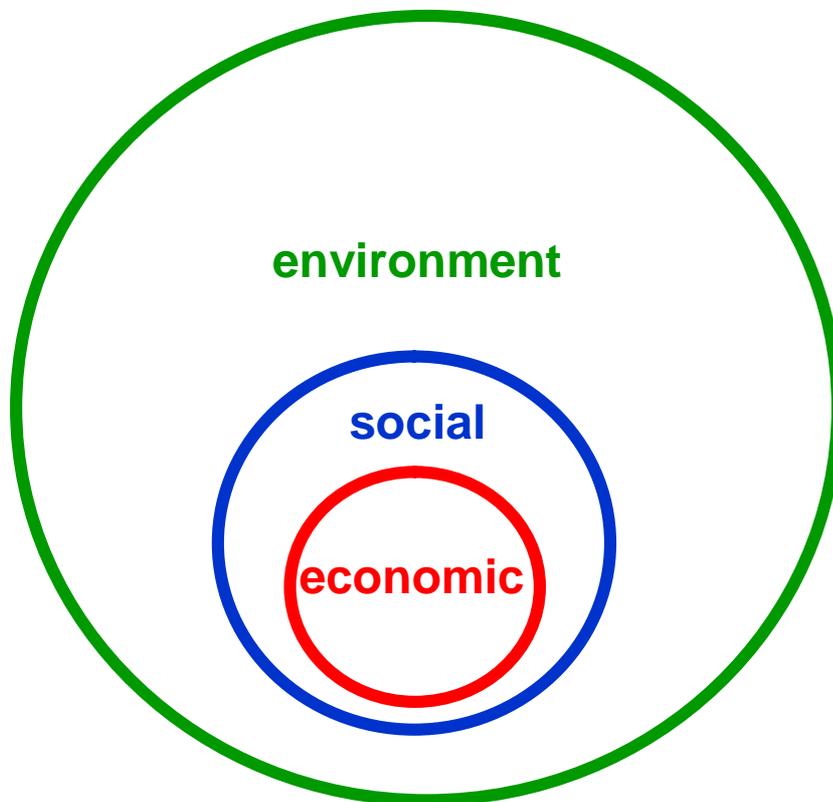


DEFINITION OF SUSTAINABILITY

The definition of sustainability is that **the social, environmental and economic impacts of an action¹ are all positive; now and for the next seven generations.**

The principle is 'First do no harm'.

The mind map is :-



where 'environment' is the ecosystem of the planet earth, upon which all life is dependant,

where 'social' is humankind, being but one of 1.7million known species on planet earth, and

where 'economic' is a social outcome, to be seen in context and not seen as the sole goal, or even the paramount goal.

¹ In this definition 'action' includes projects, policies and strategies

Explanatory notes

1. **The definition** of sustainability requires positive social, economic and environmental impacts, which implies that 'remediation' and 'offsets' are needed. This is because it is usually not possible to have a basic action with absolutely no negative impacts. For example, building a road will usually either increase noise, require clearing of vegetation, take houses, or have some other negative impact. To overcome these negative impacts requires the following process.

1.1 **The process** has four requirements.

The first requirement is to review the action to see if its objectives can be met in some other way, eg by travel demand management rather than road construction.

The second requirement is to see if the action can be modified to avoid the negative impacts, eg divert the road around the houses.

The third requirement is to add remediation actions, eg build a noise wall.

Once all these avenues are explored, with community involvement, the fourth requirement is to develop 'offsets', eg provide 'equivalent' vegetation elsewhere that is of similar ecological value to the area cleared and a bit more in size, so that a net environmental gain is made.

Finally, if the combination of review, modification, remediation and offsets cannot produce a sustainable action, then it may be useful to go back to the first requirement, the objectives, to see whether another way of meeting those objectives can be found that is sustainable. This may include reviewing the objectives themselves.

The aspiration is that through this process all actions can be made positive socially, economically, and environmentally.

1.2 **An aspirational definition** has been deliberately chosen, because we need to define true sustainability: otherwise we won't recognise our goal. It is likely that many actions will not be able to attain positive impacts in all areas and so be truly sustainable. Some actions will get close; they will be only slightly unsustainable. Other actions will be more unsustainable.

We, the STC, propose to develop the concept of 'degrees² of unsustainability' in 2009. The longevity, or otherwise, of the sustainability of an action will be part of this.

1.3 **Seven generations** is part of the definition. North American Iroquois Indians, when making decisions, kept in mind the needs of the seventh generation to come. If we take 20 years as one generation then seven generations equates to 140 years.

A long time frame is necessary because many of our actions today have impacts for decades. For example, subdivisional layouts and freeway alignments are likely to remain substantially unchanged for a century or more. Major bridges should last over a century. Road pavements only last 30 to 50 years, but most pavements are replaced and perhaps widened, with the basic road remaining in place indefinitely.

² Degrees relative to true sustainability

2. **The principle** is literally to do no *net* harm. *Net* being the result of avoiding, modifying, remediating, and/or offsetting (as above).

3. **The mind map** should be seen as a reminder that all life is dependant upon the global environment, that it is often more difficult and sometimes impossible to reverse many types of environmental damage, and that the environment has no direct voice in community consultation.

Clearly there are proponents of many environmental causes, but the environment as a whole cannot say what will happen to its complex interactions if parts are disrupted.

This is different to consultation with people about social or economic impacts, where options can be more fully explored and the people involved have a right to input and to express acceptance or otherwise of the consequences of an action, and where those consequences may be more reversible.

In this context it must be remembered that it is only the present generation that have a say, so our generation needs to also bear in mind, and endeavour to articulate, the needs of future generations.

Definition approved at STC Committee meeting 19/1/09

The STC web page is www.stcwa.org.au