



# CHAPTER 6 - GLOSSARY



A FAIR APPROACH  
TO MAKING CHANGE

# GLOSSARY

**Carbon offset** - a reduction in emissions, or sequestering of greenhouse gas which is made in one part of a business or entity or by an external third party on behalf of the business, in order to compensate for (or offset) an emission made elsewhere. For example, an organisation may offset its greenhouse gas emissions by investing in a tree planting project that absorbs greenhouse gases (in this case carbon dioxide) from the atmosphere. The release of greenhouse gas emissions by the organisation is netted out against the greenhouse gases absorbed by the tree planting project to deliver zero greenhouse gas emissions.

**Energy efficiency** - refers to the efficiency at which energy is used to perform processes and activities. By way of example, two different pumps may deliver the same flow of water but may use different amounts of electricity. How well a pump converts electricity input to energy output (in the form of water flow) is the energy efficiency.

**Mitigation/mitigation opportunities** - in the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples of mitigation approaches include using fossil fuels more efficiently, switching to renewable energy, improving energy efficiency so less energy is required, and expanding forests and other 'sinks' to remove greater amounts of carbon dioxide from the atmosphere.

**Offset** - an activity that compensates all or part of the greenhouse gas emissions or energy consumption of an emitting entity, by reducing the emissions or energy consumption elsewhere, or increasing the greenhouse gas absorption of another entity.

**Resources** - a resource is a supply of limited availability that needs to be consumed to obtain a benefit from it. Resources are frequently thought of as physical, such as coal, metals, water, forests, but can also be virtual, such as human capital potential, corporate reputation, etc.

**Renewable energy** - energy derived from non-fossil energy sources that are continuously renewed by natural processes. These include wind, solar, biomass, geothermal, wave, tidal and hydropower.

**Solar energy** - solar energy relates to energy harnessed from the sun. Solar energy technologies are broadly categorised as passive or active and can harness energy as heat or as electricity. Active solar technologies include the use of photovoltaic panels and solar thermal collectors. Passive solar techniques include orientation of buildings and using materials with favourable thermal mass to maximise the capture of heat in winter and minimise heat input in summer.

**Sustainability** - Under the *Local Government Act 1993*, the principles of ecologically sustainable development that Councils are obligated to take into consideration are:

- (a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:
  - (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
  - (ii) an assessment of the risk-weighted consequences of various options,

- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:
  - (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
  - (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
  - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

