SAIA HABITAT POLICY

PREAMBLE

The first principle the SAIA Code of Ethics places on members is a "*responsibility to serve and promote the public interest in a professional and responsible manner*". The primary rule derived from this principle is for members to "*ensure that their professional actions contribute to the quality and sustainability of the natural and built environment and, within this context, to the health and safety of the public*".

We acknowledge the drive towards the goal of sustainability as a broad-based initiative, launched and co-ordinated globally by the United Nations, and commit ourselves to be actively engaged in this initiative within the sphere of our professional activity and the environments in which we work. To this end we understand "environment" holistically, to mean the economic, social and natural environments which make up the total living environment, and understand "sustainable development" in the context of the Brundtland definition as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (*Our Common Future*, 1987).

We commit ourselves to maintain the strategic objectives outlined below, at all times understanding that these objectives are interrelated and must not only be interpreted individually, but also holistically, to give effect to the integrative nature of sustainable development.

1 ECONOMIC AND REGULATORY ENVIRONMENT

1.1 POLICY STATEMENT:

Acknowledging that the construction sector plays a crucial role in the economy of the country, we commit ourselves to engagement in economic activity which promotes responsible utilization of financial, human and biophysical resources, in the interest of development that is sustainable into the future.

1.2 STRATEGIC OBJECTIVES:

The South African Institute of Architects undertakes to:

1.2.1. assist in the creation of an enabling environment for economic and regulatory development that will attract investments, generate employment and contribute to the eradication of poverty;

1.2.2. promote economic and regulatory development that is fully integrated with social development and environmental protection as mutually reinforcing components of sustainable development;

1.2.3. encourage improved access by all people to work, goods, services and amenities, *inter alia*, by promoting effective and environmentally sound transportation systems and by promoting spatial development patterns and communications policies that reduce transport demand;

1.2.4. understand all utilization of resources in construction in the context of a cradle-to-grave lifecycle, and aim at optimum resource utilization through considerations of resource conservation, waste elimination, recycling and minimal reliance on non-renewable energy;

1.2.5. engage in research into, and employ in practice the most appropriate resource- and energy-efficient technologies and methodologies serving the goal of sustainable development;

1.2.6. support the intentions of sustainable development by maintaining high ethical standards in professional practice, giving effect to relevant legislative provisions and engaging pro-actively with government and the business sector to foster a political culture which supports the concepts of sustainability contained herein.

2 SOCIAL ENVIRONMENT

2.1 POLICY STATEMENT:

Acknowledging that a country's worth are its people, and that architecture serves the people of the country, we commit ourselves to high ethical standards in our human relationships, and to shape through our work a living environment, that enables and enriches human social, cultural and economic interaction, and fosters both physical and spiritual health and well-being.

2.2 STRATEGIC OBJECTIVES:

The South African Institute of Architects undertakes to:

2.2.1. commit to improving the living conditions in human settlements in ways that are consonant with local needs and realities, and respectful of the population's spiritual and cultural values;

2.2.2. advocate the integration of urban design, planning and management in order to foster the development of sustainable cities;

2.2.3. promote planning and design which helps to heal divisions in South African cities, supports integrative urban development which underpins healthy social interaction, and provides all people, in particular those belonging to vulnerable and disadvantaged groups, with equal opportunities for a healthy, safe and productive life;

2.2.4. assist with the provision of adequate and integrated services infrastructure, especially sufficient, continuous and safe freshwater supplies, sanitation, drainage and waste disposal services, to all settlements and in particular to segments of the population living in poor and insanitary conditions;

2.2.5. protect and maintain, as appropriate, the historical and cultural heritage, including traditional shelter and settlement patterns, of indigenous and other people;

2.2.6. take all reasonable steps to avoid the use of harmful materials, including heavy metals, harmful chemicals, toxins or carcinogenic particles, which may affect environmental quality or human health during construction or occupation of a building, and where such use is unavoidable take the necessary steps to ensure safe and effective management of such substances with a view on eliminating uncontrolled exposure and protecting human health and the environment;

2.2.7. take the necessary precautions through careful and considered design, to prevent man-made disasters, including major technological disasters, by ensuring adequate regulatory and other measures to avoid their occurrence, and to reduce the impacts of natural disasters and other emergencies on human settlements, *inter alia*, through consideration of appropriate risk management strategies;

2.2.8. acknowledge the special needs of persons with disabilities in our society and effect their optimal inclusion in all spheres of social life through design;

2.2.9. promote an expanded concept of sustainability, which recognizes accountability towards directly and indirectly affected parties, including future generations, for economic, environmental and social consequences of resource utilization in the construction sector.

3 BIOPHYSICAL ENVIRONMENT

3.1 POLICY STATEMENT:

Acknowledging the inherent value of our environment and the limited availability of our natural resources, we commit ourselves to optimum conservation of the ecosphere which sustains us, and sustainable utilisation of the biotic, abiotic and energy resources it offers.

3.2 STRATEGIC OBJECTIVES:

The South African Institute of Architects undertakes to:

3.2.1. promote the implementation of improved land management practices which will address competing land requirements in the context of sustainability, and thus ensure the optimal use of productive land in urban and rural areas and protection of fragile ecosystems and environmentally vulnerable areas from the negative impacts of human settlements;

3.2.2. promote the redevelopment and reuse of already serviced but poorly utilised commercial and residential land and buildings in urban centres in order to revitalize them and reduce development pressures on natural environments and productive agricultural lands on the periphery;

3.2.3. ensure the protection of our natural heritage by optimally maintaining the integrity of all realms of natural ecosystems, in rural and urban areas, and managing resource utilization through a combination of conservation and sustainable use;

3.2.4. promote changes in favour of efficient use of resources within the carrying capacity of ecosystems through more sustainable production and consumption patterns in industrialized society, and advocate population policies and settlement structures that meet basic needs while reducing environmental stress, thereby reducing the ecological footprint of human settlements;

3.2.5. promote the responsible use of materials in development, by promoting sustainability in product extraction, beneficiation, manufacturing, use and decommissioning, and considering the product lifecycle from cradle to grave in respect of embedded energy, economy, renewability of the resource and recyclability of the product;

3.2.6. minimize reliance on energy sources which are harmful to human health and the environment, including all fossil fuels, and optimize energy-efficiency of buildings through design and maximum use of renewable energy sources;

3.2.7. aim at optimum reduction of waste, whether in solid, liquid or gaseous form, generated directly or indirectly during the construction, operational or decommissioning stages of a project, and implement appropriate waste management strategies;

3.2.8. promote education about, and training on, environmentally sound technologies, materials, products and practices.

BACKGROUND

During the second half of the 20th century it became increasingly clear that our way of life places the environment and our social well-being under threat. A critical view on the social, economic and physical environments in which we act out our lives has given rise to renewed appreciation of their interrelatedness, and the need for active management in all of these areas, not only in isolation, but in a holistic manner. Following the Brundtland Commission's report "Our Common Future" (1987), a global undertaking was adopted in the United Nations' Agenda 21 (Rio de Janeiro, 1992) to address the sustainability of our life on and exploitation of our planet. In a top-down approach this agenda (with subsequent elaborations) has guided initiatives at all levels of policy-making in national, provincial and local levels of government, and all spheres of life. It has informed key provisions of South Africa's national constitution and laws enacted in terms thereof. Specific development targets, such as the Millennium Development Goals, stem from this agenda. The Rio plus Ten World Summit on Sustainable Development (Johannesburg, 2002) reinforced a strong commitment to social and economic sustainability to complement the environmental focus of the original Rio Declaration.

In addressing global social and environmental problems, special attention must inevitably be given to the construction industry and the built environment. Internationally the construction industry accounts for approximately 28% of all industrial employment. In South Africa, 403 000 employees were recorded as formally working in the sector in 2004, though informal labour could increase the number to 750 000. The built environment is the platform where society interacts, and as such it comes charged with both problems and opportunities. It constitutes more than half the total capital investment of many countries, absorbs 50% of globally exploited resources, including 50% of global timber production, and accounts for 60% of losses in prime agricultural land. It consumes 45% of all energy generated in utilization of buildings, and another 5% in their construction.

The global problem of urbanization and slum development is exacerbated in South Africa specifically by divisions brought about by the former apartheid policies in our social structures, economic interaction and the physical urban environment. For the largely urban Gauteng Province, for instance, a population growth from the present 9.5 million residents to 14.6 million in 2015 is projected. The province's water demand has already exceeded naturally available supplies two decades ago, and keeps growing. Globally, at present, energy demand is beginning to outstrip supply. At the same time global warming, caused to a large extent by our burning of the world's fossil fuels, is an escalating threat. Current scientific consensus suggests that we have only a 10 year window in which we could act to contain global warming below a 2 degree increase in temperature. Beyond this band a process of potentially unstoppable and irreversible damage to our living environments is projected.

Against this background the question needs to be asked whether, from an environmental perspective, the architectural professions are part of the problem facing our people, our country and our planet, or part of the solution.

With this Habitat Policy Document the South African Institute of Architects confirms its commitment to be part of the solution of addressing environmental and social concerns. The Policy is intended to inform the approach of members in achieving the intention of the SAIA Code of Ethics in respect of a responsibility towards the public and the environment within which we live. The policy affirms SAIA's undertaking to foster and promote the concepts of sustainable development, design and construction, and to work towards an appropriate balance of social, economic, biophysical and technical factors in projects with which its members engage.

The SAIA Habitat Policy is meant to be a living document, to be updated from time to time as needs and priorities change.

ANNEXURE: IMPLEMENTATION GUIDELINES

Many tools have been developed to guide building projects in the context of sustainable development. Some of these assessment or rating tools have been adopted by the Green Building Councils of specific countries as a standard framework by which projects can be steered towards more sustainable processes and products. Examples of commonly used assessment methods are:

- **BREEAM** (Building Research Establishment's Environmental Assessment Method), from the UK (**http://www.breeam.org**)
- **LEED**™ (Leadership in Energy and Environmental Design) green building rating system, developed by the U.S. Green Building Council (USGBC) (**http://www.usgbc.org**)
- **Green Star**, the rating system adopted by the Green Building Council of Australia (**http://www.gbcaus.org**)

At present SAPOA (with representation from SAIA) is guiding the establishment of a Green Building Council for South Africa, which will aim at introducing a building assessment framework for South Africa.

The building assessment frameworks tend to focus specifically on energy and material resource-efficiency of buildings, and are useful tools to address environmentally sustainable building design.

In South Africa specific socio-economic conditions exist which compel us to adopt a broader understanding of sustainability. With its Habitat Policy SAIA adopts a triple-bottom-line approach, which adds to the natural environment the economic and the social environments as key spheres of sustainable development.

A useful guide, following a "triple bottom line" framework is **An Architect's Guide to Designing for Sustainability**, a comprehensive guideline document for sustainable architectural design. This document was prepared by the CSIR Built Environment Unit on behalf of the Commonwealth Association of Architects.

This guide addresses sustainability under the headings of Economic, Social and Environmental Capital, and is a valuable resource for translating the SAIA policy into practical application. The guide is available on:
http://www.comarchitect.org/webhelp/an_architect_s_guide_to_designing_for_sustainability.htm