From Paul Hawken's Commencement Address

- "...If you look at the science about what is happening on earth and aren't pessimistic, you don't understand data.
- ...But if you meet the people who are working to restore this earth and create a new business model, and you aren't optimistic, you haven't got a pulse."

Can Business Rise to the

Climate Change Challenge?

Lisa Swallow, CPA CMA MS November 2013

"Solving" Climate Change

- Governments
- Markets
- NGOs
- Individual behavior
- Businesses of all sizes
- Policy makers of all levels
- UN-led efforts



KÆMP FOR KLIMAET

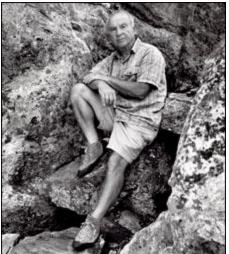


Montana Climate Change Action Plan

Final Report of the Governor's Climate Change Advisory Committee

November 2007

Early Visionaries – Value Congruent



Source sustainable raw materials Reduce packaging Early green builder Percentage of gross revenue to environmental activism

Patagonia's Mission Statement

Build the best product, cause no unnecessary harm, use business to inspire and implement solutions to the environmental crisis.

Imagine living up to this lofty goal while building \$250,000,000 enterprise

Environmental imperative – business risks & opportunities

Multiple business risks (and opportunities) Climate change-induced ecosystem shifts

- Raw materials access impacted fisheries, forest products, fibers, biodiversity-based products
- Water tables
- Transportation/energy systems shifting
- Natural disasters intensifying insurance costs
- Physical facilities impacted
- Certain industry sectors particularly exposed ag, tourism, etc.
- Energy related regulations/markets
 - Carbon taxing/capping
 - Evolving capital markets institutional investor shift



Social Imperative

- Global inequity is increasing 20% of the world consumes 80% of its resources
 - Markets in developed world saturated
 - 30,000 people die every day from poverty related causes – an opportunity Stu Hart calls BOTP
 - Eco refugees 'caused' by globalization
 - Human health ramifications
 - Zero/negative economic growth & mounting debt



Incorporating climate change into biz model is "Just Good Business!!"

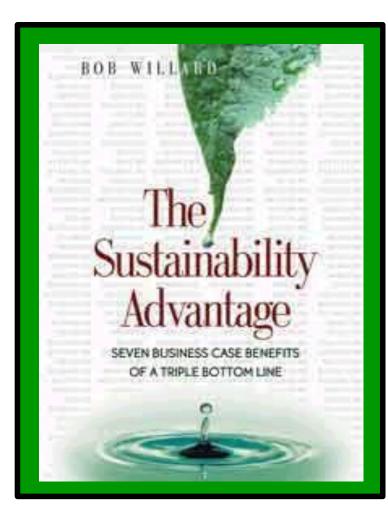
Risk reduction

- "Business case for sustainability" TBL
- Innovation opportunities for the impending green economy are limitless
 - Clean energy
 - Consumer products
 - New services
 - Green building products
 - Many early adopter niches going mainstream

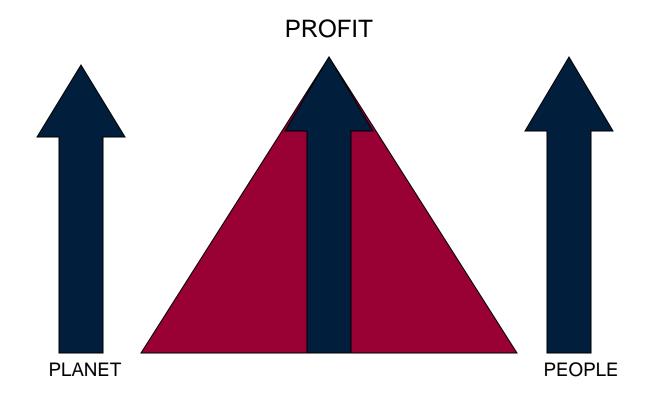


Sustainability Driven Innovation

- Sustainable Development implies
 - a business strategy that propels the firm to succeed commercially
 - while contributing to a globally sustainable world
 - while considering effect of decision on the triple bottom line



Triple Bottom Line



Also called 3E – Environment, Equity & Economics

Jill Bamburg, 2005

Financial Impetus for Change

- Brand imaging/marketing
- Cutting operating costs
 - Waste
 - Water
 - Energy
 - Materials
- Increasing access to capital interest in investment world in socially responsible and sustainable companies

Eco-efficiencies

- SRI \$3.2 trillion
- Response to activist shareholders
- More loyal/motivated employees



Market Recognition





1 in \$9 now in SRI

22% growth in 2004-2012





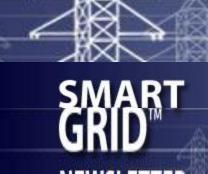
POWERED BY NYMEX

Vast Opportunities for Big Business

- Smart grids
- Distributed energy
- Hydrogen infrastructure
- Water desalinization and purification
- Renewable energy
- Energy efficiency
- Green building products
- New financial services and markets
- Alternative transportation models
- New manufacturing processes









Opportunities for Small Business

Enhance revenue stream - green market niche Increase customer, employee and vendor loyalty

Reduce operating costs





Entrepreneurial products in 'early market'

Small, lean and flexible



Fear Factor + Opportunity = Change

	10 Market Forces
5 Mega-Issues	5 Demanding Stakeholders
Climate Change	Green Consumers
Pollution & Health	Activist Shareholders
Globalization Backlash	Civil Society / NGOs
Energy Crunch	Government Regulators
Erosion of Trust	Financial Sectors

GHG reduction mandates are becoming more accepted as inevitable

Risk Mitigation

- Q: What do corporations fear more than anything?
- A: Risk!
- A: Regulation!

Activist shareholders are forcing companies to disclose how they are preparing for GHG-reducing regulation Scenarios. They are also gaining momentum directing corp. strategies!



CC Risk Mitigation Plans

- Assumption is CC will impact different industry sectors differently
 - Geographic location critical too
- Formal risk assessment
 - Physical risk
 - Regulatory risk
 - Fixed asset risk
 - Product risk
 - Competitive risk
- Develop policies & procedures
 - Including specific targets
- Benchmark transparency with peers
 - Carbon Disclosure Project



"GE plans to more than double its investment, in technologies that include cleaner coal-fired power plants, a diesel-and-electric hybrid locomotive and agricultural silicon that cuts the amount of water and pesticide used in spraying fields".

Beyond Operational Effectiveness

Look for Strategic Value Added Options

- New products (Toyota Prius)
- Lead in industry restructure (Johnson Control – Empire State Building)
- Innovate processes (Alcoa reduced energy to create ton of aluminum by 8%)

Changes that add value to the firm's operations and are hard for competitors to mimic, at least initially, are strategic

Commerce Needs Policy & Direction

Desirable Policy Attributes

- Simplicity/Transparency
- Certainty of effect on individual business
- Macro economic development impact is measurable



Who is at the Policy Table?

Investor Network on Climate Risk

- \$6.5b of assets under management 450 institutional investors
- Powerful group formed 2005
 - Released Progress Plan
 - Released Climate Risk Action Plan
 - Call on legislators to do 3 things
 - Reduce regulatory uncertainty
 - Provide incentives for solutions
 - Minimize risk why critical?



Investor Network on CLIMATE RISK

a project of Ceres

Industry Flexes its Muscles

"In our view, the climate change challenge will create more economic opportunities than risks for the U.S. economy."

USCAP is an expanding alliance of major businesses and leading climate and environmental groups that have come together to call on the federal government to enact legislation requiring significant reductions of greenhouse gas emissions.



Diverse Voices Represented

Member Organizations:







Shareholders are at Policy Table

- 2011 proxy season 50% increase over prior year
 - Hydraulic fracturing
 - Global water scarcity
 - Sustainable palm oil sourcing
 - Use of renewables/CO2 emissions
 - First ever resolutions to propose linking exec comp to sust. metrics
- 2010 40% increase in resolutions over
 2009
 - Record 95 climate change-related shareholder resolutions
 - ExxonMobil & ConocoPhillips & Massey
 - Regulatory risk from oil sands
 - Safety and environmental records





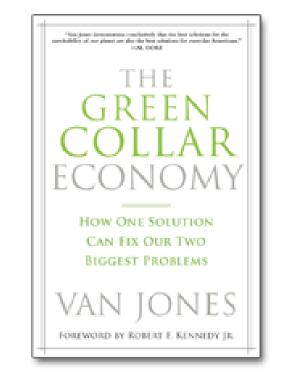
ExonMobil Taking on the world's toughest energy challenges."





"The Green Recovery"

- How to transition to a low-carbon economy
 - Focus on six areas:
 - Retrofitting existing buildings
 - Expand mass transit/freight
 - Construct 'smart grids'
 - Wind projects
 - Solar projects
 - Next gen biofuel projects
- ST creation of 2,000,000 jobs



Sustainability Profiles

- Timberland
- Herman Miller
- Grameen Bank



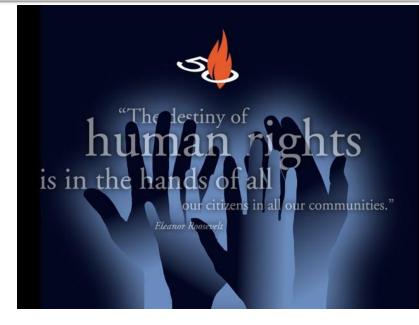
Timberland

Drivers

- Activist shareholders
- Specifics of implementation
 - Solar powered distribution facility
 - Hired Verite'

K IN FREEDOM

- International Labor Code of Ethics
- Triple Bottom Line effect
 - People Increased productivity in foreign facilities
 - Planet reduce 4200 metric tons CO2
 - Profit Increased shareholder value two fold in 3-year time period



ESPONSIBILITY RUNS DEEP.

READ THE MOST RECENT CORPORATE SOCIAL RESPONSIBILITY REPORT

Herman Miller Furniture

- "We contribute to a better world by pursuing sustainability and environmental wisdom. Environmental advocacy is part of our heritage and a responsibility we gladly bear for future generations."
 - -Excerpted from Herman Miller's Corporate Values Statement





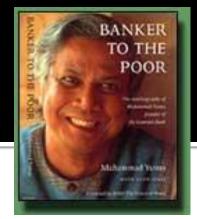




"PERFECT VISION PROGRAM"

Grameen Bank

Drivers



- Break vicious cycle of poverty and lack of access to capital
- Specifics of implementation
 - Microfinance
 - Grameen Bank's Method of Action
- Triple Bottom Line effect
 - People Increased standard of living 90%
 - Planet Sustainable products
 - Profit Family of enterprises \$5b

You too can be a microfinancier







There's no business to be done on a dead planet.

---David Korten