

Proposed framework legislation for renewable energy in South Africa

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List of Abbreviations

CC	Constitutional Court
CDM	Clean Development Mechanism
CEC	Committee for Environmental Co-ordination
CONNEP	Consultative National Environmental Policy Process
CO ₂	Carbon Dioxide
DAFF	Department of Agriculture, Forestry and Fisheries
DEAT	Department of Environmental Affairs and Tourism
DME	Department of Minerals and Energy
ECA	<i>Environmental Conservation Act 73 of 1989</i>
EES	Energy Efficiency Strategy
EIAs	Environmental Impact Assessments
EIPs	Environmental Implementation Plans
EMCAs	Environmental Management Co-operation Agreements
EMIs	Environmental Managements Inspectors
EMPs	Environmental Management Plans
ERA	<i>Electricity Regulation Act 4 of 2006</i>
ICC	International Chamber of Commerce
IEP	Integrated Energy Plan
IRP	Integrated Resource Plan for Electricity
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GG	Government Gazette
GN	Government Notice

GWh	Gigawatt hours
Gen.N	General Notice
MBO	Management by Outsiders
MDGs	Millennium Development Goals
MPRDA	<i>Mineral and Petroleum Resources Development Act 28 of 2002</i>
MW	Megawatt
NDP	National Development Plan
NEA	<i>National Energy Act 34 of 2008</i>
NEAF	National Environmental Advisory Forum
NEMA	<i>National Environmental Management Act 107 of 1998</i>
NERSA	National Energy Regulator of South Africa
NGOs	Non-Governmental Organisations
OHCHR	United Nations High Commissioner for Human Rights
PAIA	<i>Promotion of Access to Information Act 2 of 2000</i>
SADC	Southern African Development Community
SAHRA	South African Heritage Resources Agency
SCA	Supreme Court of Appeal
TSAR	Tydskrif vir die Suid Afrikaanse Reg
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WLD	High Court of South Africa (Witwatersrand Local Division)
WWF	World Wide Fund for Nature

Opsomming

Dit is gemenesaak dat Suid-Afrika ryk is aan diverse natuurlike hulpbronne en dat Suid-Afrika welbekend is daarvoor. Dit word verder ook oor die algemeen aanvaar dat Suid-Afrika van die beste wetgewing het met betrekking tot die omgewing oor verskeie velde, byvoorbeeld water, lug, biodiversiteit en afvalbestuur. Afgesien daarvan, is daar nog nie spesifieke regulering met betrekking tot hernubare energie in Suid Afrika nie. Weens die hoë vlak van werkloosheid en armoede is meeste lede van die gemeenskap, veral die landelike gemeenskappe genoodsaak om natuurlike hulpbronne (insluitend hernubare hulpbronne) te benut met die oog op om krag te verwek. Die implikasies hiervan is dat die gesondheid en welstand hierdie gemeenskappe op 'n negatiewe wyse beïnvloed deur die besoedeling wat daardeur veroorsaak word. Verder veroorsaak dit die degradasie van die omgewing wat opsigself nadele inhou vir mens en dier. Die gebruik van hernubare hulpbronne om krag of elektrisiteit op te wek, is definitief 'n aspek van die omgewing wat strenger regulering nodig het ten einde volhoubare ontwikkeling te bevorder en effek te gee aan artikel 24 van die *Grondwet van die Republiek van Suid Afrika*, 1996, asook ander fundamentele regte (soos vervat in artikel 25 en 27 van die Grondwet) wat verband hou met die reg op 'n omgewing wat nie skadelik vir hul gesondheid of welsyn is nie; en op die beskerming van die omgewing.

In terme van artikel 24 van die Grondwet word die staat verplig om wetgewing en ander redelike maatstawwe in te stel, ten einde uitvoering te gee aan artikel 24 van die Grondwet en die doel wat in terme daarvan vervat is, naamlik - volhoubare ontwikkeling, te bevorder en te verwezenlik. Die wet op *Nasionale Omgewingsbestuur* 107 van 1998 (NEMA), was die eerste wetgewing wat in terme van artikel 24 van die Grondwet in werking getree het. Hierdie wet neem die vorm aan van 'raamwerk-wetgewing' en val binne die grondwetlike bepalinge soos beoog deur artikel 24 van die Grondwet.

In hierdie skripsie word die teoretiese aspekte van raamwerk-wetgewing volledig bespreek ten einde vas te stel wat die elemente is waaruit raamwerk-wetgewing moet bestaan en die beginsels wat daarin geïnkorporeer moet word om die doel

daarvan te bevorder en te verseker. Na aanleiding van die navorsingsvraag, is die vraag: Wat moet ingesluit word in raamwerk-wetgewing wat daarop gemik is om hernubare energie effektief te reguleer? Om hierdie vraag te beantwoord, word daar gekyk na wat raamwerk-wetgewing is en hoe dit ooreenstem met NEMA. Verder word daar ook gekyk na energie beleide en energie wetgewing, in terme waarvan daar beginsels geïdentifiseer word wat ooreenstemmend is en wat essentieël is vir die vestiging, implementering en funksionering van raamwerk-wetgewing met die doel om hernubare energie op 'n effektiewe wyse te reguleer, in die geval – 'raamwerk-wetgewing vir hernubare energie in Suid-Afrika'.

Sleutelsterme: Volhoubare ontwikkeling; hernubare energie; energie beleide; energie wetgewing; omgewingsbeginsels; Wet op *Nasionale Omgewingsbestuur* 107 van 1998; *Grondwet van die Republiek van Suid-Afrika*, 1996; raamwerk-wetgewing.

Summary

It is common-cause that South Africa can be regarded as a country that is rich in diversity of natural resources. Moreover, it is generally accepted that South Africa has the best legislation with regard to the regulation of the environment in various fields such as water, air, biodiversity and waste management. However, there is to date, no specific legislation regulating renewable energy in South Africa. As a result of the high unemployment rate, poverty and the rural population not having adequate access to electricity, these communities depend heavily on the traditional use of biomass, which refers to the direct combustion of wood, charcoal, leaves, agricultural residue, and animal/human waste for their basic energy needs, which include cooking, drying and charcoal production. The traditional use of biomass results in a host of detrimental side-effects such as environmental degradation and negative social impacts. The latter necessitates that the use of renewable energy sources will need to be regulated in terms of law and policy reflective of section 24 of the *Constitution of the Republic of South-Africa*, 1996.

In terms of section 24 of the Constitution, the State must establish and implement reasonable legislative measures to promote sustainable development and the

sustainable use of natural resources while providing for the protection of the environment for the benefit of present and future generations. It is immediately evident that the legislative measures mandated by section 24 of the Constitution should be geared towards the facilitation of environmental protection. Falling within the ambit of such legislative measures is framework legislation. An example of framework legislation is the *National Environmental Management Act* 107 of 1998 (the NEMA).

In this dissertation an overview of the concept of framework legislation will be provided with specific reference to the NEMA and its role as such in South African environmental law. This will be followed by an analysis of existing South African renewable energy policy documents, during which norms and/or principles common to these documents will be identified. The question subsequently arises: What should be included in framework legislation aimed at regulating renewable energy in South Africa? These identified norms will be proposed as the general basic norms which should be included in renewable energy framework legislation aimed at regulating the supply of renewable energy in South Africa.

Key words: Sustainable development; renewable energy; energy policy; environmental principles; framework legislation; *Constitution of the Republic of South-Africa*, 1996 ; *National Environmental Management Act* 107 of 1998 (the NEMA).

1 Introduction

1.1 Problem statement and research question

In the modern developing world of today the use of renewable energy¹ sources is widely considered to be an essential element of the promotion of sustainable development, as the inclusion of energy from such energy sources into national energy systems, encumbers a number of advantages. These advantages include, among others, the enhancement of diversification in energy markets; the securing of long-term sustainable energy supplies; a reduction in atmospheric emissions; and the enhancement of the security of supply due to a reduction in imports. Renewable energy sources, in this context, are generally taken to be sources of energy that can be replenished within a human lifetime, by natural processes.² When a person takes into account the foregoing advantages, it is surprisingly shocking that renewable energy accounts for only 9% of South Africa's total primary energy supply³ - the bulk of which is derived from the unsustainable harvesting and burning of traditional sources of biomass.⁴

1 Renewable energy is a term that is often used to describe sustainable forms of energy. Another term that is used in conjunction with the latter term is 'sustainable energy', which is defined as energy which is replenishable within a human lifetime and which causes no long-term damage to the environment. With regard to this term, it is evident that sustainable energy, by its nature, promotes sustainable development. There is thus no difference between the concepts of renewable energy and sustainable energy. For the purposes of this dissertation reference will be made to the term "renewable energy" only, and not to the term "sustainable energy". Renewable energy, in the South African legal context, was defined by the (then) Department of Minerals and Energy as energy which harnesses naturally occurring non-depletable sources of energy, such as solar, wind, biomass, hydro, tidal, wave, ocean current and geothermal energy, to produce electricity, gaseous and liquid fuels, heat or a combination of these energy types. See paragraph 1.2 of the *White Paper on Renewable Energy* of 2003.

2 These processes include *inter alia*: wind, wave, solar, biomass (wood fuel, agricultural residues, animal wastes, biofuel and other bioenergy), hydropower and geothermal energy.

3 International Energy Agency Statistics 2013, available at www.eia.gov/cabs/South_Africa.

4 See paragraph 2 of the *White Paper on Renewable Energy* of 2003. While South-Africa has a 75% electrification rate, only 55% of the rural population has access to electricity. See Barnard 2012 *Potchefstroom Electronic Law Journal* 207. These communities depend heavily on the traditional use of biomass, by which is meant the direct combustion of wood, charcoal, leaves, agricultural residue, and animal or human waste, for their basic energy needs, which include cooking, drying and charcoal production. See Karakezi, Lata and Coelho 'Traditional Biomass Energy: Improving its Use and Moving to Modern Energy Use' 233.

The traditional use of biomass results in a host of detrimental side-effects such as environmental degradation and negative social impacts.⁵ The reasons why there has been only slight effort put into the introduction of renewable energy into South Africa include the high initial investment needed for its establishment, a lack of awareness with respect to its benefits, and the lack of legal and regulatory measures regulating its implementation.⁶ It becomes clearer that in order to mitigate the negative impacts of the traditional use of biomass as the primary renewable energy source in South Africa, legal developments in the energy sector must focus on promoting the implementation of modern renewable energy.⁷ The introduction of modern renewable energy sources into the South African energy system will, however, need to be regulated in terms of law and policy reflective of section 24 of the *Constitution of the Republic of South-Africa*, 1996 (hereinafter referred to as the Constitution).⁸

The Constitution recognises the correlation between the objectives of the regulation of environmental protection and the promotion of sustainable development. In terms of section 24,⁹ the State must establish and implement reasonable legislative

5 Barnard 2012 *Potchefstroom Electronic Law Journal* 207.

6 Paragraph 3.1.7 of the *White Paper on Renewable Energy* of 2003.

7 In referring to modern renewable energy sources the author is referring to those renewable energy sources listed in paragraph 1.2 of the *White Paper on Renewable Energy* of 2003. See note 1 above and Barnard 2012 *Potchefstroom Electronic Law Journal* 208. There is no clear indication of what distinguishes traditional renewable energy from modern renewable energy. However, the difference between modern energy renewables and traditional energy renewables can be explained at the hand of the usage of biomass. Biomass produced in a sustainable way—the so-called modern biomass—excludes traditional uses of biomass as fuel wood and includes electricity generation and heat production, as well as transportation fuels, from agricultural and forest residues and solid waste. On the other hand, “traditional biomass” is produced in an unsustainable way and it is used as a non-commercial source—usually with very low efficiencies for cooking in many countries. Goldemberg and Coelho ‘Renewable Energy: Traditional Biomass vs Modern Biomass’ 2004 *Energy Policy* 32 711. It is the author’s view that the phrase “modern renewable energy” should be taken to refer to the usage of renewable energy sources in such a way as to promote sustainable development. Also see Winkler ‘Renewable Energy Policy in South Africa: policy options for renewable energy’ 2005 *Energy Policy* 33 28.

8 Barnard 2012 *Potchefstroom Electronic Law Journal* 208.

9 S 24 of the Constitution provides that:

Everyone has the right –

(a) to an environment that is not harmful to their health or well-being; and

(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –

(i) prevent pollution and ecological degradation

(ii) promote conservation; and

measures to promote sustainable development and the sustainable use of natural resources while providing for the protection of the environment for the benefit of present and future generations. It is immediately evident that the legislative measures mandated by section 24 of the Constitution should be geared towards the facilitation of environmental protection. Falling within the ambit of such legislative measures is framework legislation. An example of framework legislation which falls under the ambit of section 24 of the Constitution is the *National Environmental Management Act* 107 of 1998 (the NEMA).

Framework legislation aims to define overarching and generic principles in terms of which sectoral-specific legislation is embedded, as well as to enhance co-operative environmental governance amongst fragmented line ministries.¹⁰ It furthermore provides general basic norms that may be used to introduce new environmental legislation or to amend or maintain existing legislation.¹¹ The latter part of the definition of framework legislation is especially relevant in proposing solutions to the research question stated below.

Recent policy developments recognise the interconnectivity in South Africa between the implementation of renewable energy and the protection of the environment.¹² The link between the implementation of modern renewable energy and the mitigation of environmental degradation serves as the basis for the assumption that legislative measures as envisaged by section 24 of the Constitution are needed to regulate the implementation of modern renewable energy in South Africa. Considering that various policy documents pertaining to renewable energy do indeed exist within South African law but that there is as yet no pertinent legislation, the following hypothesis is put forward. The objectives, principles and/or norms contained in

(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

10 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 1-2. See also Kidd *Environmental Law* 38.

11 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 1-2.

12 This includes *inter alia*: the *White Paper on Energy Policy of the Republic of South Africa*, the *White Paper on Renewable Energy Policy of the Republic of South Africa*, the *National Energy Efficiency Strategy of the Republic of South-Africa* of 2005, the *National Development Plan* and the *The National Climate Change Response White Paper* 2011.

current policy documents pertaining to renewable energy should be used as reference points for the proposed renewable energy framework legislation.

The *White Paper on the Energy Policy of the Republic of South Africa* of 1998 (hereinafter referred to as the White Paper of 1998)¹³ was the first energy policy document to be drafted in terms of section 24 of the Constitution. The main objectives of the energy policy contained in the White Paper of 1998 were spelled out as - increasing access to affordable energy services; improving energy governance; stimulating economic development; managing energy-related environmental impacts; and securing supply through diversity.¹⁴ It is thus evident that the White Paper of 1998 recognises the importance of managing energy-related environmental impacts and that it necessitates the formulation of effective law and policy focused on environmental protection.

The *White Paper on Renewable Energy* of 2004¹⁵ (hereinafter referred to as the White Paper of 2004) seeks to promote an energy economy in which modern renewable energy increases its share of energy consumed and provides affordable access to energy throughout South Africa, but also recognises the importance of environmental protection.¹⁶ The White Paper furthermore recognises the importance of developing, implementing, maintaining and continuously improving an effective legislative system to promote the introduction of renewable energy for ensuring environmental protection and giving effect to section 24 of the Constitution.¹⁷ Therefore it is clear that the White Paper necessitates the formulation of effective law and policy which would translate into the effective legislative system it seeks to achieve.

Another policy document which correlates with the White Paper of 1998 and the White Paper of 2004 is the 2008 first review of the *National Energy Efficiency*

13 The *White Paper on Energy Policy of the Republic of South Africa*, Department of Minerals and Energy Notice 3007/1998 in *Government Gazette* no 19606, which was published on 17 December 1998.

14 See paragraph 3.2.2 of the White Paper of 1998.

15 The *White Paper on Renewable Energy Policy of the Republic of South Africa*, Department of Minerals and Energy Notice 513/2004 in *Government Gazette* no 26169, which was published on 14 May 2004.

16 See paragraph 1 of the White Paper of 2004.

17 See paragraph 7.2.2 of the White Paper of 2003.

*Strategy of the Republic of South-Africa of 2005*¹⁸ (hereinafter referred to as EES 2008). As stated in above mentioned first review of the EES 2008, in order for the country's renewable energy policy to be considered sustainable, it needs to facilitate development in the social, economic and environmental spheres.¹⁹ The EES 2008 recognises the importance of environmental protection and the effectiveness of standards of efficiency in that regard.²⁰ However, the EES 2008 also acknowledges that such standards would have limited impact unless made mandatory.²¹ One of the methods of ensuring that these standards do indeed become mandatory is by codifying them in legislation. As stated previously, this would include framework legislation. The question subsequently arises: What should be included in framework legislation aimed at regulating renewable energy in South Africa?

A specific method will be followed in proposing an answer to this question. In the first instance, an overview of the concept of framework legislation will be provided with specific reference to the NEMA and its role as such in South African environmental law. This will be followed by an analysis of existing South African renewable energy policy documents, during which norms and/or principles common to these documents will be identified. In the final instance, these norms will be proposed as the general basic norms which should be included in renewable energy framework legislation aimed at regulating the supply of renewable energy in South Africa.

18 GN 908 in GG 32342 of 26 June 2009.

19 Executive Summary of the EES 2008 ii.

20 See paragraph 4.1 of the EES 2008.

21 See paragraph 4.1 of the EES 2008.

2 Conceptualising framework legislation

This chapter will focus on aspects which is inherent to the notion 'framework legislation. The first part of this chapter will give a basic background as to where the concept of framework legislation originated and how it fits into South Africa's environmental law. After this introduction of framework legislation in the context of the environment, the discussion will now turn to the characteristics of framework legislation and the intended achievements thereof. These characteristics and intended achievements will be discussed in brief so as to reflect the importance thereof in the formulation and establishment of framework legislation for renewable energy in South Africa. The reason for discussing certain principles such as sustainable development in great detail is that environmental framework legislation is mainly aimed at regulating environmental matters so as to promote sustainable development and give effect to section 24 of the Constitution. Other principles such as governance and public participation will also be discussed in brief, as they are in principle directly related to the promotion of sustainable development, as well as to the regulation of the environment. The latter must be considered when ascertaining what should be included in framework legislation aimed at regulating renewable energy in South Africa. The characteristics and the intended achievements of framework legislation will be discussed. In the first instance, all the characteristics of framework legislation will be discussed and thereafter the intended achievements of framework legislation.

2.1 Introducing framework legislation

In addition to sound environmental management and conservation, environmental protection is often afforded through law.²² Environmental law is a distinct branch of law which consists of all legal principles which 'have in common not so much their

22 Van der Linde 'NEMA' 194.

special character, but the subject they regulate – the environment.²³ In an environmental law context, the notion of 'environment' has been defined in South African legislation in terms of the provisions contained in the NEMA, which states that:

'environment' means the surroundings within which humans exist and that are made up of —
(i) the land, water and atmosphere of the earth;
(ii) micro-organisms, plant and animal life;
(iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and
(iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.²⁴

With regard to environmental protection in South Africa, it has been recognised that three legislative mechanisms exist in order to afford the protection of the environment.²⁵ The first mechanism relates to the constitutional entrenchment of environmental issues through either a rights-based or a regulatory approach in the Constitution.²⁶ The second mechanism, which is of significant importance to the study, is the protection of the environment through environmental framework legislation.²⁷ The third mechanism is the adoption of sectoral-specific legislation that can cover an array of environmental media.²⁸ In the South African context it is evident that a combination of all three of these mechanisms is necessary to ensure the protection of the environment. At national level, framework legislation makes provision for an overarching framework for environmental protection in a particular country.²⁹ Moreover, framework legislation can give force to constitutional provisions

23 Kidd *Environmental Law* 4.

24 S 1 of NEMA.

25 Van der Linde 'NEMA' 194.

26 S 24 of the Constitution entrenches the environmental right in South Africa and also makes provision for the establishment of legislation.

27 Van der Linde 'NEMA' 194. Framework environmental legislation may cover the following issues: definitions; the declaration of general objectives and principles; the establishment of relevant environmental management institutions including streamlining institutional arrangements, and the definition of the common procedural principles for environmental decision-making applicable to all sectors; environmental policy formulation and planning; environmental impact assessment and audits; environmental quality criteria and standards; integrated pollution control; environmental management; public participation in decision-making and implementation; environmental inspectorates; dispute settlement procedures; and links with and the hierarchy of other laws impacting on the environment. 'The role of national environmental law.' *Training Manual on International Environmental Law*. Available at http://www.unep.org/environmentalgovernance/Portals/8/documents/training_Manual.pdf.

28 Van der Linde 'NEMA' 194.

29 Van der Linde 'NEMA' 195.

pertaining to the environment and/or serve as enabling legislation with regard to the constitutional provisions that are concerned with environmental rights.³⁰ In South Africa the NEMA is an example of framework legislation which serves as enabling legislation for an environmental right as contemplated in section 24 of the Constitution and as a vehicle to realise the constitutional protection afforded to the environment.³¹

As stated previously, framework legislation aims to define overarching and generic principles into which sectoral-specific legislation is embedded,³² as well as to enhance co-operative environmental governance amongst fragmented line ministries.³³ It is also commonly understood that framework legislation provides general basic norms that may be used to introduce new (environmental) legislation or to amend or maintain existing legislation.³⁴

When reading section 24 of the Constitution, one could easily identify the environmental framework elements recognisable in some South African legislation. Section 24 of the Constitution provides for the normative framework in terms of which other legislation has to be interpreted. To date, the NEMA is the only piece of environmental framework legislation. Other sectoral-specific legislation such as the *National Water Act*,³⁵ the *Development Facilitation Act*³⁶ and the *National Forests Act*³⁷ does however contain some elements pertaining to framework legislation. They can be characterised as generic legal elements³⁸ incorporating a flexible approach to addressing changing circumstances, dedicated to a specific sector of the

30 Van der Linde 'NEMA' 195.

31 Van der Linde 'NEMA' 195.

32 The relevant sectoral legislation addresses specific aspects of the environment and human activity such as a law on water, land, energy, forest, wildlife, marine environment, or a law establishing a national park or legislation to control factories.

33 See paragraph 1 above.

34 See paragraph 1 above. The framework environmental legislation is a single law that provides the legal and institutional framework for environmental management without seeking to legislate comprehensively.

35 36 of 1998.

36 67 of 1995.

37 84 of 1998.

38 The generic legal elements include *inter alia* the preamble, short title and commencement, definitions, institutional arrangements, civil liability, offences and penalties and miscellaneous provisions such as regulatory powers, repeal of laws and transitional arrangements. See Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 6.

environment, but including broadly based environmental policy and principles. Moreover, environmental framework legislation endeavours to ensure broad-based participation in its formulation, co-operative governance between all spheres of government, and the innovative use and integration of multiple environmental management tools and instruments in order to benefit the environment.³⁹

2.2 The characteristics of framework legislation

With regard to current examples of environmental framework law, environmental framework legislation in general has four characteristics. These characteristics are that it has generic legal elements, employs a flexible approach to address changing circumstances, is dedicated sector-specific legislation, and expresses broad-based environmental policy and principles.⁴⁰ These characteristics will be discussed in detail below.

2.2.1 Generic elements

The elements generic in most legislation originating from the Anglo-American legal tradition are also found in environmental framework legislation.⁴¹ As stated previously, these elements include *inter alia* a preamble, a short title and commencement, definitions, institutional arrangements, civil liability, offences and penalties and miscellaneous provisions such as regulatory powers, the repeal of laws, and transitional arrangements.⁴²

39 Van der Linde 'NEMA' 195.

40 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 3.

41 The flexibility is achieved through investing relevant authorities with wide regulatory powers to promulgate subsidiary legislation addressing specific environmental issues and completing the generality of the framework statute. In addition, the framework law provides a basis and a reference point for the coordination of sectoral activities and the rationalization and harmonisation of sectoral legal regimes. *Training Manual on International Environmental Law*. Available at http://www.unep.org/environmentalgovernance/Portals/8/documents/training_Manual.pdf.

42 See paragraph 1.1 above.

2.2.2 A flexible approach

Flexibility is regarded as one of the principle characteristics of environmental framework legislation.⁴³ The aim of the latter principle is to provide 'a broad and flexible framework to address environmental issues and for responding to changes in socio-economic and ecological parameters'.⁴⁴ The flexibility of environmental legislation is achieved by means of broad-based policy principles, which in turn are supported by separate, sector-specific legal arrangements.⁴⁵

2.2.3 The relationship between overarching and sector-specific legislation⁴⁶

Sectoral-specific policy documents such as White Papers, policy statements and discussion documents form the basis of sector-specific legislation and regulations. Du Plessis and Nel⁴⁷ suggest the following illustration of the relationship between environmental framework law and sector-specific legislation:

43 Iqbal 'Recent Trends in National Environmental Legislation' 10.

44 Iqbal 'Recent Trends in National Environmental Legislation' 10.

45 Iqbal 'Recent Trends in National Environmental Legislation' 10.

46 Framework law such as the NEMA provides a basis and a reference point for the coordination of sectoral activities and the rationalisation and harmonisation of sectoral legal regimes. This is the reason for referring to the framework law as the umbrella legislation, to signify its overarching role as a framework environmental law which provides for the legal and institutional framework for environmental management, thus underlining the need for regulations as necessary or as a state is able to manage and fund. *Training Manual on International Environmental Law*. Available at http://www.unep.org/environmentalgovernance/Portals/8/documents/training_Manual.pdf. See the illustration below.

47 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 4-5.

Framework legislation:

National Environmental
Management Act 107 of 1998

Framework
policy:

White Paper on Environmental policy for South Africa – GN R749 in GG 18894 of 15 May.

Sectoral policy
and guideline
documents:

White Paper on Integrated Pollution and Waste Management for South Africa – Gen. N 227 in GG 20978 of March 2000.

White Paper on Sustainable Coastal development in South Africa - June 2000.

White Paper on a National Water Policy for South Africa - April 1997.

Strategies and
sectoral
legislation

National Environmental Management: Waste Act 59 of 2008. National Waste Management Strategy was published in GN R344 in GG 35306 of 4 May 2012.

The National Environmental Management: Integrated Coastal Management Act 24 of 2008.

The National Water Act 36 of 1998. The Water Resource classification system was published in GN R810 in GG 33541 of 17 September 2010.

In the light of the above illustration of the relationship between environmental framework law and sector-specific legislation, a similar approach will be followed in order to indicate the necessity for the establishment of framework legislation for renewable energy in South Africa. Currently, there is no umbrella statute which provides for an overarching legal framework for renewable energy in South Africa.⁴⁸ However, there are legal provisions dealing with renewable energy which are found in a disparate set of laws. These laws will be dealt with in chapter 6. There are also policies and guideline documents dealing with energy which must be considered with regard to the establishment of framework law for renewable energy in South Africa. The latter will be discussed in chapter 5.

2.2.4 Environmental policy and principles

During the performance of this research it was found that environmental policy statements are contained in some international framework legislation, while some legislation only broadly define environmental principles.⁴⁹ With regard to the latter it can be rightfully argued that both policy statements and principles serve as a framework against which all or some defined actions are to be considered.⁵⁰ A fundamental requirement of both policy statements and principles defined in terms of environmental framework legislation is that the legislation should be geared to enhance sustainable development, as contemplated in section 24 of the Constitution. In order to shift towards sustainability, it is of the utmost importance that equal weight should be given to the three spheres of sustainability, the ecological, economic and social spheres, which are supported by clearly enunciated societal rights.⁵¹ Sustainability principles are defined *inter alia* in the Ceres principles,⁵²

48 To date, the only recognised environmental framework law in South Africa is the NEMA.

49 Ferreira 1999 TSAR 90-113.

50 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 6.

51 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 6. See also *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs* 2004 5 SA 124 WLD at 144B-C; Glazewski *Environmental Law in South Africa* 80; Kotzé *ea South African Environmental Law through the Cases* 116. The societal rights referred to above include *inter alia* the right to a clean and healthy environment, the right to sue, and the right of workers to be protected (In this regard also see the preamble of the *Occupational Health and Safety Act* 85 of 1993), right of access to information, and the protection of whistleblowers.

Agenda 21,⁵³ Responsible Care®,⁵⁴ the ICC Principles for Sustainable Business Development,⁵⁵ and Caring for the Earth,⁵⁶ as are sustainability criteria. One could argue that, in order to ensure the promotion of sustainability, environmental framework legislation should address principles from the ecological sustainability, economic sustainability and social sustainability spheres.⁵⁷

2.2.4.1 Environmental principles contained in the NEMA

The NEMA is South Africa's principal environmental management framework law that *inter alia* contains a number of environmental principles.⁵⁸ These environmental management principles:

Apply throughout the Republic to the actions of all organs of state that may significantly affect the environment and-

(a) shall apply alongside all other appropriate and relevant considerations, including the State's responsibility to respect, protect, promote and fulfil the social and economic rights in Chapter 2 of the Constitution and in particular the basic needs of categories of persons disadvantaged by unfair discrimination;

(b) serve as the general framework within which environmental management and implementation plans must be formulated;

52 The Ceres principles include *inter alia* the protection of the biosphere, the sustainable use of natural resources, and the reduction and disposal of wastes, as well as energy conservation. Available at <http://www.ceres.org/about-us/our-history/ceres-principles>.

53 Agenda 21 – An agenda for sustainable development into the 21st Century (May 1998). Agenda 21 is a massive and complex blueprint and action plan for the whole international community, linking development and environmental action for the 'fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future'. See chapter 1, par 1.1 of Agenda 21. Available at <http://www.sustainabledevelopment.un.org/content/documents/Agenda21>. See also 'Environmental Law and Sustainable Development' *Training Manual on International Environmental Law*. Available at http://www.unep.org/environmentalgovernance/Portals/8/documents/training_Manual.pdf.

54 Available at <http://responsiblecare.americanchemistry.com/Responsible-Care-Program-Elements/Guiding-Principles>.

55 See <http://www.iisd.org/business/tools/principles.aspx>.

56 *Caring for the Earth. A strategy for Sustainable Living* part 1. Available at <http://coombs.anu.edu.au/~vern/caring/caring.html>.

57 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 6.

58 Du Plessis 2008 *Potchefstroom Electronic Law Journal* 19. Framework legislation such as the NEMA includes concepts and international soft law principles that ensure the sustainability of the environment and natural resources; adopts precautionary measures in relation to socio-economic impacts; and integrates environmental considerations into development.

- (c) serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of this Act or any statutory provision concerning the protection of the environment;
- (d) serve as principles by reference to which a conciliator appointed under this Act must make recommendations; and
- (e) guide the interpretation, administration and implementation of this Act, and any other law concerned with the protection or management of the environment.⁵⁹

With regard to the first two principles, it is evident that it provides that environmental management must place people at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably;⁶⁰ and that development must be socially, environmentally and economically sustainable.⁶¹ Given the importance of these principles, it is worthwhile reproducing the principles which are of particular relevance to renewable energy:

- (a) Sustainable development requires the consideration of all relevant factors including the following:
 - (i) That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
 - (ii) that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
 - (iii) that the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;
 - (iv) that waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;
 - (v) that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;
 - (vi) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;
 - (vii) that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and

59 S 2(1) of the NEMA.

60 S 2(2) of the NEMA.

61 S 2(3) of the NEMA.

(viii) that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.⁶²

These principles have many commonalities with internationally accepted principles of environmental management, a fact which is easily recognisable when one compares these principles with the Rio Principles.⁶³ The most prominent principle identified with regard to the latter in terms of environmental management is the principle of 'sustainable development'. The concept of sustainable development, reflected in section 24 of the Constitution, is the fundamental 'building block' around which environmental legal norms and standards have been formed and established, both internationally and in South Africa.⁶⁴ The concept of sustainable development is not only enshrined in the South African Constitution but is also vested in other legislation such as the NEMA. Sustainable development is defined in the NEMA as:

the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations.⁶⁵

Not only is the notion of sustainable development overtly reflected in the South African Constitution but it is an inherent factor that needs to be considered in environmental decision-making (related to good environmental governance). The foregoing was endorsed in *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs*,⁶⁶ where the court held:

The concept of 'sustainable development' is the fundamental building block around which environmental legal norms have been fashioned, both

62 S 2(4)(a) of the NEMA.

63 In December 1987 the UN General Assembly convened UNCED, the purpose of which was to elaborate strategies and measures to halt and reverse the effects of environmental degradation in the context of strengthened national and international efforts to promote sustainable and environmentally sound development in all countries. The conference was held in Rio de Janeiro, Brazil, in June 1992. The *Rio Declaration* (a non-binding instrument) was adopted at this conference. It is a statement of 27 principles setting out the bases upon which states and individuals are to co-operate and further develop 'international law in the field of sustainable development'. See Kidd *Environmental Law* 55-56.

64 Glazewski *Environmental Law in South Africa* 80.

65 S 1 of the NEMA.

66 2004 5 SA 124 WLD.

internationally and in South Africa, and is reflected in s 24(b)(iii) of the Constitution...Pure economic principles will no longer determine in an unbridled fashion, whether a development is acceptable. Development, which may be regarded as economically and financially sound, will, in future, be balanced by its environmental impact, taking coherent cognisance of the principle of intergenerational equity and sustainable use of resources in order to arrive at an integrated management of the environmental sustainable development and socio-economic concerns.⁶⁷

In the light of the above it is important to note that the pillars of sustainable development must be integrated in order to achieve a balance and to ensure the achievement of sustainable development. It could thus be argued that the principle of integration is central to the attainment of sustainable development, and indeed it forms the backbone of sustainable development. In *MEC for Agriculture, Conservation, Environment and Land Affairs v Sasol Oil (Pty) Ltd*,⁶⁸ the Supreme Court of Appeal recognised that the NEMA requires that:

The interpretation of any law concerned with the protection of the environment must be guided by the principles in section 2. At the heart of these is the principle of sustainable development, which requires the organs of state to evaluate the social, economic and environmental impact of activities.⁶⁹

In *Fuel Retailers Association of SA (Pty) Ltd v Director General Environmental Management Mpumalanga and Others*,⁷⁰ the court discussed the principle of sustainable development in international law and found that the principle of the integration of environmental protection and socio-economic development is fundamental to the principle of sustainable development.⁷¹ The court said:

The integration of economic development, social development and environmental protection implies the need to reconcile and accommodate these three pillars of sustainable development. Sustainable development provides a

67 144B-C; Glazewski *Environmental Law in South Africa* 80; Kotzé *et al South African Environmental Law through the Cases* 116.

68 2006 5 SA 483 (SCA). (Hereafter the *Sasol Oil* case).

69 *Sasol Oil* case at par 15.

70 2007 10 BCLR 1059 (CC). (Hereafter the *Fuel Retailers* case).

71 *Fuel Retailers* case at par [46-52]. Kotzé *et al South African Environmental Law through the Cases* 195.

framework for reconciling socio-economic development and environmental protection.⁷²

This makes it clear that environmental, social or economic impacts must always be considered when one makes a decision that might have an impact on the environment and that they must be integrated to give effect to sustainable development and the achievement thereof.

In the light of the foregoing discussion it is evident that environmental framework legislation should address principles relating to ecological sustainability, economic sustainability and social sustainability in order to ensure the successful promotion of sustainable development.

2.3 Defined outcomes

Regardless of its broad based, flexible and overarching nature,⁷³ environmental framework legislation should facilitate any desired outputs it seeks to achieve. According to Du Plessis and Nel,⁷⁴ the most important of these outputs are the following: providing for broad-based representation and input, establishing co-operative governance, empowering lead agencies and promoting the innovative integration of environmental management instrument and tools.

2.3.1 Providing for broad-based representation and input

With regard to the drafting of environmental framework legislation from Latin-America, the Caribbean and South Africa, an open, representative and transparent process should be followed to ensure intra-generational equity and to ensure the recognition of local knowledge and diverse needs.⁷⁵

72 *Fuel Retailers case at par [55]. Kotzé et al South African Environmental Law through the Cases 195.*

73 See paragraph 2.2.3 above.

74 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 8.

75 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 8. The provision for broad-based representation and input relates to the principle of public participation and seeks to ensure that national laws comply with framework legislation.

2.3.2 Governance, environmental governance and co-operative governance

Governance is a function of public administration which has been defined as:

the use of managerial, political and legal theories and processes to fulfil legislative, executive and judicial governmental mandates for the provision of regulatory and service functions for the society as a whole or for some segments of it.⁷⁶

Governance could also be described as all organisations, processes and individuals that are associated with carrying out the duties and functions prescribed by law and policy measurements adopted by the legislature or the executive and interpreted by courts.⁷⁷ The foregoing refers to 'governance' in general but it comes to mind that the environment, in a societal setting, is one of many areas in which governance has to take place. 'Governance' from an environmental perspective is a process that can be used to formulate and implement strategies to regulate human behaviour that has impacts on the 'environment'.⁷⁸ When one looks at the general meaning of 'governance' and 'governance' from an environmental perspective, one could define 'environmental governance' as:

A management process executed by institutions and individuals in the public and private sector to holistically regulate human activities and the effects of human activities on the total environment (including all environmental media, and biological, chemical, aesthetic and socio-economic processes and conditions) at international, regional, national and local levels; by means of formal and informal institutions, processes and mechanisms embedded in and mandated by law, so as to promote the common present and future interests human beings hold in the environment.⁷⁹

It is evident that 'environmental governance' as defined above has a strong legal character and that the mandate to govern is clearly provided by law.⁸⁰ Law, or more specifically 'environmental law', will set out the parameters for and provide the

76 Feris 2010 *Potchefstroom Electronic Law Journal* 74-75. See Rosenbloom *Public Administration* as quoted in Kotzé *Legal Framework*.

77 Feris 2010 *Potchefstroom Electronic Law Journal* 75; Gordon and Milakovich *Public Administration* 6.

78 Kotzé 'Environmental Governance' 107.

79 Kotzé 'Environmental Governance' 107-108.

80 Kotzé 'Environmental Governance' 108.

justification and means to manage the activities of people in the environment so as to promote their common 'environmental' interests.⁸¹

'Problem-solving' is one of governance many objectives. The primary purpose of environmental governance, which one could relate back to the definition of 'environmental governance', is to achieve a certain environmental objective by influencing the behaviour of human beings in such a way as to change that behaviour according to standards or agreed upon set of rules that should contribute to solving environmental problems.⁸²

Kotzé⁸³ has said the following:

The objective of regulating human behaviour could be to prevent environmental harm, to minimize or mitigate environmental harm, to maintain environmental quality, and/or to provide protection and adaptation solutions for environmental degradation and change.

Taking the foregoing discussion into account it is noteworthy that one of the most fundamental achievements of environmental framework legislation is the creation of mechanisms and structures to make arrangements for co-operative governance.⁸⁴ Co-operative governance entails more than the co-ordination between different spheres of governance i.e. international, inter-regional and intra-governmental alignment.⁸⁵ According to Du Plessis and Nel⁸⁶ co-operative governance entails the alignment of policies, plans and programmes across the different spheres of government, as well as between fragmented line function competencies.

Moreover, it creates procedures and processes for empowering civil society to engage in environmental governance via public participation.⁸⁷ As stated previously,

81 Kotzé 'Environmental Governance' 109.

82 Kotzé 'Global Environmental Governance' 274.

83 Kotzé 'Global Environmental Governance' 274.

84 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 8.

85 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 8.

86 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 8.

87 Participation in environmental decision-making (governance) is an effective tool to establish environmental priorities, offer solutions to environmental challenges and prepare, execute and apply the most appropriate decisions possible. Participation may also be crucial for

the NEMA is South Africa's principal environmental management framework law that *inter alia* makes provision for a number of environmental principles. With regard to public participation, section 2(4)(f) provides that the participation of all interested and affected parties in environmental governance must be promoted, that all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and that participation by vulnerable and disadvantaged persons must be ensured.⁸⁸ Moreover, section 2(4)(g) supports the latter provision by stating that decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.⁸⁹

This is a dimension that is generally referred to as management by outsiders (MBO). An integrated MBO-programme includes participating and active relationships between and in the empowerment of stakeholders outside formal government structures - stakeholders such as civil society, NGOs and the private sector, in accordance with the principle of controlled self-regulation.⁹⁰ There are numerous NGOs, such as Greenpeace, Friends of the Earth and the World Wide Fund for Nature, which have played a significant role in the development of environmental law, and subsequently reflects and has proved their importance in governance.⁹¹

2.3.2.1 International co-operation

In the international context, co-operative governance may be divided into two distinct elements, namely international law as framework law, and provisions for mechanisms to ensure co-operation and integration between governments at an

environmental risk identification in policy and law-making processes. See Du Plessis 2008 *Potchefstroom Electronic Law Journal* 11-12.

88 See paragraph 2.2.4 above.

89 See paragraph 2.2.4 above.

90 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 8.

91 Glazewski and Ruppel 'International environmental law' 8. In South Africa the WWF is based in the Western Cape, namely, WWF SA. This local NGO plays an important role in advocating the local application of international norms and standards, which in turn reflects its important role in governance. See also www.cer.org.za.

international level.⁹² Globally, environmental law is often drafted as treaties and conventions or as discussion or working documents.⁹³ These may also be regarded as environmental framework legislation. Other important elements of environmental framework legislation, at international level, are that it should ensure participation⁹⁴ in negotiations with regard to the writing of conventions as well as to make legislative proposals in this regard, and to ensure the establishment of mechanisms and competencies to regulate international treaties and conventions.⁹⁵

2.3.2.2 Inter-regional alignment

Not only is framework legislation important on an international scale, but it is also an important instrument with regard to environmental problems within the regional context. Environmental degradation and pollution know no boundaries.⁹⁶ South Africa is a member of the Southern African Development Community (SADC),⁹⁷ and in the light thereof it is important to ensure that member states co-ordinates their policies and strategies across national boundaries.⁹⁸ One of the many objectives of

92 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 8-9.

93 In terms of art 38(1) of the Statute of the International Court of Justice the sources of International law, are: international conventions, customary law, general principles of law recognised by 'civilised nations', judicial decisions and the writing of publicists, codification and *jus cogens*. See Dugard *International Law: a South African Perspective* 22. See also Glazewski and Ruppel 'International environmental law' 8. See furthermore Kidd *Environmental Law* 45-46.

94 See paragraph 2.2.4 above. See also Iqbal 'Recent Trends in National Environmental Legislation' 15.

95 It should be noted that South Africa has ratified several treaties and conventions to incorporate them into South African law. These conventions, however, can be regarded as framework legislation that has to be enacted into sectoral-specific national legislation. An example of such legislation is the *World Heritage Convention Act* 49 of 1999. The South African Department of Environmental Affairs and Tourism has considerable information on most of these conventions, including contact persons within the department responsible for their domestic application. In this regard see http://www.environment.gov.za/PolLeg/Conventions/conv_00082002.htm. See also Kidd *Environmental Law* 61-67.

96 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 9. This treaty is a regional economic co-operation agreement that was entered into in 1992 in Windhoek. Glazewski and Ruppel 'International environmental law' 53. Available at <http://www.sadc.int/>.

98 The SADC Treaty provides *inter alia* that member states are committed to 'co-ordinate, harmonise, and rationalise their policies and strategies for sustainable development in all areas of human endeavour...' and 'agree to co-operate in the areas of natural resources and the environment'. See art 5(1)(a) and 21(3)(e) of the SADC Treaty. Also see Glazewski and Ruppel 'International environmental law' 54.

framework legislation is to allow for inter-regional co-ordination as well as the integration of the fundamental principles of environmental law.⁹⁹ Not only does corresponding environmental framework legislation achieve improved co-ordination and the enforcement of environmental laws but it also contributes to the enhancement of sustainable development on a regional level.¹⁰⁰ Another important aspect of environmental framework legislation is that it is possible for each country within the region to regulate its own needs by way of sectoral-specific legislation that may differ between countries in order to account for the differences in legal and administrative regimes.¹⁰¹

2.3.2.3 Intra-governmental co-operation

Intra-governmental co-ordination of environmental management¹⁰² encompasses both horizontal alignment between independent, sectoral-specific line ministries and vertical alignment between the three spheres of government, as far as sustainability policy issues and principles are concerned.¹⁰³ According to UNEP:

The ultimate aim of the institutional initiatives ... is to design and apply environmental policy for sustainable development as a collective undertaking of the entire State organisation, regardless of management level or specificity.¹⁰⁴

Another important element of intra-governmental co-operation is the establishment of co-operative structures between different levels and spheres of government.¹⁰⁵ It is evident that environmental issues are of a complex and multi-faceted nature and that they cannot be addressed by a single institution.¹⁰⁶ In order for the implementation

99 See fn 99 above.

100 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 10

101 Iqbal 'Recent Trends in National Environmental Legislation' 12-13.

102 The concept environmental management has changed significantly over time and it continues to evolve. A generic and succinct definition of the concept remains elusive. See Nel and Kotze 'Environmental Management; an Introduction' 21. Also see Rabie 'Nature and scope of Environmental Law' 92.

103 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 10.

104 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 10

105 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 10.

106 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 10.

of environmental legislation to be effective appropriate institutional mechanisms must be in place. It is proposed that there should amongst others be an inter-ministerial council, an environment ministry or authority/agency, and different environmental planning committees on national and district levels.¹⁰⁷ However, for institutions to be established, it is necessary that there are sufficient human and financial resources available. If not, it is suggested that consideration should be given to the current structures of environmental governance.¹⁰⁸

Such institutions should primarily deal with the following aspects: national policy formulation, goals and objectives, and the promotion and facilitation of co-ordination and co-operation.¹⁰⁹

A national environmental action plan would be prepared by the national environmental action plan committee/commission, and would be updated every three to five years.¹¹⁰ It is suggested that framework legislation should also make provision for district environmental committees to ensure vertical co-operation to the lowest participant in the community.¹¹¹

2.3.2.4 Management by outsiders – arrangements outside formal government

One of the fundamental principles of 'modern environmental governance' is the deployment of various mechanisms and tools which enable outsiders to participate in environmental governance.¹¹² In this regard, two strategies are identified. The first strategy deals with the empowerment of civil society, while the second allows for

107 Iqbal 'Recent Trends in National Environmental Legislation' 6.

108 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 10.

109 Iqbal 'Recent Trends in National Environmental Legislation' 7.

110 This committee may consist out of representatives of all government ministries, business committees, representatives of universities, NGOs, industries and research institutes. This commission/committee integrates activities on a horizontal level between various competencies. See Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 10-11.

111 These committees may consist of representatives from government departments, local authorities, the business community, farmers, NGOs and any other persons who may assist the committee in preparing a district environmental action plan. The committees would have to liaise with and report to the national action plan committee /commission. See Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 11.

112 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 11.

agreements between the environmental lead agent and other spheres of government, the private sector, and private individuals or juristic persons.¹¹³

2.3.3 *The environmental lead agency*

According to Iqbal,¹¹⁴ environmental framework legislation should make provision *inter alia* for the establishment of an environment ministry, authority or agency that co-ordinates, monitors and supervises environmental activities, implements environmental policy, ensures the integration of environmental concerns in national planning, initiates legislation, sets standards, reviews EIAs and promotes environmental awareness programmes. This institution should strive to ensure that public participation¹¹⁵ takes place and that this process is properly conducted and administered. It has been established by this institution that there are three possible environment lead agent scenarios that may be identified. The first scenario deals with the increased centralisation of environmental control at a national level, while the second deals with the vertical devolution of power to provincial and local government. The third scenario deals with the horizontal decentralisation between various environmental line functionaries. In terms of the latter it can be argued that the allocation of powers to a lead agent in terms of environmental framework legislation will be different for the three generic models identified, but this will depend on the administrative and legislative dispensation of a particular country. Moreover, can it be argued that:

113 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 11.

114 Iqbal 'Recent Trends in National Environmental Legislation' 8.

115 When reading environmental legislation, it is suggested that the notion of public participation should rather be interpreted as 'public involvement'. Interested and affected parties (the public) have the right to be heard and to be informed about environmental matters affecting their environmental rights. However, it should be noted that there is no provision enabling them to take part in the decision-making process. In accommodating the public with regard to the decision-making process, provision should be made for administrative review and an appeal process. When looking at the NEMA, it refers to public participation. This ought to be interpreted as public involvement.

Powers may vary between coercive enforcement of national norms and standards by the lead agent to the recognition of the autonomous competencies of various environmentally related issues.¹¹⁶

In terms of the latter model, the environmental lead agent has the task to ensure that the independent line functions of the executive align their activities in accordance with general policy and principles and needs to guide them in that regard.¹¹⁷ The outcome of the latter strategy is that it allows for co-operation and alignment between fragmented competencies without depriving them of their autonomy to act.¹¹⁸

2.3.4 Defining roles, responsibilities and authorities

In order to prevent conflict and the inadvertent omission of duties, it is of the utmost importance that the roles, responsibilities and authorities of the various spheres of government, as well as of the various executive competencies, should be clearly defined. This is of particular importance in a fragmented and decentralised environmental governance dispensation.¹¹⁹

2.3.5 Conflict resolution

116 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 12. NEMA makes provision for the designation of environmental management inspectors (EMIs) in the national, provincial and local spheres of government and other organs of state. This, however, gives rise to vertical fragmentation. Whereas the Department of Environmental Affairs and Tourism (DEAT) is considered to be the lead 'compliance and enforcement' agency in South Africa, its functions and those of the EMIs are limited to enforcing the NEMA and sector-specific legislation. In other words, the DEAT and EMIs cannot enforce compliance with important environmental laws governing issues such as minerals, fresh water, forestry, agriculture and heritage. These fall within the ambit of the Department of Minerals and Energy (DME), the Department of Water Affairs and Forestry (DWAF), the Department of Agriculture (DAgric) and the South African Heritage Resources Agency (SAHRA) respectively. See Kotzé 'Environmental Governance' 113.

117 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 12.

118 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 12.

119 Iqbal 'Recent Trends in National Environmental Legislation' 8 .

One of the most important aspects of environmental framework legislation is that it should make provision for conflict resolution between organs of state.¹²⁰ If sector-specific legislation in terms of which any line function exercises its prescribed authority is in conflict with environmental framework legislation, the latter should prevail.¹²¹ In this regard it is concluded that environmental framework legislation must make provision to define and establish mechanisms for conflict resolution, should conflict occur. However, it should be noted that sector-specific legislation does contain provisions which recognise environmental framework legislation as the prevailing law if it so happens that a provision in the relevant sector-specific act is in conflict with the NEMA (environmental framework legislation).

2.3.6 *Benefitting the environment*

One of the most fundamental achievements of environmental framework legislation should be tangible benefits to the environment. With regard to the latter, Du Plessis and Nel quote UNEP as follows:

The benefits of legislation are measured by their efficiency and their effectiveness. The former refers to the degree to which behaviour is regulated; in other words, the intrinsic capacity of the norms to achieve the objectives sought. The latter refers to the degree of social effectiveness actually achieved. In the specific case of environmental laws, the latter is particularly important, since it usually refers to changes in social behaviour which are deeply rooted and inconsistent with the concept of environmental protection and sustainable development.¹²²

Another fundamental tenet of environmental framework legislation is to ensure the improvement of opportunities to contribute to the enhancement of environmental quality. The combination of co-operative governance and the integration of multiple

120 This may include *inter alia* conciliation, mediation and arbitration as forms of dispute resolution pertaining to environmental issues. See Kidd *Environmental Law* 42. Conflict management or conflict resolution is contained in chapter 4 of the NEMA.

121 Iqbal 'Recent Trends in National Environmental Legislation' 8. Sector-specific legislation usually contains a section that stipulates that where a section therein is in contradiction with framework legislation, in this case the NEMA, the latter will ultimately prevail. Also see s 146 of the Constitution.

122 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 19.

environmental governance and management tools are necessary to ensure the successful achievement of the enhancement of environmental quality.¹²³

2.4 Conclusion

In South Africa, the importance of environmental law, as a distinct branch of law, is reflected by section 24 of the Constitution. In terms of the latter section the state is obligated to establish legislative (framework law and legislation) and other reasonable measure to ensure that the environment is protected through law – giving effect to the Constitution and ensuring the promotion of sustainable development. As stated previously, NEMA is an example of environmental framework legislation aimed at giving effect to the Constitution by affording environmental protection and ensuring the promotion of sustainable development.

Framework legislation aims to define overarching and generic principles into which sectoral-specific legislation is embedded, and furthermore, enhance co-operative environmental governance. Framework legislation also provides general basic norms that may be used to introduce new (environmental) legislation or to amend or maintain existing legislation.

It is found that environmental framework legislation is subject to certain characteristics in order for it to be acknowledged as framework legislation. Firstly, it must contain the generic elements of 'legislation'. Secondly, it should be flexible to ensure to provide a broad and flexible framework to address environmental issues and for responding and adapting to changes in socio-economic and ecological spheres. Thirdly, environmental framework legislation should be dedicated to sector-specific legislation, and lastly it should express broad-based environmental policy and principles.

123 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 19.

Notwithstanding the overarching and flexible nature of environmental framework legislation, it should make provision for broad-based representation and input (public participation and/or public involvement), the establishment of co-operative governance, empowering lead agencies and promoting the innovative integration of environmental management instrument and tools. Public participation and governance (international, inter-regional and intra-governmental) are essential elements (outcomes), if not the most important, in regulating the environment and ensuring the promotion of sustainable development, by and through environmental framework legislation.

Other important elements (outcomes) that should be provided for by environmental framework legislation are the provisions regarding management by outsiders, defining the roles and responsibilities of the different spheres of government (national-, provincial- and local government) and conflict resolution/management. Management by outsiders is important in that civil society need to be part in the governing of the environment - this is realised by the principle of public participation. It is important that the roles, responsibilities and authorities of the various spheres of government, as well as of the various executive competencies, are defined, in order to prevent conflict. Conflict resolution/management is important in ensuring the effective regulation of the environment, especially if there happens to be provisions in sectoral legislation which contradicts the provisions in environmental framework legislation. In such cases, the provisions of environmental framework legislation shall prevail.

It is submitted that environmental framework legislation should comply with the abovementioned characteristics and make provision for the above discussed outcomes, in order to be acknowledged as framework legislation and to ensure the effective regulation of the environment.

3 The NEMA as environmental framework legislation

3.1 Introduction

In this section the NEMA will be scrutinised to establish if it has the characteristics and purposes of environmental framework legislation. The NEMA, for example, was formulated and established in accordance with section 24 of the Constitution, in order to give effect to people's environmental right and ensure the promotion of sustainable development. This environmental right and the promotion of sustainable development will be dealt with in more detail below.¹²⁴

This discussion will focus mainly on defining framework legislation and describing how it (in this case, the NEMA) fits into environmental law, the characteristics of framework legislation and the intended achievements of framework legislation, as these elements are of fundamental importance in the formulation and establishment of environmental framework legislation. This will lay the basis for the formulation and establishment of applicable legislation for renewable energy in South Africa. However, it is important to remember that the purpose of these characteristics and intended achievements is connected to certain principles¹²⁵ which are important in framework legislation and subsequently, the formulation and establishment of applicable legislation for renewable energy. This will lead to the answer to the question of what should be included in the framework legislation aimed at regulating renewable energy in South Africa.

3.2 Characteristics

In the light of the figure above, it is evident that the NEMA was designed with the purpose of serving as framework legislation. It was drafted in a manner conducive to its being supported by sector-specific subordinate legislation. This implies that the NEMA also deals with some sector-specific issues, such as waste management, for

124 See paragraph 2.2.4.1 below.

125 These principles are dealt with extensively throughout this mini-dissertation and lead to the answering of the research question in chapter 6.

example. The NEMA does not define the notion of policy, neither does it make provision with regard to the formulation of environmental policy. With regard to the latter it is noteworthy that section 2 of the *Environmental Conservation Act*,¹²⁶ empowered the Minister to issue an environmental policy by means of a regulation.¹²⁷ Such policy is regarded as subordinate legislation.¹²⁸ It has been determined that the extended list of generic principles ensures the achievement of flexibility.¹²⁹

It has furthermore been determined that the NEMA supports the principle of sustainability and the attendant rights.¹³⁰ In terms of section 2 of the NEMA all actions and decisions of organs of state¹³¹ that may significantly affect the environment¹³² must be in accordance with the principle of sustainability, which can be interpreted in accordance with socio-economic and environmental conditions, so as to ensure environmental quality and give effect to section 24 of the Constitution. The principles contemplated in section 2 of the NEMA serve as a 'general framework' in terms of which environmental management and implementation plans¹³³ should be formulated, as well as guidelines for government departments in exercising their prescribed functions in terms of any other legislation.¹³⁴

3.3 The purpose of the NEMA

The current version of the NEMA conforms to the intended purposes of environmental framework legislation.

126 73 of 1989. Hereafter referred to as ECA.

127 GN 51 in GG 15428 of 21 January 1994.

128 See Peart and Wilson 1998 *South African Journal of Environmental Law and Policy* 237-267.

129 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 20.

130 These rights include *inter alia* the right to an environment that is not harmful to their health or well-being; the right to sue; the right of workers to be protected; the right of access to information; and protection of whistleblowers. See table 1 – Sustainability principles and rights - Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 6-7.

131 S 239 of the Constitution.

132 S 2(1) of NEMA.

133 S 11 of NEMA.

134 S 2(1)(b)-(c).

3.3.1 *The provision for broad-based representation and input*

Before the enactment of the NEMA, the Act which most closely resembled framework legislation was the ECA.¹³⁵ Because the ECA did not give effect to the environmental right as contemplated in section 24 of the Constitution, it became apparent that a new framework environmental Act was needed. The NEMA grew out of the environmental policy development process known as the Consultative National Environmental Policy Process (CONNEPP).¹³⁶ The CONNEPP process resulted in the publication of the *White Paper on Environmental management policy for South Africa*, which formed the basis of the NEMA.¹³⁷

In the light of the foregoing it is clear that the information collection process that preceded the drafting of the NEMA led to a precedent being set in South Africa. In principle it serves as an example of consultation and participation by a broad-based stakeholder group as being a necessary preliminary to the drafting of legislation.¹³⁸

3.3.2 *Co-operative governance – An environmental perspective*

3.3.2.1 International and inter-regional alignment¹³⁹

The Constitution makes provision for the adoption of international instruments and their application in national law and is also regulated thereby.¹⁴⁰ The Minister may in his discretion make recommendations to both the parliament and cabinet to accede to or ratify international environmental instruments, publish the provisions of the international environmental instruments in the *Government Gazette*, or introduce legislation to give effect to the latter instruments.

135 Act 73 of 1989. See Kidd *Environmental Law* 35.

136 Kidd *Environmental Law* 35.

137 Kidd *Environmental Law* 35.

138 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 21.

139 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 21.

140 S 231-233 of the Constitution.

Chapter 6 of the NEMA seeks to bring South Africa in line with the international standards of environmental management. The NEMA specifically deals with issues relating to South Africa's joining of international environmental conventions, as well as their domestic implementation. It places an obligation on the Minister to submit annual reports to Parliament *inter alia* on international environmental instruments for which he or she is responsible and the progress made in implementing them.¹⁴¹ The NEMA furthermore obliges the Minister to initiate an Annual Performance Report on sustainable development to meet the government's commitment in terms of Agenda 21.¹⁴² This report must, however, cover all the activities of all national departments and spheres of government with respect to their performance under Agenda 21, as well as the prescribed procedures of review for the co-ordination of policies and budgets to meet the objectives of Agenda 21, and must furthermore review progress on public educational programmes supporting the objectives of Agenda 21.¹⁴³

As far as international environmental instruments are concerned, it is clear in the light of the above that the NEMA conforms to the requirements of environmental framework legislation. It is also clear that the NEMA makes provision for arrangements to ensure participation in negotiations and to implement international or regional agreements, as well as to measure and report on the progress thereof.

3.3.2.2 Co-operative governance in South Africa

One of the more important objectives provided for in the Constitution is co-operative governance. The Constitution specifically requires the three distinct spheres of government to govern in an interdependent, interrelated manner.¹⁴⁴ In order for co-operative governance to be effective, it is necessary that it should function both vertically and horizontally among the three spheres of government.

141 This must be understood against the background of international co-operation.

142 Agenda 21 is known as a complicated, massive document linking development and environmental action through the whole international community, aimed at fulfilling basic needs, living standards and protected ecosystems for a safer and prosperous future. Kidd *Environmental Law* 56.

143 Kidd *Environmental Law* 42.

144 Chapter 3 of the Constitution.

3.3.2.3 The establishment of co-operative governance structures

The purpose of the NEMA, as formulated in its long title, is:

To provide for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state; to provide for certain aspects of the administration and enforcement of other environmental management laws; and to provide for matters connected therewith.

Co-operative governance is promoted and achieved through the establishment of a National Environmental Forum and a Committee for Environmental Co-ordination.¹⁴⁵

As framework law the NEMA made provision for the establishment of two institutions – the National Environmental Advisory Forum (NEAF) and the Committee for Environmental Co-ordination (CEC).¹⁴⁶ The purpose of the NEAF was to allow interested and affected parties to inform the Minister with regard to the application of the relevant principles; and the object of the CEC was to promote the integration and co-ordination of environmental functions by organs of state, and to promote the application of environmental management plans (EMPs) and environmental Implementation plans (EIPs).¹⁴⁷ The relevant provisions were repealed, however, by the *National Environmental Laws Amendment Act*,¹⁴⁸ which led to the insertion of a new section which empowers the Minister to ‘establish any forum or advisory committee’.¹⁴⁹

In the light of the above it is evident that the NEMA makes provision for intra-governmental co-ordination at national level as well as between the national, provincial and local levels to a certain extent. However, it has been ascertained that

145 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 22.

146 Glazewski ‘The National Environmental Management Act’ 14.

147 Glazewski ‘The National Environmental Management Act’ 14.

148 14 of 2009. See Glazewski ‘The National Environmental Management Act’ 14.

149 S 3A of NEMA. See Glazewski ‘The National Environmental Management Act’ 14.

the NEMA does not make any specific provision for horizontal co-ordination at the local level by means of environmental planning committees.¹⁵⁰

3.3.2.4 Environmental management and implementation plans

Considering the importance of EMPs¹⁵¹ and EIPs,¹⁵² it has been established that the NEMA makes provision therefore and requires identified organs of state to use and apply the latter mechanisms in order to ensure that their diverse line function activities¹⁵³ are performed in compliance with the principles contemplated in the NEMA.¹⁵⁴ The purpose of both EMPs and EIPs is set out in some detail.¹⁵⁵ The NEMA requires that the environmental plans, policies, programmes and decisions of national, provincial and local tiers of government must be co-ordinated and harmonised in order to ensure and promote consistency as well as to minimise duplication.¹⁵⁶ Furthermore, these plans should give effect to the principle of co-operative governance.¹⁵⁷ Another important aspect of these plans is that they should give preference to national interests rather than provincial interests in cases where provincial interests are prejudicial to the interests of the country as a whole.¹⁵⁸ Moreover, the publication of such plans should enable the Minister to monitor the achievement, promotion and protection of a sustainable environment.¹⁵⁹

3.3.2.5 Management by outsiders – arrangements

The NEMA makes provision for management by outsiders outside of the government with the purpose of ensuring that the public is involved in matters relating to the protection of the environment by empowering civil society to do so, as well as by

150 S 11-15 of NEMA; S 23-24 of NEMA.

151 S 14 of NEMA makes provision for the contents of EIPs.

152 S 13 of NEMA makes provision for the contents of EMPs.

153 These diverse line function activities include *inter alia* the framing of policies, programmes, and plans (including legislation).

154 S 11 of NEMA.

155 S 12 of NEMA.

156 S 12(a) of NEMA.

157 S 12(b) of NEMA.

158 S 12(d) of the NEMA.

159 S 12(e) of the NEMA.

ensuring that civil society is represented in the NEAF.¹⁶⁰ The NEAF functions as an advisory body only, which means that civil society is empowered only to make inputs to the Minister and not to participate in the decision-making process *per se* with regard to matters relating to the protection of the environment and environmental governance.¹⁶¹ The NEMA is silent, however, on the procedural arrangements which are required in ensuring meaningful public participation.¹⁶²

When one reads the NEMA together with the relevant constitutional rights,¹⁶³ it becomes quite evident that it contains extensive arrangements to enable and/or empower the public to be involved in the protection of the environment, and to ensure that the public makes an important contribution to any activities relating to the protection of the environment. The idea, here, is that the government cannot protect the environment alone – nor should it be required to do so, as protecting the environment is the intimate responsibility of every member of society. The latter principle entails the promotion of improved public awareness regarding environmental matters. The NEMA also contains a number of provisions which the public can rely on in making a contribution towards environmental protection, including improved *locus standi*,¹⁶⁴ class actions,¹⁶⁵ private prosecutions,¹⁶⁶ beneficial cost instruments,¹⁶⁷ and green rights,¹⁶⁸ as well as the protection of whistle blowers and the right of access to environmental information.¹⁶⁹ The right of access to information held by the state and private companies is also formulated in the *Promotion of Access to Information Act*,¹⁷⁰ and can be regarded as one of the more important rights available to members of the public, as those who wish to enforce

160 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 24.

161 S 2(4)(f) of the NEMA.

162 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 24.

163 S 24, right to an environment that is not detrimental to people's health and well-being; S 32, the right of access to information (Also see PAIA in this regard, as it could be very useful in getting information from the state pertaining to environment-related matters which are of public concern); S 33, the right to administrative justice; S 38, *Locus standi*.

164 S 32 of the NEMA.

165 S 32 of the NEMA.

166 S 33 of the NEMA.

167 S 33(3)-(4) and S 34(4) of the NEMA.

168 S 2(4) of the NEMA read together with s 32 of the Constitution.

169 S 31(3)-(8) of the NEMA. See also Kidd *Environmental Law* 42-43.

170 Act 2 of 2000.

environmental law will often require information in order to do so effectively.¹⁷¹ NEMA does not make provision for the collection, analysis and active dissemination of environmental information held by the state. The only exception to this position is the Agenda 21 report, which has to be published by the state in terms of section 2(b).¹⁷²

Another instrument which is aimed at the enhancement of environmental management by outsiders encompasses mechanisms for controlled self-regulation by means of environmental management co-operation agreements (EMCAs).¹⁷³ These agreements are provided for in chapter 8 of the NEMA, which authorises the Minister, provincial governments and local authorities to enter into EMCAs with any person¹⁷⁴ or community for the purpose of promoting compliance with the principles of environmental management.¹⁷⁵

3.3.3 Roles, responsibilities and authorities¹⁷⁶

One of the most salient inadequacies of the NEMA is the fact that there is no clear definition with regard to the roles, responsibilities and authorities of different environment-related line functions or between the various spheres of government. For instance, both the NEMA and the *National Water Act*¹⁷⁷ make provision for the control of emergency incidents.¹⁷⁸ This could give rise to a conflict situation between the two departments if one or the other department or even a private person decides to investigate the particular incident in order to either negate or reduce the other department's authority.¹⁷⁹ Another fundamental issue is the inadequacy of the passages relating to the establishment or the formalisation of procedural

171 Kidd *Environmental Law* 27.

172 S 26(2)(a) and S 26(2)(b)(i) and (ii) of the NEMA. See Glazewski 'The Environmental Management Act' 20..

173 S 35 of the NEMA. See Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 25. Also see Kidd *Environmental Law* 43.

174 Including a juristic person. See s1(1)(xxiii) of the NEMA.

175 Kidd *Environmental Law* 43.

176 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 27.

177 36 of 1998.

178 S 30 and S 20, respectively.

179 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 27.

arrangements in respect of various departments that have joint jurisdiction over a particular activity. The NEMA does not contain provisions on making pro-active arrangements to avoid such conflict.¹⁸⁰

3.3.4 Conflict management

There are various ways in which conflict can arise between government departments. Conflict could arise from conflicting legislation or conflicting provisions therein or disjunctures in administrative practices, or between stakeholders with conflicting interests, or between developers and the competent authorities. The NEMA includes a number of provisions on dispute resolution.¹⁸¹ When conflict arises between departments in the same sphere and between different spheres of government, or among stakeholders and developers, this may be addressed and resolved by implementing mechanisms such as conflict resolution, arbitration and court action.¹⁸²

The Constitution makes explicit provision for the regulation of the relationship between national and provincial legislation,¹⁸³ but not in respect of conflict that may arise in the case of conflicting national legislation or on the other hand, conflict between state organs within the same sphere of governance.¹⁸⁴ One needs to bear in mind that if it so happens that conflict originates between statutes, as a result of the wording of the different statutes, then the rules regulating the interpretation of statutes have to be implemented in order to resolve the issue.¹⁸⁵ The Constitution does not contain a provision that framework legislation on a national level has preference over other legislation, but it does contain a provision that national

180 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 27.

181 Glazewski 'The National Environmental Management Act' 20. Also see Glazewski *et al* 'Compliance with and Enforcement of Environmental Laws' 1-56.

182 S 17-19 of the NEMA.

183 S 146-150 of the Constitution.

184 In terms of s 139 of the Constitution, a provincial executive may (on a vertical level) intervene to ensure that a municipality fulfils its obligations imposed on it by law. With regard to the latter, the national executive may in the same manner, in terms of s 100 of the Constitution, intervene in a province.

185 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 27.

framework legislation has preference over provincial legislation.¹⁸⁶ One could argue that a Constitutional revision or amendment is required to give preference to framework legislation. Nonetheless, one could come to a fair and reasonable conclusion that the NEMA does not enjoy preference over all sector-specific legislation, although it serves as environmental framework legislation.

3.4 Conclusion

In the light of the above discussion it is evident that the NEMA serves as environmental framework legislation. With regard to the preamble of the NEMA, it should be noted that it expressly refers to the environmental right contemplated in section 24 of the Constitution and it is also evident from the preamble that the NEMA is aimed at giving effect to the relevant fundamental right at framework level.¹⁸⁷ In terms of international environmental framework legislation, one could argue that it forms the basis for the formulation of environmental framework legislation, as it contains certain generic characteristics that are found in the theory of environmental legislation. Moreover, environmental legislation is flexible, deals with the issue of overarching as well as sector-specific issues, and includes policy and or principles. It is found that the NEMA complies more or less with these characteristics. With regard to the sustainability principles imposed by international environmental framework legislation, it has been ascertained that the provisions of the NEMA compare well with the international sustainability principles. The principles are foregrounded in section 2 of the NEMA. They can be seen as the foundation for the formulation of environmental legislation and are accompanied by the other generic characteristics of environmental framework legislation. It is thus submitted that framework legislation for renewable energy in South Africa should be formulated in accordance with these principles and characteristics.

186 S 146(2)(b) of the Constitution.

187 See *Kidd Environmental Law* 35. Also see *MEC, Department of Agriculture, Conservation and Environment v HTF Developers (Pty) Ltd* 2008 2 SA 319 (CC) at para 24.

4 Renewable energy law in South-Africa

This chapter will look at energy law and how renewable energy fits into energy law as a distinct branch of energy law coupled with environmental law. It will also look at energy law from a constitutional perspective to ascertain the importance of the regulation of renewable energy in order to promote sustainable development and to give effect to section 24 of the Constitution. In relation thereto, there will also be a discussion on energy generation in South Africa in order to give an overview of the current usage and generation of energy, as well as to establish the importance of the use of renewable energy. This precedes a discussion of renewable energy policy, in terms of which normative principles will be identified, with the focus being on what (principles) should be included in framework legislation aimed at regulating renewable energy.

4.1 *Introducing energy law*

According to Glazewski,¹⁸⁸ energy law is regarded as the “collection of different branches of the law relating to energy production, conservation and utilisation”. It is evident that energy law is inherently connected to environmental law, being concerned with resource use, conservation and atmospheric pollution.¹⁸⁹ Bradbrook defines energy law as follows:

The allocation of rights and duties concerning the exploitation of all energy sources between individuals and the government, between governments, and between states.¹⁹⁰

Bradbrook also adopts the notion of ‘energy sources’, which he divides into two categories, namely primary and secondary sources.¹⁹¹ Primary sources include *inter alia* non-renewable and finite sources, such as coal, oil, natural gas and uranium, as

188 Du Toit and Glazewski ‘Energy Law and the Environment’ 3.

189 Du Toit and Glazewski ‘Energy Law and the Environment’ 3.

190 Bradbrook 1996 *Journal of Energy and Natural Resources Law* 194.

191 Bradbrook 1996 *Journal of Energy and Natural Resources Law* 194.

well as non-finite energy reserves (renewable energy), such as solar energy, wind energy, wave energy, tidal energy, ocean thermal energy, hydro-electricity, biomass, hydrogen and geothermal energy; whilst secondary sources consists of electricity and energy conservation.¹⁹²

In the current South African context there is no ‘umbrella’ statute which provides an overarching legal framework for renewable energy in South Africa.¹⁹³ However, it must be pointed out that in South African renewable energy law there are various pieces of legislation and policy documents dealing with a wide range of issues related to renewable energy and aimed at regulating renewable energy. The issues referred to include *inter alia* the pricing and licensing requirements;¹⁹⁴ procurement;¹⁹⁵ the mitigating effects of the implementation of renewable energy;¹⁹⁶ the establishment of a national energy regulator;¹⁹⁷ and fiscal matters such as tax and revenue.¹⁹⁸ All of these issues are important from an energy law perspective, but it is not the purpose of this chapter to give a full analytical discussion of how they fit into South African renewable energy law and policy.

4.2 Energy law - a constitutional perspective

South Africa’s legal system was brought into a new era in 1994 with the enactment of a new Constitution including a bill of fundamental human rights.¹⁹⁹ When reading the Constitution one can identify the various aspects which are of fundamental importance to South African environmental law.²⁰⁰ The most noteworthy is the

192 Bradbrook 1996 *Journal of Energy and Natural Resources Law* 194.

193 See paragraph 2.2.3 above.

194 *Renewable Energy Feed-in-Tariff Regulatory Guidelines* of 2009.

195 *Renewable Energy Independent Power Producer Programme* (2011).

196 *Medium Term Risk Mitigation Project for Electricity in South Africa* (2010 – 2016), which is also closely related to the provisions of the *Integrated Resource Plan for Electricity* (2010 – 2030).

197 *National Energy Regulator Act* 40 of 2004. Related to Act 40 of 2004 are the provisions contained in the *Electricity Regulation Act* 4 of 2006. These Acts will be dealt with below.

198 A Framework for Considering Market-Based Instruments to support Environmental Fiscal Reform in *South Africa National Treasury Draft Policy Paper on Market-Based Instruments* of 2006 and the *Carbon Tax Policy Paper* of 2010.

199 Kidd *Environmental Law* 20.

200 Kidd *Environmental Law* 20.

environmental right contained in section 24 of the Constitution.²⁰¹ As stated previously, section 24 provides a clear and prominent indication of the correlation between environmental regulation concerning the protection of the environment and the promotion of sustainable development.²⁰² Section 24 imposes a constitutional imperative on the State to establish and implement measures aimed at the promotion of sustainable development and the sustainable use of natural resources, while providing for the protection of the environment for the benefit of present and future generations.²⁰³ In the case of *Government of the Republic of South Africa v Grootboom*²⁰⁴ the Constitutional Court had an opportunity to consider how the state was to meet this type of constitutional obligation, albeit not in the environmental field. The court made the following finding:

The state is required to take reasonable legislative and other measures. Legislative measures by themselves are not likely to constitute constitutional compliance. Mere legislation is not enough. The State is obliged to act to achieve the intended result, and the legislative measures will invariably have to be supported by appropriate, well-directed policies and programs implemented by the Executive. These policies and programs must be reasonable both in their conception and their implementation. The formulation of a program is only the first stage in meeting the State's obligations. The program must also be reasonably implemented. An otherwise reasonable program that is not implemented reasonably will not constitute compliance with the State's obligations.²⁰⁵

In the light of the above it is evident that the legislative measures mandated by section 24 of the Constitution should be geared towards the facilitation of the promotion of sustainable development.²⁰⁶ Falling within the ambit of the legislative measures contemplated in section 24 of the Constitution is framework legislation. The NEMA is the most prominent and classic example of framework legislation and more specifically of environmental framework legislation.²⁰⁷

201 Kidd *Environmental Law* 20.

202 See chapter 1 above

203 Section 24(b) of the Constitution.

204 2001 1 SA 46 (CC). (Hereinafter referred to as the *Grootboom* case).

205 2001 1 SA 46 (CC) para 42.

206 See chapter 1 above.

207 See the whole of chapter 2 above.

Moreover, the Constitution makes provision for and determines the respective roles of the three spheres of government, national, provincial and local, in South Africa, which enjoys a quasi-federal system of government. In terms of the Constitution, all of these spheres of government are under an obligation to:

exercise their powers and perform their functions in a manner that does not encroach on the geographical, functional or institutional integrity of government in another sphere.²⁰⁸

Furthermore, chapter 3 of the Constitution, entitled “Co-operative Government”, sets out a set of eight principles of co-operative government and intergovernmental relations.²⁰⁹ In addition thereto, the Constitution sets out the the legislative and executive functions of the three spheres of government in general terms.²¹⁰ Schedule 4 makes provision for a list of the ‘Functional Areas of Concurrent National and Provincial Legislative Competence’ while Schedule 5 makes provision for a list of the ‘Functional Areas of Exclusive Provincial Legislative Competence’. Both of these schedules are divided into Parts A and B to deal with local authority competencies. Each of these schedules contains a number of items related to environmental management; however, the only reference to energy made in the latter schedules is the item ‘electricity and gas reticulation’ which is found in Part B of Schedule 4 of the Constitution. According to Glazewski,²¹¹ the implication of this absence is that energy matters generally and renewable energy more specifically are by default national matters which are to be administered by the DME.

Significantly, recent legislation enacted by the DME wholeheartedly embraces the principle of sustainable development referred to in section 24(b)(iii) of the environmental right.²¹² In this regard an example would be the *Mineral and Petroleum Resources Development Act* (MPRDA),²¹³ which gives prominence to sustainable development in South African mining legislation, which is defined in the latter Act as follows:

208 S 41(1)(g) of the Constitution.

209 S 41(1) of the Constitution.

210 Chapters 5 and 6 of the Constitution, respectively.

211 Glazewski 2005 ‘The Legal Framework for Renewable Energy in South Africa’ 3.

212 Glazewski 2005 ‘The Legal Framework for Renewable Energy in South Africa’ 3.

213 28 of 2002.

the integration of social, economic, and environmental factors into planning, implementation and decision making so as to ensure that mineral and petroleum resources development serves present and future generations.²¹⁴

In the light of the above it is evident that the State has the duty to establish and implement reasonable measures in order to give effect to the environmental right as contemplated in section 24 of the Constitution. The mere establishment of legislation would not necessarily constitute constitutional compliance by the State. The State is under an obligation to realise the intended achievement, by promoting and ensuring 'sustainable development'.²¹⁵ This implies that environmental legislation, including environmental framework legislation, should be geared towards the facilitation of 'sustainable development' to ensure and promote the sustainable use of natural resources while providing for the protection of the environment for the benefit of the present and future generations.²¹⁶ It is thus evident that the principle of sustainable development serves as the fundamental building block of environmental legislation and environmental framework legislation. Therefore it is concluded that framework legislation for renewable energy in South Africa should be formulated and established to be geared towards the facilitation of sustainable development.

4.3 Energy generation in South Africa

The White Paper of 1998, which was published prior to the energy shortages during the early 2000s, indicated that South Africa has abundant energy resources.²¹⁷ It indicated *inter alia* that fossil fuels such as coal, uranium, liquid fuels, and gas play an important role in the industrial and social development of South Africa, whilst simultaneously establishing an infrastructural economic base to encourage foreign investment.²¹⁸ The White Paper of 1998 also indicated that biomass forms the main

214 S 1 of the MPRDA.

215 *Grootboom* case para 42.

216 Section 24(b) of the Constitution.

217 See paragraph 1 of the White Paper of 1998.

218 See paragraph 1 of the White Paper of 1998.

energy source in rural areas, but that there are also renewable energy development opportunities, such as solar and wind power.²¹⁹

The White Paper of 1998 also emphasised that all energy carriers should strive to ensure sustainable economic growth and development.²²⁰ Many of the sectors contributing to the GDP are heavily reliant on these energy carriers.²²¹ For example, the manufacturing industry, (which contributes around 25% to the GDP) and the mining sector (which contributes around 10% to the GDP) are heavily reliant on the consumption of electricity.²²² As a matter of fact, South African industry as a whole consumes a massive 40% of the total electricity generated, thus making it the chief energy consumer in the country.²²³

The White Paper of 1998 also points out the problems and challenges facing the electricity sub-sector.²²⁴ It pointed out that at the time of the publication approximately 40% of all households had not been electrified. (The situation has changed over the last decade, and the figure now stands at approximately 25%.)²²⁵ On the other hand, it was able to make the point that the electrification targets set for schools and clinics had been reached.²²⁶

South Africa's dependence on coal-based electricity generation results in significant pollution and has major impacts on climate change.²²⁷ Research has shown that in the past electricity was used wastefully rather than sparingly, due to the perception that it was a cheap commodity, but the picture has changed a lot in the last decade.²²⁸ According to Du Toit and Glazewski²²⁹ it was generally accepted that the cheap electricity prices in South Africa excluded externalities, which refer *inter alia* to

219 See paragraph 1 of the White Paper of 1998.

220 See paragraph 1 of the White Paper of 1998.

221 See paragraph 1 of the White Paper of 1998.

222 See paragraph 1 of the White Paper of 1998.

223 See paragraph 2 of the White Paper of 1998.

224 See paragraph 2 of the White Paper of 1998.

225 Department of Energy 2009 Electrification Statistics (available at http://www.energy.gov.za/files/media/explained/statistics_electrification_2009.pdf) at 10 accessed at 1 May 2014.

226 See paragraph 2 of the White Paper of 1998.

227 Du Toit and Glazewski 'Energy Law and the Environment' 6.

228 Du Toit and Glazewski 'Energy Law and the Environment' 6-7.

229 Du Toit and Glazewski 'Energy Law and the Environment' 7.

costs arising from the pollution caused by the coal-generated electricity. However, it has been argued that such external costs should be included in the price of electricity,²³⁰ as some type of penalty or remediation payment relating to the polluter pays principle.²³¹

The White Paper of 2004 stressed the need to promote and more specifically, optimise the use of renewable energy resources²³² and to integrate their use into the mainstream energy economy.²³³ Renewable energy technologies are somewhat underdeveloped in comparison with the traditional energy generating options. With regard to the latter, the comparison indicates that renewable energy technologies are more costly and are considered to be risky investments.²³⁴ However, the White Paper of 2004 suggests that conditions should be created for the purpose of development as well as the commercial implementation of appropriate technologies.²³⁵ In this regard it set a target for the contribution to be made by renewable energy of 10 000 GWh to the total energy consumption by 2013, which in fact amounts to 4% of the projected electricity supply.²³⁶ According to the White Paper of 2004, the renewable energy will be produced *inter alia* from biomass,²³⁷ wind,²³⁸ solar,²³⁹ and small-scale hydro-electric power,²⁴⁰ as well as biogas and

230 Du Toit and Glazewski 'Energy Law and the Environment' 7.

231 See chapter 4 of the White Paper of 2004.

232 See the Deputy Minister's foreword in the White Paper of 2004.

233 See the Deputy Minister's foreword in the White Paper of 2004.

234 See the Deputy Minister's foreword in the White Paper of 2004.

235 See the Deputy Minister's foreword in the White Paper of 2004.

236 See the Deputy Minister's foreword in the White Paper of 2004.

237 Biomass includes *inter alia* firewood, wood waste, dung, charcoal and bagasse. Biomass accounts for approximately 10% of the net national energy use and for approximately 60% of household energy consumption. In South Africa the high rate of poverty is a reality and one can conclude that that is why biomass is used as a primary source of energy, especially in rural areas. See paragraph 7.7 of the White Paper of 1998.

238 Numerous experimental wind farms have been built. They are considered to be suitable for both small-scale battery charging systems and well as large-scale battery charging systems. For example, a 5,2MW wind farm has been established and developed in Darling in the Western Cape. See <http://www.darlingwindfarm.co.za/>. In terms of the IRP 2010-2030, wind energy is to supply 9200 MW, alternatively 10,3%, of South Africa's electricity supply by 2030. See paragraph 7.7 of the White Paper of 1998.

239 South Africa experiences some of the highest levels of solar radiation in the world, yet solar energy currently contributes less than 1% of the country's primary energy needs. However, solar energy has tremendous potential and is, accordingly, the fundamental element of the country's rural energy programme, where millions of people don't have access to the national grid. See paragraph 7.7 of the White Paper of 1998.

240 Hydro-power is commonly perceived as a comparatively clean, low-cost renewable source of energy. It is often favoured by countries that have limited fossil fuels. Although small-scale

landfill gas.²⁴¹ The White Paper of 1998 and the White Paper of 2004 must be read with the *Integrated Resource Plan for Electricity (IRP 2010-2030)*, which will be dealt with below.

4.4 Conclusion

Energy law, as stated previously, is defined as a 'collection of different branches of the law relating to energy production, conservation and utilisation'. In terms of the latter, it is clear that renewable energy can be regarded as a branch of energy law and coupled to environmental law. However, there is to date no pertinent framework legislation for renewable energy in South Africa. Section 24 of the Constitution recognises the importance of establishing legislative measures in order to enhance and ensure environmental protection, and more importantly – sustainable development. Therefore it is clear that the establishment of framework legislation for renewable energy for South Africa falls within the mandate of section 24 of the Constitution. In discussing the generation of energy in South Africa it has been noted that South Africa has abundant energy sources and that there is a need in the energy sector for the promotion of renewable energy. As stated previously, South Africa is heavily reliant on energy sources such as coal, which causes a significant amount of pollution (of air and water) and has a major impact on climate change as well. There is concern, however, in the context of the development of the renewable energy sector, regarding the availability and cost of appropriate renewable energy technologies. Nonetheless, it is still important to promote renewable energy, as South Africa can only benefit from it, especially considering the need to promote sustainable development, which suggests in turn the need for the establishment of framework legislation for renewable energy in South Africa.

and large-scale hydro generators have potential in South Africa, it is indicated that less than 1% of South Africa's energy supply is generated by hydro-power. See paragraph 7.7 of the White Paper of 1998.

241 Biogas and landfill gas address thermal energy needs. It is suggested by the renewables tendering process that these energy sources will play a small role in South Africa's future energy supply. See paragraph 7.7 of the White Paper of 1998.

5 The current renewable energy legal landscape in South Africa

5.1 Introduction

The discussion so far has had to do with energy law as a distinct branch of environmental law, with the Constitutional dimension relating to framework law for renewable energy, and with the background relating to energy generation in South Africa, and it has become clear what renewable energy framework legislation should strive towards, namely sustainable development. The following discussion will be focused on current energy legislation and the various policy documents relating to what is needed for renewable energy framework legislation, by identifying norms and/or principles common to these respective policy documents and energy legislation.

5.2 *National Energy Act 34 of 2008*²⁴²

In the preamble to the NEA it is stated that the increased generation and consumption of renewable energies will be an important contributing factor with regard to the promotion of sustainable development.²⁴³ This necessitates the establishment and/or formulation of an integrated and sustainable energy plan with the purpose of focusing on energy-related issues,²⁴⁴ while taking into account economic, environmental and social factors.²⁴⁵ The latter must also be taken into consideration when establishing framework legislation for renewable energy in South Africa, as they relate to the achievement of sustainable development. The NEA identifies several principles that must be taken into consideration when formulating and/or establishing policy when regulating an integrated energy plan. It should be

242 (Hereinafter referred to as the NEA).

243 The importance thereof is based on ensuring a diverse energy mix that is both affordable and sustainable, but also on contributing towards economic growth and poverty alleviation. See the objects of the NEA as contained in s 2 thereof.

244 These energy-related issues include energy supply; transformation; transport; storage; and the demand for energy. S 6(2) of NEA.

245 These factors include the security of supply; economically available energy sources; affordability; universal accessibility and free basic electricity; social equity; employment; the environment; international commitments; consumer protection and the contribution of the energy supply to socio-economic development. S 6(2)(a) – (j) of NEA.

noted that these principles may and can be included in the framework legislation for renewable energy. The principles referred to in the latter include sustainable development,²⁴⁶ the optimal use of indigenous and regional energy resources,²⁴⁷ a balance between supply and demand,²⁴⁸ economic viability,²⁴⁹ environmental, health, safety and socio-economic impacts,²⁵⁰ and the developmental requirements of the Southern African region.²⁵¹ Moreover, the NEA makes it clear that before an integrated development plan is finalised the Minister has an obligation to invite the public to give their comments thereon as well as to consider such comments. This must be done in accordance with the principles of good governance and public participation.

In assessing the preamble to the NEA it becomes evident that renewable energy (as part of a diverse energy mix) could play an important role with particular regard to the facilitation of economic development and the eradication of poverty. The facilitation of economic development and the eradication of poverty relates to the principles of the eradication of poverty and equity.²⁵² In terms of the NEA the optimal utilisation of energy, necessitates the collection of data and information²⁵³ with the purpose of applying such collected data and information in minimising the adverse impacts regarding the utilisation of energy on human health, safety and the environment.²⁵⁴ The NEA furthermore states that any data and/or information collected with regard to the establishment or formulation of an integrated energy plan must be made available to the general public in terms of the *Promotion of Access to Information Act* and the *Statistics Act* 6 of 1999.²⁵⁵ With particular reference to these provisions, it is evident that such provisions relates to the principles of public participation,²⁵⁶ access to information²⁵⁷ and environmental justice.²⁵⁸ It is also

246 S 6(4)(a) of NEA.

247 S 6(4)(b) of NEA.

248 S 6(4)(c) of NEA.

249 S 6(4)(d) of NEA.

250 S 6(4)(e) of NEA.

251 S 6(4)(f) of NEA.

252 See paragraph 3.3.5 above.

253 S 2(f) of the NEA, which specifically provides for employment as an priority objective and more specifically for the eradication of poverty.

254 S 2(h) of the NEA.

255 S 3 of the NEA.

256 S 2(4)(f) of the NEMA.

257 S 2(4)(k) of the NEMA.

evident that the provisions in the NEA for the minimisation of the adverse impacts pertaining to energy carriers relate to the precautionary approach to human health, natural resources and ecosystems.²⁵⁹

The principles to be applied in establishing an integrated resource plan, as contemplated in the NEA, are related to the principles contained in section 2 of the NEMA (the current environmental framework legislation in South Africa). The latter imposes an obligation on the South African Government to ensure the optimal use of indigenous and regional energy resources²⁶⁰ and the sustainable use of natural resources.²⁶¹ It could be argued that in the light of the reference to regional energy sources in this particular section, the principle of common but differentiated responsibilities²⁶² should also be taken into account in the formulation and/or establishment of an integrated resource plan. However, the consequence thereof might be the possibility that it could transcend the traditional regime of sovereign resource exploitation.²⁶³ The NEA states that economic viability and environmental and social impacts must be taken into account when an integrated resource plan is formulated and/or established, which relates to the principle of sustainable development and the principle of integration,²⁶⁴ which are central to the attainment of sustainable development. In the final instance, the provision requiring the Minister to invite the public to give their insights on the draft integrated resource plan, as stated above, it relates to the principles of public participation, access to information and environmental justice, as well as good governance.

The provisions contained in the NEA with regard to the promulgation of an integrated resource plan led to the drafting of the *Integrated Resource Plan for Electricity*,

258 S 2(4)(c) of the NEMA.

259 S 2(4)(a)(vii) of the NEMA.

260 S 6(4)(b) of NEA. This also relates to the 'public trust principle', which expresses the belief that the environment is held in the public trust for the people, that the beneficial use of environmental resources must serve the public interest (including the optimal use of indigenous and regional energy resources), and that the environment must be protected as the people's common heritage. See s 2(4)(o) of the NEMA.

261 S 24 of the Constitution. See also the preamble and s 2 of the NEMA.

262 See paragraph 3.3.5 above.

263 Barnard 2012 *Potchefstroom Electronic Law Journal* 229.

264 See paragraph 2.2.4 above.

2010–2030 by the South African Department of Energy.²⁶⁵ This document has been released for public commentary, but it has not yet been promulgated into legislation.²⁶⁶

5.3 The Electricity Regulation Act 4 of 2006

The *Electricity Regulation Act* (ERA) is a relatively new Act that repealed the *Electricity Act* 41 of 1987.²⁶⁷ The ERA is mainly concerned with the establishment of a national regulatory framework and with making the National Energy Regulator of South Africa (NERSA) the enforcer of that framework. The latter national regulatory framework for energy can also be brought into the context of framework legislation for renewable energy in South Africa. In order to ensure the enforcement thereof, it will be meaningful to establish a National Renewable Energy Regulator in terms of framework legislation for renewable energy in South Africa as to enforce principles that should be included in framework legislation for renewable energy in South Africa.²⁶⁸ The ERA is also concerned with licensing and registration mechanisms with regard to various activities which include the generation, transmission and distribution of electricity.²⁶⁹

In terms of the objectives of the ERA, sustainable development is once again recognised as the core principle in ensuring efficient, effective, sustainable and orderly development and operation with regard to the electricity supply infrastructure in South Africa, which is of particular relevance to renewable energy.²⁷⁰ The ERA also recognises the interests and needs of present and future electricity customers, which recognition relates to the principle of equity as well as to good governance.²⁷¹ The latter principle relates directly to the principles of public participation, transparency, access to information and environmental justice. The ERA furthermore

265 Barnard 2012 *Potchefstroom Electronic Law Journal* 230.

266 Barnard 2012 *Potchefstroom Electronic Law Journal* 230.

It should be noted, however, that only s 5B of the *Electricity Act* 41 of 1987, which deals with the funds of the NERSA, is still in force.

268 See paragraph 7 below.

269 See the long title of the ERA.

270 S 2 of the ERA.

271 S 2 of the ERA.

recognises the importance of the promotion of the use of diverse energy sources and energy efficiency, including the use of renewable energy.²⁷²

5.4 The White Paper of 1998

The White Paper of 1998 is an overarching policy document expressing government's official policy on the supply and consumption of energy for the next decade.²⁷³ As stated previously, the latter document was the first energy-related policy document established in accordance with section 24 of the Constitution.²⁷⁴ It acknowledges the fact that the context as well as the general approach to policy formulation has changed as a result of the democratisation of the country.²⁷⁵ With regard to the energy policy as well as the process for the formulation of an energy policy prescribed therein, it is geared towards the promotion of sustainable development by giving effect to the principles of equity and the sustainable use of natural resources provided for by section 24 of the Constitution. In this regard, it is important to look at the underlying objectives, which are described as being:

- to increase access to affordable energy;
- to improve energy governance – clarifying the relative roles and functions of various energy institutions in the context of accountability, transparency and inclusive membership, particularly participation by the previously disadvantaged;
- to stimulate economic development – encouraging competition within energy markets;
- to manage energy-related environmental and health effects – promoting access to basic energy services for poor households while reducing negative health impacts arising from energy activities;
- and to secure supply through diversity – promoting increased opportunities for energy trade, particularly within the Southern African region, and diversity of both supply sources and primary energy carriers.²⁷⁶

In the light of these objectives it is evident that sustainable development is at the top of the priority list. Another important matter highlighted by the White Paper of 1998 is

272 S 2 of the ERA.

273 Du Toit and Glazewski 'Energy Law and the Environment' 14.

274 See Chapter 1 above.

275 See paragraph 3.1 of the White Paper of 1998.

276 See paragraph 3.2.2 of the White Paper of 1998.

the importance of the principles related to transparency; inclusiveness and the accountability of elected and/or appointed officials. It states that that these principles should be applied to every aspect²⁷⁷ of the formulation process.²⁷⁸ The principle of good governance²⁷⁹ and the principle of public participation²⁸⁰ and access to information and justice²⁸¹ relate directly to the principles of transparency, inclusiveness and the accountability of elected officials.²⁸² The objectives of the White Paper relate to the principles of equity and the eradication of poverty.²⁸³ The principle of good governance can also be coupled with the state's obligation to establish and implement reasonable legislative and other measures so as to promote sustainable development and to ensure the fulfilment of people's environmental right.²⁸⁴ These principles relate to the process leading to the formulation of renewable energy law and policy and it is therefore concluded that they set the benchmark for the principles to be included in renewable energy law and policy. The principles of transparency, inclusiveness and accountability should therefore be applied in the formulation process and be included in the resulting policy documents.²⁸⁵

277 These aspects include making government's approach to energy policy formulation more transparent, building public confidence in the policy formulation process, clarifying accountability and organizational roles, communicating policy in a manner which is clear and understandable to all, and integrating various government policies. See paragraph 4.2 of the White Paper of 1998.

278 See paragraph 4 of the White Paper of 1998. Also see the executive summary.

279 The principle of good governance is perceived as a normative principle of administrative law, which obliges the State to perform its functions in a manner that promotes the values of efficiency, non-corruptibility, and responsiveness to civil society. See Barnard 2012 *Potchefstroom Electronic Law Journal* 219.

280 The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured. Decisions must take into account the interests, needs and values of all interested and affected parties. See s 2(4)(f) and (g) of the NEMA. See also Murombo 2008 *Potchefstroom Electronic Law Journal* 113.

281 See Barnard 2012 *Potchefstroom Electronic Law Journal* 219.

282 See Barnard 2012 *Potchefstroom Electronic Law Journal* 219.

283 The objectives of the White Paper of 1998 emphasise that priority should be given to improving the access to energy of previously disadvantaged groups in order to facilitate sustainable development and the eradication of poverty. See paragraph 3.1 of the White Paper of 1998.

284 Referring to the correlation between good governance and human rights, the United Nations High Commissioner for Human Rights (OHCHR) identifies five key characteristics of the concept of good governance, namely transparency, responsibility, accountability, participation, and responsiveness by the State to the needs of the people. The latter relates to sustainable development principles as contained in s 2 of NEMA. See Barnard 2012 *Potchefstroom Electronic Law Journal* 219.

285 Barnard 2012 *Potchefstroom Electronic Law Journal* 224.

It is evident from the above discussion of the White Paper of 1998 that there are various principles that are of the utmost importance in the formulation process of renewable energy law and policy and the establishment thereof. What has become clear from the above discussion is that the principles of transparency, inclusiveness and accountability are directly related to the principle of good governance, public participation and access to information, and are necessary to the promotion of sustainable development. It is therefore important that these principles are contained in the framework legislation for renewable energy in South Africa, if it is to ensure the promotion of sustainable development, as well as effective regulation with regard to renewable energy.

5.5 *The White Paper of 2004*

Emphasising the provisions of the Constitution regarding the sustainable use of natural resources, the White Paper of 1998 acknowledges the principle of equity by pointing out that an equitable level of natural resources must be invested in renewable energy technologies.²⁸⁶ When the White Paper of 2004 was drafted it was evident that it was complementary to the White Paper of 1998 (the White Paper on Energy policy) and pledged government's support for the development, demonstration and implementation of renewable energy sources for small- and large-scale applications.²⁸⁷ The overall purpose of the policy principles, goals and objectives is to achieve:

An energy economy in which modern renewable energy increases its share of energy consumed and provides affordable access to energy throughout South Africa, thus contributing to sustainable development and environmental conservation.²⁸⁸

286 Paragraph 7.7 of the White Paper of 1998.

287 Du Toit and Glazewski 'Energy Law and the Environment' 15.

288 See vision 1.1 of the White Paper of 2004.

As stated previously, South Africa relies heavily upon coal with regard to its energy needs.²⁸⁹ It is regarded as the cheapest method of supplying electricity to many residential, commercial and institutional consumers.²⁹⁰ However, the need for the utilisation of renewable energy was recognised as a result of major concerns regarding the over-consumption of fossil fuels and global warming.²⁹¹ Consequently the former DME embarked on a plan, known as the Integrated Energy Plan (IEP), with the purpose of developing renewable energy sources, while taking safety, health and the environment into consideration.²⁹²

In this regard the Government set the target of:

10000 GWh (0.8 Mtoe) renewable energy contribution to final energy consumption by 2013, to be produced mainly from biomass, wind, solar and small-scale hydro. The renewable energy is to be utilised for power generation and non-electric technologies such as solar water heating and bio-fuels.²⁹³

However, the White Paper of 2004 points out that the renewable energy industry in South Africa is still relatively underdeveloped, and demands significant capital outlay.²⁹⁴ It also points out that an innovative approach is required to ensure that renewable energy sources become a sustainable alternative to sources that use fossil fuels, and that they attract investors.²⁹⁵

Moreover, the White Paper of 2004 identifies sustainable development as the fundamental and most essential element of the national renewable energy policy. While its overarching principles are the same as those contemplated in the Constitution and Bill of Rights, as well as those contained in the White Paper of 1998,²⁹⁶ further key policy principles²⁹⁷ are identified for the promotion of renewable

289 In 1999, 91% of the electricity generated was derived from coal, as was 75% of the fossil fuel-based energy. Paragraph 2 of the White Paper of 2004.

290 Du Toit and Glazewski 'Energy Law and the Environment' 15.

291 Paragraph 2 of the White Paper of 2004.

292 Du Toit and Glazewski 'Energy Law and the Environment' 15.

293 This is approximately 4% of the estimated electricity demand in 2013. See paragraph 5 of the White of Paper of 2004.

294 Du Toit and Glazewski 'Energy Law and the Environment' 16.

295 Du Toit and Glazewski 'Energy Law and the Environment' 16.

296 Paragraph 6 of the White Paper of 2004.

energy policy. These include not only sustainable development but also the full-cost accounting principle,²⁹⁸ the principle of equity,²⁹⁹ the principle of global and international cooperation and responsibilities; the principle guiding the allocation of functions;³⁰⁰ and the principle of public participation.³⁰¹

The full-cost accounting principle entails *inter alia* that pricing will take into account the full economic, social and environmental costs of generation and supply, as well as the benefits of policies plans, programmes, projects and activities of energy production and utilisation connected with the implementation of a renewable energy scheme. The latter principle seems to correlate with certain principles contained in section 2 of the NEMA. The first issue to which the full-cost accounting principle relates is the polluter pays principle, in terms of which a person involved in any polluting activity should accordingly be held responsible for the costs of preventing or dealing with any pollution caused by such an activity, instead of delegating this responsibility to somebody else.³⁰² Another issue that can be linked with the full-cost accounting principle is a principle known as the preventative principle, in terms of which it is required that environmental degradation should be prevented.³⁰³ However, the latter principle cannot be regarded as an absolute principle since it is impossible to completely prevent pollution. It could thus be argued that the full-cost accounting principle correlates with the precautionary approach (which relates to the precautionary principle) to human health and the protection of the environment, as the full-cost accounting principle entails that both the impacts as well as the benefits related to the intended activity be taken into consideration before commencing action.³⁰⁴

297 The policy principles set the foundation for government to apply, develop and test its policy and actions, which include decision-making, legislation, regulation and enforcement with specific reference to renewable energy. See paragraph 6 of the White Paper of 2004.

298 Paragraph 6 of the White Paper of 2004.

299 Paragraph 6 of the White Paper of 2004.

300 Paragraph 6 of the White Paper of 2004.

301 Paragraph 6 of the White Paper of 2004.

302 Kidd *Environment Law* 7-8. See 2(4)(p) of the NEMA. Also see s 28 of the NEMA, which *inter alia* provides for the principle of the duty of care.

303 Kidd *Environment Law* 10.

304 Barnard 2012 *Potchefstroom Electronic Law Journal* 226.

The principle of equity³⁰⁵ entails *inter alia* the Constitutional imperative to ensure equitable access to basic services - in other words, to ensure that people's needs are met, as well as to ensure their well-being and to protect future generations' ability to enjoy the same rights. It is clear that the latter principle can be linked to the principle of sustainable development.

The principle of global and international cooperation and responsibilities³⁰⁶ emphasises that government should consider all relevant regional policy principles, as well as international policy principles, when formulating national renewable energy policy, as South Africa might have shared responsibility regarding particular global and/or regional issues such as climate change.

Another principle contained in the White Paper 2004 is the principle of the allocation of functions.³⁰⁷ In terms of this principle the government is under an obligation to apply the provisions in the Constitution with regard to the duties of the different spheres and institutions of government.³⁰⁸ It is clear that the principle of the allocation of functions relates to the principle of good governance, the reason being that it allocates duties to specific institutions and therefore creates accountability.³⁰⁹

In the final instance, the principle of participation is also contained in the White Paper of 2004.³¹⁰ In terms of this principle the government is required to encourage the inclusion of all stakeholders in energy governance with the aim of achieving equitable and effective participation.³¹¹ From previous discussions it is clear that the principle of participation is related to both the principle of good governance and the principle of public participation, as well as to access to information and justice.³¹²

During this discussion of the White Paper of 2004 various principles have been identified which are essential for the formulation of national renewable energy policy,

305 Paragraph 6 of the White Paper of 2004.

306 Paragraph 6 of the White Paper of 2004.

307 Paragraph 6 of the White Paper of 2004.

308 Paragraph 6 of the White Paper of 2004.

309 Barnard 2012 *Potchefstroom Electronic Law Journal* 227.

310 Paragraph 6 of the White Paper of 2004.

311 Paragraph 6 of the White Paper of 2004.

312 See section 32 of the Constitution.

and which in turn will also be essential for the establishment of renewable energy framework legislation, and must consequently be contained in the provisions of the legislation. The principle of sustainable development has once again been amplified, this time in the White Paper of 2004, by stating that sustainable development is essential to the promotion of a policy for the generation and use of renewable energy. It is therefore clear that it would serve as the basis for the establishment of renewable energy framework legislation. Another important principle identified is the full-cost accounting principle, which can be implemented as a precautionary and preventative mechanism (which relates to the precautionary and preventative principles) in implementing a renewable energy scheme. In other words, the principle can in effect create liability as to costs regarding the implementation of precautionary measures, in order to avoid pollution or to prevent pollution from occurring. It is therefore clear that this principle should also be contained in renewable energy framework legislation.

In terms of the White Paper of 2004, the principle of engaging in international cooperation and honouring global responsibilities is considered to be very important, imposing a duty on the government to take into consideration global and regional policy principles for addressing global or regional environmental issues such as climate change in establishing renewable energy framework legislation. This will ensure that South Africa complies with its global and regional responsibility in adapting to climate change and combating its negative effects. Another important principle emphasised by the White Paper of 2004 is the principle of the allocation of functions. The purpose of this principle is to enable and/or impose a duty on the government to allocate functions within the framework of the Constitution to the institutions and spheres of government that can most effectively achieve the objective of a function within the context of energy policy. As stated above, the latter principle relates to the principle of good governance. Therefore it is clear that this principle must be contained in renewable energy framework legislation, as it allocates duties to specific institutions in terms of which such institution(s) can be held responsible/liable for not performing their duties, thus ensuring effective regulation and implementation of the supply of renewable energy.

Another fundamental principle contained in the White Paper of 2004 is the principle of participation. As stated previously, this principle is of significant importance in the effective formulation of renewable energy policy as well as in the formulation and establishment of framework legislation for renewable energy. As stated above, this principle relates *inter alia* to the principles of good governance and public participation, and moreover to the principle of access to information and justice. It is thus clear that the principle of participation is an absolute necessity for the purposes of the formulation of renewable energy policy, as well as for the establishment of framework legislation for renewable energy.

In the light of the above it is submitted that the foregoing principles are the fundamental premises that government must apply in developing and testing policy and subsequent actions, including *inter alia* decision-making, legislation, regulation and enforcement.³¹³ Falling in the ambit of the latter is the establishment of framework legislation for renewable energy.

5.6 The Energy Efficiency Strategy of 2008

The EES 2008 is the first consolidated government document geared towards the development and implementation of energy efficiency practices in South Africa.³¹⁴ It takes its mandate from the White Paper of 1998, and connects the energy sector development with national socio-economic development plans and other government departmental initiatives.³¹⁵

In terms of the EES 2008, South Africa is a developing country with significant heavy industry, which is very energy intensive and largely relies on indigenous coal reserves for its power supply.³¹⁶ The EES 2008 points out that energy efficiency has significantly developed in stature and has become recognised as one of the most cost-effective ways of meeting the demands of sustainable development.³¹⁷ The EES

313 See fn 269.

314 Executive Summary of the EES 2008 ii.

315 Executive Summary of the EES 2008 ii.

316 Paragraph 1.1 of the EES 2008.

317 Paragraph 1.1 of the EES 2008.

2008 acknowledges the fact that the environment can benefit from energy efficiency measures,³¹⁸ but the low cost of energy has not incentivised the economical use of energy or the adoption of energy-efficiency measures.³¹⁹

The vision of the EES 2008³²⁰ is geared towards supplying affordable energy to all, as well as minimising the negative impacts of energy usage upon human health and the environment.³²¹ In order to achieve this vision, the EES focuses on encouraging sustainable energy development and energy use through efficient practices.³²² In terms of the EES 2008, sustainable development is embraced by its strategic goals,³²³ these being environmental, social and economic sustainability.³²⁴

The first three goals contained in the EES 2008 are the improvement of the health of the nation,³²⁵ job creation³²⁶ and the alleviation of energy poverty,³²⁷ which falls under the category of social sustainability. These goals are followed by two further goals which are the reduction of environmental pollution³²⁸ and the reduction of CO₂ emissions,³²⁹ which fall under the category of environmental sustainability. Finally these goals are followed by three further goals which are the improvement of

318 Paragraph 1.1 of the EES 2008.

319 Du Toit and Glazewski 'Energy Law and the Environment' 16.

320 Paragraph 2 of the ESS 2008. Also see the Executive Summary of the EES 2008 ii.

321 Executive Summary of the EES 2008 ii.

322 Executive Summary of the EES 2008 ii.

323 The EES 2008 makes provision for 8 strategic goals which are categorised into environmental, social and economic sustainability. See paragraph 2 of the EES 2008.

324 Executive Summary of the EES 2008 ii.

325 Energy efficiency reduces the atmospheric emission of harmful substances such as oxides of sulphur, oxides of nitrogen, and smoke. Such substances are known to have an adverse effect on health and are frequently a primary cause of common respiratory ailments. See paragraph 2 of the EES 2008.

326 Studies show that jobs will be created by the spin-off effects of the implementation of energy efficiency. Improvements in commercial economic performance and uplifting the energy efficiency sector itself will inevitably lead to nationwide employment opportunities. See paragraph 2 of the EES 2008.

327 Energy efficient homes not only improve the occupants' health and wellbeing, but also enable the adequate provision of energy services to the community at an affordable cost. See paragraph 2 of the EES 2008.

328 Energy efficiency will reduce the local environmental impacts of its production and use. These impacts include the atmospheric emission of harmful and odorous gases. See paragraph 2 of the EES 2008.

329 Energy efficiency is one of the most cost-effective methods of reducing Greenhouse Gas emissions, and thereby combating Climate Change. Addressing Climate Change opens the door to utilising novel financing mechanisms, such as the CDM, to reduce CO₂ emissions. See paragraph 2 of the EES 2008.

industrial competitiveness,³³⁰ the promotion of energy security³³¹ and the reduction of the necessity for additional power generation capacity,³³² which fall under the category of economic sustainability. In the light of this discussion it is evident that the principle of sustainable development lays the foundation for the achievement of the vision contemplated in the EES 2008.

The EES 2008 points out the importance of environmental protection and the effectiveness of efficiency standards in that regard.³³³ Moreover, the EES 2008 recognises that efficiency standards, for example, will have limited impact unless made mandatory.³³⁴ With regard to the latter, one of the methods of ensuring that these standards become mandatory is by codifying them in legislation, including environmental framework legislation. Moreover, the National Energy Regulator (NER) has the responsibility to contribute regarding the development of regulatory measures for guiding reporting and compliance.³³⁵

In the light of the discussion of the EES 2008, it is once again evident that the principle of sustainable development is the foundation on which the promotion of energy efficiency is to be built in order to give effect to the EES 2008 as well as to ensure the fulfilment of section 24 of the Constitution. An important point made in the EES 2008 is the fact that standards related to energy efficiency must be codified in legislation in order for them to become mandatory and enforceable. It is thus submitted that, in the context of the above, environmental framework legislation

330 It has been demonstrated that one of the most cost-effective ways of maximising commercial profitability is the adoption of appropriate energy efficiency measures. Nationwide, this would improve South Africa's export performance and improve the value that her economy derives from indigenous energy resources. See paragraph 2 of the EES 2008.

331 Energy conservation would reduce the necessary volume of imported primary energy sources, crude oil in particular. This would enhance the robustness of South Africa's energy security and would increase the country's resilience against external energy supply disruptions and price fluctuations. See paragraph 2 of the EES 2008.

332 It is estimated that the country's existing power generation capacity will be insufficient to meet the rising national maximum demand by 2007-2012. Energy efficiency is integral to Eskom's Demand Side Management programme, which is intended to reduce the level of load growth by a cumulative value of 4255 MW by 2025, which is equivalent to a saving of a six unit coal-fired power stations. Efforts will be made to give Eskom responsibility for meeting a portion of the target set out in this strategy through its annual shareholder compact. See paragraph 2 of the EES 2008.

333 See paragraph 4.1 of the EES 2008.

334 See paragraph 4.1 of the EES 2008.

335 See paragraph 4.1 of the EES 2008.

should make provision for the establishment of principles and the codification thereof, in this case, framework legislation for renewable energy. It is the author's view that the principles to be included in the framework legislation for renewable energy must be similar to the principles contained in section 2 of the NEMA, so as to promote sustainable development and ensure the fulfilment of section 24 of the Constitution.

5.7 The National Climate Change Response White paper 2011

The White Paper of 2011 encompasses South Africa's commitment towards a fair contribution in respect of stabilising global greenhouse gas concentrations in the atmosphere as well as to protecting the country and its citizens against the inevitable climate change.³³⁶ It is recognised by the White Paper of 2011 that South Africa is very vulnerable to the projected impacts of climate change, and it is also recognised that South Africa is considered to be a 'relatively significant contributor to climate change'.³³⁷ In terms of the White Paper it is required that climate change must be dealt with to address the country's national priorities, which include *inter alia* sustainable development, poverty eradication and the creation of jobs.³³⁸ One of the strategic priorities contained in the White Paper of 2011 is 'policy and regulatory alignment'.³³⁹ The latter can be especially relevant in the context of renewable energy as it can contribute to adapting to climate change or mitigating the effects thereof, when establishing framework legislation for renewable energy.

The White Paper of 2011 also makes provision for several 'Near-Term Priority Flagship Programmes' which include *inter alia* the Climate Change Response Public Works Flagship Programme; the Renewable Energy Flagship Programme; the Waste Management Flagship Programme; and the Adaptation Research Flagship Programme.³⁴⁰ These programmes are to be implemented as a response to climate change.

336 Paragraph 4 of the White of Paper 2011.

337 Paragraphs 2 and 3 of the White of Paper of 2011.

338 Paragraph 2 of the White of Paper 2011.

339 Paragraph 4.2 of the White of Paper 2011.

340 Paragraph 8 of the White of Paper 2011.

It should be noted that the White Paper also sets out a number of principles as contained in the NEMA, the Millennium Development Goals (MDGs) and the United Nations Framework Convention on Climate Change (UNFCCC),³⁴¹ with the purpose of guiding South Africa's climate change response objective.³⁴² These principles include *inter alia* the principle of common but differentiated responsibilities; sustainable development; equity; the precautionary principle; the polluter pays principle; and informed participation, all of which are vested in national and international law.³⁴³

The 'principle of common but differentiated responsibilities' in a broad interpretation entails a duty to co-operate in the achievement of global sustainable development.³⁴⁴ According to the White Paper of 2011, this principle entails the alignment of South Africa's domestic measures to GHG emissions and adaptation to the adverse effects of climate change with our unique national circumstances, stage of development and capacity to act.³⁴⁵ Barnard³⁴⁶ argues that the practical implication of this principle is that countries will have different environmental standards imposed upon them in order that they may exercise the common responsibility of protecting shared environmental resources.

Another principle provided for in the White Paper of 2011 is the principle of sustainable development. This principle has been dealt with and does not need further discussion. However, it is important to note that, also in the context of renewable energy, enhancing the sustainability of the economic, social and ecological services is an integral component of an effective and efficient climate change response.³⁴⁷

341 Du Toit and Glazewski 'International Climate Change Law' 21.

342 Paragraph 2 of the White of Paper 2011.

343 Paragraph 2 of the White of Paper 2011.

344 Barnard 2012 *Potchefstroom Electronic Law Journal* 215.

345 Paragraph 2 of the White of Paper 2011.

346 Barnard 2012 *Potchefstroom Electronic Law Journal* 215.

347 Paragraph 2 of the White of Paper 2011.

The principle of equity, as provided for in the White Paper of 2011, entails *inter alia* the fair allocation of effort, cost and benefits in the context of the need to address disproportionate vulnerabilities, responsibilities, capabilities, disparities and inequalities with regard to climate change. The principle of equity is one of the principles³⁴⁸ that are recognised as being of utmost importance in international sustainable development law. In terms of the latter principle, it is common ground that the resources of the earth belong to all generations, a statement which correlates with section 24(b) of the Constitution. This is a core principle regarding the attainment of sustainable development, and it includes inter-generational equity³⁴⁹ and intra-generational equity.³⁵⁰ The principle of equity also relates to the sustainable use of natural resources, which confers a demand on the present generation to take into account the long-term impact of its activities and to sustain the resource base and the global environment for the benefit³⁵¹ of future generations of humankind.

Other important principles amplified in the White Paper of 2011 are the precautionary principle and the polluter-pays principle. The precautionary principle entails the application of risk-averse and cautious approaches, whilst the limits of current knowledge about the consequences of decisions and actions are taken into account.³⁵² This principle also recognises the possibility that a particular harm to the environment can be irreversible, and that it is therefore better to avoid possible harm to the environment rather than to attempt to remedy it later on.³⁵³ The other principle contained in the White Paper of 2008 is the polluter-pays principle. This principle provides that persons responsible for harming the environment can be held liable for paying the costs of remedying the pollution and environmental degradation and supporting any consequent adaptive response that may be required as a result of

348 The other principle referred to is the eradication of poverty. Barnard 2012 *Potchefstroom Electronic Law Journal* 214.

349 this refers to the rights of future generations to enjoy a fair level of the common patrimony.

350 The rights of all peoples within the current generation of fair access to the current generation's entitlement to the Earth's natural resources.

351 These benefits include, *inter alia*, economic, environmental, social and intrinsic benefits.

352 Kidd *Environmental Law* 9. See s 2(4)(a)(vii) of NEMA.

353 Kidd *Environmental Law* 9.

harm caused by an activity for which the person was responsible.³⁵⁴ The principle of informed participation relates to several other principles including the principles of good governance, public participation, access to information and environmental justice.

In the light of the above discussion of the White Paper of 2011, several significant principles have been identified for the purpose of the response to climate change. However, the principles must also be brought into the context of renewable energy law, as the use of renewable energy is recognised as a strategic response to climate change. All of the principles that have been referred to above correlate with the constitutional ideal of ensuring the promotion of sustainable development, especially with the focus on protecting the environment against the negative impacts of climate change. These principles should therefore be considered for inclusion in the framework legislation for renewable energy, so as to contribute to sustainable development not only on a national level but also on a regional and an international level. The establishment of framework legislation for renewable energy could promote and ensure the effective regulation of renewable energy as a strategic priority in response to climate change, and could promote sustainable development.

5.8 The National Development Plan

The *National Development Plan* (NDP) was published on 11 November 2011. This document *inter alia* sets out the vision for South Africa's energy sector and provides that:

By 2030, South Africa will have an energy sector that promotes:

- Economic growth and development through adequate investment in energy infrastructure and the provision of quality energy services that are competitively priced, reliable and efficient. Local production and energy technology will support job creation.
- Social equity through expanded access to energy services, with affordable tariffs and well-targeted and sustainable subsidies for needy households.

354 Paragraph 2 of the White of Paper 2011. See Kidd Environmental Law 7-8. Also see s 2(4)(p) of NEMA.

- Environmental sustainability through efforts to reduce pollution and mitigate the effects of climate change.³⁵⁵

In terms of the NDP the aim is to have adequate supplies of electricity and liquid fuels to avoid disruptions to the economic sector, transport and welfare. The document goes on to state that:

Although likely to be higher in the future, prices of energy services will still be competitive with South Africa's major trading partners. In addition, more than 95 per cent of the population should enjoy access to electricity within 20 years. To realise this vision, South Africa's energy system needs to be supported by effective policies, institutions, governance systems, regulation, and where appropriate, effective markets.³⁵⁶

It is evident from the above that 'sustainable development' is the core principle with regard to the development of the energy sector. It is also clear that such development necessitates the establishment of effective policies, institutions, governance systems and regulation. From a renewable energy perspective, the latter can be addressed through the establishment of framework legislation, in this case, framework legislation for renewable energy in South Africa. The principle of sustainable development would thus serve as the foundation for renewable energy framework legislation. Other principles identified in the NDP are the principles of equity and good governance. These principles cannot be taken lightly as they are of utmost importance in ensuring the fulfilment of the state's constitutional obligations. It is also clear that the state's obligation to establish reasonable legislative measures to promote sustainable development is interconnected with the principle of good governance. This implies that good governance is a necessity in order to promote sustainable development and should accordingly be included in framework legislation for renewable energy in South Africa. The principle of equity should also form an integral part of the framework legislation for renewable energy in South Africa, as it relates to the all-important principle of sustainable development. These aforementioned principles also relate to the principles of public participation, transparency, environmental justice and access to information.

355 NDP 140.

356 NDP 140.

5.9 The EIA guideline for renewable energy

The EIA guideline for renewable energy was recently published in the *Government Gazette* for public comment.³⁵⁷ This paper recognises the need and desirability for guidelines pertaining to the renewable energy sector, in order to address the internal³⁵⁸ and external barriers,³⁵⁹ underpinning development. However, concern is expressed in the guideline document with respect to the lack of process co-ordination and the large number of associated authorities that have legislative powers in the energy sector.³⁶⁰ This has sometimes led to the complication of the authorisation process. The main concern lies in the fact that there is a lack of understanding by business, industry and the public sector of the environmental approval aspects of on-site renewable energy projects.³⁶¹

The main purpose of this guideline is to give guidance regarding the environmental management legal framework applicable to renewable energy operations for all role players³⁶² in the energy sector. The latter relates directly to the research question, which is what should be included in framework legislation aimed at regulating renewable energy in South Africa?

The renewable energy guideline document consists of four parts. Part A of the document sets out the different technologies related to renewable energy. These technologies include wind energy,³⁶³ residual biomass and biofuels,³⁶⁴

357 GN 777 in GG 37984 of 8 September 2014. Hereinafter referred to as the renewable energy guideline document.

358 Internal barriers include technical and contractual issues. See paragraph 1.1 of the renewable energy guideline document.

359 External barriers relate to the difficulty of acquiring approvals with regard to EIAs. See paragraph 1.1 of the renewable energy guideline document.

360 See paragraph 1.1 of renewable energy guideline document.

361 See paragraph 1.1 of renewable energy guideline document.

362 Public Sector Authorities (as regulators and/or competent authorities); Joint public sector authorities and project funders, e.g., Eskom, IDC, etc. Private Sector Entities (as project funder/developer/consultant); Other interested and affected parties (as determined by the project location and/or scope).

363 Paragraph 2,1 of the renewable energy guideline document.

364 Paragraph 2,2 of the renewable energy guideline document.

hydropower,³⁶⁵ solar energy,³⁶⁶ wave energy,³⁶⁷ ocean currents,³⁶⁸ and energy from waste.³⁶⁹ Part A also recognises the importance of sustainable development, being the main purpose of EIAs. Part B of the renewable energy guideline document sets out all the legislation³⁷⁰ pertaining to renewable energy authorisation requirements. Part C of the renewable energy guideline document specifically deals with stakeholders and their responsibility and the importance of public participation.³⁷¹ Part D deals with the integrated environmental application process.³⁷² The focus here will be on parts A and C of the renewable energy guideline document.

Sustainable development is the primary and ultimate goal the renewable energy guideline document seeks to achieve by providing guidance through an environmental management legal framework applicable to renewable energy.³⁷³ Of course, the legal status of this document is that it is of a non-binding nature and cannot effectively be enforced.³⁷⁴ To ensure the effective application of this guideline it needs to be codified into legislation, in this case framework legislation for renewable energy in South Africa. The renewable energy guideline document makes reference to sustainable energy,³⁷⁵ which is an element of sustainable development.³⁷⁶ However, it must be pointed out that there is no difference in meaning between sustainable energy and renewable energy.

365 Paragraph 2,3 of the renewable energy guideline document.

366 Paragraph 2,4 of the renewable energy guideline document.

367 Paragraph 2,5 of the renewable energy guideline document.

368 Paragraph 2,6 of the renewable energy guideline document.

369 Paragraph 2,7 of the renewable energy guideline document.

370 The Constitution; NEMA; *National Environmental Management: Biodiversity Act* 10 of 2004; *National Environmental Management: Air Quality Act* 39 of 2004; The *National Environmental Management: Integrated Coastal Management Act* 24 of 2008; *National Environmental Management: Protected Areas Act*; *National Environmental Management: Waste Act* 59 of 2008; *Hazardous Substances Act* 15 of 1973; *National Water Act* 36 of 1998; *Water Services Act* 108 of 1998; *National Heritage Resources Act* 25 of 1999; *Development Facilitation Act* 67 of 1995; ERA ; The *Physical Planning Act* 125 of 1999; *Municipal Systems Act* 32 of 2000; *Conservation and Agricultural Resources Act* 43 of 1983; MPRDA; *Road Traffic Management Corporation Act* 20 of 1999 and *National Roads Act* 93 of 1996; *Spatial Planning and Land Use Management Act* 16 of 2013; *Astronomy Geographic Advantage Act* 21 of 2007.

371 Paragraph 6 of the renewable energy guideline document.

372 Paragraph 7 of the renewable energy guideline document.

373 Paragraph 4 of the renewable energy guideline document.

374 Paragraph 1.2.3 of the renewable energy guideline document.

375 See fn 1 above.

376 Paragraph 4 of the renewable energy guideline document.

The renewable energy guideline document also recognises the importance of public participation in the EIA process.³⁷⁷ The principle of public participation relates directly to the principles of access to information, environmental justice, good governance and transparency. All these principles are of essential importance in the EIA process to promote sustainable development and consequently to give effect to section 24 of the Constitution.

The primary objective of EIAs is to ensure the promotion of sustainable development. In light of the renewable energy guideline document it is once again evident that the principle of sustainable development is the core principle in the EIA process with regard to the establishment and operation of renewable energy technologies. In other words, sustainable development is a key principle in the environmental management legal framework applicable to renewable energy operations. In addition, it has been established that the principle of public participation is an essential principle, like the principles of access to information, environmental justice, good governance and transparency, in ensuring that the EIA process is effective and just. The EIAs also relate to the preventative and precautionary principles, as an EIA is a process of establishing what impacts certain projects and/or operations may have on the environment if such projects and/or operations are to be conducted.

5.10 Conclusion

In the light of the energy legislation discussed above there are various principles that have been identified that are highly important with regard to the establishment of framework legislation for renewable energy in South Africa. Once again, sustainable development is recognised as the core principle in both the NEA and the ERA. In the NEA the following principles have been identified: good governance, public participation, equity, the eradication of poverty, access to information, environmental justice, the precautionary principle, common but differentiated responsibility, and the principle of integration. These principles should be considered for inclusion in

377 Paragraph 6 of the renewable energy guideline document.

framework legislation for renewable energy in South Africa, but this will be dealt with in the final chapter. In the ERA the principles of equity and good governance have been identified as important principles in regulating electricity in South Africa. However, it has been established that the principle of good governance encompasses the principles of public participation, transparency, access to information and environmental justice.

Moreover, in the light of the above discussion of the relevant policy documents it is evident that the documents recognise the interconnectivity of the implementation of renewable energy and the protection of the environment.³⁷⁸ However, the purpose of this chapter was to establish what principles/norms are particularly needed for inclusion in renewable energy framework legislation, and to identify the norms and/or principles common to these various policy documents. The fundamental principle identified as the basis from which all other principles flow, and which should serve as the basis for framework legislation for renewable energy in South Africa, is the principle of sustainable development. This principle is to be found in all of the policy documents discussed, and directly relates to the mandate given by section 24 of the Constitution. As stated above, the White Paper of 1998 was the first policy document established in terms of section 24 of the Constitution with respect to energy regulation in South Africa.³⁷⁹ This policy document contains various principles that are very important with regard to the promotion of sustainable development. The principles identified in this policy paper include *inter alia* transparency, inclusiveness and accountability.³⁸⁰ These principles furthermore relate to the principles of good governance (inclusive of co-operative governance), public participation and access to information and justice.³⁸¹ These principles are with regard to the promotion of sustainable development and to give effect to section 24 of the Constitution. Two more principles identified in the White Paper of 1998, which directly relate to the objectives of the aforesaid policy document, are those of equity and poverty eradication.³⁸² All of these principles are necessary for the promotion of sustainable

378 See paragraph 1.1 above.

379 See paragraph 5.1 above.

380 See paragraph 5.1 above.

381 See paragraph 5.1 above.

382 See paragraph 5.1 above.

development and to give effect to the environmental right contained in the Constitution.

In the White Paper of 2004 various principles are identified which are of importance to the promotion of sustainable development. They include the principle of equity, the full-cost accounting principle, the principle of global and international co-operation and responsibilities, the principle guiding the allocation of functions, and the principle of participation.³⁸³ The full-cost accounting principle, as stated above, correlates with the polluter-pays principle, the precautionary principle and the preventative principle.³⁸⁴ These principles are also reflected in section 2 of the NEMA, as principles that are necessary for the promotion of sustainable development. The principles of equity and participation, as contained in the latter policy document, relate directly to the principles of good governance (inclusive of co-operative governance), and also to the principle of access to information and justice.³⁸⁵ All of these principles are of significant importance in ensuring the promotion of sustainable development.

The EES is a policy document aimed at the implementation of energy efficiency practices in South Africa.³⁸⁶ This policy document contains only the principles of sustainable development and the eradication of poverty.³⁸⁷ The most important point made by the EES is that the relevant norms or principles should be codified into legislation in order to ensure the enforcement thereof and purposefully promote sustainable development in energy efficient practices, especially in the context of renewable energy. With regard to the research question, it is clear from the latter that the norms or principles should be codified in order to ensure the effective regulation of renewable energy and the enforcement of such principles under framework legislation for renewable energy in South Africa.

383 See paragraph 5.2 above.

384 See paragraph 5.2 above.

385 See paragraph 5.2 above.

386 See paragraph 5.3 above.

387 See paragraph 5.3 above.

The White Paper of 2011 is a policy document aimed at addressing the most important global issue, namely climate change. The latter document recognised the importance of the implementation of renewable energy as one of a few strategies for combatting climate change, such as the Renewable Energy Flagship Programme. There are, however, important principles identified by the White Paper of 2011. These principles include *inter alia* sustainable development, poverty eradication, equity, common but differentiated responsibilities, the polluter-pays principle and the precautionary principle, as well as informed participation. Informed participation, as stated above, is a principle that relates to the principles of good governance, public participation, access to information and environmental justice. All of these principles are of importance to ensuring the promotion of sustainable development and must be included in framework legislation for renewable energy in South Africa.

The NDP is a policy document that contains various objectives for the energy sector. This policy document, once again, makes reference to the principle of sustainable development, which is recognised as the core principle in the development of the energy sector. However, other principles are identified that are important in ensuring such development, such as the principles of good governance and equity. These principles are directly related to public participation, transparency, environmental justice and access to information, and should form an integral part of framework legislation for renewable energy in South Africa.

The renewable energy guideline document is a document which sets out the EIA guidelines with respect to the establishment and operation of renewable energy technologies. This document also recognises sustainable development as the core principle and purpose of the EIA guidelines with regard to renewable energy operations. Other important principles that are identified in the latter document are the principles of access to information, environmental justice, good governance and transparency. These principles are essential to the effectiveness of the EIA process and should consequently be included in framework legislation for renewable energy in South Africa. The EIA process itself should also be included in framework legislation for renewable energy in South Africa to ensure the effective governance and regulation of renewable energy operations.

Now that the principles have been identified in current energy legislation and the various policy documents, the next step is to establish which principles or norms are held in common in the various policy documents (which are essential for regulating renewable energy in terms of framework legislation for renewable energy in South Africa). This will be established in the final chapter of this dissertation.

6 Recommendations and conclusion

Renewable energy is considered to be a core ingredient for the promotion of sustainable development and its implementation would result in various benefits to the country.³⁸⁸ It has been stated above that the traditional use of biomass contributes directly to the production of detrimental side-effects such as environmental degradation and negative social impacts. The White Paper of 1998 indicated that biomass forms the main energy source in rural areas, mainly as a result of the poverty that prevails in those areas and the lack of access to electricity. It also has been identified that in order to combat against or mitigate the adverse impacts of the traditional use of biomass as the primary energy source in South Africa, the focus must fall on promoting the implementation of the generation of renewable energy. This process needs to be effectively regulated, however, which would necessitate the formulation of effective law and policy (including framework legislation for renewable energy).³⁸⁹

It has also been stated that the Constitution recognises a correlation between the objectives of the regulation of environmental protection and the promotion of sustainable development, which makes the need to frame effective legislation even more obvious.³⁹⁰ The Constitution obliges the state to establish and implement reasonable legislative measures to promote sustainable development and the sustainable use of natural resources, while providing for the protection of the environment for the benefit of present and future generations.³⁹¹ It is thus very clear that the legislative measures contemplated in section 24 of the Constitution should be geared towards the protection of the environment. Falling under that ambit is framework legislation such as the NEMA. In this regard it is evident that the

388 See paragraph 1 above. Also see fn 1 for an extensive definition of renewable energy.

389 See paragraph 1 above.

390 See paragraph 1 above.

391 See paragraph 1 and 4.2 above.

establishment of renewable energy framework legislation is required to fulfil the mandate of section 24 of the Constitution.³⁹²

It is evident that South Africa does not currently have an ‘umbrella statute’, such as the NEMA, which provides for an overarching legal framework for renewable energy in South Africa.³⁹³ However, there are policy developments recognising the interconnectivity of the implementation of renewable energy and the protection of the environment.³⁹⁴ The *nexus* between the implementation of renewable energy and the mitigation of environmental degradation provides the basis for the establishment of legislative measures as envisaged by section 24 of the Constitution, which are needed to regulate the implementation of renewable energy in South Africa.³⁹⁵ With regard to the latter the hypothesis was put forward that the objectives, principles and/or norms contained in current policy documents pertaining to renewable energy should be used as reference points for the proposed renewable energy framework legislation. The question that subsequently arose from the problem statement was: What should be included in framework legislation pertaining to renewable energy in South Africa?³⁹⁶

In attempting to arrive at an answer to this question a specific method was followed. In the first instance, it was necessary to give a full overview of the concept of framework legislation with specific reference to the NEMA and its role as such in South African environmental law, which included the discussion of certain characteristics of and the intended achievements inherent in framework legislation in general.³⁹⁷ This was followed by an analysis of existing South African renewable energy policy documents in terms of which certain norms and/or principles common to these documents were identified. These principles included the principle of sustainable development, the principle of public participation, the principle of good governance, the principle of equity, and the precautionary principle, among others.³⁹⁸

392 See paragraphs 1 and 4.2 above.

393 See paragraphs 2.2.3 and 4.4 above.

394 See paragraphs 1 and 4.2 above.

395 See paragraphs 1 and 4.2 above.

396 See paragraph 1 above.

397 See paragraphs 2 and 3 above.

398 See paragraph 5 above for all the principles identified in the respective policy documents.

There other principles identified in these documents will be dealt with below in table form.

As stated previously, the NEMA serves as environmental framework legislation. Such framework legislation aims to define overarching and generic principles in terms of which sector-specific legislation is embedded, as well as to enhance co-operative environmental governance amongst fragmented line ministries.³⁹⁹ It also makes provision for general basic norms that may be used to introduce new environmental legislation or to amend or maintain existing legislation. The overarching and generic principles as well as the generic basic norms are specifically relevant in establishing framework legislation. The preamble of the NEMA expressly refers to the environmental right contained in section 24 of the Constitution. It is furthermore evident from the preamble that the NEMA is aimed at giving effect to the fundamental right at framework level. Taking the foregoing into account it is argued that in the context of renewable energy, framework legislation for renewable energy should give effect to section 24 of the Constitution.

It has been determined that international environmental framework legislation might justifiably form the basis for the formulation of environmental framework legislation, as it contains certain generic characteristics that are found in the theory of environmental legislation. From the above discussion it is evident that environmental legislation is flexible, deals with overarching issues as well as sector-specific issues, and includes policy and or principles.⁴⁰⁰ It is against this background that it is found that the NEMA complies more or less with these characteristics.⁴⁰¹ Therefore it is argued that framework legislation for renewable energy should also comply with these characteristics.

With regard to the sustainability principles contained in international environmental framework legislation, it has been ascertained that the NEMA compares well with the

399 Du Plessis and Nel 2001 *The South African Journal of Environmental Law and Policy* 1-2. Also see Kidd *Environmental Law* 38.

400 See paragraph 2.2.

401 See paragraph 3.3 above.

international legislation.⁴⁰² This fact is very evident in section 2 of NEMA. These principles can be seen as fundamental to the formulation of environmental legislation, as are some other generic characteristics of environmental framework legislation. It is consequently submitted that framework legislation for renewable energy in South Africa should be formulated and/or established in terms of the aforementioned principles and characteristics.

As stated previously, sector-specific legislation and regulations are formed upon the foundation of sector-specific policy documents such as white papers, policy statements and discussion documents. Based on the foregoing discussions pertaining to the energy policy documents and energy legislation, it would be useful to give an indication of the relationship between renewable energy framework law and sector-specific legislation (including energy policy documents).⁴⁰³ However, this relationship must be understood against the background of a principled approach towards framework legislation for renewable energy in South Africa. This relationship can be illustrated as follows:

402 See paragraph 3.3 above.

403 See paragraph 2.2.3 above.

Framework legislation

Framework Legislation for renewable energy in South Africa

Framework policy

Principles contained in the white paper on renewable energy policy of the Republic of South Africa GN 513/2004 in GG 26169 of 14 may 2004.

Sectoral policy and guideline documents

Principles contained in the national development plan 2011.

White paper on the energy policy of the republic of south Africa GN 3007/1998 in GG 19606 of 17 December 1998.

Principles contained in the national climate change response white paper 2011 GN 757 in GG 34695 of 19 October 2011.

Strategies and sectoral legislation

Principles contained in the energy efficiency strategy.

Principles contained in the *national energy act* 34 of 2008.

Principles related to policy and regulatory alignment as contained in the white paper of 2011 also makes provision for the renewable energy. Flagship programme

In the light of the discussion of the renewable energy documents and legislation, it may be worthwhile to reproduce the principles identified in the respective energy policy documents and legislation in table form, thus clarifying which norms and/or principles are common to these documents.

Principles	National Development Plan 2011	White Paper on Energy Policy of 1998	White Paper on Renewable Energy Policy of 2004	White Paper on Response to Climate Change of 2011	EES	EIA guideline for renewable energy projects	The <i>National Energy Act</i> 34 of 2008	The <i>Electricity Regulation Act</i> 4 of 2006
Sustainable development	✓	✓	✓	✓	✓	✓	✓	✓
Good Governance	✓	✓	✓	✓	✓	✓	✓	✓
Public Participation	✓	✓	✓	✓	x	✓	✓	✓
Transparency	✓	✓	✓	✓	x	✓	✓	✓
Equity	✓	✓	✓	✓	✓	X	✓	✓
Polluter pays	X	x	✓	✓	x	X	x	x
Poverty eradication	X	x	x	✓	✓	X	✓	x
Precautionary	X	x	✓	✓	x	✓	✓	x

Access to information	✓	✓	✓	✓	x	✓	✓	✓
Environmental justice	✓	✓	✓	✓	x	✓	✓	✓
Integration	X	x	x	X	x	x	✓	x
Preventative	X	x	x	X	x	✓	x	x

The above table makes it easy to identify what principles or norms should be included in framework legislation aimed at regulating renewable energy. As stated above on various occasions, the core principle upon which framework legislation should be formulated is the principle of sustainable development. This principle has been extensively discussed and the importance thereof has already been reflected in legislation, policy and case law.

The need to regulate the generation and supply of renewable energy and to mitigate environmental degradation would be the reasons for framing the envisaged legislative measures, which would promote sustainable development in the energy sector, which should be the foundation upon which the environmental framework legislation should be constructed. It is also important to note, in conclusion, that sustainable development cannot be effectively promoted without taking action in accordance with the principles described in section 2 of the NEMA, which include public participation, good governance, transparency, access to information and environmental justice. These principles, as indicated in the table above, should at least be contained in framework legislation regulating renewable energy in South Africa if it is to ensure the promotion of sustainable development, and thus to give effect to section 24 of the Constitution.

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