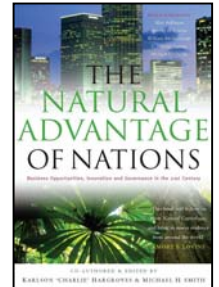


## The Natural Edge Project – Climate Change Resources Freely Available Online.

### 1) How to Achieve Sustainable Cuts in Greenhouse Gas Emissions

i) Hargroves, K. and Smith, M. (2005) *The Natural Advantage of Nations (Vol I): Business Opportunities, Innovation and Governance in the 21st Century*, Earthscan Publishing, London, Chapter 17: Profitable Greenhouse Solutions. Freely Available online at <http://www.naturaledgeproject.net/NAON1Chapter17.1.aspx>



ii) Smith, M. Hargroves, K (2007) "Executive Report: Action on Climate Change Can Help Business Competitiveness and Economic Growth" National Business Leaders Forum for Sustainable Development. Freely Available from <http://www.nblf.com.au/framework.php>

iii) CSIRO ECOS magazine is featuring a series of articles by The Natural Edge Project on how to achieve sustainable (deep) cuts to greenhouse gas emissions. The following short articles provide new insights into some of the most exciting and effective ways to profitably reduce greenhouse gas emissions. Freely Available at [www.naturaledgeproject.net/TNEPArticles.aspx](http://www.naturaledgeproject.net/TNEPArticles.aspx)

- Berry, M. Smith, M. Hargroves, K (2007) 'Energy Superpower or Sustainable Energy Leader?'
- Smith, M. Hargroves, K. (2007) Climate Leaders: The New Corporate Standards. ECOS Issue 136 pp. 27-29.
- Smith, M. Hargroves, K (2007) The Gore Factor; Reviewing the Impact of An Inconvenient Truth. ECOS Issue 134 P16-17.
- Smith, M. and Hargroves, K. (2006) 'The First Cuts Must be the Deepest', CSIRO ECOS, Issue 128, pp 8-11.
- Smith, M. and Hargroves, K. (2006) 'Wood - another low carbon footprint solution', CSIRO ECOS, Issue 129, pp 12-13.
- Smith, M. and Hargroves, K. (2007) 'Smart Approaches to Electricity Use', CSIRO ECOS, Issue 135, pp12-13
- Smith, M. and Hargroves, K. (2004) 'Encouraging more sustainable practices - the easy way', CSIRO ECOS, Issue 121, pp 24-25.



### 2) Emissions Trading Schemes – Prospering in a Carbon Constrained World

How can business most cost effectively respond to an emissions trading scheme? This key question is addressed in detail in a detailed report for the Chicago and European Climate Exchanges. This report was developed by Natural Capitalism Solutions (NCS) and The Natural Edge Project for the Chicago Climate Exchange (CCX) and the European Climate Exchange (ECX). The report was researched and prepared by Karlson 'Charlie' Hargroves and Michael H. Smith of The Natural Edge Project, and supervised, reviewed and edited by Hunter Lovins and Christopher Juniper. (<http://www.naturaledgeproject.net/KeyAchievements.aspx>)



### 3) Engineering Sustainable Solutions Program - Design Principles Portfolio

The first module of the Design Principles Portfolio has been completed, with funding from the Australian Department of Environment and Water Resources, and is focused on Whole Systems Approaches to Sustainable Design (WSD). Whole System Approaches to Sustainable Design for buildings, cars, cities, industry plants, appliances, motors, farming and agriculture, lighting systems, are increasingly being seen as the key to achieving cost effective reductions in greenhouse gas emissions. Whole System Approaches to Sustainable Design can help to achieve 75 percent (Factor 4) or greater eco-efficiency savings in new designs. This is



because “by the time the design for most human artifacts is completed but before they have actually been built, about 80-90 percent of their life-cycle economic and ecological costs have already been made inevitable.”<sup>1</sup> This module consists of 10 Units (250 pages). ANU Engineering is using this material as part of its System Design courses. All 10 units are freely available online. Available at [http://www.naturaledgeproject.net/Whole\\_Systems\\_Design\\_Suite.aspx](http://www.naturaledgeproject.net/Whole_Systems_Design_Suite.aspx)

#### 4) Sustainable Energy Solutions Portfolio– An Online Training Package for Business/Industry, Government and Households to Achieve Sustainable Cuts

The project delivers an effective toolkit for capacity-building engineers, architects and other key technical professions to help business and industry especially find the cost-effective low-carbon energy approaches and energy efficiency options. TNEP led a collaboration with Griffith University (Centre for Environmental Systems Research) and the Australian National University (Institute for Environment), with support from the Institution of Engineers Australia, to develop this education and training material which was funded as part of the CSIRO Energy Transformed Flagship. Now three training modules (30 lectures) are freely available online ([http://www.naturaledgeproject.net/Sustainable\\_Energy\\_Solutions\\_Portfolio.aspx](http://www.naturaledgeproject.net/Sustainable_Energy_Solutions_Portfolio.aspx)) addressing the following issues to help business, government and households achieve sustainable cuts to greenhouse gas emissions:

1. Identifying, and implementing energy efficiency opportunities for Industrial/Commercial users – By Technology
2. Integrated systems based approaches to realising energy efficiency opportunities for Industrial/Commercial users – By Sector
3. Integrated approaches to energy efficiency and low emissions electricity, transport and distributed energy.

This training program seeks to compliment other initiatives seeking to encourage the reduction of greenhouse gas emissions through behaviour change, sustainable consumption, and constructive changes in economic incentives and policy. All are needed to achieve sustainable cuts to greenhouse gas emissions.

**6) The Nuclear Energy Debate.** Over the last two years there has been renewed debate about nuclear energy. TNEP has created an educational resource for schools and tertiary level students ([www.naturaledgeproject.net/TheGreatSustainabilityDebates-NuclearPower.aspx](http://www.naturaledgeproject.net/TheGreatSustainabilityDebates-NuclearPower.aspx))

**7) Stay Informed – Subscribe to ECarbon News.** eCarbon News is a free monthly emailed digest of news from around the world relevant to climate change and is read by decision makers around the world. eCarbon News is now hosted on a new Australian Climate Forum web site (<http://www.australianclimateforum.com/>), with financial support from The Australian National University’s Research School of Biological Sciences (<http://www.rsbs.anu.edu.au/>), and Treesmart (<http://www.treesmart.com.au/>).



<sup>1</sup> Hawken, P. Lovins, A. and Lovins, H. (1999) Natural Capitalism: The Next Industrial Revolution, Chapter 6: Tunneling Through the Cost Barrier. Earthscan, London. Available at <http://www.natcap.org/images/other/NCchapter6.pdf>. Accessed 25 September 2007