



## THE NATURAL EDGE PROJECT

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### *Greetings to the supporters, endorsees and teams of [The Natural Edge Project](#).*

Much has happened since the last update with our secretariat undertaking the projects international study tour. The tour started in New Zealand with meetings with the Parliamentary Commissioner for Sustainability and the Institution of Professional Engineers and then on to Rocky Mountain Institute. Over the 18 days we were hosted by RMI we had the opportunity to discuss the First Draft in detail with Amory Lovins and the RMI teams as well as spending time with Hunter Lovins from the Global Academy.

Following this, Michael Smith, the projects content coordinator returned to Australia to incorporate the experience in to the draft and I was able to visited London, Japan and Perth on the way home to develop relations and seek contributions from a range of groups and bodies such as the UK Forum for the Future, Earthscan Publishing, London First, Commonwealth Engineers Council, UNEP International Environmental Technology Centre, Asia Pacific Forum for Environment and Development (APFED) an the Sustainability Policy Unit of the Western Australian Department of the Premier and Cabinet.

The experience was an amazing opportunity to engage wider involvement in the development of the project with a major result being the development of a new structure for the publication along with some new initiatives for the project. This structure builds on from the extensive work of our co-authors and incorporates the current thinking of many of the leaders in the field as to how to operationalise sustainability.

The first change you will notice is to the title of the publication, from the working title of '*Achieving a Sustainable Future*' to '*Natural Advantage of Nations*'. Our team is confident that by bringing together theories of Competitive Advantage such as the work done by Prof. Michael Porter with theory on National Systems of Innovation and the Sustainability Paradigm we can produce a publication to assist a country or company to achieve genuine progress through Natural Advantage.

NOTICE: Due to this major redevelopment of the publications structure and focus during the study tour the timeline for the development of the first draft will be extended by 4 weeks. Release to editorial team and co-authors is targeted for the 12<sup>th</sup> of June and then more broadly for peer review shortly after.

**Highlights of this period** have been the time spent at RMI, visits in New Zealand, London, Japan and Perth, and then joining the working group members to attend the Business Leaders Forum on Sustainable Development as part of the TNEP Young Professionals Delegation; and the development of 2 new initiatives following on from the first initiative being the publication and database '*Natural Advantage of Nations*', read on for more details.

Cheers

Karlson 'Charlie' Hargroves  
TNEP Coordinator

#### Summary of Update:

- Report from secretariat on the recent Colorado Spring Study Tour,
  - Global Academy - Natural Capitalism Group,
  - NEW – Whole Systems Design Alliance; Design Integration Guide with RMI,
  - NEW – Documentary: Australia’s Sustainability; Meeting the Challenges of the 21st Century,
  - ARUP joins list of Industry Sponsors,
  - Report on TNEP involvement in Business Leaders Forum on Sustainable Development,
  - TNEP contributes to the AusCID ‘Sustainability Framework’ Handbook 2003,
  - ‘Students for Sustainability’ in Adelaide – Keynote Speaker, TNEP member Mike Smith,
  - Update on the TNEP Initiated ‘Young Professions Australia Roundtable 2003’,
  - TNEP contributes to the latest TELA Paper due for release – Universities and Sustainability,
  - Communications Report from Secretariat, including;
    - ECOS and ECOFUTURES join forces and features TNEP article,
    - Australian Association of Environmental Educators support TNEP in April Newsletter,
  - TNEP Working Group Member Profile: Cheryl Desha
  - TNEP Partner Profile: CSIRO Sustainability Network
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### Rocky Mountain Institute Study Tour

During the 18 days we were privileged to spend at RMI we were given many opportunities to highlight and explain the range of amazing initiatives, projects and groups active in Australia working towards the same outcomes as RMI. As a result our project has been invited to provide articles for the RMI Newsletters summarising the activities related to sustainability from our region and to also join with RMI to develop an Asia Pacific focused monthly column to highlight sustainable activities in our region and the potential for ongoing partnerships. We are confident that through our partners and alliances we can provide best practice and worthy material for these publications.

Our team was afforded many opportunities to meet with and discuss in depth many issues with RMI staff and where invited to address the staff meeting. Due to the very close alignment of the goals of our respective organisations RMI and TNEP have committed to work together to achieve these goals over the coming years.

*Overall the RMI trip was far more successful than we could have ever hoped for, largely because it turned out that RMI is interested in working on projects that overlap with our goals almost identically. For instance, everyone we talked to saw the directions that Asia takes as critical to whether we make progress towards Sustainability so are super keen to help any book that further assists our region of the world. In addition, RMI are starting to do curricula reform work with Universities, wanting to work with Institutions generally like Institutions of Engineers and so on.*

**Mike Smith, TNEP Content Coordinator**

Mike and I realised that until one visits an organisation for at least a week it is impossible to truly know where that organisation is at. Over those 2.5 weeks a great level of trust, understanding and respect was built that bodes well for the future. The level of potential constructive synergies between what our teams, co-authors, advisors, steering committee members are doing and what RMI wants to do was remarkable.

Hence it was from these sorts of synergies and sharing of information that we left RMI with the sense that it is time to write “Natural Advantage of Nations”. And infact, to aim for anything less, would be an injustice to the quality of material we have so generously received from our remarkable co-authors, partnering organizations and RMI.

*I am particularly pleased with the new book, *Natural Advantage of Nations*, that which will in effect, follow on from our book with Paul Hawkin, *Natural Capitalism*, and bring in newer evidence from around the world and apply it in particular to Australian conditions, there are a lot of clever people in Australia doing very resourceful things that I think we all need to learn about.*

*We have learned a lot of lessons since *Natural Capitalism* came out in 1999, that I think will make the next explications of this subject even more powerful and effective, so working with our Natural Project Edge collaborators I think shows great promise, these are very diligent and well informed people that I think are doing valuable work and we are looking forward to cooperating with them in ways that will help us all to learn faster and get more done better.*

**Amory Lovins, CEO, Rocky Mountain Institute**

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## Global Academy - Natural Capitalism Group



As some of you will be aware, Hunter Lovins has joined the team at the Global Academy as President and Co-Chair of the Natural Capitalism Group and is actively focused on enabling Natural Capitalism to become a central organising principle of business and society around the world.

Whilst in Colorado recently on the study tour, Michael and I were treated to conversations with Hunter on a range of topics from the human aspects of Natural Capitalism to the ancient Asian art of steel blade making. Hunter has an amazing capacity to contribute on many levels to society, from being an active volunteer in the local emergency services to developing material

and tools for implementation of natural capitalism in developing countries. Spending time with Hunter was truly an honour.

Hunter has accepted an invitation from TNEP to join the editorial committee for the publication 'Natural Advantage of Nations' and sit on the projects Advisory Board and we look forward to working with the Global Academy long into a sustainable future.

The Natural Capitalism Group (NCG) seeks to implement the principles of Natural Capitalism throughout the business world. Founded by Hunter and Global Academy Chair, Walter Link, NCG works directly with senior decision-makers in corporations and communities around the world to develop environmentally and socially responsible strategies that also increase prosperity.

The Group pursues its mission via three primary methods of outreach.

The first is by developing and delivering compelling educational programs in formats ranging from executive seminars and corporate training programs to business school courses and online learning.

Second, NCG offers consulting in the practical implementation of Natural Capitalism to create showcase examples of companies and communities that behave in ways that are environmentally benign and at the same time increase public wellbeing and shareholder value.

Finally, NCG partners with respected development organizations that have significant experience in emerging economies, helping them to incorporate the principles of Natural Capitalism into their work and thereby disseminating this critical information as widely as possible.

In addition to this Hunter and Walter Link are currently developing a publication entitled, **Human Dimensions of Natural Capitalism** This sequel to *Natural Capitalism* will be based on extensive research and consulting that Hunter Lovins conducts in the field of Natural Capitalism, as well as the deep background in corporate social responsibility, responsible investing and the humanities that Walter Link brings to the partnership.

Even economically rational ideas, however appealing, do not implement themselves. They must be acted upon by people, who come in a dazzling diversity of individuals and organizations. However, individually and collectively people resist change. Even if, as a leader, you have decided to do things differently, how would you begin? What motivates this decision, and what hinders its achievement?

As Hunter worked with companies, communities and citizens to implement the ideas of Natural Capitalism, it became clear that there is a need for a sequel that would enable those initiating change to recognize the various forces acting on their decisions to move towards transformation. The Human Dimensions of Natural Capitalism will explore what makes people want to change, what motivates them, and what hinders change, at three levels, from that of key global systems, to the organization, to the level of the individual staff member.

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## **NEW: Whole Systems Design Alliance – Design Integration Guide**

An exciting outcome of the study tour was the development of a joint proposal by The Natural Edge Project and Rocky Mountain Institute to initiate an international ‘Whole Systems Design Alliance’ involving key stakeholders from the engineering establishment, engineering educational associations, and key engineering firms. The focus of the alliance will be to appropriately build whole system design (as discussed in Chapter 2 and 6 of Natural capitalism [www.natcap.org](http://www.natcap.org)) into engineering professional development and University degrees globally,.

**The first phase** is focused on developing an open source RMI initiated ‘Design Integration Guide’ over the next 2 years through research, collaboration and an intensive summer study bringing together a range of leading systems thinkers. The guide will be in the form of a direct comparison between current and whole system design for a range of disciplines. This is aimed to show engineers globally how to achieve Factor X at the same cost or less, to achieve as good or better service as part of their day to day work. The case studies will be focused on ‘Tunnelling through the Cost Barrier’ and environmentally responsible.

**The second phase** is to align with the UN Decade of Education for Sustainable Development and seeks to develop engineering curriculum material in an ongoing way through the alliance.

The alliance will be formed initially by international members however the formation of a Regional Alliances to assist in the development of the material, peer review and piloting the material is planned and interested groups are very welcome to contact our team for further information (Project Coordinator 08 8361 6929).

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## **NEW: Australia’s Sustainability: Meeting the Challenges of the 21<sup>st</sup> Century**

A proposal to develop a **collaborative documentary series** based on sustainability in Australia and the Asian Pacific Region is in its early stages of development. The idea sparked by many occasions when members of TNEP were privileged to meet with leaders in the field and hear their thoughts and strategies and thinking that this message was one for all Australians to hear.

The leader of the initiative, TNEP Working Group member Simon Nash, an environmental economist passionate about documenting and delivering the message of sustainability to a wide audience, will lead the team to develop the material for the proposed series beginning with an approx. 45 minute ‘**documentary**’ to show the potential.

Whilst at RMI the secretariat was able to record footage of both Amory and Hunter discussing their passions and motivations for achieving a sustainable future and will continue to invite co-authors, partners and endorsees of the project to record their thoughts and comments for the mock version of the documentary.

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## **ARUP joins list of Industry Sponsors**

Sustainable solutions demand holistic thinking; Arup Sustainability provides greater success for organisations. Through sustainability-based risk assessment and strategic planning we can identify an organisation's risks and evaluate opportunities for performance improvement. Arup has developed a set of tools and services which are tailored to your business to help smooth the, sometimes difficult, path from best intentions to a meaningful commitment to, and reporting of, sustainability.

*Arup's interest in the Natural Edge Project arises from wanting to be a part of an initiative that showcases sustainability success stories in the Asia Pacific Region, raises awareness of the sustainability imperative, and that encourages collaboration between industry, academia, private and public organisations. We are proud to already be actively involved with organisations like the Australian Green Development Forum, and see this project as an opportunity to further network with other like-minded individuals and organisations.*

**David Singleton, Arup Australasia CEO**

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## **Business Leaders Forum on Sustainable Development**

*The aim of the National Business Leaders Forum on Sustainable Development is to bring together business leaders from across Australia to recognise outstanding leadership, debate and accelerate uptake of sustainability. The Forum is helping to build a network of business excellence and innovation, and create competitive advantage for Australian companies. Importantly, it provides a means of championing the business "heroes of our time" who are moving down the path of sustainability. This is a keen area of interest for (the 2003 Keynote Speaker) Al Gore, whose international leadership and commitment to sustainable development is well known.*

**John Hewson, Forum Chair 2003**

After meeting the forums organiser, Molly Olsen, at a Foundation for Young Australians Forum in 2001 the projects coordinator, Charlie Hargroves, was invited to lead a Young Professionals Delegation to the event in 2002 and again in 2003 drawing on members of TNEP. At both forums Charlie was invited to give closing words to reflect on the proceedings from a young professionals point of view.

*This experience has been an amazing reassurance that sustainability as a central operation procedure for business in the 21<sup>st</sup> century is inevitable and the work of our project is then able to contribute to developing natural competitive advantage for firms and nations seeking genuine progress, these are exiting times and there is much inspirational work to be done.*

**Charlie Hargroves, TNEP Coordinator**

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## **Sustainability Framework for the Future of Australia's Infrastructure**

AusCID CEO, Dennis O'Neill presented the recently developed handbook entitled 'Sustainability Framework for the Future of Australia's Infrastructure' at the Business Leaders Forum for Sustainable Development held in Sydney on the 29<sup>th</sup> of May. This document will form the basis of a campaign by AusCID to incorporate sustainability aspects into infrastructure planning and development in all levels of government and among the Councils membership.

The handbook was produced by Phillip Toyne of Eco Futures Pty Ltd and member of the TNEP Advisory Board with acknowledged additional material contributed by Julian Crawford Eco Steps Pty Ltd, Alan Tate and Justin Sherrard of Cambiar Pty Ltd and TNEP members Charlie Hargroves and Mike Smith.

*This Handbook is AusCID's contribution towards developing a new framework for the development of national infrastructure, to take account of its environmental and social aspects as well as the economic. The Handbook was developed to present and enable a strong case for Sustainable Development in Infrastructure as a driver for innovation.*

*The Handbook is a dynamic document and will change in content and use as investors, developers and communities understand the benefit of applying more rigour to measurement of their progress towards sustainable infrastructure outcomes. AusCID is proud to be involved in facilitating this journey.*

**Denis O'Neill, AusCID CEO**

## Students for Sustainability in Adelaide, Keynote Speaker, TNEP member Mike Smith

The vision of the [event](#) is to provide a conference that will bring together diverse groups of people to share inspiring and thought-provoking experiences, which encourage positive discussion and action aimed at creating ecological, political, economic and social sustainability in the world.

To provide an opportunity for individuals to become empowered with the confidence, practical skills and motivation, required so that humanity can have a healthy relationship with the earth and all of its diverse ecosystems.

*One of the main inspirations for our book has been the overwhelming demand from fellow students and from Universities for quality peer reviewed curricula materials on sustainable development. Events like this are a sign of the demand for such information from the next generation, SoS is an entirely volunteer run annual conference which attracts over 700 University students.*

Mike Smith, TNEP Content Coordinator

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## Young Professions Australia Roundtable 2003 Update

Following the recently held biannual meeting of Professions Australia (formally the Australian Council of Professions) the proposal developed by TNEP with support from Barry Gear, Engineers Australia representative and current President, has been **formally approved allowing the formation of the Young Professions Australia Roundtable** to focus on the theme chosen for 2003, namely **'Achieving a Sustainable Future'**.

Formal nominations have already been received from the Institution of Engineers Australia, Australasian Institute of Mining & Metallurgy and Australian Institute of Quantity Surveyors with strong interest from all members. The Secretariat and Co-Chairs for the inaugural 2003 Roundtable will be TNEP members Charlie Hargroves and Nick Palousis and the participants will meet at the Professions Australia November meeting in Canberra.

The content will be coordinated by TNEP member Mike Smith with both Mike and Nick attending the recent dinner and meeting of Professions Australia to discuss the proposal. Both saying that the response was very positive and the potential for a range of interactions amongst the professions driven by young professionals is enormous.

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## Latest TELA Paper due for release; Universities and Sustainability

The projects content coordinator, Mike Smith, joined a team to develop a [TELA](#) paper with ACF on 'Universities and Sustainability' and the final report will be released after 2 years in the making by Emeritus Prof David Yenken with the AVCC July 25th.

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## Communications Report

### *a) ECOS and ECOFUTURES join forces and features TNEP article*

"This special **EcoFutures** supplement is designed to give you a taste of things to come in **EcOs** magazine. It explores the latest thinking on critical issues facing our future, how we can use science to discover sustainable solutions and how industry and governments are becoming sustainability change-agents."

TNEP is grateful for EcoFutures urging a 'whole of society' approach. EcoFutures states on the CSIRO web page "It is only through the combination of dedicated scientific research and innovation, a business community focused on the triple bottom line, a policy and regulatory framework conducive to sustainable progress and an informed and participatory community that a sustainable future can be attained."

Article on The Natural Edge Project entitled '[Engineering a Sustainable Future](#)' is featured on page 11 and we thank the editors for this amazing and generous support.

## *b) Australian Association of Environmental Educators support TNEP in April Newsletter*

[AAEE](#) kindly showed its support of the project shown by the following extract from an article in the April 2003 Newsletter, also containing an article from a TNEP co-author, Anna McKenzie on Student Exhibitions; ‘A team of innovative young engineers and scientists have joined forces to develop a not-for-profit project to develop education materials to respond to the overwhelming demand for reliable, peer reviewed information on sustainable development in Australia and the region – a source that will cover cost effective best practice nationally and globally.

*Among the stewards of our country's future, our young leaders are setting the pace to achieve a sustainable future. This project reflects much of the Institutions thinking on sustainability and with their enthusiasm it's bound to succeed. They've assembled an incredible network which will definitely ensure a positive triple bottom line and multi-sectoral involvement.*

**Dr Peter Greenwood, President Engineers Australia**

The Natural Edge Project will seek to improve communication among innovators in science, engineering, social sciences, government, and business. Providing options and solutions for many of the key issues and challenges that we face in this century, showing how holistic, systemic approaches are already delivering significant outcomes to companies, governments, educational systems, and throughout society.

From the early stages, the Institution of Engineers Australia has been a crucial supporter and advisor to the project, seconding the Institution's Sustainability Research Officer and project co-founder, Charlie Hargroves, to coordinate the project.’

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## **Working Group Member Profile**

### **Cheryl Desha, Environmental Engineer**

Cheryl is working for Arup, an international engineering consultancy, in their Brisbane office. She has a passion for environmental engineering and her career goal is to promote sustainable development in all aspects of her work. Her life goal is to make a positive difference and she is working towards this by being involved in Young Engineers Australia, the Natural Edge Project, the Australian Green Development Forum and the International Young Professionals Foundation.

Cheryl is the current President of Young Engineers Queensland and an active member within the Institution of Engineers Australia. At work, Cheryl's time is spent preparing sustainability assessments for infrastructure projects, land and water management work, and raising awareness of sustainability issues. She values innovation, consultation and risk management as key tools in achieving successful outcomes for all.

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## **Partner Profile: CSIRO Sustainability Network, Elizabeth Heij explains;**

The CSIRO Sustainability Network is a “virtual learning community of practice” dedicated to inclusive exchange of ideas and information on sustainability and sustainable development - and this means across science disciplines within CSIRO, and across enterprises, professions, disciplines and generations generally. It is still growing, but currently has over 500 members, some inside CSIRO, but the majority outside in business, industry, education, government (all levels), NGOs, and the community. Most are in Australia, but some are international. Ages range from about 19 to 90.

As you might expect for a CSIRO-led activity, the emphasis is on scientific and technological trends and resources but, since sustainable development is all about the integration of economy, environment and society, consideration goes way beyond the purely technological to encompass the socio-economic context in which science and technology are applied.

My job as Facilitator is to supply the Network with relevant, summarized, trend information, and to make linkages - among pieces of information and between people. In fact you could say that one aspect of my job is to "drown"

in all the sustainability trend information to help others "keep their heads above water" – to listen to the “chatter” and find the things that make us think! Mostly this is done via informal newsletters that go out every 3-4 weeks (so as not to “snow” members’ e-mailboxes); and all Network members are encouraged to bring relevant materials to my attention for inclusion in newsletters or to contribute appropriate short features of their own. Contributors are acknowledged, and their e-contact details are normally given for any follow-up discussion with other Network members.

Membership in the Network is free – anyone can join, and newsletters can be freely circulated to any friends, colleagues, and family members who may be interested. The activity is supposed to be as inclusive as possible.

My thinking behind the Network is that the creativity needed to build more sustainable pathways of development lives not just in "temples of knowledge" but within individuals in all age groups and all levels, right across the world community - and information is the fuel to fire it up! Change is too important and too urgent to depend entirely on the top-level decision makers of today; we need dialog at all levels – and especially with the decision makers of tomorrow.

The way information flows is also important - it needs to be two-way, reciprocal, multidimensional - not just one way. I also believe that horizontal linkages within informal networks are just as important as the vertical information flows within our organizations and businesses. While it may frustrate some colleagues who like to severely focus their attention, I recognize that sustainability is a complex, interrelated set of issues, and often we don't know where we will find relevant ideas and information until after we have found them. I therefore deliberately keep newsletter content broadly interdisciplinary – in contrast to requested contacts, which I try to make as issue-specific or discipline-specific as possible.

One of my main objectives is to give science an approachable human face in “sustainability” – a topic increasing concern to the community – and also to provide an entry point into our collective knowledge base for those (such as small businesses, local government, community groups, etc) who have traditionally found research providers difficult to access.

The Network has a CSIRO Intranet site and a public-access website at [www.bml.csiro.au/sustnet.htm](http://www.bml.csiro.au/sustnet.htm) Back-issues of newsletters are available through these web pages, and also directly in the newsletter archive at [www.bml.csiro.au/SNnewsletters.htm](http://www.bml.csiro.au/SNnewsletters.htm).

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## **Partner Event Profile: Regional Government Network for Sustainable Development**

The Premier of Western Australia, Dr Geoff Gallop MLA, announced on Tuesday that the Government of Western Australia will host two international sustainability conferences from 17-19 September 2003:

- The Third Conference of the Regional Government Network for Sustainable Development - the Premier will invite the participation of some 50 sub-national governments from five continents
- The Second Meeting of the Academic Forum of Regional Government for Sustainable Development - all welcome

The theme of both events is "Regional Governance for Sustainability" with the following topics:

- Governance for sustainability (particularly the relationships between local, regional and national government and their communities)
- Tools for sustainability (including sustainability assessment)
- Partnerships for sustainability (particularly with the resources industry)
- Greenhouse policy and adaptation to climate change
- Sustainability and tourism and
- Sustainability, regional planning and cities.

These conferences will run in parallel and share keynote speakers, social events and plenaries. The Premier's media statement, a conference flyer and a call for abstracts for the Academic Forum are attached. We hope to see you in Perth in September 2003!

For more information or to register, go to the website: <http://www.sustainability.dpc.wa.gov.au/conferences.htm> or email the Conference Secretariat on [nrg4sd@debretts.com.au](mailto:nrg4sd@debretts.com.au)



### Supporters

The members of the secretariat wish to thank the following supporters of the project;

- [Australian Conservation Foundation](#) (ACF),
- [Australian Green Development Forum](#),
- [Australian Virtual Engineering Library](#) (AVEL) – Sustainability Knowledge Network
- [Barton Group](#),
- [Business Council for Sustainable Energy](#),
- [Centre for the Encouragement of Philanthropy in Australia](#),
- [CSIRO](#),
- [Environment Business Australia](#),
- [Green Innovations](#), [EcoFutures](#), [Arup](#) and [Hatch](#);
- [Institution of Engineers Australia](#),
- [International Young Professionals Foundation](#),
- [Nature and Society Forum](#),
- [Rocky Mountain Institute](#),
- [University Leaders for a Sustainable Future](#) (ULSF),
- [UN International Environment Technology Centre](#) (IETC),
- [World Federation of Engineering Organisations - ComTech](#),
- [Young Engineers Australia](#).



#### **The Natural Edge Project Website is under construction!**

Thanks to the amazing team from Izilla, an Australian website application design company, our project will receive their expert services in-kind to ensure the site has a state of the art content management system and interface. [click here](#).



Please contact the team at [secretariat@naturaledgeproject.net](mailto:secretariat@naturaledgeproject.net) or on +61 (0)8 8361 6929 or +61 (0) 412 427 543 for any queries regarding the project.

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