

## ETHICAL AND ENVIRONMENTAL CONSIDERATIONS OF DESIGNERS AND SOCIETY

There are numerous ethical considerations that influence designers. They include:

### *Assessing the impact of the design on consumer:*

The designer may consider safety, ease of use and built-in obsolescence. Designs may be created for a higher moral purpose, such as to improve equity within our society.



### *Protection of intellectual property:*

Intellectual Property is the product of a person's mind or intellect. The designer needs to be aware of patents which can be legally enforced, thus giving the patent holder exclusive rights to the invention.

### *Privacy:*

Privacy is of particular concern in the public sector as specific personal details are collected and stores as a matter of course. There are certain inventions and uses of technology which have the potential to invade privacy such as computer databases and security monitoring devices. E.g., E-mail



### *Exposure to the undesirable:*

Some designs enable exposure to information and experiences that would not otherwise be possible. E.g., pornographic sites on the Internet.



### *Advertising of designs:*

Some designs are forcefully advertised, especially to the young and impressionable. There are advertisements that are offensive to certain subcultures such as migrants, Aboriginal people, women, the elderly, disabled and homosexuals. E.g. Coca-Cola is heavily marketed towards young people but it is very unhealthy.

### *The right to alter natural order:*

Some people believe that designs should honor the concept of natural order. Society's view on these issues is varied as people come to terms with new technology and concepts that until recently were just science fiction. E.g. genetic engineering and the selection of fetuses.

### *Whether designs should be tested on animals and humans:*

Certain testing on humans may be harmless, while other forms will always remain controversial. All animal (including human) testing is strictly controlled by government regulations.

### *Environmental impact:*

Designs have been modified and created because of concerns about the impact humans have on the environment through using both renewable and non-renewable resources. Environmentally friendly products have become a major marketing tool.



### *Sustainable technology:*

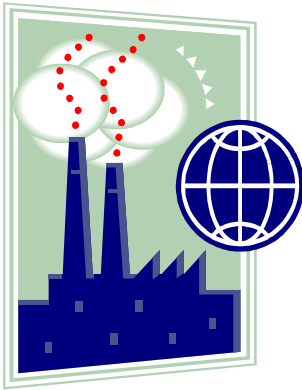
Designers may choose one design over another depending on whether the resources used in design and production are conserved while still meeting production requirements.



**Minority groups:**

Some groups in our society require special design attention such as the disabled, the elderly and isolated communities. Often these designs are only required in small quantities and so can be expensive or of low profitability.

**ENVIRONMENTAL CONSIDERATIONS FOR DESIGNS AND SOCIETY INCLUDE:**



***The Greenhouse effect or Global warming:***

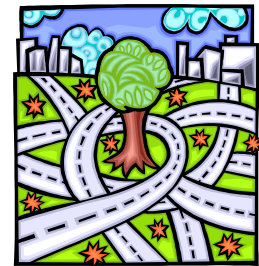
Gases in the atmosphere insulate the Earth, preventing some of the sun’s heat escaping into space, which has resulted in the warming of the Earth. The designers responsibility is to design products and buildings powered by alternate power sources and to manufacture energy-efficient product designs for everyday use.

***The Ozone Layer:***

The ozone layer forms a protective shield against ultraviolet radiation from the sun. The ozone is broken down by the use of chlorofluorocarbons (CFCs). The designer should ensure that CFCs are not used, as there are alternatives available.

***Tropical deforestation:***

The effects of deforestation include the destruction of many species of animal and plant life and the disruption of local climates, possible leading to desertification due to changes in rainfall. Designers should choose to not use any tropical wood unless it is proven that it is from a sustainable source.



***Waste:***

The designers decision could be to produce less waste. They can increase the life cycle of a product, reduce the amount of material use, use biodegradable materials and so on. They could also design for reuse, recyclability and for remanufacture.

***Water pollution:***

The growth in population and the increasing use of large volumes of water for industrial purposes means that there is not sufficient clean water to meet demand.

***Resource consumption:***

The conservation of natural resources and the responsible management of renewable resources are at the centre of the concept of sustainable development. Designers decisions have an impact on this in three ways through the choice of materials; the energy used throughout the processes; and creating a reduction in the need to consume.

