

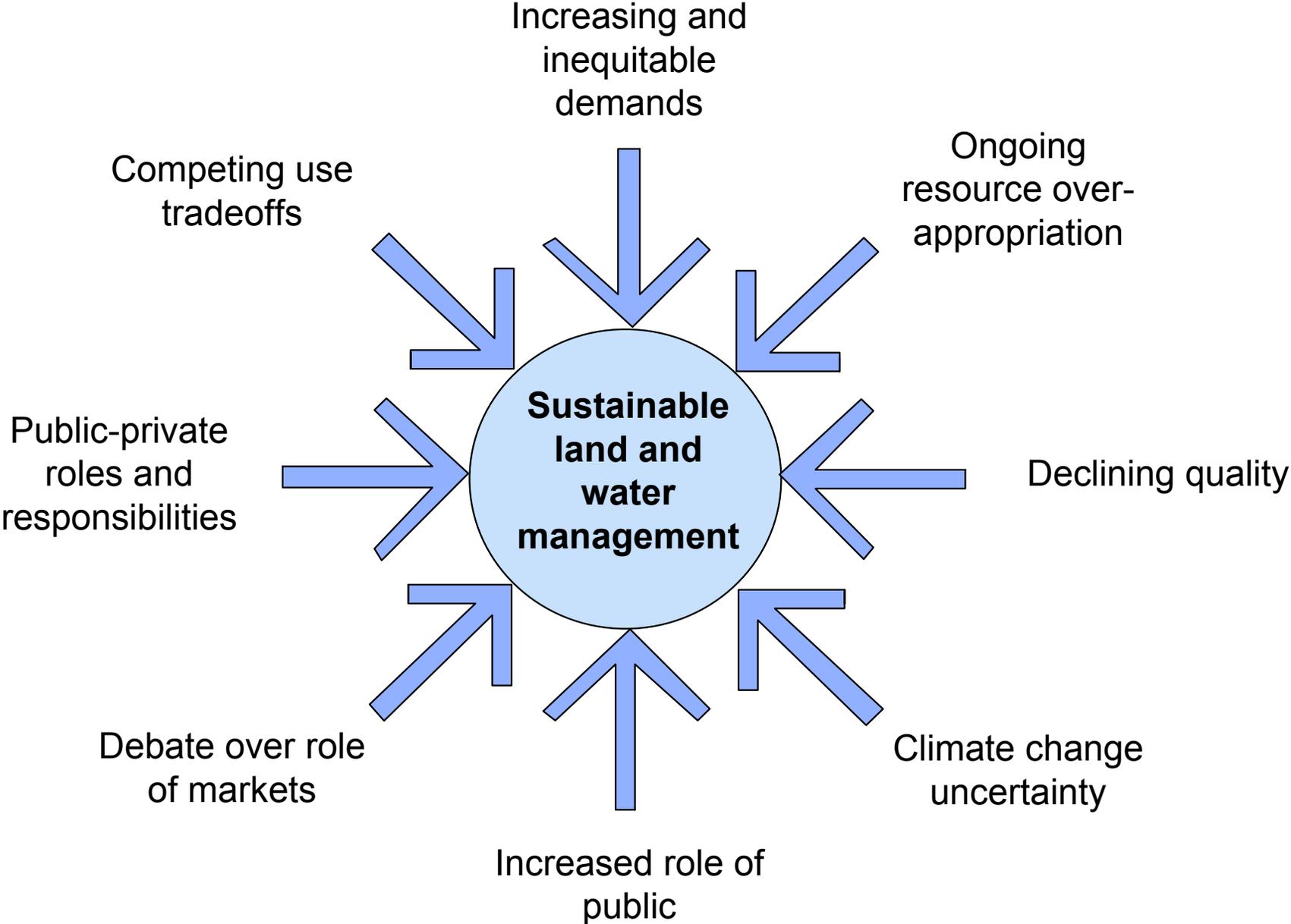


# Perspectives on Integrated Strategic Approaches to Land and Water Stewardship

**McKinsey & Company**

Regional Resource Stewardship Council  
March 13, 2008

# AT A GLOBAL LEVEL, THERE ARE MANY COMPLEX ISSUES CHALLENGING SUSTAINABLE LAND AND WATER MANAGEMENT

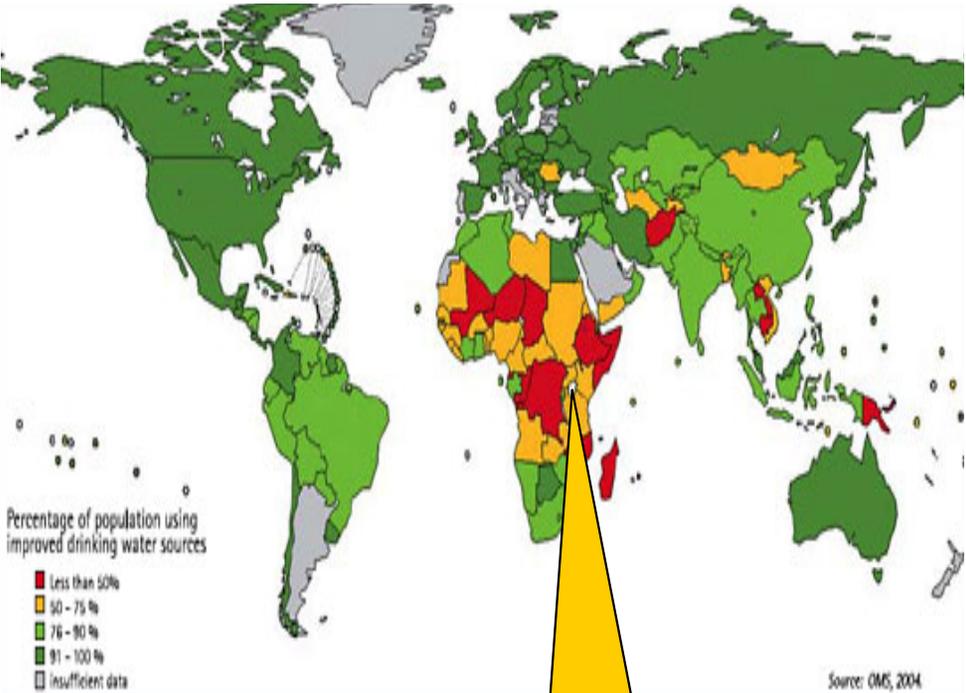


Source: McKinsey

# DRINKING WATER ACCESS AND FRESHWATER SUPPLY DYNAMICS BOTH EMERGING AS SIGNIFICANT GLOBAL ISSUES

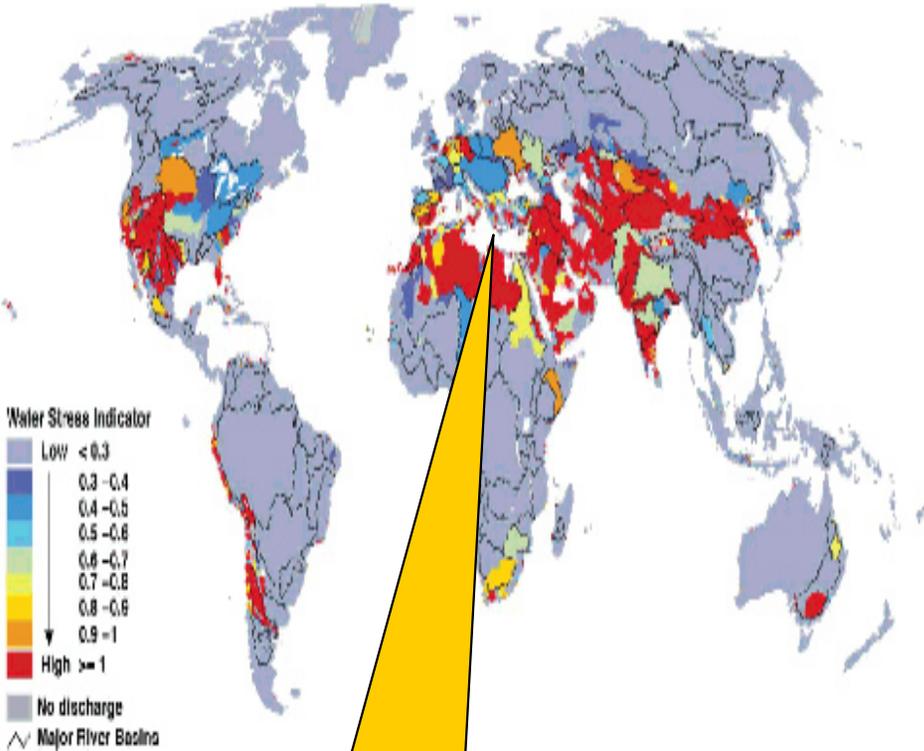
EXAMPLE

### Coverage with improved drinking water sources, 2002



Safe water access is an issue limited to poorest nations

### Water stress indicator, 2004

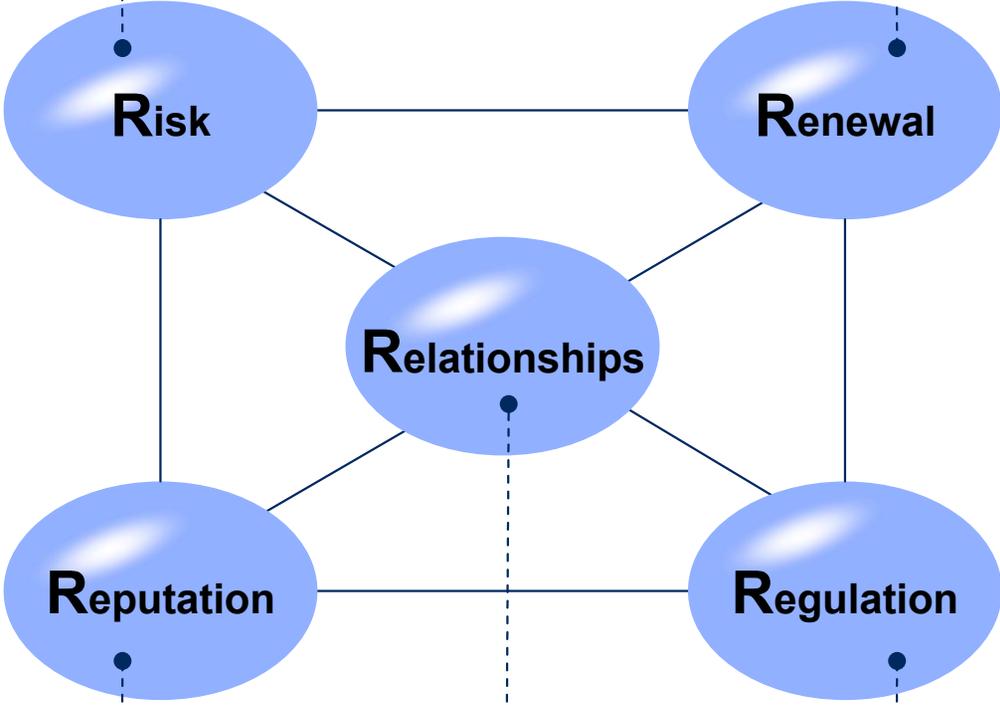


Water stress is an issue involving developed and developing nations

# MANAGING SOCIO-POLITICAL ISSUES REQUIRES A STRATEGY AROUND 5 DIMENSIONS

How to spot and evaluate socio-political trends that can pose a risk to the business

How to turn socio-political trends into new business and industry-shaping opportunities



How to build trust around the company's brand and the values to which it aspires

How, and where, to build and maintain meaningful relationships with stakeholders

How to anticipate or shape legislation for competitive advantage based on insight/foresight into trends

# LEADING COMPANIES DISTINGUISH THEIR ENVIRONMENTAL PERFORMANCE ACROSS 5 DIMENSIONS



Source: McKinsey

# RISK – ADOPTING A LONG-TERM PERSPECTIVE AND STAYING ATTUNED TO NEW CLASSES OF EMERGING RISKS IS CRITICAL

## American automobile manufacturers, by adopting a short-term outlook to lobbying ...

### Situation

- Increased concern about **improving efficiency in cars engines**

### Approach

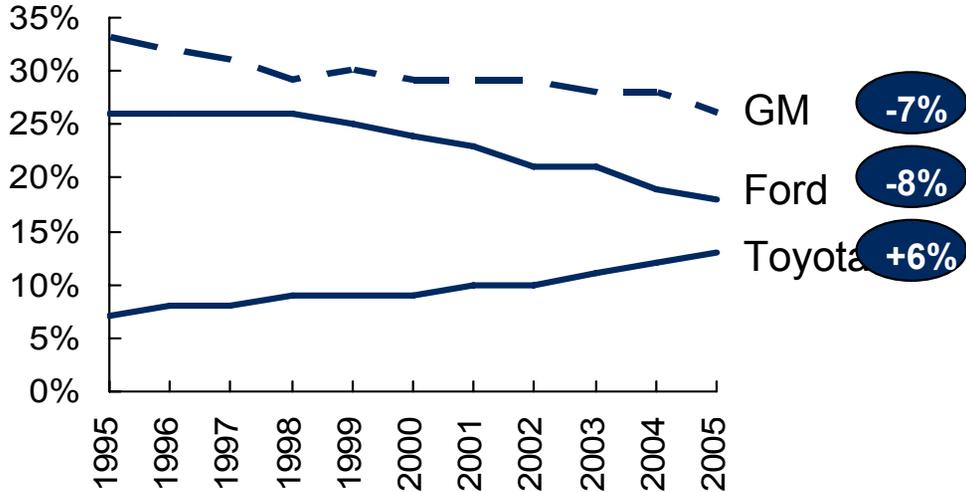
- American automobile manufacturers lobbied to prevent fuel-efficiency standards from rising (**total lobbying spend** by the alliance between **2000-5 = \$37 mn\***)
- American OEMs **continued producing gas guzzlers** that remained popular while oil was cheap

## ... may have undermined their own long-term interests

### Impact

- Rising oil prices and environmental consciousness have seen a rise in demand for fuel efficient cars and hybrids

US Market share of vehicle units



**“Had it passed, it would have saved the industry”**, [About the 1990 proposal to raise fuel efficiency which failed due to lobbying from the industry]

– Laura MacCleery, Public Citizen

# RENEWAL – INCORPORATE ISSUES INTO STRATEGY BY PLACING BETS ON FUTURE OPPORTUNITIES



## What is your big bet?

### GE LAUNCHES 'ECOMAGINATION' INITIATIVE, ANTICIPATING FUTURE CUSTOMER NEEDS

GE spent 18 months researching customer needs, inviting heads of industries to 2-day 'dreaming sessions' and asking them to imagine the GE products they would need in 2015



A wish list emerged that reflected their customers' clear need for cleaner technologies

GE's customers were under pressure from:

- Rising fuel costs
- Ever-tighter environmental regulations
- Growing end-consumer expectations

In May 2005, GE announced they would be making significant commitment to clean technology as part of 'Ecomagination' initiative

"We decided that if this is what our customers want, let's stop putting our heads in the sand, dodging environmental interests, and go from defiance to offence"

- David Calhoun, GE Vice Chairman

### GE IS BANKING A LOT ON THE SUCCESS OF THE INITIATIVE

GE is making some big promises...

- Double sales from clean-technology businesses from \$10 bn in 2004 to \$20 bn by 2010 (which would equal 10-15% of 2005 revenue)
- Cut greenhouse gas emissions by 1% by 2012, which would have otherwise have risen 25%

...reinforced by organisational changes...

All global managers evaluated on green bottom lines in addition to financial performance (e.g., all units have ambitious targets for reducing CO<sub>2</sub> emissions by 2012)

...and actively spearheaded by the CEO, Jeffrey Immelt, both inside and outside of the company



"[GE's] words are being backed up by visible action, coherent long-term strategy, and some very big bets"

- Wall Street analyst

### ECOMAGINATION INITIATIVE IS CALCULATED TO MEET THE NEEDS OF MULTIPLE STAKEHOLDERS

Increasing shareholder value is clearly a primary goal of GE's new strategy...

"Let's be clear about this. GE's obligation is first and foremost to our shareholders. We're investing in an environmentally cleaner technology because we believe it will increase our revenue, our value, and our profits"

- Jeffrey Immelt, GE CEO



"Every one of the Ecomagination initiatives looks commercially viable, even without the green angle"

- Deane Dray, Goldman Sachs

...as is the desire to shape an increasingly strict regulatory environment

"General Electric has another motive to get ahead of the curve: the inevitable squeeze of tighter environmental regulations. [The Ecomagination initiative] establishes its 'green' credentials early in the game"

- Wall Street analyst



"I believe we must have a proactive business policy or we will get a reactive government policy"

- Jeffrey Immelt, GE CEO

# REGULATION – PROACTIVELY SELF REGULATE TO RELEASE PRESSURE ON CRITICAL ISSUES

Coca-Cola and Pepsi got together to tackle a potentially critical issue facing soft drinks

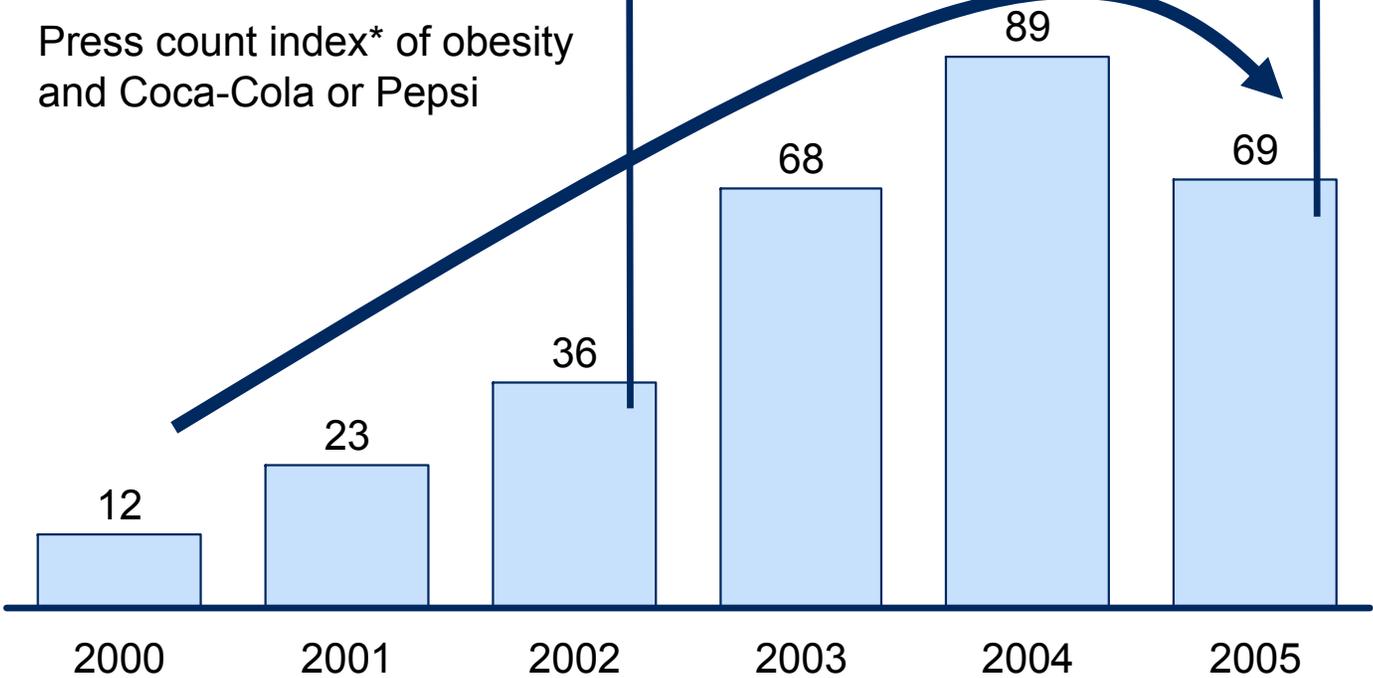


- Mounting pressure from health advocates and parents who blame consumption of soft drinks for **child obesity**
- Since 2003, 6+ state **legislatures voted to restrict soft drink sales in schools**

- American Beverage Association (i.e., Pepsi, Coke and others accounting for 85% of beverage sales to schools), **imposed self-regulation on marketing soft drinks to children**, (Aug 2005)
  - No carbonated soft drinks in elementary schools
  - No sugared drinks in middle schools
  - Nationwide campaign to inform public about the healthier beverages that these companies sell



Press count index\* of obesity and Coca-Cola or Pepsi



- **Prevented legislation** on this issue
- Generated **positive publicity** through national campaigns as well as media buzz
- Created awareness about their healthier beverages

\* No. of articles of obesity and Coke/Coca Cola or Pepsi, divided by total number of articles in million, in each year

# REPUTATION – ALIGN THE COMMUNICATION STRATEGY WITH COMPANY OBJECTIVES AND STAKEHOLDER CONCERNS



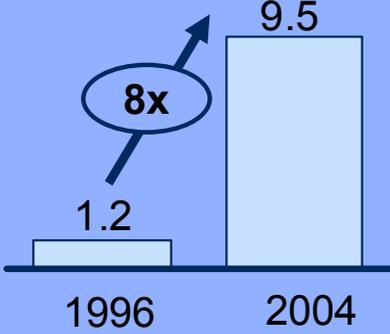
Print media coverage of ‘Microsoft and monopoly’, ‘000 number of hits

- “Microsoft represents the biggest **threat to innovation and competition**”  
– Audrie Krause, Head of NetAction, May 1997
- “Microsoft success in its market constitutes a ... **threat to this nation...**”  
– Federal Judge Stanley Sporkin, June 1998

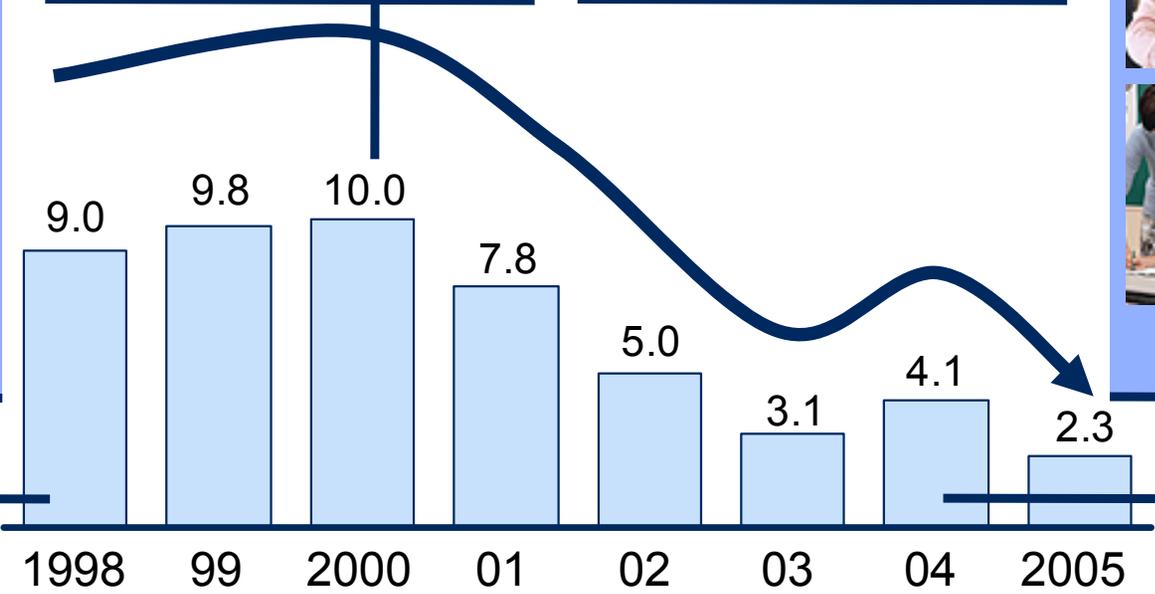
**1. Social effort**  
(foundation, helping NGOs, new business development)



**2. Increased public education spend**  
\$m



**3. Massive institutional campaign**  
 (“Your Potential. Our Passion”)



Source: Factiva; Microsoft website; Bill & Melinda Gates Foundation websites; McKinsey

# RELATIONSHIPS – PROACTIVELY DEFINE A CLEAR POSITION WITH STAKEHOLDERS ABOUT CRITICAL ISSUES

ENERGY EXAMPLE

Approach

**Situation**



- Local opposition to **negative effects** of power plants **on local communities**, such as traffic congestion, noise pollution, water and air pollution

**Cultivation of local committees**



- \$1.5m donated to **local school** in education partnership
- Financial support and physical involvement in local community projects – e.g., **baseball complex, fire department**, etc.



- Maximized **purchase from local suppliers**
- Use 70% coal mined in the state

**Advertising**



- “...we promised to be good corporate neighbors, someone you wouldn’t mind having in your community...”*



- Education of opinion makers and outreach to those expressing discontent, particularly on steps taken to be environmentally sensitive

**Impact**

- Company perceived as “awfully helpful in the county with a lot of different things...they want to do things first class and we are tickled to be associated with them...”** (local school Superintendent)
- Positive press coverage:**
  - “...extracting the most holistic value from a coal-fired power plant with the least environmental impact...”
  - “Between the 77 jobs at the plant, the roughly 3,000 direct and indirect mining jobs created, the increased tax base, and other factors, this power project has had a \$60m annual impact on the economy of our rural area...”

# KEY THEMES ON THE ISSUES OF WATER AND LAND MANAGEMENT FROM SUCCESSFUL ENERGY COMPANIES

REPRESENTATIVE EXAMPLES

## Risk

- Emerging changes in values and priorities relative to the environment offer a **clear opportunity to differentiate performance** from industry peers and build or lose trust with key stakeholders

## Renewal

- Land and water stewardship are frequently linked to clean energy efforts to form an **integrated sustainability strategy**, which can be a powerful driver of cultural renewal

## Regulation

- **Self-regulation** and **voluntary actions** are critical components required to establish public trust; these are frequently coupled with education to ensure commitments are understood broadly

## Reputation

- **Expanded view of reputation** with recognition that end-product is often viewed as a commodity, but that performance (and direct impact on the community) can define the brand

## Relationships

- **Proactive engagement** of the broad stakeholder base is imperative to maintain trust and support right-to-operate

# COMPETITORS' AND PEERS' ENVIRONMENTAL POLICY AND REPORTING COVER A LARGE ARRAY OF ENVIRONMENTAL DIMENSIONS, WITH PRIMARY FOCUS ON CLIMATE CHANGE

FOR DISCUSSION

INTERIM WORK  
PRODUCT EXAMPLE

			Climate change	Renewables	Energy eff	Land use	Waste mngmt	Water quality	Ecodiversity
Competition	 <b>AEP AMERICAN ELECTRIC POWER</b>	• Corporate responsibility report 2006	Specific focus	Specific focus	Limited focus	Not covered	Limited focus	Limited focus	Not covered
	 <b>SOUTHERN COMPANY</b>	• Corporate responsibility report 2006; Climate change summary	Specific focus	Specific focus	Specific focus	Not covered	Not covered	Specific focus	Specific focus
	 <b>Duke Energy</b>	• Sustainability report 2006-07	Specific focus						
	 <b>Entergy</b>	• Sustainability report 2006	Specific focus	Specific focus	Specific focus	Specific focus	Limited focus	Specific focus	Limited focus
	 <b>Progress Energy</b>	• Corporate responsibility report 2007; Env excellence report 2004	Specific focus	Specific focus	Specific focus	Not covered	Specific focus	Limited focus	Not covered
Peers	 <b>FPL</b>	• Corporate responsibility report 2006	Specific focus	Specific focus	Specific focus	Not covered	Specific focus	Specific focus	Specific focus
	 <b>BPA</b>	• BPA's strategic direction 2008-2014	Limited focus	Limited focus	Specific focus	Not covered	Limited focus	Limited focus	Limited focus
	 <b>PG&amp;E</b>	• Environment policy framework 2006	Specific focus						
	 <b>nationalgrid</b>	• Corporate responsibility report 2007; Environment report 2006	Specific focus	Limited focus	Specific focus	Not covered	Specific focus	Limited focus	Specific focus
	 <b>Exelon</b>	• Progress report 2006	Specific focus	Specific focus	Specific focus	Not covered	Limited focus	Specific focus	Specific focus
	 <b>Xcel Energy</b>	• Triple bottomline report 2006	Specific focus	Specific focus	Specific focus	Not covered	Specific focus	Specific focus	Specific focus

**Inconsistent focus on land-use and water quality issues**

Source: Company websites; McKinsey analysis

# UTILITIES ARE MOVING TOWARDS SUSTAINABILITY CONCEPTS INTEGRATING CLEAN ENERGY WITH STEWARDSHIP ACTIVITIES

A select set of power companies have already been integrating clean energy and stewardship into a single business concept

Country	Utility	Integration concept	Elements	
			Clean energy	Stewardship
United States		<ul style="list-style-type: none"> <li>Planet Power</li> </ul>	<ul style="list-style-type: none"> <li>Energy efficiency</li> <li>Carbon capture</li> <li>Emissions controls</li> <li>Emerging techs</li> </ul>	<ul style="list-style-type: none"> <li>Water use</li> <li>Land and natural resource conservation</li> </ul>
Canada		<ul style="list-style-type: none"> <li>Sustainable Development Company</li> </ul>	<ul style="list-style-type: none"> <li>Energy efficiency</li> <li>Hydro power</li> <li>Nuclear</li> </ul>	<ul style="list-style-type: none"> <li>Water management</li> <li>Reforestation</li> <li>Biodiversity</li> </ul>
Norway		<ul style="list-style-type: none"> <li>Pure Energy</li> </ul>	<ul style="list-style-type: none"> <li>Hydro power</li> <li>Wind power</li> <li>Gas power</li> <li>Innovation</li> </ul>	<ul style="list-style-type: none"> <li>Water management and safety</li> <li>Biodiversity</li> </ul>

Water management and biodiversity are the common themes



# ESTABLISHING A GLOBAL LEADERSHIP POSITION ON RESOURCE MANAGEMENT AT ALCAN

## Company overview

- World's 3<sup>rd</sup> largest aluminum company
  - 54,000 employees
  - Operates in 42 countries
- Owns and operates wide range of assets, e.g.,
  - Bauxite refineries
  - Smelters
  - Dams
  - Power plants
- Consumes 32 TWh electricity annually
  - 64% owned hydro
  - 19% purchased hydro
  - 17% coal

## Land and water issues

- License to operate globally is tightly linked to environmental performance
- Manages land and water both for public good and private enterprise
- Key issues include
  - Multi-use reservoir/ watershed management
  - Water quality and availability
  - Consumption rates
  - Shoreline preservation
  - Biodiversity
  - Land management

## Response

- CEO took over chair of Sustainable Water committee for World Economic Forum
- Worked with stakeholders to define a global set of initiatives across asset base and created global stewardship network
- Published first report on sustainable water management in 2003

# CASE STUDY – NECHAKO WATERSHED: LEGAL CONTRACTS TO SOCIAL CONTRACTS WITH STAKEHOLDERS

## Situation

- **Expansion hurdles:** Kemano Hydro capacity expansion stopped (\$370 mn invested) after protracted legal battle and strong public opposition
- **Legacy issues:** Historically, Alcan had focused only on immediate local communities and relying on govt. authorities for dealing with issues of downstream communities and First Nations. Actions were primarily guided by legal considerations
- **Reduced flow:** Kitimat-Kemano Hydroelectric power project diverted water from Nechako river resulting in reduced downstream flow
- **Water quality:** Creation of Nechako reservoir raised water temperature in the river

## Approach

- **Systematic stakeholder engagement**
  - One-one approach with different communities to recognize long term interests.
  - Active involvement in multi-stakeholder council to build consensus
- **Sustained community support**
  - Nechako Watershed Council (NWC) was established with formalized structure to capture learning and dialogue
  - Identified 20 key watershed related issues
- **Redefined relationship with First Nations**
  - Developed a constructive approach after studying best practices among BC (British Columbia) companies.
  - Relationship based on mutual benefits

## Impact



- **Resolution of difficult issues**
  - Consensus on utilization of Nechako Environmental Enhancement Fund (NEEF)
  - Alcan and NWC are currently implementing a coldwater release facility workplan
- **Protocol for mutual respect and economic cooperation with First Nations (1999)**
  - Internal shift from legal mindset to interdependent mindset
  - Identifying and implementing projects of mutual benefits based on protocol principles

# CASE STUDY – LAC SAINT-JEAN (LSJ) WATERSHED: MANAGING COMPETING STAKEHOLDER INTERESTS

## Situation

- **Growth in recreation activities:** LSJ area has increasingly become a popular vacation destination attracting 30000 people daily
- **Fluctuating water levels:** LSJ reservoir is used to generate power for alumina and smelter operations resulting in fluctuating water levels. Increased water level improves lake's recreational potential by removing obstacles to navigation
- **Shoreline erosion:** Water levels raised to make power generation results in increased shoreline erosion and leads to instability. Past efforts were not successful
- **Eco diversity:** Shoreline and wetland issues impact fish and bird habitats

## Approach

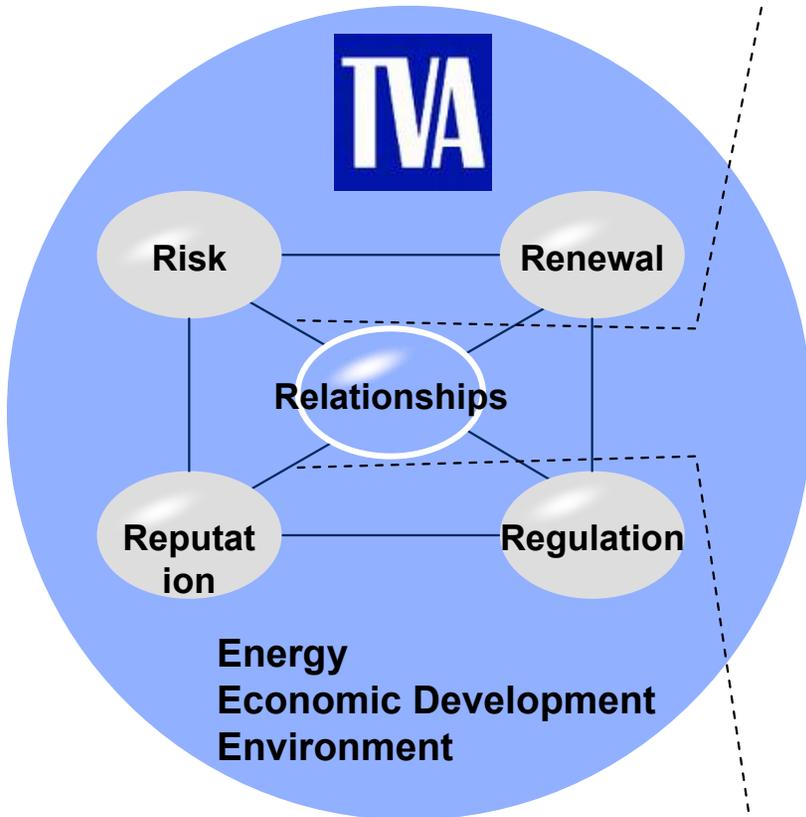
- **Engaging multiple stakeholders (global approach)**
  - Public consultation process to obtain feedback from general population, lakeside residents and other interest groups
  - Field work by Alcan to actively engage lakeside residents
- **Scientific approach to study impact**
  - Engaged external agencies to perform environmental impact assessment
  - Inputs from experts at design stages and database to measure physical and biological effects of initiatives
- **Active and comprehensive communication**
  - Annual action plans to ensure agreements
  - Communication through media of approved work plans

## Impact



- **Shoreline management program**
  - Alcan is leading the effort and also building strong capabilities to tackle environmental issues
  - Govt. of Quebec renewed the agreement with Alcan in 1995 for the second phase
- **Improved public satisfaction**
  - Increased satisfaction from 72% to 76% among lakeside residents from 1991 to 1996.

# SUMMARY POINTS FOR TVA – FRAMEWORK FOR STAKEHOLDER INVOLVEMENT FOR EFFECTIVE LAND AND WATER MANAGEMENT



- ¶ Stakeholder involvement on the issues that affect the public most is mandatory – consensus is ideal, but input is essential
  - Proactively engage
  - Leverage partnerships
  - Maintain commitments
- ¶ A successful policy requires real internal change plus public education to create an effective and supportive partnership
- ¶ Selective corporate leadership on a handful of issues (rather than trying to accelerate all simultaneously) creates the ethic and precedent for success
- ¶ Sustainability is necessarily a focus on the long-term; overt attention to legacy “sunk costs” can destroy future potential and quickly lead to perceived laggard status