



POLICY AND PROTOCOL

on

INTELLECTUAL PROPERTY

1. INTRODUCTION

It is noted and recognised that:

- 1.1 The South African National Energy Research Institute (SANERI) is a public sector institution, one of the seven subsidiaries of the CEF group accountable to CEF (Pty) Ltd, a private company established in terms of the Central Energy Fund Act no. 38 of 1977 (CEF Act).
- 1.2 CEF (Pty) Ltd has the State as the sole shareholder, the single share being non-transferable, and in terms of the CEF Act has to be involved in the search for appropriate energy solutions to meet the future energy needs of South Africa and the Southern African Development Community.
- 1.3 SANERI has been established as a subsidiary of CEF (Pty) Ltd to focus on research and development within the energy sector, its primary role including the initiation, promotion and furtherance of an energy research and development agenda, including by entering into strategic projects related to research and

development, by funding bursaries for post-graduate researchers in relevant disciplines.

- 1.4 The main business objective of SANERI is therefore to promote, commission and manage research into new energy technologies, and to promote and advance the development of such new energy technologies.
- 1.5 It is a further business objective of SANERI to identify, participate in or facilitate joint projects with outside parties, including public and private sector partners, relating to the creation, development, implementation, exploitation and/or commercialisation of intellectual property, know-how and technology in the area of new energy sources.
- 1.6 In the course of such research and development initiatives intellectual property may be created, which intellectual property may have economic value and could be used to generate income; may entail technological advances and could be used to facilitate technology transfer; and may provide competitive advantages to stimulate industrial development and economic growth.
- 1.7 The concept 'intellectual property' (IP) as used in the context of this document should be understood to include a diversity of intangible products created by the intellectual or creative endeavours of the human mind, which products can be applied in the fields of industry, agriculture, trade, science, commerce, arts and culture, and which products are protected by law, either by way of statutory provisions or by common law principles. IP thus includes, but is not limited to, patents for inventions, industrial designs, trade marks, copyright, plant breeders' rights, trade secrets and know-how.
- 1.8 The purpose of this policy is to provide an enabling and overarching framework, taking into account the Department of Science & Technology's Intellectual Property Rights from Publicly Financed Research Framework policy document and relevant legislation from time to time, to create a supportive environment to:
 - achieve best practice in IP management in SANERI;

- where appropriate, to facilitate effectiveness of knowledge transfer by SANERI to the public and private sectors;
- achieve effective and timely protection of SANERI IP and, where appropriate, its commercialisation;
- where appropriate, small and medium businesses and/or economic empowerment businesses will be given preferential opportunities to participate in commercialisation activities; and
- establish an equitable relationship between SANERI and third parties engaged in research and development projects to ensure a fair and realistic sharing in the benefits to be derived from IP created or developed for or on behalf of SANERI.

2. **AIMS AND OBJECTIVES**

In generating and developing IP through its research initiatives, and optimising the benefits to be derived from such IP, the following aims and objectives are to be taken into account by SANERI:

- 2.1 The beneficial use and application of IP must be optimised through responsible and accountable management to -
- identify valuable IP
 - preserve such IP
 - secure ownership of such IP
 - secure protection of such IP
 - maintain and enhance IP assets
 - monitor the application and/or use of IP to achieve an appropriate balance between operational use and commercialisation.
- 2.2 An equitable relationship must be established between SANERI and outside parties/private sector parties engaged in research and development projects, to -
- ensure a fair and realistic sharing in the benefits, commercial and otherwise, to be derived from IP created or developed for or on behalf of SANERI by the initiatives of SANERI

- encourage and facilitate the application and use of such IP by or on behalf of SANERI or by other parties to the benefit of SANERI, the country and the community
- encourage the creation and beneficial use of more IP.

2.3 The creation and commercialisation of IP must be used to achieve -

- access to renewable energy resources
- cleaner fossil fuel technology and energy efficiency
- reduction of the negative impact of energy usage on the environment
- increased revenues to SANERI and participating third parties
- growth in IP assets
- development of local industries
- national goals of socio-economic development
- any other useful purposes.

2.4 The development and use of IP must ensure that -

- fair and equitable benefits accrue to SANERI, the country and the community
- fair and equitable benefits accrue also to the outside parties/private sector partners collaborating with SANERI pursuant to any joint project undertaken.

2.5 To the extent that this is feasible, the operational use of IP within the CEF group must be promoted to achieve –

- increased operational efficiencies
- employment of reliable energy production systems and to minimise risk exposure
- improved energy production and delivery
- installation of and adherence to workable monitoring systems.

2.6 The adoption and implementation of this IP policy must ensure that –

- commercialisation of IP does not compromise or detract from the pursuit of public interest objectives and socio-economic development
- commercialisation of IP will take place through appropriate partnerships/enterprises.

2.7 In the policy position of SANERI and in this document and any of its attachments or annexures, the following concepts have the meaning as set out below:

‘commercialisation’ means the process of taking new knowledge, technologies, or products or processes beyond research and development and exploiting them in the market place, covering a broad range of activities, endeavours and enterprises which may result in financial returns;

‘intellectual property’ means intangible creations by the human intellect including but not limited to the following: inventions and patents; trade secrets, confidential information, know-how and generally all items of proprietary information, including manufacturing technique and production methods; databases, compilations of data and other items of information; designs, including designs created in the course of manufacturing operations; utility models; copyright, including technical reports, memoranda, tables and compilations of data, computer programs, drawings of a technical nature, diagrams, charts and plans; trade marks, including logos and distinctive get-up; and including any and all technical or commercial information relating to the foregoing, and generally all intellectual capital;

‘knowledge transfer’

the process of taking new knowledge, technology, or knowledge products or services to society, without necessarily demanding or expecting direct monetary compensation or reward, including through training and exchange of personnel, tender processes, open distribution, co-development and collaborative arrangements, open licenses and other suitable mechanisms;

‘net returns’

means the balance of revenue received by SANERI from commercialisation of the relevant IP, after deducting the associated costs.

‘background intellectual property’

means existing intellectual property generated by a third party or SANERI.

3. CORE PRINCIPLES**3.1 Identification of IP**

The following classes or species of intellectual property, whenever created through innovative activity in the course of a research-related or development initiatives of SANERI, with or without the participation of external persons, institutions or agencies, shall be identified:

3.1.1 inventions suitable to be covered by patents;

3.1.2 trade secrets, confidential information, know-how and generally all items of proprietary information eligible for protection under common law principles;

3.1.3 databases, compilations of data and other collections of items of information whether or not eligible for copyright protection;

- 3.1.4 original works susceptible to copyright protection, including literary works, particularly reports, memoranda, tables and compilations of data; computer programs; artistic works, particularly drawings of a technical nature, diagrams, charts and plans;
- 3.1.5 trade marks, logos, distinctive get-up and other distinctive indicators used to signify or distinguish goods or services with which the CEF group or any of its subsidiaries, including SANERI, is associated;
- 3.1.6 designs, particularly designs having functional shapes or configurations applicable to articles intended for industrial multiplication;
- 3.1.7 new varieties of plants or plant material susceptible to be protected as plant breeders' rights, particularly plants or plant material suitable for use in the production of bio-fuels.

3.2 **Duty to disclose**

Any employee or other person, including a contracted person, consultant or grant recipient, who has created IP or who is involved in creating IP for or on behalf of SANERI, shall forthwith disclose such fact and the nature of the IP to a person designated by SANERI to act as a rapporteur for this purpose, to enable the relevant information to be recorded as contemplated in paragraph 3.3. Similar provisions shall be made binding on parties that receive funding by or through SANERI in any situation where IP may arise, or on parties engaged in joint projects with SANERI as envisaged in paragraph 1.6.

3.3 **Recordal system**

A recordal system for IP will be created and maintained for SANERI, and a person or body of persons will be designated by SANERI to be responsible for establishing and maintaining the system. In the recordal system will be recorded the information as set out below in respect of IP created by or within SANERI by its employees, or by outside parties contracted or funded by SANERI.

In the IP recordal system, the following information is to be recorded:

- 3.3.1 the name(s) of the person(s) who created or participated in the creation of the IP;
- 3.3.2 the position(s) and job description(s) of such person(s) who are employees of SANERI, or the contractual or other relationship of such person(s) with SANERI;
- 3.3.3 the circumstances in which the IP was created, for example on the instructions of a superior, at the request of an outside party, on own initiative, as part of a joint initiative etc;
- 3.3.4 the source(s) or existing information used in the process of creating the IP;
- 3.3.5 the funding details where IP was created in the course of a joint project between SANERI and outside parties, including public or private sector partners;
- 3.3.6 the time period over which the IP was created, with details of experimental work (including failed trials);
- 3.3.7 the prospective application or utilisation of the IP, including an indication of the development work required to render the concept suitable for use or commercialisation;
- 3.3.8 the relevant contractual provisions in regard to ownership of the IP applicable to the creator(s), for example employment contract, assignment deed, etc;
- 3.3.9 an adequate description of the nature of the IP, or a reference to a source where such description may be found;
- 3.3.10 any interest held by third parties, eg licensing rights, equity or shareholding rights;
- 3.3.11 any steps taken for securing protection of the IP, eg filing of applications, and the outcome of such steps;

- 3.3.12 any steps taken for the product development or commercialisation of the IP, and the outcome of such steps;
- 3.3.13 the results of any commercial and non-commercial applications of, and dealings with, the IP (such as distribution, licensing or assignment of the IP) and the performance of any commercialisation model;
- 3.3.14 any income generated by or derived from the IP, e.g. royalties received, and any expenses or losses incurred through the IP.

The records forming part of the recordal system are to be updated regularly to reflect developments, such as operational implementation and commercialisation efforts. Relevant contracts with other parties shall be retained in an appropriate record system for the duration of the IP concerned.

Consideration should be given to the managerial benefits to be achieved by the designation of an official in every department or research unit of SANERI where this may be required, or in relevant working sections or divisions of such department or unit, to act as a rapporteur in regard to IP, to receive reports from individual employees in regard to IP created by them, to ensure that the information is recorded as contemplated in paragraph 3.3, and to report to the IP Manager as envisaged in paragraph 4.

3.4 **Ownership of IP**

In the normal course of SANERI activities, IP may be generated by SANERI employees, by contracted persons, by consultants or by grant recipients. IP may be generated jointly through collaboration between SANERI and other parties from industry, research and higher education institutes.

When portioning the benefits of intellectual property the following shall be taken into account –

- IP created within or by SANERI;

- IP created by outside parties or bodies or institutions with funding or partial funding provided or arranged by SANERI;
- IP created in the course of joint projects between SANERI and an outside party, including a public or private sector partner, or when facilitated by SANERI as envisaged in paragraph 1.6; and
- Background or existing IP owned by outside parties and introduced into any of the above-mentioned categories of IP:

3.4.1 in the case of any IP created by employees of SANERI within the course and scope of their employment or under the control or direction of SANERI, the ownership shall vest in SANERI;

3.4.2 in the case of IP created by employees of SANERI outside the course and scope of their employment but directly related to the activities of SANERI, when SANERI resources were used in the creation or development of such IP, and when the creation of IP was a reasonably foreseeable outcome of the usual job description of such employee, the employee shall report the creation of the IP to SANERI and the ownership of the IP shall vest in SANERI;

3.4.3 in the case of IP created or proved by outside parties or bodies or institutions with funding or partial funding provided or arranged by SANERI, the creation of the IP shall be reported to SANERI, and the ownership shall vest in SANERI, or jointly in SANERI and the outside parties, bodies or institutions in accordance with the terms of the agreement between them;

3.4.4 in the case of IP created in the course of a joint project between SANERI and an outside party, including a public or private sector partner, when initiated or facilitated by SANERI, the creation of the IP shall be reported to SANERI, and the ownership shall vest in SANERI, or in the outside party, or jointly in SANERI and the outside party in accordance with the terms of the agreement setting up the joint project;

- 3.4.5 in the case of IP otherwise created by employees of SANERI outside the course and scope of their employment and outside working hours and their workplace, and without the use of SANERI resources, the ownership shall vest in the employees concerned.
- 3.4.6 Whenever SANERI enters into an arrangement with third parties (eg consultants, research and higher education institutions and other parties from industry) that may result in the creation of IP, there must be a written contract that deals with the relationship and addresses the ownership of any IP created. As a starting point, SANERI should seek to own the IP where SANERI has participated in the creation or development of that IP (eg by cash or in-kind input including the creative efforts of its employees), subject to a revenue sharing plan agreed to between SANERI and the third party and in accordance with Annexure A hereto.
- 3.4.7 Whenever the development of new IP relies on the use of existing IP or builds on existing IP (eg to create an improvement, modification, enhancement, addition or subtraction to existing IP owned by a third party), ownership of and rights to use the pre-existing background IP also must be addressed, eg by way cross-licensing.

In asserting and negotiating SANERI ownership, joint ownership or reciprocal rights to use particular IP, SANERI should consider:

- the purpose of the ownership (ie whether it is necessary or desirable for SANERI to own the IP having regard to its internal use, knowledge transfer and commercialisation requirements);
- in the case of contractors, the nature of the services, the other terms and conditions of the contract, how the IP arrangements may impact on the project cost, and ongoing cost to SANERI;
- in the case of joint ventures and cooperative projects, any background IP and other resources brought to the project by the participating parties, any further developments to be made or funded by each party and their respective capacities and opportunities to leverage the developed IP for broader application; and

- the cost of protecting and maintaining the IP.

3.5 **Obligation to sign documents**

Any employee of SANERI who has created IP as contemplated in paragraph 3.4.1 or 3.4.2 shall undertake to sign, and shall sign, such documentation, including assignment documents, as may be required to enable SANERI to establish or enforce its ownership of the IP. An outside party or body or institution which has created IP as contemplated in paragraph 3.4.3, or an outside party, including a public or private sector partner, which created IP as contemplated in paragraph 3.4.4 shall undertake to sign and shall sign such documentation, including assignment documents, as may be required to enable SANERI to establish or enforce its ownership of the IP.

3.6 **Confidentiality**

The parties as set out below and who have created or who are involved in creating IP as contemplated in paragraphs 3.4.1, 3.4.2, 3.4.3, or 3.4.4 shall undertake and be obliged to keep such IP secret and confidential, and shall not disclose any information in regard to the IP to any outside party in any way, until such time as the IP has been appropriately assessed and protected and disclosure has been authorised, or a final decision has been taken by the IP Manager that no protection will be applied for or acquired and that the IP is not a trade secret, the parties being the following:

- all employees of SANERI;
- bodies and institutions, and their employees, engaged in research or development work with funding or partial funding provided or arranged by SANERI;
- all outside parties, including public or private sector partners, involved in joint projects with SANERI as envisaged in paragraph 1.6.

In particular, there shall be no publication of SANERI IP, including at seminars and in academic or research papers, which might tend to disclose or compromise SANERI IP, without the express permission of SANERI.

3.7 **Innovation incentives**

In order to promote innovative activity of employees of SANERI and the due reporting and recordal of IP created by such innovative activity, consideration is to be given to the structuring and implementation of an innovation incentive scheme whereby employees of SANERI are given recognition and such other rewards or benefits as may be appropriate, for useful IP created by them.

4. **MANAGEMENT PRINCIPLES**

In managing its intellectual property, SANERI will require that its IP Manager as contemplated in this paragraph will apply best practices in the management of the IP, and will ensure that:

- there is recognition of SANERI IP as a potentially valuable asset;
- IP assets are managed and used effectively, prudently and in a fully responsible, transparent and accountable manner;
- SANERI IP is accessible to industry, the community and Government in a way that maximises the overall benefits to the State;
- benefits from protection, knowledge transfer and commercialisation are evaluated against resources applied to achieve these;
- risks associated with knowledge transfer and the use and commercialisation of SANERI IP are appropriately managed;
- potential conflicts of interest that may arise with respect to the use and commercialisation of SANERI IP are appropriately addressed;
- SANERI processes and procedures facilitates the making of judicious and timely decisions about IP; and
- expert advice on legal, contractual, financial and technical issues is sought as appropriate as an integral part of the management, use and commercialisation of SANERI IP.

The information reported in terms of paragraph 3.2 and recorded in terms of paragraph 3.3, and the rights and obligations provided for in terms of paragraphs 3.4, 3.5 and 3.6 shall be dealt with in the following manner:

- 4.1 A senior official of SANERI, or a body of persons (herein referred to as the IP Manager), to be designated and/or established by SANERI, shall be made responsible for the administration and management of all IP matters in which SANERI has an interest, and shall be made responsible for implementing, monitoring and managing the Intellectual Property Policy as accepted by SANERI.
- 4.2 The IP Manager shall be responsible for promoting within SANERI and by all parties and agencies with which SANERI co-operates in regard to the matters referred to in paragraph 2, the general adherence to and compliance with the IP Policy.
- 4.3 The IP Manager shall be responsible for ensuring that appropriate clauses are included in the employment contracts of SANERI employees, in all contracts with parties engaged in research and development work in terms of agreements with SANERI and/or funded by SANERI, and in all agreements entered into with outside parties or public or private sector partners for purposes of joint projects as envisaged in paragraph 1.6, to provide for ownership of IP to vest in SANERI in respect of IP created by such employees or parties.
- 4.4 The IP Manager shall be responsible for putting in place and implementing at least the following procedural and monitoring systems:
- reporting and other procedures in regard to IP as envisaged in paragraphs 3.1 and 3.2;
 - a recordal system as envisaged in paragraph 3.3;
 - reporting lines and procedures in regard to the execution of joint projects in which SANERI has an interest, including such projects as envisaged in paragraphs 1.6 and 2.2;
 - monitoring and management systems to ensure the effective and efficient progress with joint projects in which SANERI has an interest, including such projects as envisaged in paragraphs 1.6 and 2.2;
 - identification and reporting procedures in regard to new development or commercialisation opportunities involving IP;

- reporting lines and procedures for infringements of IP rights in which SANERI has an interest.

4.5 The IP Manager shall be the entity which will be responsible to monitor, maintain and administer, and if necessary enforce, all IP rights on behalf and for the benefit of SANERI.

4.6 In administering the IP assets on behalf of SANERI, the IP Manager shall focus on beneficial management of the IP assets, primarily to promote the effective operational application of IP but also to promote the commercialisation or sale of the IP assets.

4.7 Complementary to the preferred focus as contemplated in paragraph 4.6, the IP Manager shall also engage in identifying and pursuing beneficial and/or profitable commercialisation opportunities with a view to setting up legal relationships, partnerships or other enterprises through which the IP assets may be commercialised to the benefit of SANERI, the country and the community.

4.8 As a feature of the commercialisation of its IP assets by or on behalf of SANERI as contemplated in paragraph 4.7, policy guidelines may be formulated to ensure that, in appropriate circumstances, small and medium businesses and/or economic empowerment businesses will be given preferential opportunities to participate in commercialisation activities.

4.9 As part of the promotion of innovative activity and the consequent creation of IP assets, the formulation and implementation of appropriate policies and measures may need to be investigated, to provide for recognition of and appropriate incentives to employee creators of useful IP.

5. **PROTECTION OF IP**

The decision as to whether and how IP should be protected, including the countries in which protection will be required, is important; appropriate protection can establish and confirm the owner's exclusive rights over the IP and

significantly increase its value, and enhance the competitive position of the owner.

In order to decide on the protection of the IP, including the extent of the protection, SANERI must establish and maintain systems and processes to:

- review a specific item of IP;
- assess whether protection of such IP is required;
- record and monitor the ownership and protection arrangements of all IP on an ongoing basis (including relevant patent renewal and expiry dates);
- act appropriately on any potential infringement.

6. **APPLICATION OF SANERI IP**

SANERI IP is a potential valuable asset and its effective use can generate a broad range of benefits to the government and the community. Appropriate application of SANERI IP can result in monetary benefits such as net financial gains to SANERI without detracting from its ordinary business, or net operational gains through defrayment of costs.

There is no single best approach and informed decisions are made on a case-by-case basis as to whether an opportunity for knowledge transfer or commercialisation exist, whether to pursue it, and if so the most effective manner in which this ought to be done in order to maximise benefits and minimise risks, having regard to:

- the nature and scope of the IP, its scientific and technical validity and stage of development;
- its potential uses, the public good and commercial significance;
- analysis of the market;
- the potential risks, costs, revenues and benefits of the proposed strategy; and
- legal, financial or technical advice.

6.1 **Commercialisation**

SANERI may:

- assign ownership of its IP outright to a third party under appropriate negotiated arrangements; or
- license the right to exploit its IP under certain conditions for a set term.

SANERI remuneration for the assignment or license may include up-front or deferred payments and periodic royalties. The assignment or license may be in return for other benefits such as information and materials exchange or payments, equity participation in a commercialisation vehicle, collaborative agreements and other forms of remunerations appropriate to the specific case.

The third party assignee or licensee may be a collaborative partner from the private sector, the research or tertiary education sectors or other government entity.

6.2 **Approval Procedure**

SANERI shall implement an approval procedure for the effective application of IP, and efficient and prompt commercialisation, including appropriate mechanisms to deal with third parties and to make timely and informed decisions at all stages of the IP life cycle.

6.3 **Financial Returns from Commercialisation**

All financial returns or income from commercialisation are to be used in the first instance to meet the costs associated with seeking and maintaining IP protection and commercialisation of the IP. Any payments due to external organisations pursuant to a revenue sharing plan agreed to under a sponsored research or other agreement between SANERI and a third party shall only be paid out of net returns in accordance with the objectives in Paragraph 2 of this agreement.