



Principles of Sustainability

Sustainability Principles

Sustainability principles provide the basis for developing practical planning and decision making tools. Sustainability principles are variously expressed but usually include principles relating to managing risk (precautionary principle), biodiversity, using natural resources, social and economic welfare and community involvement as follows:

- ♦ **The Precautionary Principle** – taking action now despite a level of uncertainty, to minimise future risks. This principle may lead to a decision not to take action or proceed with a proposal because of a high level of uncertainty about beneficial outcomes. The principle poses some difficulties for decision makers in that it exposes them to criticism that they are adopting a ‘no risk’ approach although in fact there may be substantial, though incomplete, evidence of risk.
- ♦ **Intra- and Inter-generational Equity** – this principle aims to ensure that each generation passes on its inherited social, economic and natural capital to the next. Each generation can live off the interest or even add to the capital it inherits, eg, increasing natural capital through wetland creation associated with storm water management. Intra-generation equity relates to equality in exercising choice eg, ready access for all to community and health services.
- ♦ **Sustainable Use of Natural Resources** – the conservation of non-renewable and the use of renewable resources according to their rate of replenishment. In the context this project it is an important principle that embraces the flows of materials into the region, their use and the discharges into the receiving environments (land, water and air). It has implications for the extent of land put to essentially inflexible and irreversible uses, the location of development to take account of capacity of land to support development, the design and functioning of development and opportunities for resource conservation and habitat creation.
- ♦ **Maintenance of Biological Diversity** – biodiversity is the variety of all life forms – plants, animals and micro-organisms; the genes they contain and the ecosystems of which they form a part.
- ♦ Life support systems are the essential ecological processes that sustain all life on earth. They cleanse air and water, regulate climate, recycle essential elements, restore depleted soils. Their functioning depends on the extent to which they are disturbed, modified and polluted. The concept of carrying capacity and loads discharged to receiving environments is ill-defined and difficult to establish but limits can be identified eg, e.coli, nutrients and other pollutants and storm water.
- ♦ **Enhance Economic and Social Well-being** – actions that enhance the quality of life and economic prosperity without compromising the other principles. The notion of community well-being rather than individual wealth and influence is paramount. The principle seeks to promote the new technologies that have reduced impacts on resource use and off-site impacts by incentives and appropriate market mechanisms. Improved valuation, pricing and incentive mechanisms would ensure that environmental and social factors are included in valuations and costings.
- ♦ **Strengthen Community Involvement and Participation** – the achievement of societal goals are dependent upon the extent to which these become embedded in community behaviour. The influence of individuals and households is central to achieving changes in the way communities function. This in turn depends upon access to good information and opportunities to participate in educative discussions. Community participation requires structures that encourage this and outcomes that demonstrate the success of their involvement.