



The University of Sydney
Integrated Sustainability Analysis TM



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Talented Student Program topic

Equity and technology in the
sustainability debate – implications
for developed-world citizens

Rationale

There is a widespread belief that provided innovative technological solutions, environmental problems such as climate change can be tackled. However, a range of studies have demonstrated that affluence growth has so far almost always and everywhere outpaced any gains in resource efficiency (see references in Lenzen and Smith 2000). This is especially so in developed countries such as Australia, which come under intense pressure from developing countries such as India and China as these countries claim their fair and equitable share of economic development (Grübler and Fujii 1991; Den Elzen *et al.* 1992; Ghosh 1993; Parikh and Painuly 1994; Heil and Wodon 1997; Byrne *et al.* 1998; Muradian and Martinez-Alier 2001; Brown and Corbera 2003). It appears hence that there is so far no silver-bullet technology that will lead to sustainable development and global equity, whilst allowing us to maintain affluent lifestyles (Trainer 1997; Trainer 2010).

The moral conundrum faced by many developed-world citizens is that they have appropriated the lion's share of the global environmental commons for decades, become accustomed to the associated levels of convenience, and despite an environmentally-constrained world (see eg Sala *et al.* 2000; Meinshausen *et al.* 2009), are resisting to revert from unsustainable and inequitable levels of affluence (whether voluntarily through more education or coerced through fiscal policies; see Kempton 1993; Lutzenhiser 1993; Stokes *et al.* 1994; Gatersleben *et al.* 2002; Lenzen *et al.* 2002; McKibben 2003; Poortinga *et al.* 2004; Vringer *et al.* 2007; Hertwich 2008; Whitmarsh *et al.* 2011).

The topic of the TSP project is for the students to 1) become informed about the nexus of technology, environment, and global equity, 2) critically discuss the inherent moral conundrum, in particular the roles of technology, affluent lifestyles, and 3) put forward a well-argued position on what they believe to be imperatives for action.

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