

Careers for a Sustainable World – Yolanda van den Bemd

CDANZ Career Research Symposium – July 2011

Introduction

This paper looks at the need and the opportunities available for people to make a difference in the world through their work. I see a role for Career Consultants as guides and motivators, encouraging resilience and hope for a sustainable world. New trends, training and jobs will be examined along with skills for our clients and ourselves and a vision for the future.

The situation on Planet Earth now...

Every day we hear of the degradation of the earth, extinction of species, consequences of climate change and injustices humans deal out to each other. From the perspective of our physical situation this quote sums it up well; “Nothing is more important to human beings than an ecologically functioning, life sustaining biosphere on the earth. It is the only habitable place we know.....we all depend on it to live and we are compelled to share it; it is our only home... we cannot live long or well without a functioning biosphere, and so it is worth everything we have.” (Joseph Guth in Leonard, 2010)

From the perspective of our everyday livelihoods, economy is inseparable from ecology; we believe in the free market, despite ecological destruction, concentration of financial wealth in few hands and diminished happiness, community life and family cohesiveness....no economy can be sustainable in the long term without a balanced prosperous ecological system andsocial equity. (Ivanko, Kivirist 2008)

Definitions of Sustainability

The Collins dictionary definition of sustain is to ‘keep alive, endure’.

The Brundtland Commission (convened by the UN) has this definition: “Sustainable development....meets the needs of the present without compromising the ability of future generations to meet their own needs” (Kross, 2009)

Monash University Sustainability Institute’s definition is succinct – “Sustainability aims for a balance between the principles of environmental protection, social justice, economic well-being and diversity.”

Otago Polytechnic Centre for Sustainable Practice states this; “Sustainable practice.....enables all people to realise their organisational potential and improve their quality of life in ways which.....build resilient communities and protect and enhance nature’s support systems.”

Sustainability is therefore about working with the best and enriching practices and attitudes that enable life to continue and be improved for the future.

Definition of Careers for Sustainable World

My definition; activities that work towards sustaining, enriching and enhancing life and make it more wonderful. I have decided to consciously seek out good news, focus on positive stories and look for potential for environmental and social responsibility. Everyone who wants to be part of the solution has roles they can play, in paid or unpaid employment. It’s about considering the wider impacts of daily activities and includes the whole range from making small changes in ones current role, finding an organisation that is becoming more aware, seeking a role with potential in this area right through to a ‘green career’ of practical environmental work.

The North American Regional Consultation on Sustainable Livelihoods said that “Sustainable livelihoods provide meaningful work that fulfills the social, economic, cultural and spiritual needs of all members of a community – human, non-human, present and future – and safeguards cultural and biological diversity” (Everett, 2007)

Inventions and implementation of new innovations require professionals and trades people to commit their paid work hours to solving the key issues of our time in history. (McClelland, 2008)

I am privileged to meet many wonderful people who have moved into, or are on the way to careers in this area. See Appendix 1 for some examples.

Initiatives in Education

Education is a key sector where new knowledge can ignite fertile minds of all ages. I will mention some areas here, but there are a large number of institutions of all types that are riding the new wave of sustainability training.

Tertiary Institutions teach areas that traditionally make a difference in the world such as education, health, social services, engineering and design. Many institutions also have courses with sustainability topics embedded within them. There is huge potential for tertiary institutions to work with industry to create the courses that will be needed as new skills are required.

Appendix 2 has a selection of courses at NZ’s larger tertiary institutions that are starting to equip people with wider knowledge and knowhow for healing of planet and people.

Schools: The Enviroschools Foundation delivers training, programs and resource development across NZ for all types of schools and early childhood centres. There are 783 enviroschools in NZ! The Ministry of Education has a huge section on Education for Sustainability with lots of resources for the curriculum and schools.

Community Education: The NZ Association for Environmental Education is a non-profit organisation that promotes/supports lifelong learning about sustainability. The Sustainable Living Centre in New Lynn and The Kaipatiki Project & Environment Centre in Birkdale hold evening & weekend talks and courses and have visitors centres. The Sustainable Living Education Trust runs evening classes for adults to learn practical skills in reducing environmental impact.

Internationally there are specialist institutions, universities with sustainability centres and educational initiatives that are truly inspiring. See Appendix 3 for some examples.

Some trends in NZ Business

The Sustainable Business Network provides advice and support to help business become more sustainable with networking opportunities, practical tools, training and assessments. They had a 40% increase in membership in 2008. The Sustainable Living Centre and Ecomatters holds an Ecoday each year – an expo of green businesses and products and community initiatives. The Green Living network held its inaugural Green Living Show and NZ Organic Expo in Auckland in May 2011. 65 organizations exhibited products/services, with 12 workshops and 5 seminars. At the show, New Zealand Business Council for Sustainable Development’s Operations Manager Graeme Colman presented : ‘The power of green: what business needs to know about sustainability in 2011’. Included were results from Global Compact’s 2010 survey of 1000 CEOs worldwide: 91% reported that their company will employ new technologies to address sustainability issues over the next five years.

Attorney Jonathan Lucas, from James & Wells Intellectual Property writes that patent applications filed for inventions in Clean Energy Technologies have increased annually by 20 per cent over the last 14 years, mostly in solar photovoltaics, wind energy, carbon capture and biofuel technologies.

“The ecopreneur is the 21st century child of the industrious and profiteering entrepreneur and the social and environmentally passionate eco warrior. They’re riding the new wave of reduce, reuse, recycle

business consciousness” (AUT 2011) Some great examples of NZ ecopreneurs include efficient manufacturing, reusable nappies, resource recovery, medical centre combining natural health, organic food shops, plant based household products, natural funerals and fair-trade. See Appendix 4 for details on these.

Some initiatives/trends in business overseas

Green for All and Apollo Alliance in America work in collaboration with the business, government, labor, and grassroots communities to create and implement programs that increase jobs in green industry.

Good Jobs Green Jobs is a series of national conferences in varying states of the USA.

Schneider Electric, a global specialist in energy management, has Energy University; free online courses which provide information and training on energy efficiency and best practice.

Boston College Center for Corporate Citizenship is a research organization that helps global corporations work towards corporate citizenship.

Where are the jobs

Energy sector New Zealand

The ESITO says there are a growing number of NZ companies specialising in design, installation and maintenance of residential scale photovoltaic, wind, and mini-hydro power generation, in solar water heating and heat pump air/water heating. A new National Certificate in Renewable Energy (Level 4) for electricians is currently awaiting NZQA approval. (B Fawdray, personal communication, May 2011)

Alphatron Pacific, a solar equipment distribution/installation company have had a huge increase in enquiries and sales of renewable energy products, with the fastest growing being ‘grid-connected’ photovoltaic solar. A massive boom is predicted in this area. (J Brand, personal communication, 18 May, 2011)

Bradman Recruitment, an Australian company with an Auckland office states “If you have climate change/ energy /renewable energy experience we invite you to submit your resume” and “Sustainability, renewable energy...is the industry of the future”. People in engineering, electronics, computing and design will be sought after in the near future. (T Jones, personal communication, May 2011)

Proactive research and job search - Auckland yellow pages has 47 companies under “Solar Energy Equipment” and 68 companies under “Environmental Consultants”. The Bioenergy Association of NZ lists 29 companies actively involved in this industry.

Energy sector overseas

61% of members of the Association of Energy Engineers (America) report a growing shortage of qualified professionals and 37% say they will retire in the next 10 years. According to the Center for American Progress, clean energy will be one of the largest industries in the country by 2020. (Coyle & Flynn, 2010) The Hays report ‘*Creating Jobs in a Global Economy, 2011-2030*’, compiled with Oxford Economics states “Climate change will lead to job creation in the development of green energy sources and in occupations needed to mitigate the impacts of global warming.”

New Green Occupations will include solar power operations & lab work, photovoltaic fabrication, carbon capture and sequestration engineering, energy retrofitting, home performance analysis, industrial ecology, waste composting, recycling & reclamation and hybrid car maintenance, to name a few. (Stone 2010)

Jobs in all areas

McClelland (2008) puts green industries into five categories: traditional environmental sciences, natural resource management industries, emerging industries, traditional industries greening their products and services and traditional companies becoming sustainable.

Appendix 5 has a selection of overseas recruitment companies focused on sustainability roles.

The Auckland Council has roles such as Waste Minimisation Advisors, Environmental Education Officers, Environmental Programmes Advisors, Regional Advisor for Ecology, Biodiversity Manager, Corporate Sustainability Manager. (W Warth, personal communication, May 2011)

UrbanTrans recently advertised for Sustainable Transport Advisors in Auckland; socially minded people to encourage reduction of car use through engagement conversations, survey collection and phone calls. Not-for-profit organizations such as Greenpeace, Oxfam and Forest & Bird have paid and unpaid work including internships in marketing, website, communications, IT, campaigns, fundraising, HR, project coordination, advocacy, public relations and administration.

Amazing good work is going on around us without us being aware of even a small part of it. Often it is under the radar, not obvious in the media, but nevertheless quietly going its way. (Hawken 2007)

Methods of working with people and resources

“To figure out where to plug in, I recommend that you take an inventory of your interests, passions and skills and then look out in the world and see which organizations are a good match.” (Leonard, 2010)

Different types of clients...

- Those who are fully aware that they want to make a difference and need assistance with decision making, focus, research, networking or confidence.
- Those who are open to this possibility but haven't given it much thought. I pose questions such as “If you could change something for the better, what would it be?” or “Is there a cause/problem/issue you have always been really passionate about?”
- For those who have not considered it at all, I might ask the above questions and if it is not on their radar I don't pursue it.

The outline of the workshop I run for Unitec students is in Appendix 6.

Some websites as a starting point include:

www.career.unitec.ac.nz – Careers for a Sustainable World – resource with links to organizations doing socially and environmentally responsible work and a book list

www.careers.govt.nz - Jobs Database, Science, Green Jobs. There is also a ‘Where to ?’ poster about Green Jobs.

www.greencareercentral.com set up by Carol McClelland is an online guide for those embarking on a journey to identify, articulate, and land green careers for career seekers and career practitioners.

www.wiserearth.org has about a million organizations working for environmental and social justice.

Our young people need great examples of what they can do and ‘Green Career\$ - You can make money and save the planet’ by Jennifer Power Scott is full of them.

My favourite books are Melissa Everetts, see references.

Skills we need to encourage in our clients

Resilience, problem solving, self belief, hope, positivity, bravery, creativity, imagination, playfulness, perceptiveness, critical thinking, ability to research, ability to network, ability to look outside the square, ability to slow down enough listen and learn.

Nigel Phillips, CEO of Careers Fastrack & Career Life College says that our task is to help our clients tap into the infinite possibility of human ingenuity and develop attitudes of mind that become open to exploring new ideas.

Green career seekers must begin by targeting a specific area that matches their interests, experience and values. Next, immerse themselves in that industry with meetings, websites, newsletters and

networking. Keep up with advances and trends to make informed decisions about steps. The green frontier is not for passive job seekers, they must actively pursue their goal. After landing a job they must continue that active stance. The green economy landscape changes constantly. To have a successful green career, employees must be nimble, responding quickly as industries, technologies, and policies open up the next wave of green opportunities. (McClelland.2008)

Melissa Everett says we can help our clients to gauge risks, build a support system, stabilize their lives, and be guided by the emerging needs around them.

We all are walking a life/career journey in a very uncertain world. We all need to find ways to engage with hope. One of the many ways of doing this is by developing curiosity and discovery. (Poehnell & Amundson 2011)

We can encourage people to start from where they are now...and take one small step. I personally did this in my role as Career Consultant; I started to collate websites for the 'Careers for a sustainable world' resource on www.career.unitec.ac.nz

Skills we need to develop ourselves to work with our clients

All the skills mentioned above that we need to encourage our clients to develop, we also need in ourselves.

We need an expanded toolkit and fresh knowledge about the world of work. We need to know how to help clients to be entrepreneurial and where to find socially and environmentally responsible employers. We need to learn to facilitate their discovery of the social environmental contexts and the power to make a difference. We need these new skills because our clients are faced with deeper levels of choice than our profession has historically had to address – not just choices about their own opportunities, but about their responsibilities and potential for influence in the world. (Everett 2007)

Vision for the future

There is a need for a new psychology of career development...which gives legitimacy to social and environmental values that are the wellspring of the human being's ability to care about his/her world.... knowing what we love enough to work hard for.....it means shifting from 'risk-management' to 'opportunity-seizing' mode. (Everett 2007)

William McDonough, co-author of the book *Cradle to Cradle*, about ecologically intelligent design, is quoted as giving design students this assignment: "Design a system what doesn't produce any hazardous toxic material or put it in your soil, air and water. Measure prosperity by how much natural capital you can put into constant closed systems that are healthy. Wouldn't you like to reimagine the world?" (Ray P, Anderson S, 2000)

Blessed Unrest is a book about the million or so organizations that exist in the world who are working in their own way for positive change . "This is the story without apologies of what is going right on this planet, narratives of imagination and conviction." (Hawken, 2007)

Knowing that this groundswell of good work is being done gives me hope so my vision for us as Career Practitioners is for continual learning about the possibilities and opportunities. I aim to be constantly on the lookout for wonderful, inspirational and surprising new information that informs us for our work with others and can inspire them into activities and livelihoods that make a real difference.

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Appendix 1

Examples of people who have moved into, or are on their way to careers for a sustainable world

Client – 30 years in retail, knows she wants to get into horticulture. She is now researching permaculture, organics, and biodynamics.

Client – IT professional wanting to make a difference, not sure how. Discovered he can research energy efficiency in the IT industry and look into applying it to his current company.

Lee – University graduate in Biological Anthropology – has now started a small business collecting the 'waste' soil from mushroom farms and bagging it for sale at nurseries.

Noel – Recent graduate in Product design, very knowledgeable about radical new closed loop designs, is now investigating where he would like to share his talents

Wendy – started by volunteering to run a small team caring for an urban stream and green belt area, eventually gave up her paid job and now is paid part-time for the stream care

Waveney – started a challenge to live rubbish free for one year. Results – a lot of learning, a website and now working at the Auckland Council as a Waste Minimisation officer.

Damon - Bachelor of Planning, journalist, policy analyst, researcher, energy management & environment officer, senior environmental programmes advisor at Auckland Council.

Appendix 2

Training & Education in NZ – a selection of courses related to environmental and social responsibility

Polytechnics:

Aoraki Polytechnic – Ecological Building & Design, Natural Building

Bay of Plenty Polytechnic – Environmental Management

Eastern Institute of Technology – Sustainable Horticulture

Nelson Marlborough Institute of Technology – Conservation, Trainee Ranger

Northland Polytechnic - Sustainable Rural Development, Applied Environmental studies

Otago Polytechnic – Sustainable Practice, Sustainable growing. Has a Centre for Sustainable Practice with three dedicated staff which organizes projects, courses, consultancy & research.

Southern Institute of Technology – Solar Water Heating Installation, Environmental Management, Organic Horticulture, Applied Technology (Renewable Energy)

Tai Poutini Polytechnic - Ecotourism

Telford Rural Polytechnic – Apiculture (Beekeeping)

The Open Polytechnic of New Zealand – Environment and Sustainability

Unitec Institute of Technology – Biodiversity, Animal Management & Welfare, Not-for-Profit Management. Staff in different departments are working on sustainability projects, research and embedding it into the curriculum within many departments including Building, Architecture, Design, Engineering, IT, Marketing and Social Practice

Unitec has had an Environmental Sustainability Strategy Project team in 2010, recently appointed an Environmental Manager in April 2011 and has just awarded the first round of funding for staff and students to work on environmental projects.

Wairiki Institute of Technology - Sustainable Energy

Waikato Institute of Technology – Solar Hot water installation

Wellington Institute of Technology - Solar Water Heating Installation Short Course

Wananga:

Te Whare Wānanga o Awanuiārangi – Environmental studies, Indigenous graduate studies

Te Wananga o Aotearoa – Wide range of courses about Maori language and culture

Universities:

Auckland University of Technology - Mindbody Healthcare, Environmental Studies, Conflict Resolution, Maori Development, Treaty of Waitangi studies, Ecopreneurs. Sustainability Research Cluster

Lincoln University – Environmental planning & management, Business and Sustainability, Environmental studies

Massey University- Dispute resolution, Development studies, Environmental studies, Environmental health, Resource & Environmental planning, Environmental Technology & Sustainable Energy, Ecology, Environmental Science, Environmental Management, Maori Resource and Environmental management
Also has Centre for Energy Research

University of Auckland - Environmental Science and Environmental Engineering, Strategic Sustainability and Social Responsibility offered as an In-house Short Course for organizations

The University of Auckland has had a Sustainability & Environmental Coordinator since 2006. It is becoming a model for efficient resource use and waste disposal as well as a living laboratory for sustainable practices. (Wilson, 2011)

University of Canterbury - Environmental Science & Ecology. There are 2 staff members who are Sustainability Advocates on campus.

University of Otago – Environmental health, Environment & Society, Indigenous studies, Peace & Conflict studies, Environmental management, Environmental science, Ecology, Indigenous development. Also has New Zealand Centre for Sustainable Cities, Oceans and Climate Change Research Centre and Otago Energy Research Centre

University of Waikato - Treaty of Waitangi studies, Environmental Sciences, Environmental Planning

Victoria University of Wellington - Development studies, Ecology & Biodiversity, Environmental science

Appendix 3

International examples of Educational Initiatives

Australia - Monash University's Sustainability Institute has 40 staff involved in research, education and action. Swinburne University of Technology has a National Centre for Sustainability, with services for business and community, courses in sustainability, green skills research and course development. The Dusseldorp Skills Forum runs YGreen where young people are trained in local home sustainability assessments.

England - Schumacher College is an international institution for people everywhere to learn about environmental and social sustainability.

Netherlands - A new book "Inspired by Cradle to Cradle" (about intelligent design) is being freely sent out to all institutions in the Netherlands to get the message out there.

United States - College of the Atlantic has Bachelor of Human Ecology . Wilderness Awareness School is dedicated to fostering understanding and appreciation of nature, community and self. Ecotech Institute has environmental training in renewable energy and sustainable design. Solar Energy International offers a free online course in renewable energy. American Institute of Renewable Energy has training in solar and wind technology.

Appendix 4

Some great examples of NZ ecopreneurs

Ecoeffect, Tauranga, helps businesses to design highly efficient manufacturing operations with a restorative approach to natural resources.

Reusable nappies – there are as many as 12 small environmentally friendly nappy companies in NZ set up by entrepreneurial people, often couples with young children.

Wanaka Wastebusters is a community owned enterprise, providing resource recovery solutions and Education for Sustainability in communities, want 70% resource recovery by 2014.

Holistic Medical Centre – Auckland –integrates the best of medicine with the best of complementary natural health to provide holistic health care.

Kapai NZ Limited in Wellington provides healthy food, supports a wildlife sanctuary, fair-trade and zero-waste.

Little Hero -organic groceries and café in Pt Chevalier – fair trade, local, natural.

Ecostore - manufacturer wholesale distributor and retailer of sustainable plant and mineral based household products

The Natural Funeral Company provides the choice of eco friendly funerals.

Tradeaid - not for profit organisation supporting disadvantaged producers of food and crafts by being a retailer, importer, wholesaler and development agency

Appendix 5

Examples of recruitment companies overseas

www.environmentaljobs.com.au - Australia

www.ecorecruitment.com.au - Australia

www.renewableenergyjobs.com -UK

www.greenrecruitmentcompany.com - UK

www.jobsinsustainability.com - USA

www.ecojobs.com – USA

www.redfishtech.com - recruiting for the High tech and green energy sectors - USA

www.jobsinsustainability.com – USA

www.corporatesocialresponsibilityjobs.brighterplanet.org - USA

Appendix 6

Outline of 1 hour workshop on Careers for a Sustainable World for Unitec Students

- Introductions
- Show 21 minute animation “The Story of Stuff” viewable from www.thestoryofstuff.com
- Time for individual and group reflection and responses to the animation
- Show www.careers.unitec.ac.nz - ‘Careers for a sustainable world’ resource and discuss how it can be used
- Activity: Landscape page folded into 3 columns
 - In column 1, write down a list of all the things you are interested in, are passionate about, love doing etc...
 - In column 3, write down a list of the needs you are aware of in your community, society, globally
 - In the middle column, 2, make connections with any of the things from list 1 with those from list 3 where you could see a potential for your input in making a difference
- Sharing of ideas that have come up in the activity.
- Wrap up, encouragement to go and do research and suggestion to make an appointment with me to continue the conversation, if they wish.