Living the Dream

How following one’s passions can change the world
William Kamkwamba
Ray Anderson changes Industrial world

**Interface** had a goal is to be the first fully sustainable corporation (it promises to eliminate any negative impact it may have on the environment by the year 2020). To reach it’s goal, Interface, which operates in 100 countries with more than 5200 staff, had to completely **rethink its business philosophy and redesign its entire production systems and processes globally.**


More people are buying our products because they buy our way of thinking.
What was your first love in life?
Dreamed about...
I listened to my instincts and made conscious choices to only take jobs that furthered my skill base, expertise, or made a difference...
Developed a significant range of skills

• Media, fundraising and special events
• Strong organisational skills – high and low profile events of all sizes
• Risk management and negotiation
• Stakeholder engagement
• Strong communication skills
• Built communities
• Learnt how to collaborate
• Secretary of a youth group at 12

• Left school at 15 – became Dental Nurse.

• 18 was married was running a busy radiology clinic by day part owner of a marketing business at night

• 20 was running 2 regions of the Miss Australia Quest and Miss Secondary School Quest, Superwalk and Annual Door knock appeal across NQ
5 years worked for one of Australia’s most loved and iconic brands
My experience is that Passion will out perform experience with the right sort of leadership every time...
World Masters Games tapped into passion and community...
Used my love of nature to keep me grounded and sane along the journey...
Nature is important to reconnect us to all that is and remind us we are part of the whole. It’s also a haven when people feel safe to breakthrough and reconnect to our passions and what is important.
Taken my love of nature
+ my passion to make a difference
= Team building and leadership programs around the world
Developed the industry body for CSR and Sustainability in Aust

- Inspiring change
- Building capacity – at all levels from shop floor to top floor
- Improving innovation and triple bottom line
- Bring awareness of the risks and opportunities of climate change
- Invite business government and community to work collaboratively
Led Business delegations to UNFCCC
Our world is in trouble...

- Growing population
- Wasteful habits
- Hunger for profit & growth
- Greenhouse Gases up
- Deforestation
- Water

We are currently consuming more natural resources than the earth can produce.
The Ten Hottest Years on Record

Source: NASA/GISS
Change in Annual Global Temperature

• 1880 – 2009

Anomaly Relative to 1901 – 2000 Mean (°C)

Source: National Climatic Data Center; NOAA, 2010
Kinglake
Marysville
February 9, 2009
Victorian Bush Fires February 2009

173 Deaths
500 Injured
72 Hospitalised
78 Townships
3,500 Buildings destroyed including 2029 homes
7562 homeless/displaced
450,000 Ha Burnt
Increase in Heavy Precipitation Days
World Wide

Songkhla Province, Thailand
November 3, 2010
Guilin, China
July 3, 2009

• 40 million in 12 provinces affected by floods
• 75 people died
Mumbai India on July 26, 2005, 94 centimeters of rain fell in 24 hours. The water levels reach two meters. This is the most rainfall any Indian city has ever received in one day. The death toll in western India reached 1,000.
40 dead or missing in landslides and floods
Northwest Pakistan
August 2010
The worst Asian monsoon in decades flooded approximately 20% of Pakistan in 2010
Lora del Rio, Spain
December 9, 2010 3,000 evacuated
Oaxaca State, Mexico

October 2, 2010

35 Areas declared disaster zones after repeated flooding and mudslides
Queensland

January, 2008

20,000 homes damaged
$150m in crop and stock losses Vic & NSW

Photo: The Gold Coast Bulletin
Queensland February 2009
Dalby
December 30, 2010
Bundaberg, Australia
January 1, 2011

Flood waters covered area bigger than France and Germany.
Rockhampton
January 2, 2011
Rockhampton Airport, Australia
January 3, 2010
Cyclone Yasi, Australia
February 2, 2011

Banana growers 75 per cent of their crop - valued at about $350 million - wiped out – with a dramatic price hike that followed. Sugar growers estimate that about 20 per cent of their crop lost and put the damage bill to the crop and infrastructure at about $500 million.
.... if we are seeing an intensification of extreme weather events now, you ain't seen nothing yet."

Professor Ross Garnaut
4 Feb 2011, Update launch
Cost of Australia’s Natural Disasters 67 - 99

2002 – 2003
Drought cost $7.2b

2011 Qld Floods alone greatest single natural disaster in Aust
Cost Estimate
$30 Billion

Source: Bureau of Transport Economics, 2001 analysis of Emergency Management Australia (EMATrack) database
The Economics of Climate Change...

Currently costing us 1% of GDP

If no action, could disrupt economic and social activity on a similar scale to that of the great wars and the economic depression of the first half of the 20th century that would be difficult or impossible to reverse.

If no change – cost between 5 – 20% OF THE GLOBAL GDP NOW AND FOR EVER.

Source: Stern Review on the Economics of Climate Change 2006

In Aust CSIRO suggest 3- 15% of GDP
Lord Stern...

- Magnitude of the challenge is enormous
- Now at 435ppm adding 2.5ppm annually
- 50 – 50 chance of 5° increase by 2050 (been 30 million years since it was that temperature)
- **Currently 7 t per capita needs to be**↓ 2  Aust and US is 20t  Japan 10 -12t
- We need to be zero carbon
- Great market failure – we don’t have public policy across whole economy – architecture, energy, transport, forestry, agriculture – everything!
- We must learn from history – we need to be zero carbon
- 50% of where we need to go if energy efficient. 90% of our energy has 60% waste!
50 Grams – Black Balloon
Average home 200,000 black balloons a year
1kg of CO2 occupies the same space as a large fridge.
1 tonne of CO2 occupies the same space as a family home and this orange inflatable balloon

Gigaton = 1 bil tonnes

Photo courtesy Ray Wills
Emissions Gap between scientific reality and current level of ambition of nations

- **To limit 2° increase - needs to be 44 GtCO$_2$e by 2020** if we have a likely (>66%) chance of reducing temp to a 2% increase
- **Business as usual emissions - 56 Gt in 2020** (12 GtCO$_2$e Gap)
- If lowest emission pledges were implemented emissions could be slightly lower 53GtCO$_2$e range (Gap 9GtCO$_2$e)
- If highest ambitions achieved – likely to be 49Gt CO$_2$e (5GtCO$_2$e Gap)
- 5Gt Gap = total emissions of all the worlds cars, buses and trucks in 2005 – 60% of the way to reaching a 2°C target
Likely avoided temperature increase of IAM scenarios. Bar superimposed in 2020 shows expected emissions from the pledges.
History of Climate Law Development

Rio Earth Summit
UNFCCC

Second World Climate Conference

COP 1
Berlin
1990

COP 4
The Hague
1997

Australian RECs
Feb 2001

COP 6
Bonn
July 2001

G8 Genoa Statement

US rejects Kyoto
Nov 2001

EU commits to ratifying Kyoto
March 2002

UK Emissions Trading Scheme
April 2002

UK ROCs

COP 8 New Delhi
Oct 2002

COP 13
Bali
Dec 2007

Kony  Protocol enters into force
Dec 2009

EU Emissions Trading Scheme starts

COP 15
Copenhagen
Dec 2010

1st KP Commitment Period starts

2nd Phase EU ETS starts

COP 16
Cancun

First mention of the Clean Development Mechanism (Art 12)

1992

1995

2000

2002

2005
How does the carbon price work?

Federa; Government imposes a carbon price, paid by Australia’s largest polluters.

Industry reduces carbon pollution to avoid paying $23 a tonne. What remains is passed on.

Some revenue from the carbon price is used to compensate households for price rises.

Households change behaviour, favouring low-emissions goods.

Carbon-intensive industries shift towards lower emissions.

Renewable energy and low-emissions goods become more competitive.

Emissions fall.
Draft Bill released to the public for comment
August

Passage through the House of Representatives, Canberra
September/October

Passage through Senate
November

Passed into Legislation
End November
Opportunity:

To create a better future for all...
Concentrated solar thermal power tower in Spain
Blue Lagoon Spa in Iceland is fed by hot water from the adjacent geothermal power plant, visible in the background.
Australia’s Renewable Energy Industry

Last financial year AUD1.8 billion was invested in new renewable projects, 17 industrial-scale projects began operation in 2010 and 11 more are under construction.
Clean Energy in Australia
Potential locations for solar, geothermal and wave energy generation
The Proposed EU–N.Africa Renewable Energy Network

- Solar (CSP)
- Wind
- Hydro
- Solar (PV)
- Biomass
- Geothermal
Tomorrow's Super Grid
China
Smart Cities

By 2050 there will be 7b living in cities
We must duplicate infrastructure in 40 years that took
us centuries to develop.

Big push for Smart Cities – not dumb ones!

Singapore wants to become a living laboratory for urban smart technology.

Masdar – Home to 40,000 built entirely on a raised platform, which makes
maintenance and the installation of new gear much easier. Below the platform
sits the smart infrastructure, including water pipes with sensors and a fibre-
optic network. Above it is to be a showcase for all kinds of green technology:
energy-efficient buildings, small pods that will zoom around on paths (no cars
will be allowed) and systems that catch dew as well as rainwater.
CONNECTED CITIES ARE SUSTAINABLE

It is assumed that 70% of the world’s population will live in cities by 2020, which is only ten years away. But if this is to happen, we need to minimize the wear and tear on the world around us.

We are laying the foundation for societies to build upon; the communication infrastructure that connects the world around us. We ensure communication: person-to-person, device-to-device. We integrate connectivity into the daily lives of people, companies and cities, which will save time, money and resources. This is the first step toward connected cities and more sustainable living in the future. And it begins with connectivity.
The Green Economy is alive and well...

Siemens revenue from its green portfolio surpassed expectations and came in at around $28 billion for the 2010 fiscal year.

Expected to double by 2014 to $55 billion, according to Siemens CEO Peter Loscher, a mere fraction of the $40 trillion that cities across the globe will spend on green technologies such as energy generation, grids, water, waste and transport over the next 25 years.

“Despite the lack of global agreements, the green revolution has already begun and there's no turning back,”

Peter Loscher, CEO Siemens

¼ of their business is in the green economy.
Siemens: 4 key ways to Help...

1. Commit to reduce water, waste, energy
2. Bring solutions that helps us all
3. Private-Public-Partnerships – ways we can find solutions together
4. Share the knowledge

Established Green Cities Index to share best practice and make faster progress.
GE ecomagination: a strategy for growth

Part of GE’s growth strategy – target to increase revenue from these businesses from $10 billion in 2004 to $20 billion by 2010

- Since our launch, ecomagination has met or exceeded every goal they set:
  - $5 billion of clean-tech research and development
  - $85 billion in revenue from ecomagination products and solutions
  - 22 percent reduction in greenhouse gas emissions
  - 30 percent reduction in water use
  - $130 million in energy efficiency savings

In 2010 launched 22 new ecomagination products and solutions, bringing the total portfolio to 110

Next 5 years Grow ecomagination revenue at twice the rate of overall GE revenues
Who else is focusing on the Green Economy?

- Nike
- Samsung
- Phillips
- Avon
- GE
- Rickitt Benckiser
- Vodaphone
- Cemex
- Ericsson
- Vestas
- GE
- Accenture
- Scotiabank
- HP
Size of Market

- China suggest their Green Economy will be worth $1t b 2012 – 13.

- HSBC suggest HSBD report suggest clean economy will be worth $1.5 - $2.7t by 2020

- Mobium just released fourth annual Living LOHAS (Lifestyles of Health and Sustainability) trends report shows that the Australian consumer spending on healthier, more sustainable products and services continues to surge, from $12 billion in 2007 to $21.5 billion in 2010. Forward estimates the market will reach $27 billion by the end of 2012.
Earth is a living breathing entity...
It’s time to stop and regroup...

Requirement of business

1. Ensure carbon footprint is decreasing all the way down the value chain and make it visible to consumers.

2. Transform the sector in which you operate to catapult it to where in needs to be.

3. Leverage political constituencies – domestic regulation.


Executive Secretary UNFCCC Christina Figueres
Key requirements of business - World Climate Summit
Opening Address
Requirement of individuals

1. Invite you to look at your own footprint – water, waste and energy
2. Be an agent of change – Have a voice (consumer, policy)
3. Tap into what you love
4. Ensure there is enough, for all, forever!
Recognise Enoughness
Tips for success

✓ If you want to transform your world, transform yourself...
   Be the change you want to see in the world.
✓ Know your values and practice Harmlessness.
✓ Learn to work collaboratively and live in community. Respect people if you want them to respect the environment. Invite people to change – don’t try to convert.
✓ Tap into your passions and believe in yourself.
✓ Take the time to be silent - Always listen to your instincts.
✓ Never burn bridges.
✓ Be prepared to work hard and do what it takes.
✓ Have a mentor or brains trust.
✓ Manifest your future – if you can see it - you can create it!
✓ Have FUN.
We can create the future we want...

I invite you to join me on the journey to a more sustainable future!
Never doubt that a small group of thoughtful committed people can change the world; indeed it is the only thing that ever has.

Margaret Mead
Questions?