

Responsible Business Summit: **Making Business Sense of** **Sustainability/Business Responsibility** **...A Changing World**

by

Bill Blackburn

University of Iowa

Tippie School of Management

Pappajohn Entrepreneur Center

Iowa City, IA

May 10-11, 2018

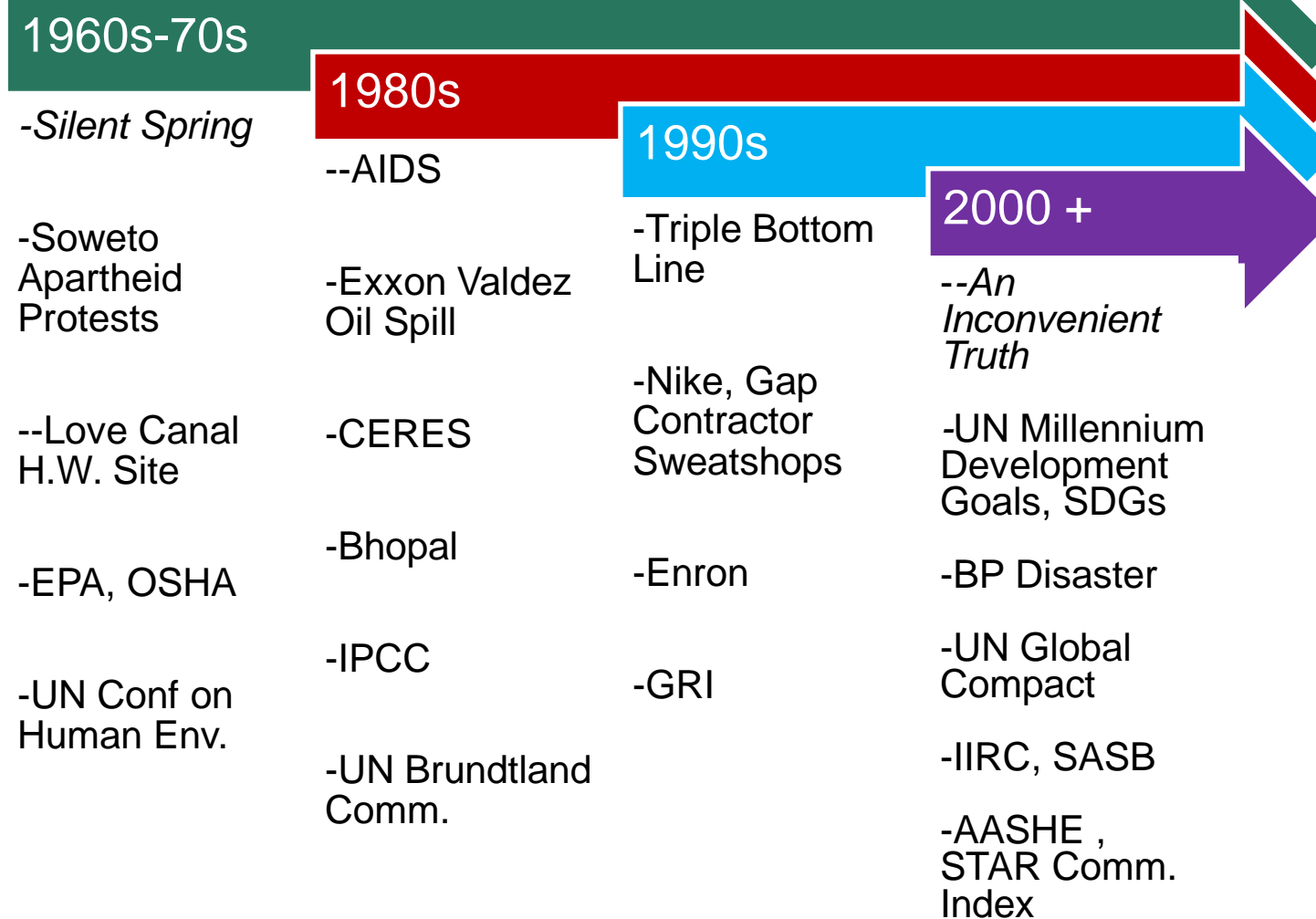




“Human history becomes more and more a race between education and catastrophe....”

--H.G. Wells

History of Sustainability



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

Changes for Review

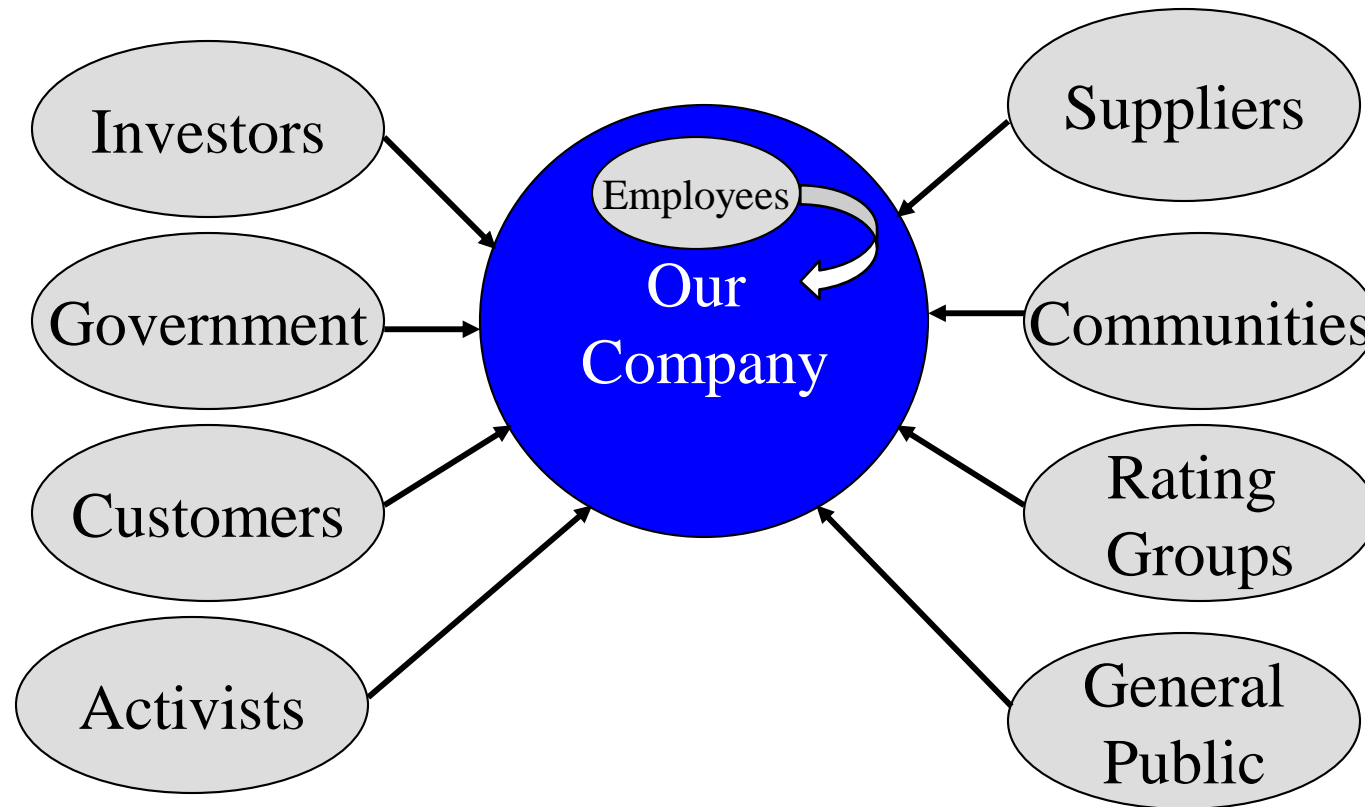
Business Changes

1. Democratization:
Stakeholders as Key Drivers
2. Globalization
3. Transparency

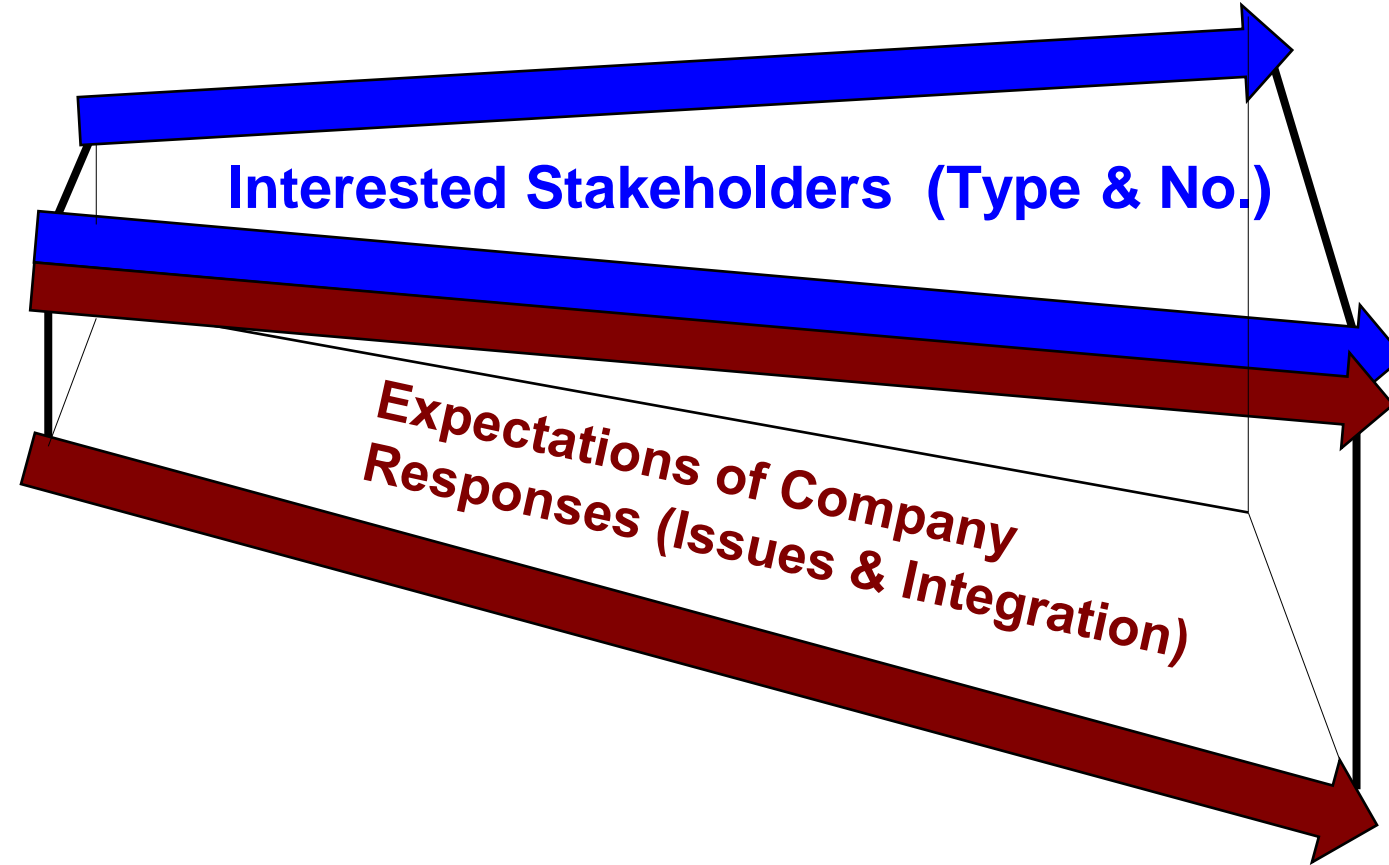
Key Environmental & Social Changes

4. Resource Consumption & Population
5. Energy & Climate
6. Water
7. Prosperity Gap

1. “Democratization” of Business: Stakeholders as Key Drivers



Stakeholder Expectations Deepening and Widening



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

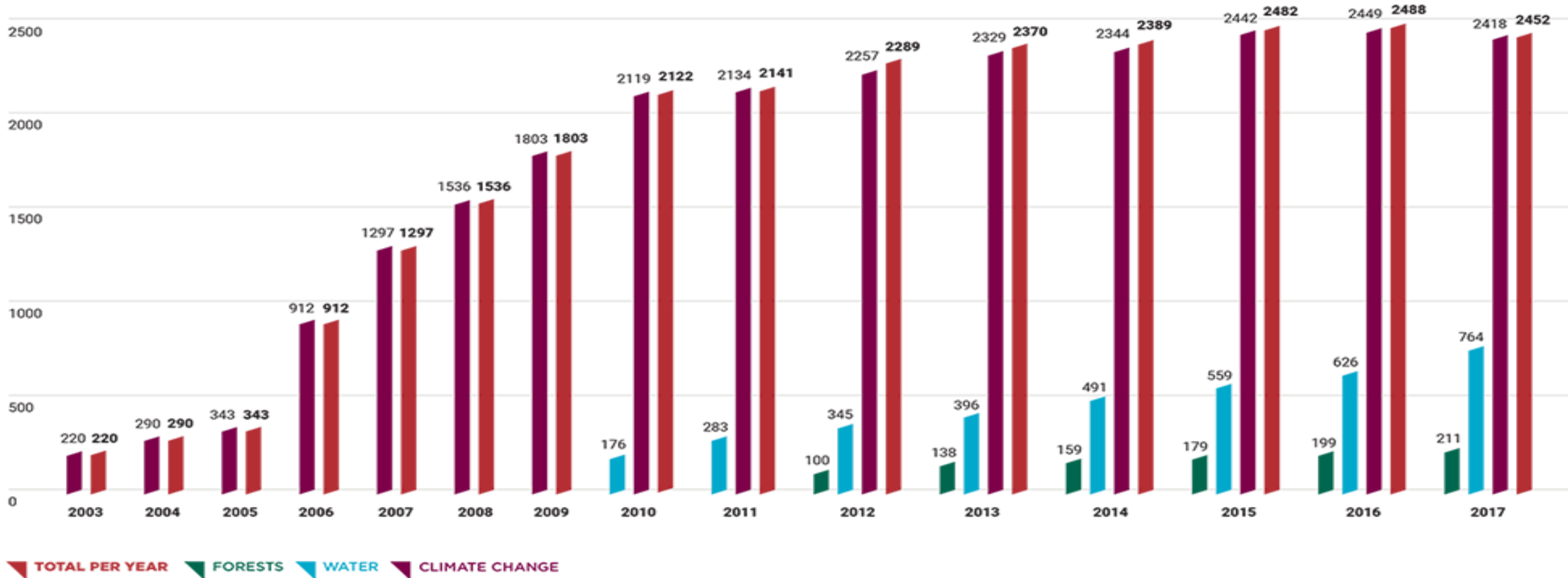
Regulators Still Drive Much Company Environmental & Social Conduct

- ☐ Environment (air, water, waste, products)
- ☐ Safety (workplace, products)
- ☐ Endangered species
- ☐ Nondiscrimination (EEO, etc.)
- ☐ Conflict Minerals in supply chain (SEC)
- ☐ CA Transparency in Supply Chain Act
(abusive labor practices)
- ☐ Sarbanes Oxley (governance)
- ☐ Antitrust
- ☐ ESG + financial reporting (UK, France, S. Africa, et al.)

800 Inst. Investors (\$100 Trillion) Driving The Carbon Disclosure Project

GROWTH IN DISCLOSING COMPANIES SINCE 2003

3000 COMPANIES



Notes

Figures for each programme do not include 'See Another' (SA) companies (i.e. subsidiary companies whose response is covered by their parent company's response)

Figures for 'Total disclosing companies' are unique (i.e. companies responding to multiple programmes are counted only once)

Customers Driving “Green” Products ~\$3.5 Trillion (2017)

– Global Industry Analysts Inc.



6 million +



~85% of Market
by 2030



\$200 Billion
by 2020



Grameen Bank

\$12 Billion Loans to Poor

Sustainability/BR Topics that Stakeholders Expect Companies to Address?

(Per GRI, ISO 26000, UN Global Compact, UN SD Goals,)

- ☐ **Environmental Issues** (pollution, energy and resource conservation, biodiversity, etc.)
- ☐ **Labor Practices** (wages, safety, working conditions, etc.)
- ☐ **Human Rights** (civil rights, nondiscrimination, antiharassment, Bill of Rights, etc.)
- ☐ **Community Involvement & Development**
- ☐ **Consumer/customer Issues** (fair marketing, consumer safety, product compliance, privacy, etc.)
- ☐ **Fair Operating Practices** (anti-corruption, fair competition, etc.)
- ☐ **Governance** (oversight structures and systems for legal and ethical compliance and risk control on sustainability topics for organization and its supply chain)
- ☐ **Economic Viability of the Organization**

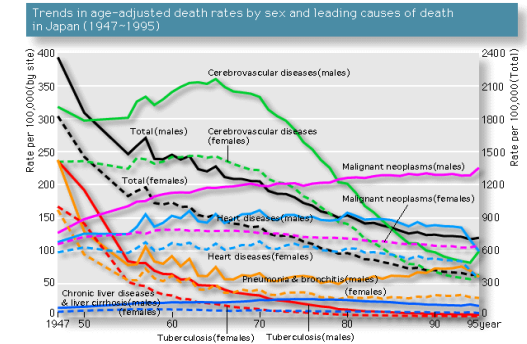
Sustainability Trends

Conditions

- Growth in Global Business Competition
- Speed of Communications/ Digital Divide
- Widening Prosperity Gap (Health, Income, Services)
- Population Growth
- Serious Disease
- Mental Health Problems
- Increased Immigration; Lower Fertility in Industrialized Nations
- Hunger and Malnutrition
- Child and Forced Labor
- Education Needs for the Disenfranchised
- Urbanization
- Privacy
- Over-consumption of Resources
- Obesity; Poor Food Nutrition
- Fossil Fuel Depletion
- Climate Change
- Deforestation
- Threats to Biodiversity
- Fresh Water Depletion/ Water Contamination
- Wetlands Destruction
- Fish Depletion
- Coral Reef Destruction
- Spread of Hazardous Pollutants
- Declining Soil Quality
- Ozone Depletion
- Declining Corporate Credibility

Responses

- **Opposition to Globalization**
- **Extended Producer Responsibility**
- **Green Products**
- **Green Marketing/Labeling**
- **Green Product Certification**
- **Socially Responsible Investing**
- **Investor Concerns about Corporate Governance**
- **Transparency/ Public Reporting**
- **Power of NGOs/CSOs**



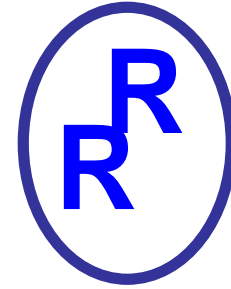
Sustainability/RB Leadership?

(Per 2014 GlobeScan/SustainAbility survey of over 800 experts in 87 countries)

A long term commitment to sustainability values integrated deeply within the organization, along with ambitious targets and policies, are the primary reasons a company is considered a sustainability leader.

Practical Definition of Sustainability?

“The 2 Rs”

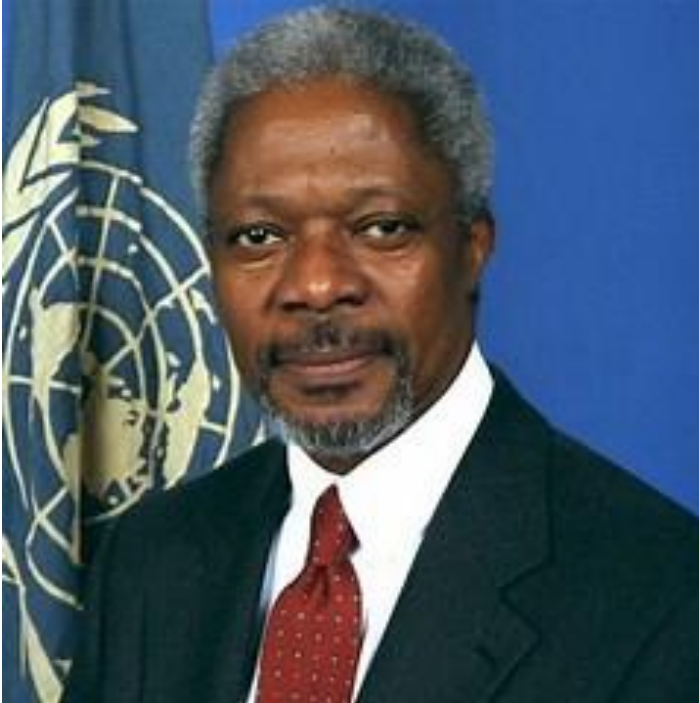


Values-driven management based on---

- ☐ **Respect**: for people and other living things;
- ☐ **Resources**: the wise use of economic and natural resources

—for the purpose of sustaining and promoting the long-term well-being of the organization and society (including the environment).

2. Globalization



“Arguing against globalization is like arguing against the laws of gravity. The question is not how to stop it, but how to make it work for everybody.”

Former UN Secretary Kofi Annan

Globalization

❑ Business

- 35,000 McDonald's, 20,000 Starbucks
- Transnational corps up 10x from WW II - 2000
- World exports up 6x since 1990



❑ Communications:

- Access to Internet by 40% of World (up 400x in 20 yrs.)
- 96% in Developing Nations have cell phone

❑ NGOs

- International NGOs up 150% (40,000) over 20 yrs.
- Biggest issues: Jobs, Sweatshops, Environment

3. Transparency

□ Scrutiny:

- 40,000 Global NGOs
- 40% Internet, 90% phones

□ Trust: US Gallop poll (2013):
only 1 of 5 say business execs have
“high standards of honesty and ethics”



Transparency Responses

- ❑ Toxics Release Inventory (1986),
Ceres (1989),
Global Reporting Initiative (1997),
Carbon Disclosure Project (2002)



- ❑ Public Sustainability/CSR reporting
 - 93% of top 250 cos. (vs half in 2005);
Total:~5,000 reports/yr.
 - Integrated ESG + financial reporting
(voluntary & mandatory)

But Transparency is Not Enough

The 1995 Shell Backlash



Brent Spar Oil Storage Buoy



Nigerian Activist Ken Saro-Wiwa

© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

4. Resources & Population

St. Matthew's Island:

***29 reindeer in 1944; experts say
2300 maximum***

Reindeer in 1953?

- a. 5
- b. 42
- c. 1,350
- d. 3,000



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

St. Matthew's Island:

29 reindeer in 1944; experts say 2300 maximum

Reindeer in 1953?

- a. 5
- b. 42
- c. 1,350**
- d. 3,000



St. Matthew's Island:

29 reindeer in 1944; experts say 2300 maximum

Reindeer in 1963?

- a. 42**
- b. 1,350**
- c. 3,000**
- d. 6,000**



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

St. Matthew's Island:

29 reindeer in 1944; experts say 2300 maximum

Reindeer in 1963?

- a. 42
- b. 1,350
- c. 3,000
- d. 6,000**



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

St. Matthew's Island:

29 reindeer in 1944; experts say 2300 maximum

Reindeer in 1966?

- a. 42
- b. 1,350
- c. 3,000
- d. 7,500



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

St. Matthew's Island:

29 reindeer in 1944; experts say 2300 maximum

Reindeer in 1966?

- a. 42**
- b. 1,350
- c. 3,000
- d. 7,500



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

How Fast Does The World Add Enough Additional People to Populate Another U.S.?

Years:

- a. 1
- b. 5
- c. 10
- d. 25
- e. 110



How Fast Does The World Add Enough Additional People to Populate Another U.S.?

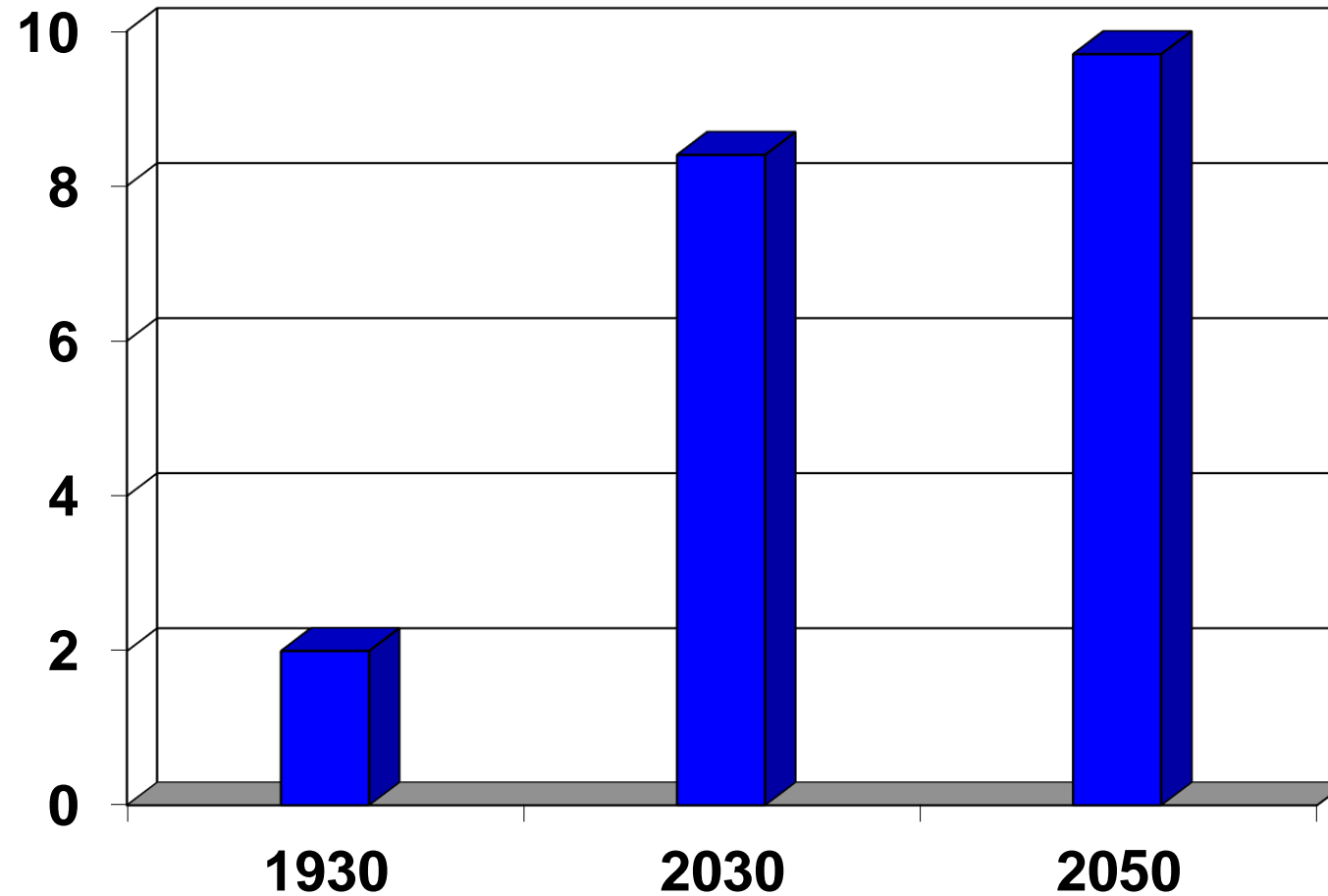
Years:

- a. 1
- b. 5**
- c. 10
- d. 25
- e. 110



World's Population (Billions of people)

Source: Population Reference Bureau (2014), UN (2012)



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

US Consumption and Waste!

- ❑ 5% of the population
- ❑ ? % of the resources and wastes



US Consumption and Waste!

- ❑ 5% of the population
- ❑ 25-30% of the resources and wastes
- ❑ Need 5-6 worlds at current production if everyone consumed at US rates!



Source: United Nations Environment Programme (2012)

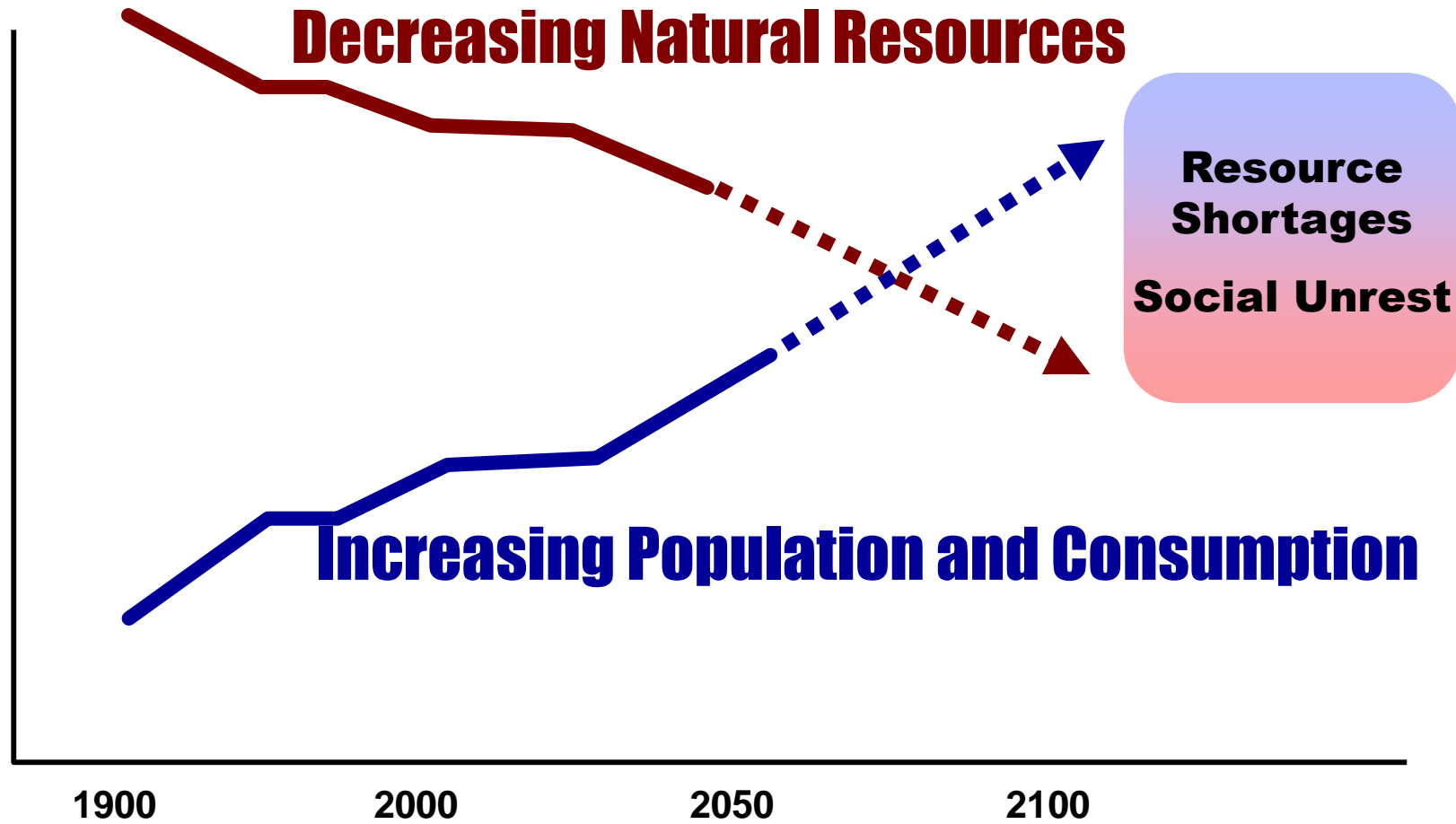
© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

Nine Planetary Environmental Boundaries

Source: Johan Rockström, et.al, "Planetary boundaries: exploring the safe operating space for humanity." *Ecology and Society*, (2009)

Earth System Boundary	Indicator	Threshold Proposed ?	Status vs Threshold	See Following Trends in Appendix 1
Biodiversity Loss	Extinction rate	Yes	Greatly exceeding	Biodiversity Fish Stocks
Climate Change	Atmospheric CO ₂ concentration	Yes	Exceeding and worsening	Climate Change Biodiversity Deforestation Hunger & Malnutrition
Nitrogen & Phosphorus Inputs to Oceans & Biospheres	N ₂ removed from atmosphere for human use; Inflow of P into ocean	Yes	N: Greatly exceeding P: Likely to soon exceed	Water Supply & Pollution Traditional Air Pollution Fish Stocks
Global Freshwater Use	Use of water runoff	Yes	Meeting but worsening	Water Supply & Pollution Wetlands
Land System Change	Percentage of land cover converted to cropland	Yes	Meeting but worsening	Soil Quality; Crop Yields Wetlands Deforestation
Ocean Acidification	Mean global ocean surface saturation of aragonite	Yes	Meeting but rate of change uncertain	Climate Change Water Supply & Pollution Coral Reefs Biodiversity
Stratospheric Ozone Depletion	Stratospheric ozone conc.	Yes	Meeting and improving slightly	Ozone Depletion
Atmospheric Aerosol Loading	Regional particulate conc. in atmosphere	Not yet	—	Traditional Air Pollution Climate Change
Chemical Pollution	Emissions, conc., or effects of haz. chemicals (e.g., persistent organic pollutants, endocrine disruptors, etc.)	Not yet	—	Dangerous Pollutants



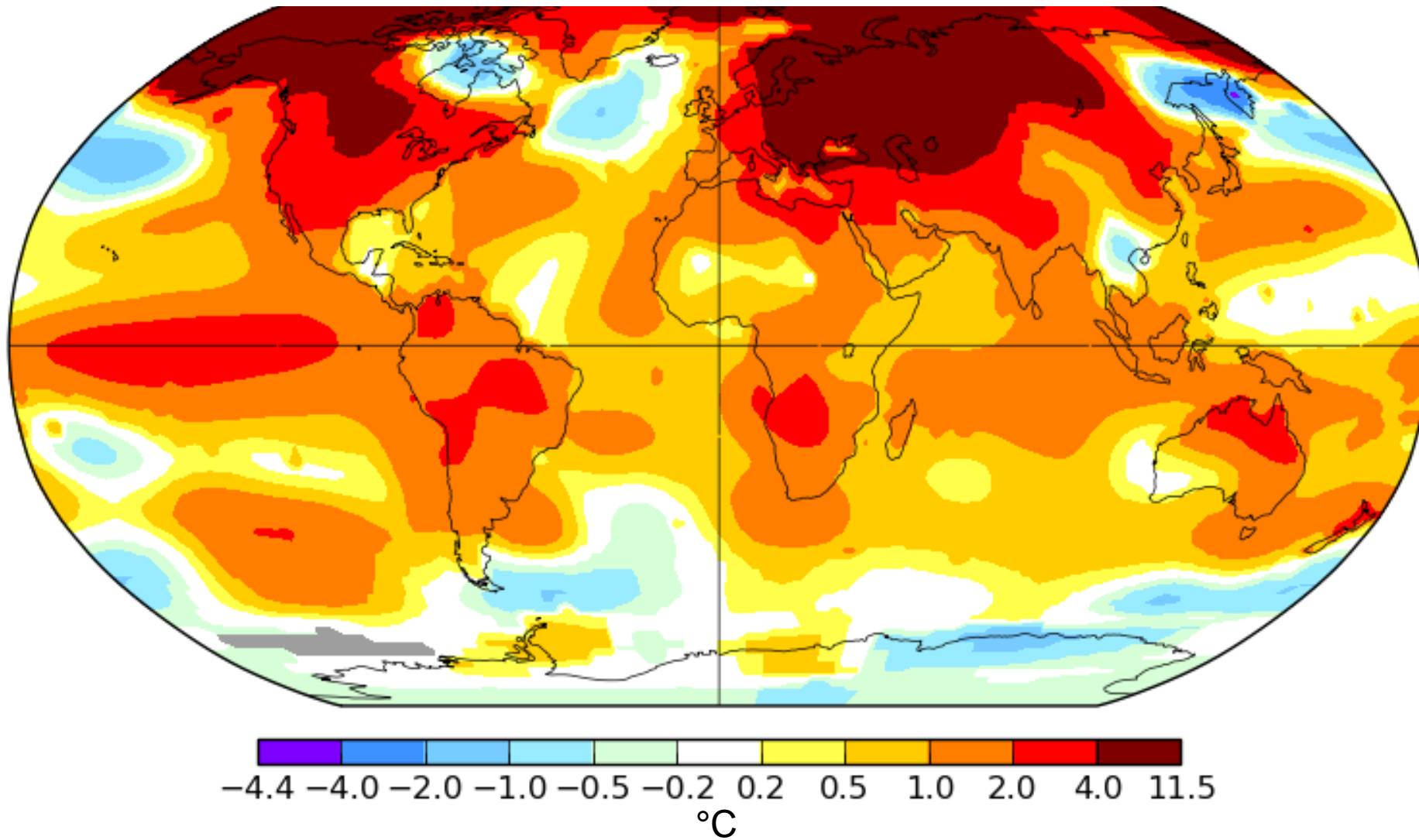
The "Big Squeeze"

Change in Global Land-Ocean Temperature Index

(Average Surface Air Temps. and Sea Surface Temps.)

2016 vs 1951-80

Source: NASA, 2016



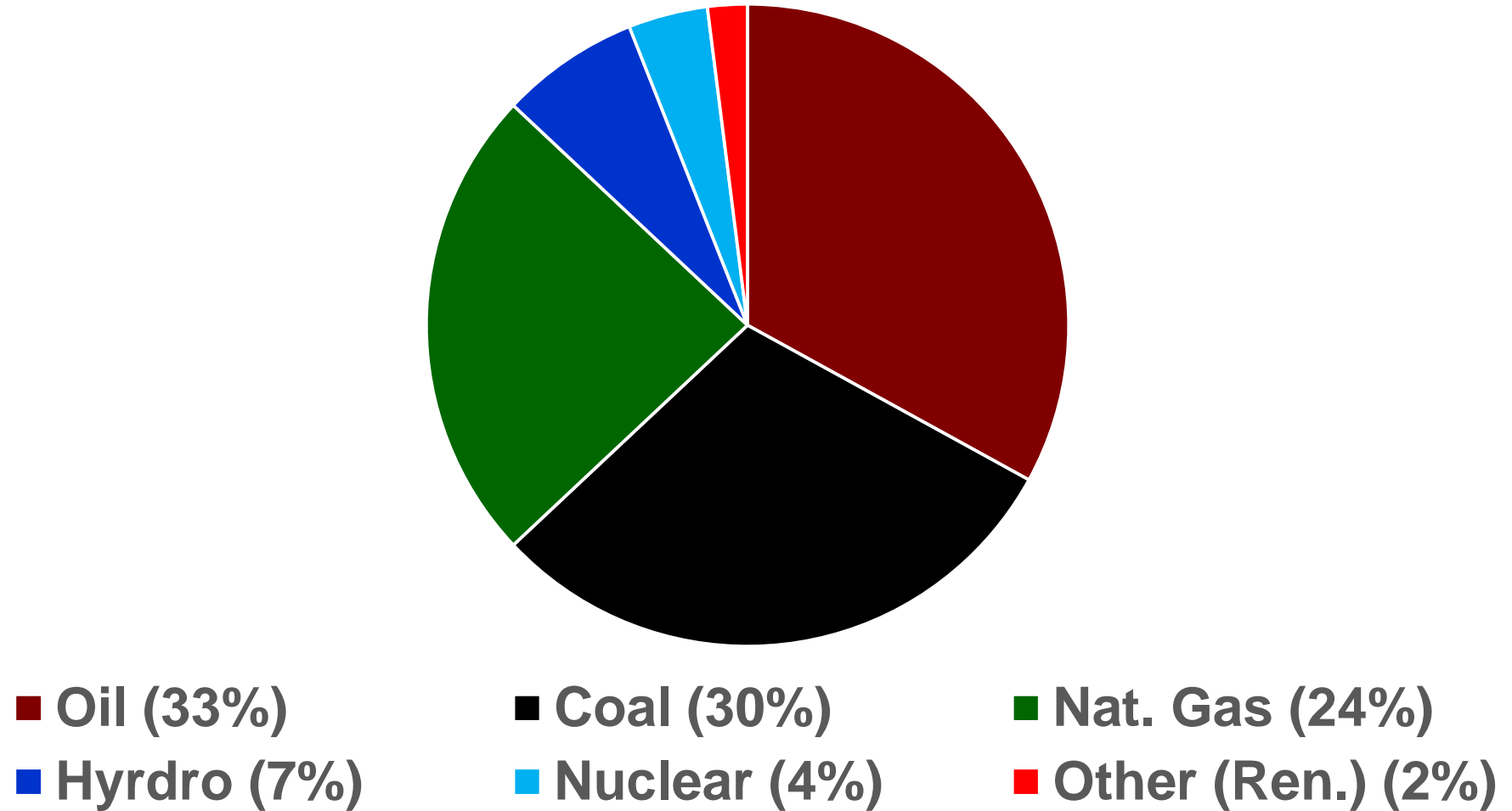
60% of WW Greenhouse Gases Due to Fossil Fuels

(U.S. Energy Info Admin.)

	<u>Now</u>		<u>2040</u>	<u>% C/Btu vs. NG</u>
❑ Coal:	44%	➡	45%	+73%
❑ Oils +Biofuels:	36%	➡	32%	+33%
❑ Nat. Gas:	20%	➡	22%	--

Percent Energy Use Worldwide 2015

(Source: BP)



© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

Energy Trends

❑ Fossil Fuels (~90% WW)

- Env. (and \$)risks of drilling/mining going up



❑ Nuclear (4-5%)

- Safety vs. Carbon: Fukushima damped interest in places
- 80% of growth projected from Developing Nations
- US: up slightly, leveling ~2025

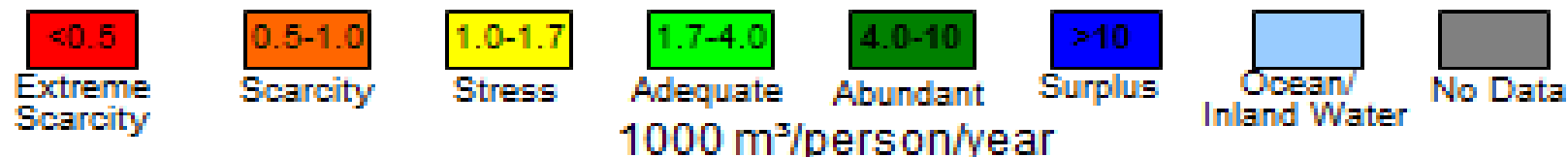
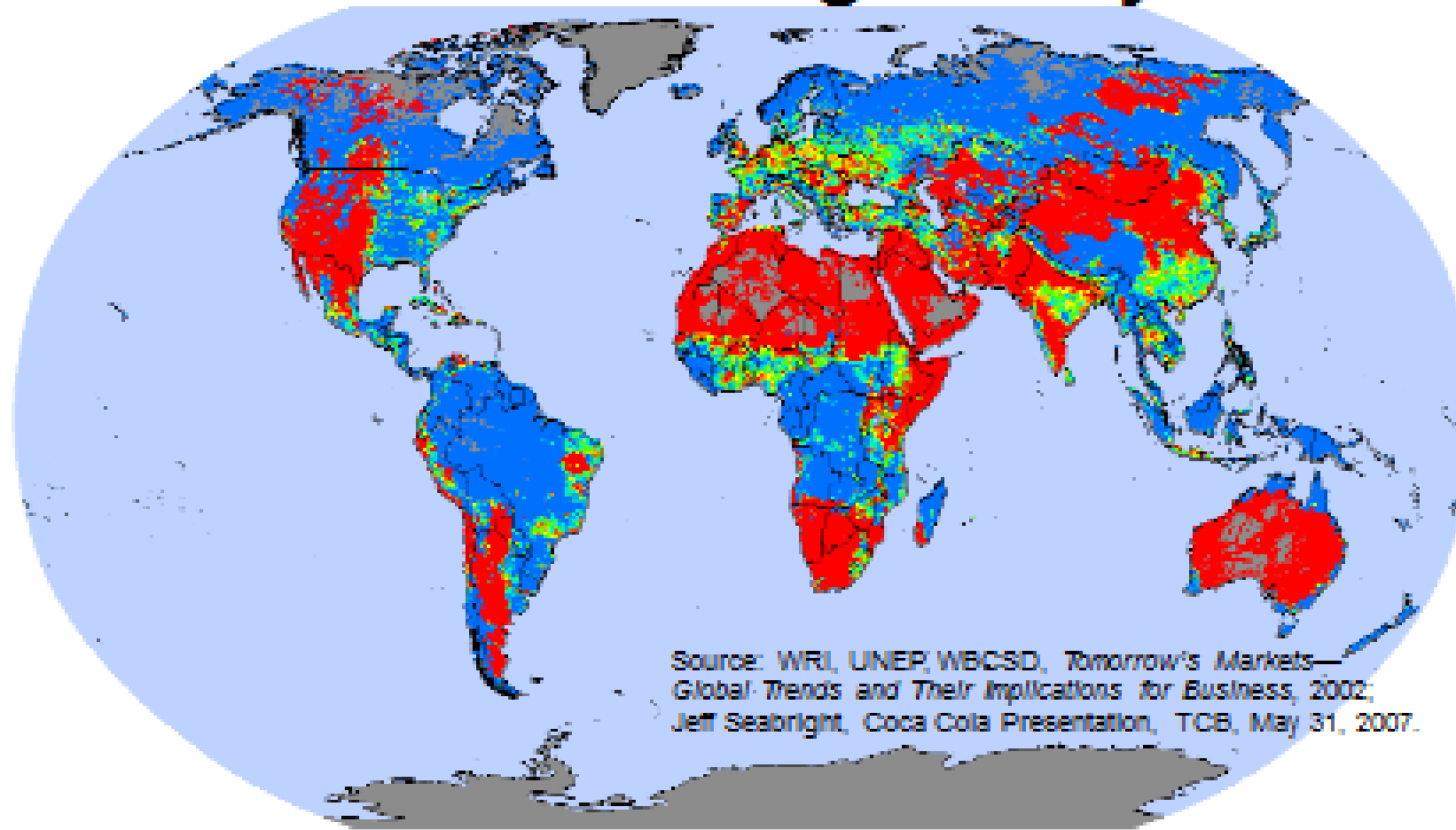
Energy Trends



- ❑ **Renewables (2% WW)**
 - Supported by Climate Change, but subsidies threatened
 - Wind: up 10X in US 2000-2010; good growth projected
 - Solar: Still costly even with Chinese developments
 - Power storage advances will help (e.g., Tesla)
 - 1/4 of World's electricity by 2040 (US EIA)

6. Water

**40% of the World Will Live in
Water-Scarce Regions by 2025**





7. Prosperity Gap

- ❑ 1.5 billion earn <\$1.25/day
- ❑ Richest 1% WW own >50%



- ❑ Bottom of Pyramid Strategies
 - Grameen Microfinance Bank
 - Nestle & P&G
 - Aravind Eye Clinic

Responsible Business Summit: **Making Business Sense of** **Sustainability/Business Responsibility** **...Sustainability Leadership & Entrepreneurship**

by

Bill Blackburn

University of Iowa

Tippie School of Management

Pappajohn Entrepreneur Center

Iowa City, IA

May 10-11, 2018



Sustainability/RB Leadership= Values + Integration

A long term commitment to sustainability values integrated deeply within the organization, along with ambitious targets and policies, are the primary reasons a company is considered a sustainability leader.

--2014 GlobeScan/SustainAbility survey of over 800 experts in 87 countries

Sustainability Leadership: The Baxter Story



Bill Graham, CEO, 1953-1980

Small Company Sustainability Values

❑ **Prairie Crossing**

(Residential development, Grayslake, IL)

1. **Environmental protection and enhancement**
2. **A healthy lifestyle**
3. **A sense of place**
4. **A sense of community**
5. **Economic and racial diversity**
6. **Convenient and efficient transportation**
7. **Energy conservation**
8. **Lifelong learning and education**
9. **Aesthetic design and high-quality construction**
10. **Economic viability**



Gaylord & Dorothy Donnelly

© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com



Roy Richards



Southwire®
WE DELIVER POWER... RESPONSIBLY

Small Company Sustainability Values

(Wire and cable company, Carrollton, GA)

1. **Growing Green.** We will reduce our environmental footprint as we grow, reduce energy intensity, increase use of renewable resources, and reduce the amount of waste to landfills.
2. **Living Well.** We will preserve and enhance the lives of our employees by building a workplace that is satisfying, meaningful and fun. In doing so, we will make certain that safety and health are always top priorities and will treat each other with respect.
3. **Giving Back.** We will strive to improve the quality of life in the communities in which we work.
4. **Doing Right.** We foster a culture guided by ethical values. We will not forget to live up to those values, even when it might be difficult. And when we make mistakes, we will be transparent and responsive.
5. **Building Worth.** We will build worth for our shareholders, customers, and other stakeholders by achieving the lowest cost, highest quality and best service in our industry. To do this, we must lead our core markets with superior products, grow steadily, spend wisely, keep debt low and protect our investments.

© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

The Conference Board Sustainability Benchmarking Studies

(See www.WBlackburnConsulting.com)

Baxter



Bristol-Myers Squibb
Company



Abbott

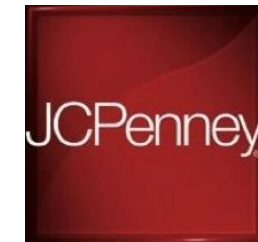
Coca-Cola



Rio Tinto Alcan

Hospira

Pfizer



Campbell's

AVEDA
the art and science of pure flower and plant essences.

xerox



COX
ENTERPRISES, INC.



STATE STREET
For Everything You Invest In™

FPL



Cargill

Conference Board Study:

A Corporate Commitment to Sustainability

(A Sample Sustainability Policy)

It is within the best interests of our company and society as a whole that our company move along the path to sustainability. To that end, we will strive to achieve the following vision of performance:

1. Economic success: the wise use of financial resources

a. Company Economic Prosperity

Our business will be positioned to survive and prosper economically.

b. Community Economic Prosperity

We will help our community survive and prosper economically.



2. Social responsibility: respect for people

a. Respect for Employees

We will treat our employees in a respectful, fair, non-exploitative way, especially with regard to compensation and benefits; promotion; training; open, constructive dialogue with management; involvement in decision-making; working conditions that are safe, healthy and non-coercive; rights of association, collective bargaining and privacy; employment-termination practices; and work-life balance.

b. Diversity, Fair Hiring Practices

We will promote diversity and use employment practices that are fair, responsible, non-discriminatory, and non-exploitative for our employees, board members, and suppliers.

c. Responsible Governance

We will manage our risks properly, use our economic power responsibly and operate our business in a way that is ethical and legal.

d. Respect for Stakeholders

We will be transparent, respectful and fair to local populations, investors, suppliers and other stakeholders outside our organization who may be affected by our operations. We will work collaboratively with our communities, governments and supply chain to enhance the well-being of others.

e. Fair Dealing With Customers

We will be honest and fair with our customers, competing fairly for their business, anticipating their needs, respecting their privacy, and providing them safe and effective products and services under the conditions we promise.



3. Environmental responsibility: respect for life; the wise management and use of natural resources

a. Resource Conservation

We will conserve our use of natural resources to the extent practicable.

b. Waste Prevention and Management

We will reduce to the extent practicable the volume and degree of hazard of the wastes we generate from our operations, and handle them in a safe, legal and responsible way to minimize their environmental effects.

c. Environmental Risk Control and Restoration

We will minimize the risk of spills and other potentially harmful environmental incidents, restore the environment where damaged by us, and enhance it to better support biodiversity.

d. Supply Chain Impacts

We will work with others in our supply chain to help ensure environmental impacts and risks associated with our products and services are reduced and properly controlled.

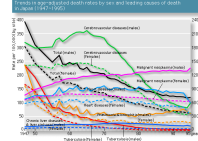
e. Collaboration With Communities

We will collaborate with our communities to protect and improve the environment.



Sustainability Trends

Conditions



- Growth in Global Business Competition
- Speed of Communications/ Digital Divide
- Widening Prosperity Gap (Health, Income, Services)
- Population Growth
- Serious Disease
- Mental Health Problems
- Increased Immigration; Lower Fertility in Industrialized Nations
- Hunger and Malnutrition
- Child and Forced Labor
- Education Needs for the Disenfranchised
- Urbanization
- Privacy
- Over-consumption of Resources
- Obesity; Poor Food Nutrition
- Fossil Fuel Depletion
- Climate Change
- Deforestation
- Threats to Biodiversity
- Fresh Water Depletion/ Water Contamination
- Wetlands Destruction
- Fish Depletion
- Coral Reef Destruction
- Spread of Hazardous Pollutants
- Declining Soil Quality
- Ozone Depletion
- Declining Corporate Credibility

Responses

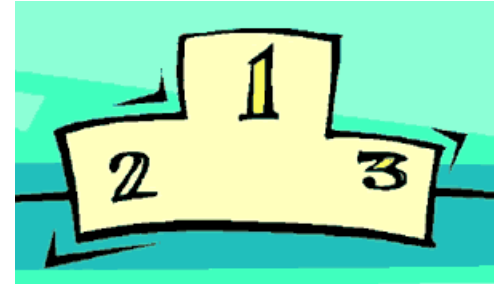
- **Opposition to Globalization**
- **Extended Producer Responsibility**
- **Green Products**
- **Green Marketing/Labeling**
- **Green Product Certification**
- **Socially Responsible Investing**
- **Investor Concerns about Corporate Governance**
- **Transparency/ Public Reporting**
- **Power of NGOs/CSOs**

Some Observations About Sustainability?



- Sustainability is not about one thing.
- The business case for sustainability is really the business case for a process that looks at sustainability trends and issues and prioritizes among the opportunities and threats to an organization to select those for action that contribute the most value.

**How do you determine what
Sustainability/BR issues are
most important for action?**

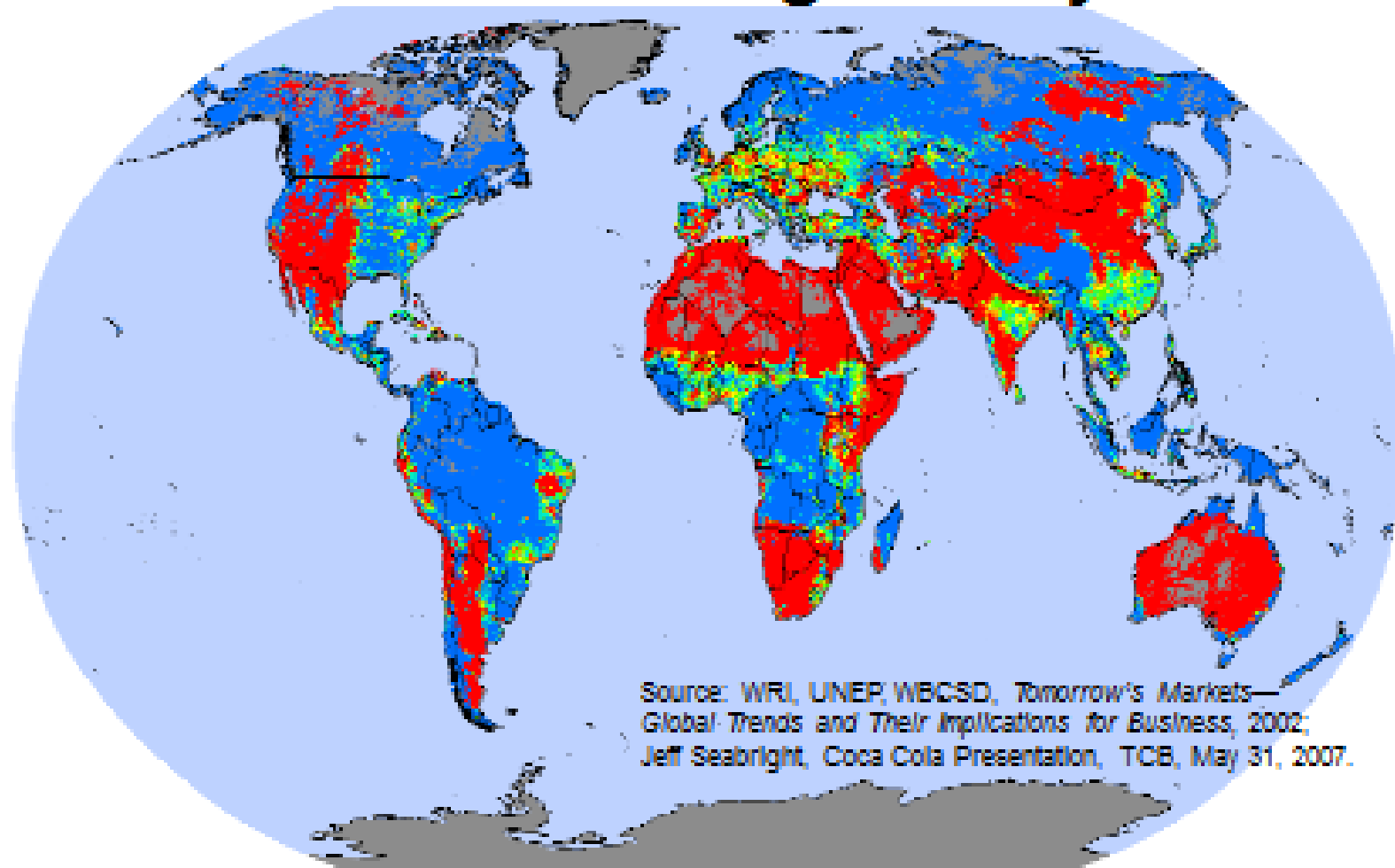


Determining Priority of Sustainability Issues for Action?

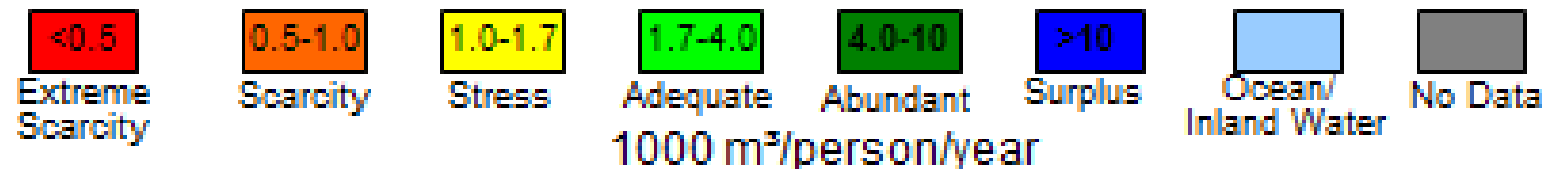
1. **GRI “Materiality”** (importance)
 - Impact on (or by) social, env., econ. Issues
 - Interest by or effect on key stakeholders
2. **Consistency with-**
 - Co. culture, values
 - Co. strat plan, short-term goals
3. **Important bus. opportunity?**
4. **Important bus. threat?**
5. **Public pressure to act**
6. **Ease of implementation**



40% of the World Will Live in Water-Scarce Regions by 2025



Source: WRI, UNEP, WBCSD, *Tomorrow's Markets—Global Trends and Their Implications for Business*, 2002;
Jeff Seabright, Coca Cola Presentation, TCB, May 31, 2007.



Sample SWOT Analysis for Sustainability Issue: Water

Issue	Threat	Opportunity	Strength	Weakness	Possible Objectives
Depletion of Fresh Water Resources 	1. Water shortage could jeopardize operations 2. Some competitors have long-term water rights	1. Water conservation projects can save money, help secure supply 2. More on-site water treatment and reuse are possible 3. May be able to secure long-term water rights in some locations	1. Some water conservation projects underway 2. Internal engineering expertise	1. No long-term water rights secured in some growth regions 2. Some communities serving our factories have poor water supply infrastructure 3. Some bad press for high water use and pollution in some communities	1. Investigate water risks on site-by-site basis and develop actions to address them 2. Consider more aggressive water treatment, reuse and conservation programs using internal engineers 3. Explore securing long-term water supplies in high risk areas while respecting community needs 4. Form links on initiatives with reputable water NGOs

Some Material Sustainability Issues in Ag?

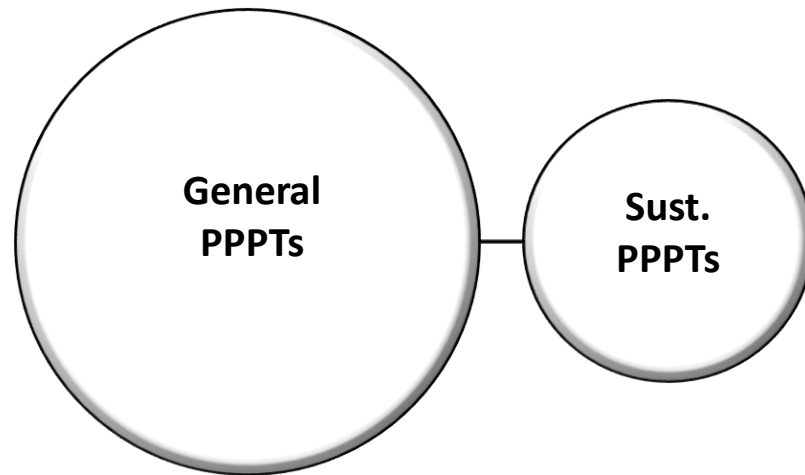
- ☐ Environmental ?
- ☐ Social?
- ☐ Economic/Financial?

Integration

How do you build Sustainability/BR into an organization?

Integrating Sustainability into Policies, Procedures, Practices and Tools (PPPTs)

Segregated Model



Integrated Model

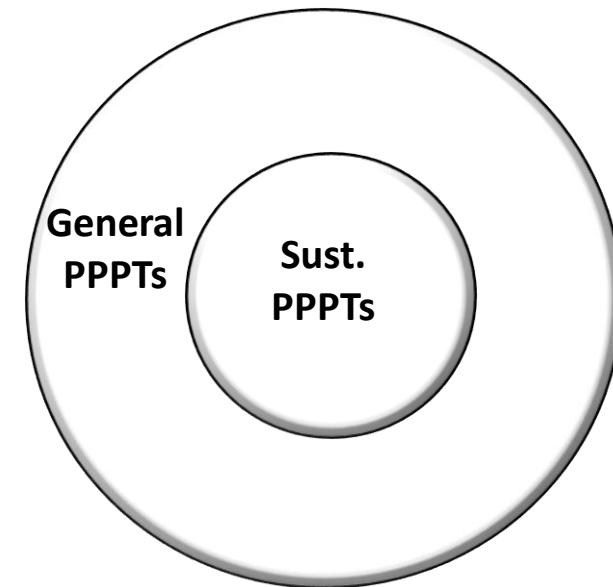
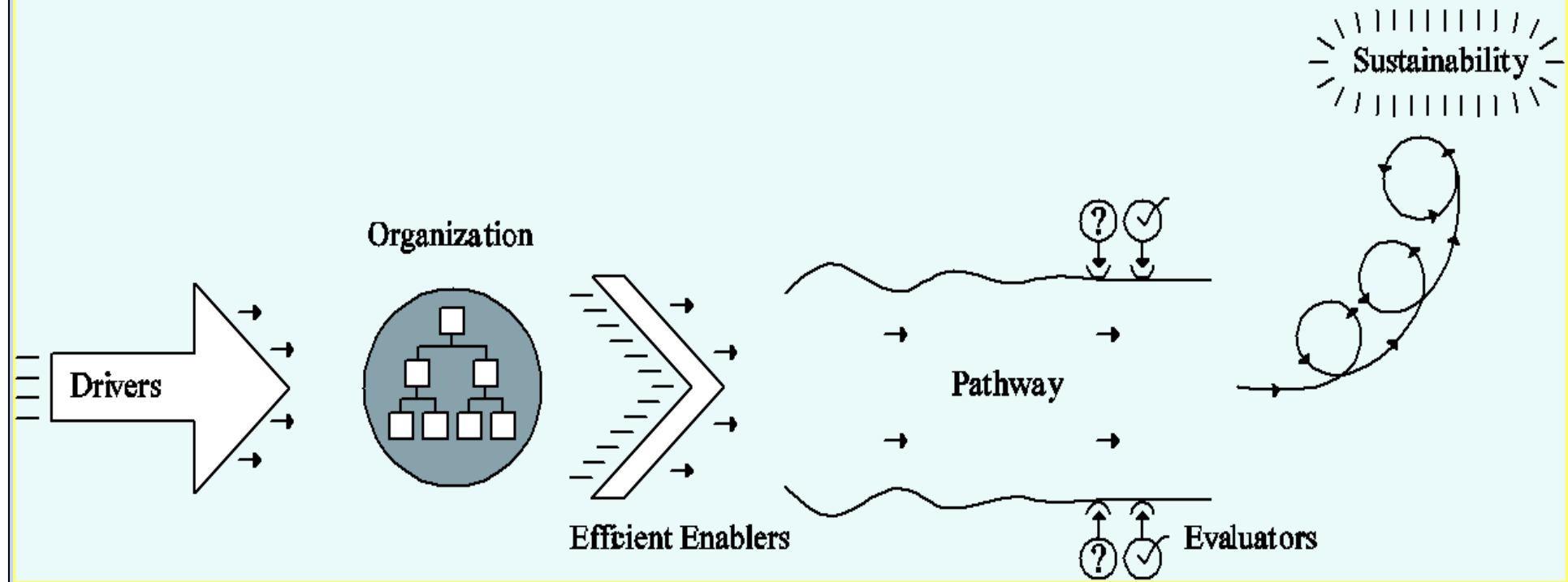


Figure 4.1 Sustainability Operating System (S.O.S.)



The Drivers	The Efficient Enablers	The Pathway	The Evaluators
<ul style="list-style-type: none"> ▪ A champion/leader; visible top management support ▪ Approach for selling the organization on sustainability ▪ Accountability/reward mechanisms 	<ul style="list-style-type: none"> ▪ Organizational structure ▪ Deployment and integration through workforce & suppliers 	<ul style="list-style-type: none"> ▪ Vision and policy ▪ Operating system standards ▪ Strategic planning for aligned priorities 	<ul style="list-style-type: none"> ▪ Indicators and goals ▪ Measuring and reporting progress ▪ Stakeholder engagement and feedback

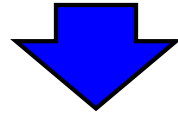
Sustainable Products & Services?

- ❑ Improve the efficient use of natural and economic resources along the product life cycle
- ❑ Provide greater respect and accommodation for the needs of people and other living things along the product life cycle

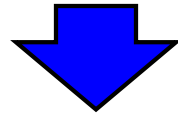


Stages of Possible Intervention in Design Process: The Baxter Example

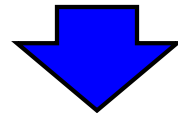
1. Pre-concept: Marketing research and discussions



2. Concept: Marketing evaluation of customer needs and challenges

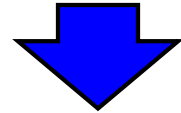


3. Feasibility: R&D evaluation of viability of concept in light of manufacturing challenges, cost, etc.

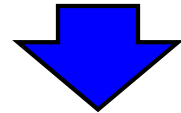


4. Development: R&D detailed engineering of product and manufacturing process; identification of bill of materials

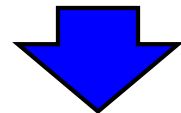
Stages of Possible Intervention in Design Process: The Baxter Example



5. Transition (Initial Production): Evaluation of product and production process by Quality Assurance and Regulatory Affairs; governmental approval for production and sale



5. Limited-control Distribution: Limited distribution of product for pilot testing by M,R&D



6. Launch: Full scale production and distribution of product

Integrating Sustainability Into Design Processes: Key Challenges?

1. **Complexity.** Not overwhelming Marketing and R&D (M,R&D) and RA/QA with complicated process and requirements
2. **Roles.** Deciding when to use trained M,R&D people vs sustainability-topic experts
3. **Tracking Change.**
 - a. Sustainability-related regulatory requirements and stakeholder (including customer) expectations
 - b. M,R&D organization and personnel changes, and their training needs

Topics Covered by Supplier Codes of Conduct

M=McDonald's Supplier Code of Conduct

NE=Nestle Supplier Code

N=Nike Code of Conduct (for Contract Factories)

NN=Novo Nordisk Responsible Sourcing Standards
for Business Partners

W=Wal-Mart Standards for Suppliers

- **Audit & Assessment:** M, NN
- **Compliance with Law:** M, NE, N, NN, W
- **Ethics, Anti-corruption:** M, NE, NN, W
- **Human Rights, Nondiscrimination:** M, NE, N, NN
- **Labor Practices, Working Conditions:** M, NE, N, NN, W
- **Health & Safety:** M, NE, N, NN, W
- **Environment:** M, NE, N, NN, W
- **Recordkeeping:** M, NE, W
- **Sub-supplier Code Compliance:** NE, N, NN

© 2018 William Blackburn Consulting, Ltd.

WRB@WBlackburnConsulting.com
www.WBlackburnConsulting.com

Common Program Elements for Responsible Supply Chains



1. Supplier standards, Codes of Conduct
2. Oversight structure
3. Supplier mapping, prioritization
4. Goals, metrics
5. Tracking and reporting; Traceability
6. Evaluation process
(surveys, self-assessments, audits, data systems)
7. Training, Communication & Engagement
8. Supplier Management Systems
9. Supplier Awards, Other Motivators
10. Collaborative Programs

Entrepreneurial Opportunities?

Organizations Respond to Sustainability Trends

Trend

Reaction

- Climate Change
- Fossil Fuel Depletion



- Energy Conservation
- Carbon Footprinting

Over Consumption
of Resources



- Recycling
- Recycled Content
- Dematerialization

Changing Population
Profile



Diversity Programs

Organizations Respond to Sustainability Trends

Trend

Reaction

- Child and Forced Labor
- Growing Concern about Toxics Contam. & Env. Problems



- Ethical Sourcing
- Supplier Assessments

Spread of Toxic Pollutants



Toxics Elimination From Inks, Electronics, etc.

Growing Mistrust of Business



- Sustainability Rptg.
- Green Labeling Rules
- Product Certifications

Entrepreneurial Opportunities from Sustainability/BR?

1. Addressing trends?

- Resources (technologies, replacements, recycling (Circ. Econ, Cradle-to-Cradle), sharing, efficiency)
- Population shifts (aging, diversity, urbanization)
- Bottom of pyramid (low cost, entrepreneurship)
- Cultural accommodation (marketing, recruiting, products, etc.)

2. Addressing process?

- Standards, compliance, certifications, training
- Tracking, measurement
- Supply chain (block chain tools)
- Design of products, services, buildings (LEED, etc.) & marketing
- Safety
- Collaboration/sharing
- Localization (food, energy, etc.)
- Engagement & communications