SADC which signs this Protocol, which, by signing this document, expresses its intention to be bound by the terms herein;

- "Sub-Committee"** the Committee within a sub-sector representing stakeholders in that particular area of activities as set forth in Article 4 (6) of this Protocol;
- "Summit"** means the Summit of the Heads of State and government of SADC, established by Article 9 of the Treaty.
- "Technical Unit"** the executing organ of the Commission and as set forth in Article 4 (4) of this Protocol;
- "Treaty"** the Treaty establishing SADC signed in Windhoek, Republic of Namibia, on 17 August 1992;
- "Tribunal"** the Tribunal of SADC established pursuant to Article 9 of the Treaty;

ARTICLE 2

General Principles

For the purpose of this Protocol, Member States shall:

- (1) Use energy to support economic growth and development, alleviation of poverty and the improvement of the standard and quality of life throughout the Region.
- (2) Use energy to promote collective self-reliance among Member States.
- (3) Ensure that the development and use of energy takes cognisance of the gender realities of the Region.
- (4) Encourage the development and transfer of science and technology related to energy through the promotion of

research and development and the evolution and use of comparable methods and standards.

- (5) Fully accept the responsibility to share the costs associated with institutional mechanisms created for the effective implementation of this Protocol.
- (6) Settle all disputes peacefully, amicably and in accordance with procedures set forth hereunder in Article 12.
- (7) Promote and encourage the direct participation of citizens and communities in the development and use of energy.
- (8) Ensure that the development and use of energy is environmentally sound.
- (9) Create a conducive environment for the private sector to participate fully in energy development in the Region.
- (10) Ensure that sectoral and subsectoral regional energy policies and programmes shall be in harmony with the overall policies and programmes of SADC and with the strategies and programmes of other SADC sectors.

ARTICLE 3
Objectives

The objectives of energy co-operation in the Region shall be to:

- (1) Strive to harmonise national and regional energy policies, strategies and programmes on matters of common interest based on equity, balance and mutual benefit.
- (2) Co-operate in the development of energy and energy pooling to ensure security and reliability of energy supply and the minimisation of costs.
- (3) Co-operate in the development and utilisation of energy in the Region in the following subsectors: woodfuel, petroleum and natural gas, electricity, coal, new and renewable energy sources, energy efficiency and conservation, and other cross-cutting themes of interest to Member States.
- (4) Strive to ensure the provision of reliable, continued and sustainable energy services in the most efficient and cost effective manner.
- (5) Promote joint development of human resources and organisation capacity building in the energy sector.
- (6) Co-operate in the research, development, adaptation, dissemination and transfer of low cost energy technologies.
- (7) Strive to achieve standardisation in appropriate energy development and application including the use of common methods and other techniques.

ARTICLE 4

Institutional Mechanism

(1) The Commission

(a) Pursuant to Articles 9 and 12 of the Treaty, there shall be established a Commission to be responsible for the implementation of this Protocol.

(b) The Commission shall comprise the following organs:

- (i) The Committee of Ministers;
- (ii) The Committee of Senior Officials;
- (iii) The Technical Unit;
- (iv) Sub-Committees established by the Committee of Ministers for electricity, petroleum, coal, woodfuel, new and renewable sources of energy, energy efficiency and conservation, energy planning and for other areas or tasks when and where appropriate pursuant to Article 4 (2) (a) (xii) hereunder.

(c) The Commission shall have the following functions:

- (i) co-ordinate regional energy activities;
- (ii) formulate a co-ordinated approach to regional energy policy, strategy and plans;

- (iii) facilitate regional energy project conceptualisation, initiation, preparation and implementation, monitoring and evaluation;
- (iv) establish and maintain a regional energy data base and facilitate information exchange;
- (v) liaise with other SADC sectors and with national, regional and international organisations;
- (vi) formulate and implement strategies for human resources development in the energy sector in the Region;
- (vii) establish procedures and criteria for the approval of SADC energy projects;
- (viii) mobilise finance for implementing SADC energy programmes and projects;
- (ix) promote research and development in the energy sector in the Region;
- (x) identify and formulate common standards and procedures in energy technology development and application, as well as common information and documentation practices; and
- (xi) provide upon request and in furtherance of the objectives of the Protocol, technical assistance to Member States, organisations and communities referred to under Article 8 of this Protocol.

- (d) In accordance with Article 18 of the Treaty, the quorum for all meetings of the Commission shall be two-thirds of the Member States.
- (e) Pursuant to Article 19 of the Treaty, decisions of the Commission shall be taken by consensus.

(2) The Committee of Ministers

- (a) The Committee of Ministers shall have the following functions:
 - (i) establish the policy and strategy of the Commission;
 - (ii) revise areas of co-operation as provided in Article 3 of this Protocol;
 - (iii) appoint and remove the Director;
 - (iv) consider and recommend for approval by the Council the business plan, budget, annual reports and financial statements of the Commission;
 - (v) consider and approve recommendations on projects and programmes;
 - (vi) consider and recommend to Council for approval rules and regulations governing the Commission;
 - (vii) recommend to the Council the location of the Headquarters and branches of the Technical Unit;
 - (viii) consider any matter having a bearing on the objectives, direction and/or

implementation of the Protocol brought to its attention by a Member State, the Committee of Senior Officials, the Technical Unit or the Sub-Committees;

- (ix) recommend to the Council amendments to the Protocol and/or changes or modifications to the structure of the Commission;
- (x) decide on the venue and dates of the meetings;
- (xi) consider any matter referred to the Committee of Ministers by the Council;
- (xii) create such other organs as may be necessary for the implementation of this Protocol;
- (xiii) identify and introduce new areas of co-operation which shall be deemed to be areas of co-operation in terms of Article 3 of this Protocol;
- (xiv) add to or eliminate an area or areas of co-operation as provided for in Article 3 of this Protocol;
- (xv) recommend to the Summit through the Council of Ministers the adoption of subsidiary agreements to regulate co-operation in any particular area of co-operation; however such subsidiary agreement shall not be inconsistent with the provisions of this Protocol; and
- (xvi) decide, without prejudice to Article 3 of this Protocol that this Protocol be implemented together with Protocols of other sectors of SADC.

- (b) The Committee of Ministers shall meet annually on dates to be agreed upon. The Committee of Ministers shall hold extraordinary meetings upon the consent of two-thirds of the Member States.
- (c) The chairperson of the Committee of Ministers shall be appointed from the Member State co-ordinating the Sector.
- (d) The Committee of Ministers may, from time to time, acquire the advice of prominent individuals who are citizens of SADC Member States on issues related to the Protocol.

(3) The Committee of Senior Officials

- (a) The Committee of Senior Officials shall comprise representatives appointed by Member States. Each Member State shall appoint one such representative.
- (b) The Committee of Senior Officials shall meet at least annually.
- (c) The chairperson of the Committee of Senior Officials shall be appointed from the Member State co-ordinating the Sector.
- (d) The Committee of Senior Officials shall have the following functions:
 - (i) Advise the Committee of Ministers and the Technical Unit on the activities of the Commission and any other organ of the Commission;
 - (ii) Recommend the agenda, provisional work programmes, studies and projects proposed by the Technical Unit for the

consideration of the Committee of Ministers; and

- (iii) Perform such other functions as may be assigned to it by the Committee of Ministers.

(4) The Technical Unit

- (a) There shall be established a Technical Unit which shall be the executing organ of the Commission.
- (b) The Technical Unit shall be headed by a Director.
- (c) The Technical Unit shall be the administrative and co-ordinating organ responsible for implementing the Protocol and promoting and facilitating all activities under Article 4 of the Protocol. The Technical Unit shall in addition be responsible to:
 - (i) implement the decisions of the Committee of Ministers;
 - (ii) facilitate the establishment and operation of the Sub-Committees;
 - (iii) organise and manage Commission meetings; and
 - (iv) oversee financial and general administration.

5. The Director

- (a) The Director shall be appointed by the Committee of Ministers. In doing so, the Committee of Ministers shall be guided by the need to ensure the highest standards of efficiency, professional competence and integrity.
- (b) The Director shall have the following functions and duties:

- (i) prepare annual reports and draft budgets and other financial statements and business plans for consideration by the Committee of Ministers;
- (ii) act as secretary to the meetings of the Committee of Ministers and Committee of Senior Officials, prepare documents, agenda and work programmes;
- (iii) organise, as appropriate, meetings of the Committee of Ministers and the Committee of Senior Officials;
- (iv) prepare internal rules and regulations of the Commission for the consideration of the Committee of Ministers;
- (v) mobilise and collect financial and other contributions from Member States and other sources;
- (vi) appoint staff of the Technical Unit in accordance with the rules and regulations prescribed by the Council;
- (vii) recommend to the Committee of Senior Officials and to the Committee of Ministers any matter of interest to the Commission;
- (viii) convene groups and panels of experts considered necessary to advise the Commission on policies, strategies, work programmes and implementation of activities of the Commission; and
- (ix) perform such other functions that may from time to time be assigned by the Committee of Ministers.

(6) The Sub-Committees

- (a) The Sub-Committees shall form an integral part of the SADC structure.
- (b) The Sub-Committees shall have a specific mandate and the following functions:
 - (i) address a regional energy need;
 - (ii) unless special circumstances dictate otherwise, they shall be established for the duration of their specific task.
- (c) Each Sub-Committee shall be co-ordinated by a part-time programme manager, who is also Chairperson appointed for a specific period of time who will be based in his/her own country and will be seconded and funded by his/her respective Member State.
- (d) The Sub-Committees shall have the following obligations and rights:
 - (i) the Sub-Committees shall have terms of reference clearly setting out objectives and conditions of membership and this shall be approved by the Committee of Ministers;
 - (ii) the Sub-Committees shall keep the Committees of Ministers informed on their membership and activities via the Technical Unit and members of the Technical Unit shall be entitled to attend all formal meetings of the Sub-Committees;
 - (iii) the Sub-Committees shall meet at least once a year;
 - (iv) the Sub-Committees shall undertake to adequately consult the organs of the Commission on matters of common interest;

- (v) the members of the Sub-Committees are responsible for their own expenses, as well as the joint expenses of the Sub-Committees for projects, studies, secretarial services etc;
- (vi) the Sub-Committees may in order to further their objectives, form working groups, commission studies, hire experts, arrange conferences etc. under their conditions and shall be responsible for related activities and costs. Such formed working groups shall report to the Sub-Committee. Members of the working groups need not be members of the respective Sub-Committees.
- (vii) the Sub-Committees may call upon the Technical Unit to facilitate their establishment and operation, including formulating objectives, drawing up of constitutions, forming of working groups, commissioning of studies, project appraisals and implementation and following up, secretarial services, contacting donors etc. The Technical Unit may charge a cost related fee for these services, including, where necessary, the hiring of consultants;
- (viii) the Sub-Committees shall make representations to the organs of the Commission, including the Committee of Ministers;
- (ix) the Sub-Committees shall decide on the scope, location and timing of their various activities in the field of regional energy;
- (x) the Sub-Committees may lobby for donor funding to achieve regional energy objectives; and

- (xi) the Sub-Committees shall restructure or dissolve themselves with approval of the Committee of Ministers.
- (e) Stakeholders shall retain control of the Sub-Committees while liaising with the Commission through the Technical Unit. Sub-Committees shall report regularly to the Technical Unit on their work.
- (f) Relevant stakeholders may include government departments, parastatals, private sector organisations, institutes, communities etc. Those who are unable to adequately represent themselves e.g. rural communities, should be consulted and assisted, and may be represented by government bodies, NGO's, etc.

ARTICLE 5

Financial Provisions

- (1) Member States shall contribute towards the budget of the Technical Unit in the manner set forth in Article 28 of the Treaty.
- (2) Members of the Sub-Committees shall meet their own expenses.
- (3) Projects, programmes, special studies, etc. shall have individual funding arrangements from various sources such as stakeholder, donors and special contributions by Member States.
- (4) The Commission may accept gifts, grants, legacies, and donations from any source provided they are consistent with the objectives of the Protocol. Information related to any of the above assistance shall be conveyed to the Committee of Ministers.

- (5) The Committee of Ministers shall consider and approve arrangements proposed by the Technical Unit for self-generation of funds by the Commission.
- (6) Articles 5 (1), 5 (4) and 5 (5) shall not be construed as prohibiting subsidiary agreements envisaged under Article 4 for purposes of adopting any other financing arrangements, provided they are based on equity, balance and mutual benefit.
- (7) Member States in arrears in payment of contributions in terms of this Protocol shall be dealt with in accordance with Article 33 of the Treaty.

ARTICLE 6

Reporting of Data and Information Exchange

- (1) Member States shall make energy data freely available in the Region. To this end, Member States agree to set up a regional energy data base to facilitate the exchange of information among institutions and in order to facilitate regional energy policy formulation and planning.
- (2) The exchange of agreed upon energy information between Member States, the Commission and SADC shall be obligatory.
- (3) Notwithstanding Article 6 (2) above, a Member State shall not be obliged to divulge any information not previously agreed and the disclosure of which may not be in the interest of that Member State.

ARTICLE 7

Co-operation with non-SADC States and Organisations

In recognition of the fact that energy development transcends national and regional boundaries, co-operation between Member States and non-SADC States and Organisations in energy development and use, shall be encouraged. In furtherance thereof, SADC and its Member States may enter into agreements

with non-SADC States and Organisations, provided that such agreements shall not:

- (1) be inconsistent with the overall objectives and other provisions of this Protocol;
- (2) create obligations upon a Member State who is not a party to such agreements; and
- (3) impede a Member State from fulfilling its obligations under this Protocol.

ARTICLE 8

Non-Governmental Organisations

In accordance with Article 23 of the Treaty, the Commission shall co-operate with Non-Governmental Organisations (NGO's), as well as the business and industrial communities, provided that their objectives and activities are not at variance with the objectives of this Protocol. The Commission shall establish working relationships with such NGO's and communities and make such arrangements as may be necessary to ensure effective co-operation.

ARTICLE 9

Research, Development and Training

Pursuant to article 21 (3) (d) of the Treaty, the Commission and Member States shall actively encourage and promote scientific research, development and training activities related to energy. Accordingly, the Commission and Member States shall:

- (1) actively involve existing facilities and institutions;
- (2) promote the development of centres of excellence in energy supply and utilisation throughout the region;
- (3) co-operate and collaborate with regional and international professional and scientific research organisations;
- (4) utilise available manpower in the region to the maximum extent; and
- (5) co-operate with and involve relevant NGO's in the Region in energy related scientific research and development.

ARTICLE 10

Annexes

- (1) Any subsidiary agreement adopted in accordance with Article 4 of this Protocol shall be annexed to this Protocol.
- (2) Annexes to this Protocol may be amended or terminated by the Council.

ARTICLE 11

Legal Status and Legal Responsibility

- (1) The Commission, in accordance with Article 3 of the Treaty, may enter into contracts, sue or be sued and generally execute all activities necessary to attain its authorised goals and objectives.
- (2) In performing their official missions and functions, the Commission and its staff shall enjoy immunities and privileges conferred by Article 31 of the Treaty and other relevant provisions.

ARTICLE 12

Settlement of Disputes

- (1) Any dispute arising between two or more Member States from the interpretation or application of this Protocol which cannot be settled amicably shall be referred to the Tribunal established under Article 9 of the Treaty for adjudication.
- (2) If a dispute pertaining to this Protocol arises between SADC and a Member State, a request shall be made by the Council for an advisory opinion in accordance with Article 16 of the Treaty.

ARTICLE 13

Withdrawal

- (1) Any Member State may withdraw from this Protocol upon the expiration of twelve (12) months from the date of giving written notice to that effect to the Executive Secretary of SADC.

- (2) Such Member State shall cease to enjoy all rights and benefits under this Protocol upon the withdrawal becoming effective, but shall remain bound by the obligations hereunder for a period of twelve (12) months from the date of withdrawal.

ARTICLE 14

Saving Provisions

Nothing contained in this Protocol shall derogate or be construed to derogate from existing agreements entered into between two or more Member States or a Member State and a non-SADC State and/or Organisation concerning energy development and use, provided that Member States shall endeavour to give effect to such agreements and any rights acquired or obligations assumed thereunder in conformity with the general principles prescribed in Article 2 of this Protocol.

ARTICLE 15

Signature

This Protocol shall be signed by duly authorised representatives of the Member States listed in the Preamble.

ARTICLE 16

Ratification

This Protocol shall be subject to ratification by the Signatories in accordance with their respective constitutional procedures.

ARTICLE 17

Accession

This Protocol shall remain open for accession by any State which is a member of SADC and is not listed in the Preamble.

ARTICLE 18

Amendments

- (1) Any Member State may propose an amendment to this Protocol.
- (2) Proposals for amendments to this Protocol may be made to the Director who shall duly notify all Member States of the proposed amendments at least thirty (30) days in advance of consideration of the amendments by the Committee of Ministers. Such notice period may be waived by the Member States.
- (3) An amendment of this Protocol shall be adopted by a decision of three quarters of all the members of the Summit.

ARTICLE 19

Entry into Force

This Protocol shall enter into force thirty (30) days after the deposit of the instruments of ratification or accession by two-thirds of the Member States.

ARTICLE 20
Termination

This Protocol may be terminated in accordance with provisions of the Article 35 of the Treaty.


ARTICLE 21
Depository

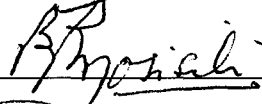
- (1) The original texts of this Protocol and all instruments of ratification and accession shall be deposited with the Executive Secretary of SADC, who shall transmit certified copies to all Member States.


- (2) The Executive Secretary of SADC shall register this Protocol with the Secretariat of the United Nations Organisation and the Organisation of African Unity.

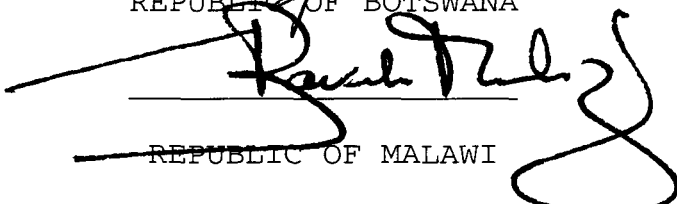
IN WITNESS WHEREOF, WE, the Heads of State or Government or duly Authorised Representatives of SADC Member States have signed this Protocol.


DONE at MASERU on the 24 day of August 1996 in two (2) original texts in the English and Portuguese languages, both texts being equally authentic.


REPUBLIC OF ANGOLA



KINGDOM OF LESOTHO


REPUBLIC OF BOTSWANA



REPUBLIC OF MALAWI

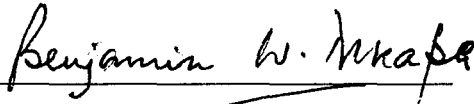

REPUBLIC OF MAURITIUS



REPUBLIC OF MOZAMBIQUE


REPUBLIC OF NAMIBIA


REPUBLIC OF SOUTH AFRICA


KINGDOM OF SWAZILAND


UNITED REPUBLIC OF TANZANIA


REPUBLIC OF ZAMBIA


REPUBLIC OF ZIMBABWE

ANNEX 1

GUIDELINES FOR COOPERATION

Pursuant to Articles 3 and 10 of the Energy Protocol of the Southern African Development Community, the following sets forth guidelines for cooperation in the Energy Commission (hereinafter the "Commission"). It should be noted that the Energy Protocol should be implemented within the context of the principles of a regional energy cooperation policy and strategy (hereinafter "the Policy"). The Technical Unit shall propose and when necessary update the Policy for the approval by the Committee of Ministers. The Policy shall emphasise the development of energy in the support of regional integration and socio-economic development and address, inter alia, the following issues:

- Energy trade
- Integrated resource planning
- Energy efficiency and conservation
- Demand-side management
- Energy pricing
- Private sector and NGO involvement
- Competition
- Training and organisation capacity building
- Gender
- Research and development and funding
- Energy investment and funding
- Environment
- Information collection, processing and dissemination
- Inter-sectoral and intra-sectoral issues, and
- Other cross cutting issues.

To the extent possible, the Policy shall complement national energy policies of Member States. It shall be the primary mission of each subsector to enhance the provision of energy co-operation and integration.

Presently, the subsectors within the Energy Sector include the following: Electricity, Petroleum and Natural Gas, Coal, Woodfuel, New and Renewable Energy Sources and Energy Efficiency and Conservation. This list of subsectors is not exclusive and, when appropriate, could be extended to include other relevant subsectors or cross-cutting themes of interest to stakeholders, Member States and the Commission as set forth in Article 3.

1.

Electricity

The electricity subsector of SADC shall strive towards an integrated power system that would be productively used and optimally managed in an environmentally sound manner. Within this context, the following sets forth guidelines for regional integration and cooperation:

- (a) Promote electricity trading and power pooling such as that described in the Southern African Power Pool (SAPP) Intergovernmental Memorandum of Understanding, the SAPP Agreement between Operating Members, all as adopted by the Member States.
- b) Promote integrated resource planning in the electricity subsector to take advantage of economies of scale and optimization of investment and equitable sharing of benefits.
- c) Coordinate the development and regular updating of a regional electricity master plan.
- d) Promote the evolution of common regional standards, rules and procedures relevant to the generation, transmission and distribution of electricity, including the standardization of electrical manufacturing facilities, particularly in areas in which the region holds a comparative advantage.
- e) Develop and utilise electricity in an environmentally sound manner, and subject electricity projects to environmental impact assessments in conformity with agreed basic environmental standards.
- f) Emphasise the provision of universal and affordable service to all citizens and the importance of quality customer service in national electricity policies.
- g) Encourage agreements between member States and non-member States, and, on regional electricity development and trade, so long as such agreements are in accordance with Article 4 of the Protocol.

2. **Petroleum and Natural Gas**

Member States should promote cooperation in the development of all aspects of the Region's petroleum resources. Likewise, natural gas continues to grow in importance and is a resource that exists variously throughout the region such as in Angola, Mozambique, Namibia, South Africa, and Tanzania. Hence, regional cooperation will be necessary in the development and user of natural gas. Combining these two broad objectives, the following sets forth applicable guidelines.

a) **Petroleum Exploration (Upstream)**

- i) Member States should take an integrated approach toward the exploration of geological structures which transgress national borders. This may invariably necessitate joint negotiations with petroleum companies
- ii) Member States should coordinate, and where possible, jointly undertake promotional activities.
- iii) The Commission shall facilitate exploration activities in the Region;
- iv) The Commission should strive to harmonise laws, regulations and agreements governing exploration activities in order to support exploration programmes. Particular emphasis should be placed on matters relating to the environment, health, safety and security.
- v) A regional petroleum data base shall be established.

(b) **Petroleum Downstream**

- (i) Member States should create an enabling legal and fiscal environment which promotes, enhances and facilitates cross-border trade and transport of petroleum products and natural gas.
- (ii) The Commission should devise procedures relating to the introduction of new petroleum products, product specifications and, where appropriate, technologies that may have a significant regional impact.
- (iii) The Commission should promote the joint procurement of petroleum products to take advantage of economies of scale.

(iv) The Commission should encourage joint development and establishment of refining, storage and transmission facilities and sharing of excess capacity.

(v) The Commission shall promote extensive exchange of information relative to petroleum and natural gas through the development of a regional data bank, staff exchange and interaction, and closer institutional liaison.

3. **Coal**

The Region has an abundance of coal, primarily located in Botswana, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. The supplies are generally site-specific and often bulky to transport. The guidelines that should be followed are:

(a) More deliberate efforts should be implemented to substitute coal for woodfuel. To this end, the Commission shall develop a strategy for expanded coal utilisation considering such issues as cost, efficient coal development, coal briquetting, coal gasification and the use of coal bed methane.

(b) Clean coal technologies available in the world markets which may improve efficiency in operation and mitigate environmental degradation should be sought.

4. **Woodfuel**

Woodfuel is recognised as a predominant source of energy throughout the region, presently and in the future. Accordingly, the goal of the Commission should be to develop, enhance and facilitate cooperation at a regional level relative to the provision and use of woodfuel in a sustainable, rational and environmentally benign manner. In so doing, it should be recognised that biomass has several end-uses, such as the provision of fuel, fodder, food, farming, construction and forestry products.

Moreover, most problems in the woodfuel sector are local and site-specific in character and therefore, solutions to the biomass problems would emanate largely from local communities. In light of this, the following sets forth guidelines for regional cooperation:

- (a) Promote local community participation in policy formulation and implementation, with special attention on the gender dimension.
- (b) Strengthen institutional capacity in the woodfuel subsector, particularly with respect to training, data collection and information dissemination.
- (c) Encourage applied research.
- (d) Improve woodfuel end-use efficiency and seek acceptable alternatives to woodfuel.

5. New and Renewable Sources of Energy

Like woodfuel and coal, new and renewable sources of energy (hereinafter "NRSE") are generally site-specific. Applications often take the form of biogas, windmills, min-hydroplants, passive solar design of buildings, photovoltaics, solar thermal, and solar stoves and water heaters. The potential is great for use of renewables in the region. The following lists the guidelines of a strategy to promote increased production and use of renewables in an economically and socially acceptable manner.

- (a) The Commission shall develop appropriate financing mechanisms suitable for the development of NSRE.
- (b) Member States shall consider the implementation of suitable tax regimes that promote the development and use of NRSE.
- (c) Member States shall strive to create an enabling environment for private sector involvement in NRSE.
- (d) The Commission shall provide, upon request and to the extent possible, technical support to governments and non-governmental organisations involved in the NRSE sub-sector.
- (e) Member States shall include cost-effective NRSE applications in their public investment programmes.

6. Energy Efficiency and Conservation

As energy resources in the Region are not inexhaustible, everyone should be encouraged to use energy judiciously and efficiently, regardless of which source of energy is consumed. Energy efficiency and conservation applications have minimal adverse impact on the environment, relative to other energy applications. Moreover, these applications reduce the amount of capital, investment in energy development. Also, energy conservation cuts across various energy sectors. In view of this, it is important that this sub-sector increase its visibility and importance. Therefore, the following sets forth the guidelines for this subsector:

- (a) Encourage the development of national energy efficiency and conservation plans;
- (b) Develop increased training opportunities for energy efficiency and conservation;
- (c) Target reduction in commercial energy intensity by an achievable and measureable percentage per annum;
- (d) Encourage the involvement of independent energy managers and energy services in energy conservation;
- (e) Involve utilities and other energy providers in energy efficiency schemes through demand side management and other appropriate means of energy conservation;
- (f) Utilize pricing as an instrument of energy efficiency and conservation where appropriate; and
- (e) Identify and minimise constraints for more efficient use of energy.