



Theme 3 (Part 2)

Measuring the Problem: Decision Making & Ideological Influences

EC SO6001: Sustainable Communities & Global Development



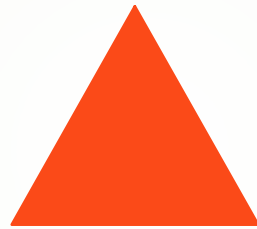


ENVI Conceptual Tools

European Committee on the Environment, Public Health & Food Safety



Scale of
the issue



The Elements of
Sustainability



Decision
Making



Values,
ideology,
strategies

(based on Barr, 2008)



Decision Making

Three Types of Decision Making



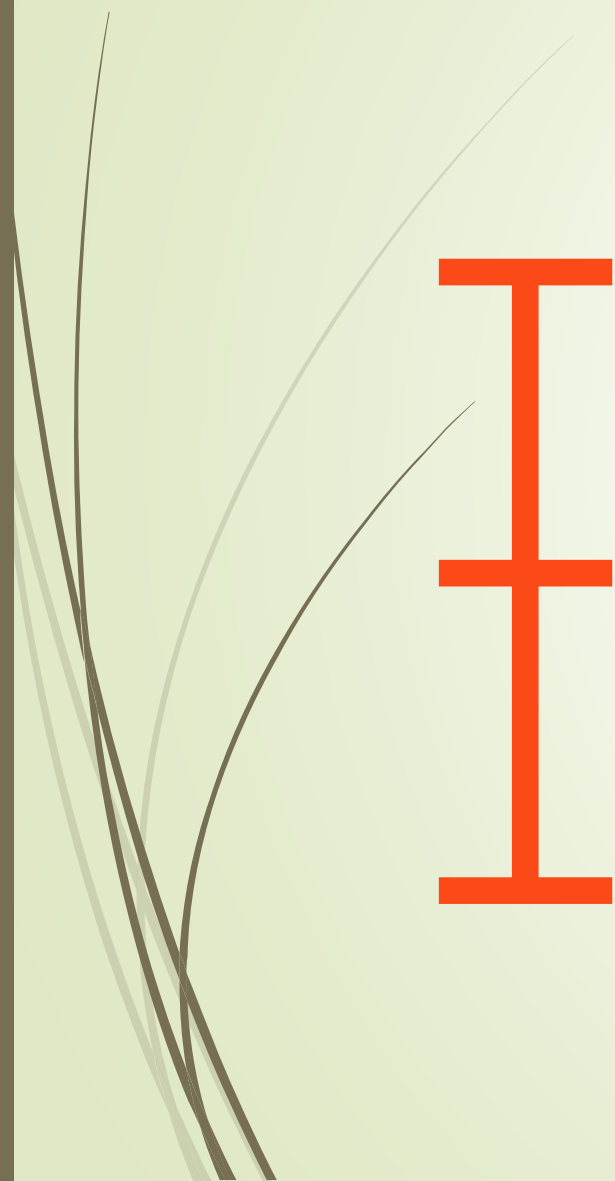
Decision Making in Industry



		Situation	'Elements' Considered
	Radical	Change in demand Less consumption Alternative consumption	Environment <u>and</u> Economy <u>and</u> Society
	Anticipatory	Change in process Cleaner technology Elimination of toxics	Environment <u>and</u> Economy
	Reactive	Treatment of sewage Disposal of waste Oil spills etc.	Environment <u>or</u> Economy



Environmental Decision Making



	Biodiversity	Transportation
Radical	Apply 'landscape ecology' principles to human activity	Completely redesigning cities and transport systems
Anticipatory	Establish National Parks to protect habitats	Creating 'cleaner' fuels, congestion charges
Reactive	Create zoos and seed banks to protect endangered species	Catalytic converters to 'clean' emissions



What are CFCs?

- Chlorofluorocarbons (CFCs) are
 - nontoxic,
 - Non-flammable chemicals containing
 - atoms of carbon, chlorine, and fluorine.
- They are used in the manufacture of
 - aerosol sprays,
 - blowing agents for foams
 - and packing materials, as solvents, and as refrigerants.



What are CFCs?

- ▶ But . . .
 - ▶ Some highly potent HFCs,
 - ▶ such as HFC-23,
 - ▶ are still increasing in usage.
- ▶ HFC-23 has a
 - ▶ global warming potential (GWP)
 - ▶ that is 14,800 times higher than carbon dioxide
 - ▶ over 100 years.
- ▶ Cooling equipment
 - ▶ contributes additional climate emissions
 - ▶ through its high energy consumption

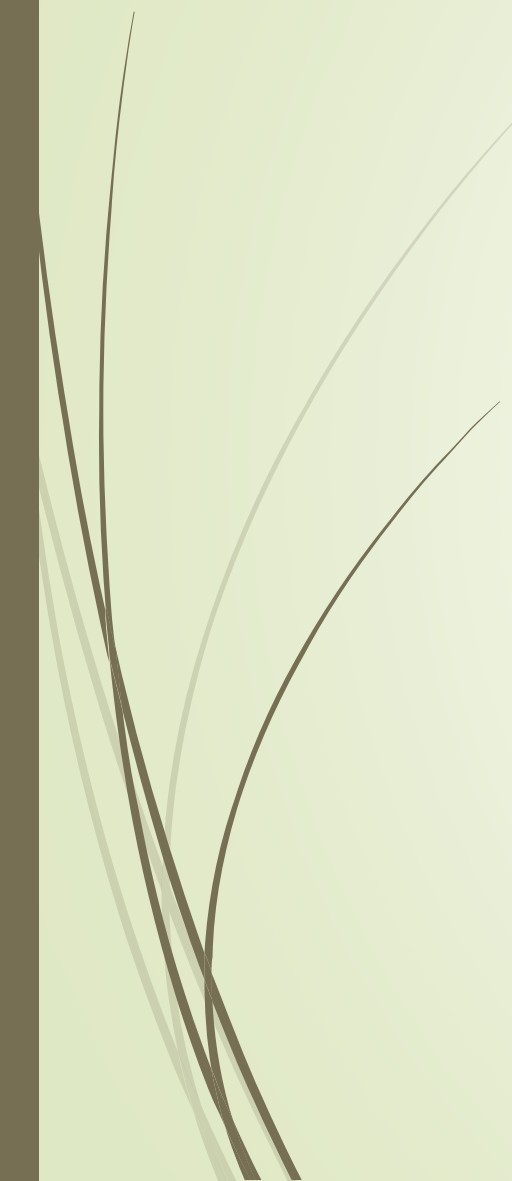


Northern Telecom Historical Example

- 42 plants in various countries
- manufacturer of electronic components
 - telecommunications
- 1988
 - 1000+ tonnes of CFCs per year
- 1992
 - 0 tonnes of CFCs used per year

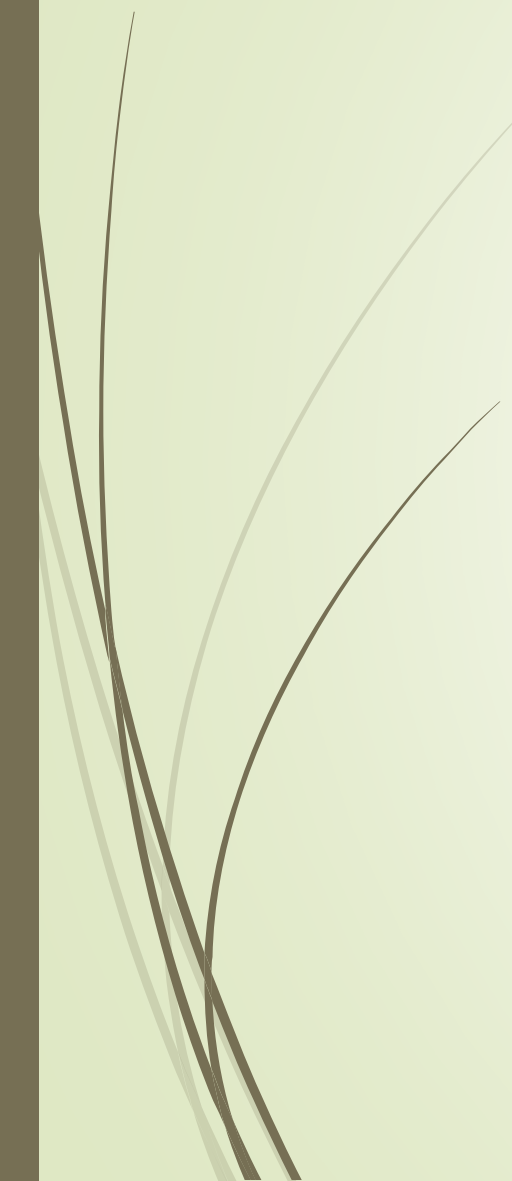


Northern Telecom Original Process

- 1) raw components **and grease**
 - 2) manufacturing and assembly process
 - 3) **clean off** grease with CFCs
 - 4) finished product
- 



Northern Telecom Revised process

- 1) raw components, **no grease**
 - 2) manufacturing and assembly process
 - 3) **no need to clean off** grease with CFCs
 - 4) finished product
- 



Environment **AND** Economy

- \$1 million
 - to develop new process
- \$4 million
 - savings in first year (no CFCs)
- \$50 million
 - savings to year 2000
- International environmental prize
 - great publicity
- Contract with Mexico for industrial innovation
 - very lucrative process now



Greenwashing

- Firm-Level Greenwashing

- The act of misleading consumers regarding the environmental practices of a company
- firm-level greenwashing is General Electric's "Ecomagination" campaign, which advertised the company's work in the environmental arena while it simultaneously lobbied to fight new clean air EPA requirements

- Product-Level Greenwashing:

- or the environmental benefits of a product or service
- LG Electronics and its mis-certified Energy Star refrigerators. Energy Star, a government-backed third-party eco-label indicating that a product meets a set of energy efficiency guidelines, certified many of LG Electronics' refrigerator models. It was discovered, however, that ten of the certified LG refrigerator models had listed erroneous energy usage measurements on their labels and did not actually meet the efficiency standards required to earn the certification

(Delmas & Burbano, 2011).

Ten Signs of Greenwashing

1. Fluffy language
 - ▀ Words or terms with no clear meaning
 - ▀ e.g. "eco-friendly"
2. Green product vs. dirty company
 - ▀ Such as efficient light bulbs
 - ▀ made in a factory that pollutes rivers
3. Suggestive pictures
 - ▀ Green images that indicate a (unjustified) green impact
 - ▀ e.g. flowers blooming from exhaust pipes
4. Irrelevant claims
 - ▀ Emphasizing one tiny green attribute
 - ▀ when everything else is not green
5. Best in class
 - ▀ Declaring you are slightly greener than the rest,
 - ▀ even if the rest are pretty terrible.



Ten Signs of Greenwashing

6. Just not credible
 - “Eco friendly” cigarettes, anyone?
 - “Greening” a dangerous product doesn’t make it safe
7. Jargon
 - Information that only a scientist could check or understand
8. Imaginary friend
 - A “label” that looks like third party endorsement
 - except that it’s made up
9. No proof
 - It could be right,
 - but where’s the evidence?
10. Out-right lying
 - Totally fabricated claims or data





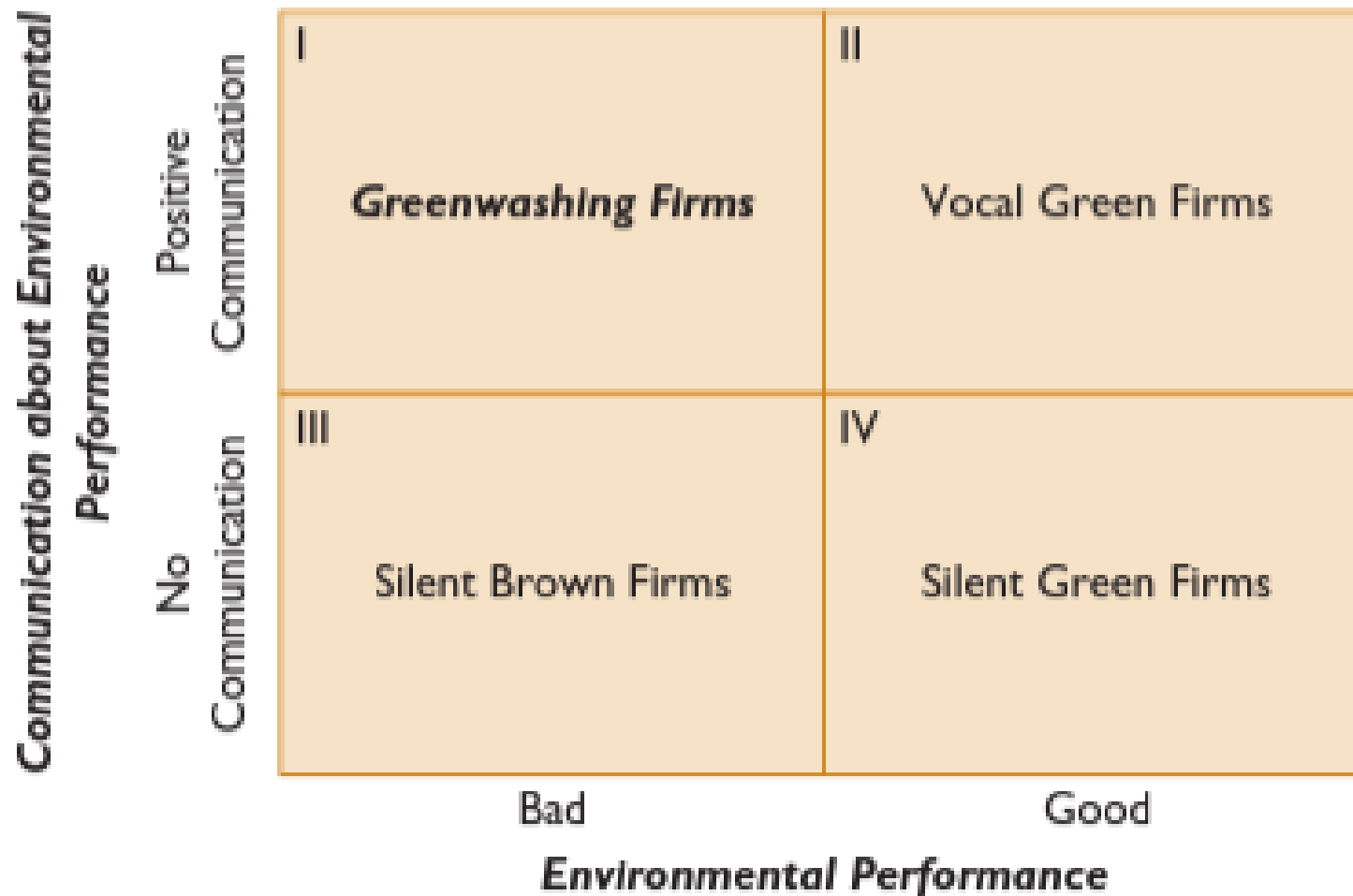
Green Washing Firms

Poor/Good and Vocal/Silent

- Two Behaviours Simultaneously
 - Poor environmental performance
 - Positive communication about its environmental performance
- Poor Environmental performers
 - Brown Firms
- Good Environmental performance
 - Green Firms

(Delmas & Burbano, 2011).

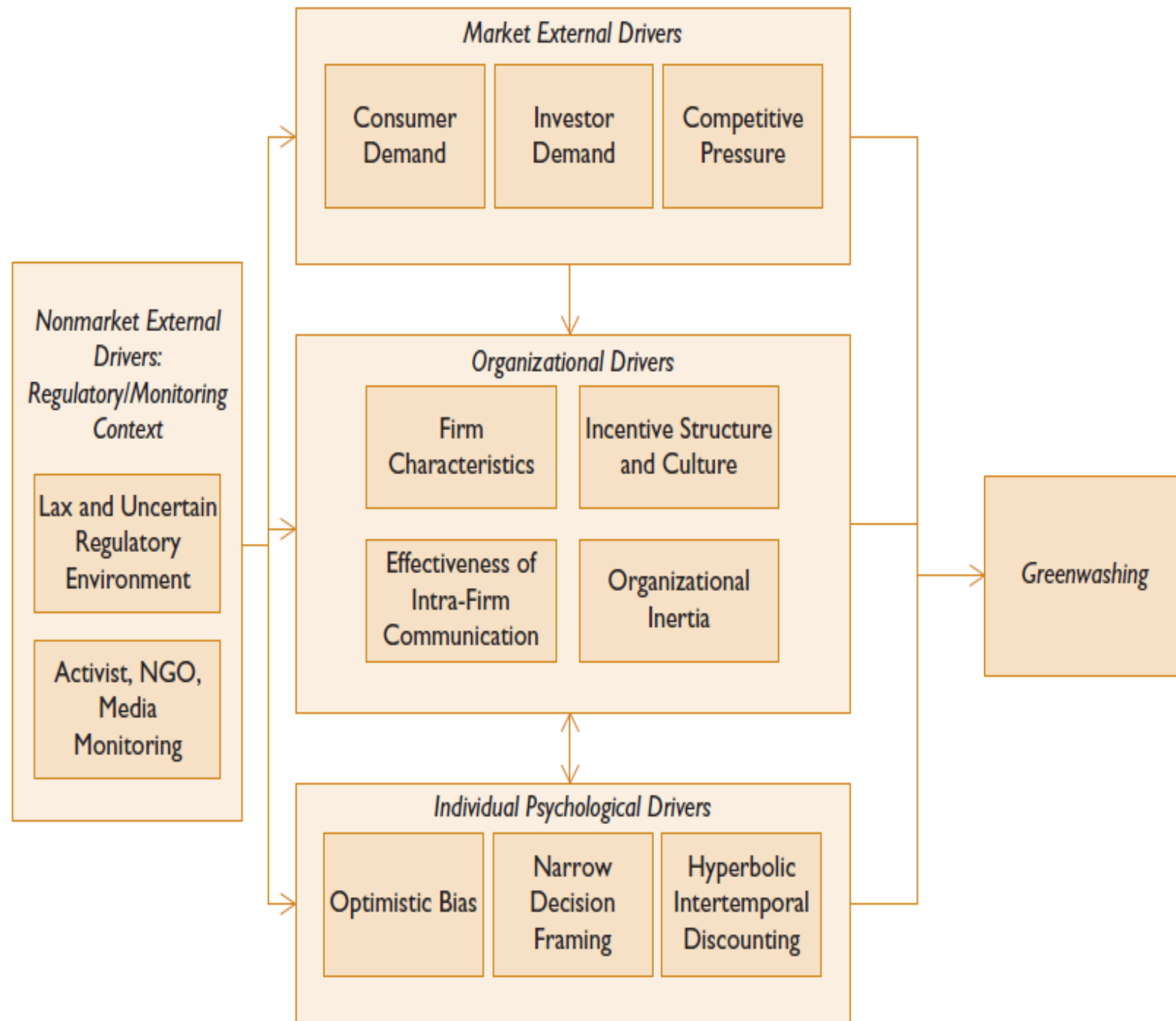
A Typology of Firms based on Environmental Performance and Communication



(Delmas & Burbano, 2011).

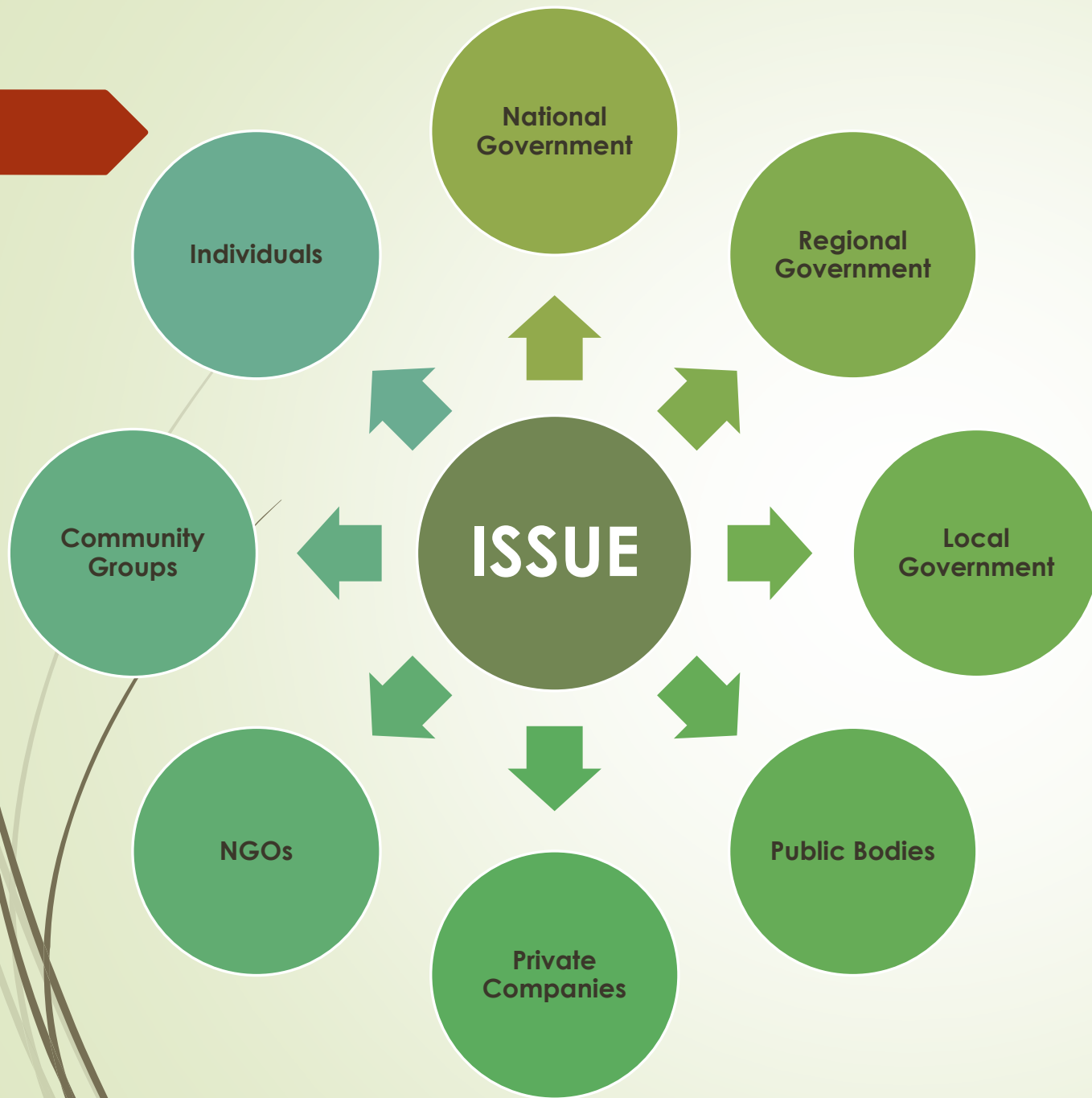
Drivers of Greenwashing

(Delmas & Burbano, 2011)



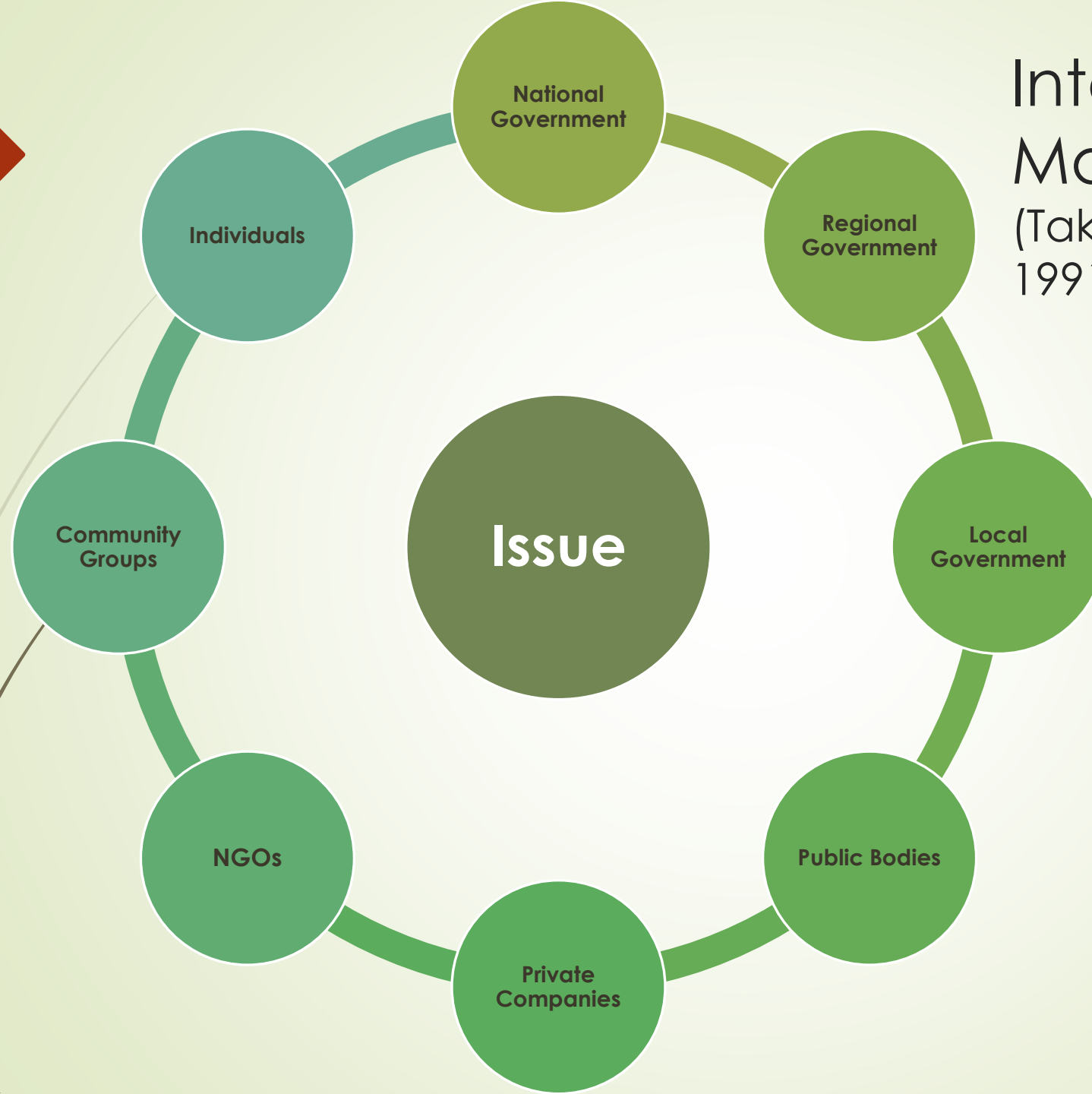
Fragmented Decision-Making

(Taken from Barrett and Kidd, 1991)



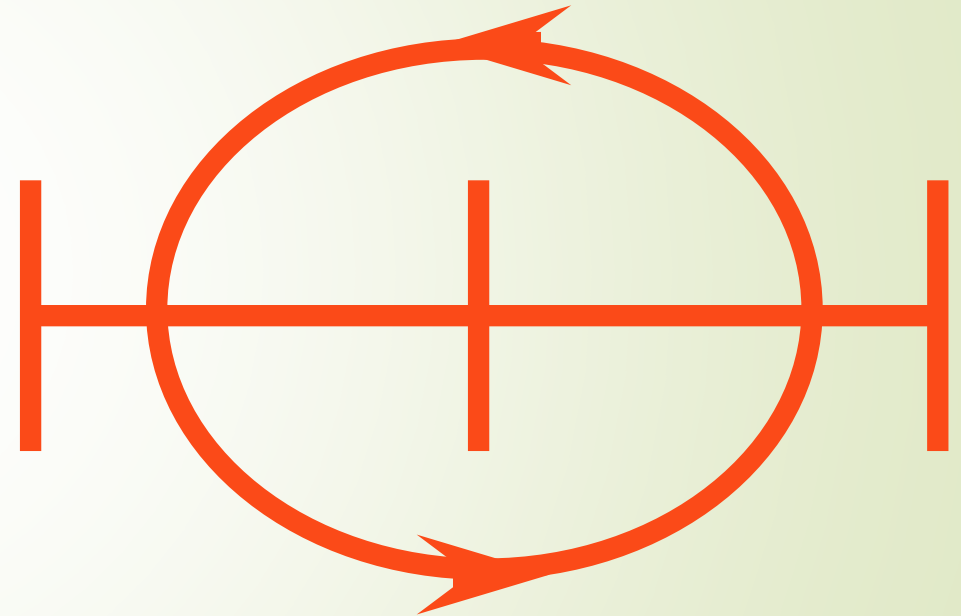
Integrated Decision-Making

(Taken from Barrett and Kidd, 1991)



Values, Ideologies and Strategies

- The
 - values,
 - ideology
 - and strategies
- of a government or organisation
 - will affect its decision making





The Interaction between Values, Ideologies & Strategies

Ideology

- Things that we hold to be
 - individually,
 - culturally,
 - socially,
 - spiritually
 - or morally important
- A definable
 - set of values
 - can be brought together
 - under the concept of **Ideology**

Values

- Short form summary of
 - basic values that
 - eliminates the need to engage in deep philosophical investigations
 - every time action is required



The Interaction between Values, Ideologies & Strategies

Ideology

- Industrial Capitalism,
- Marxism,
- Christianity
- Liberalism
- Socialism
- Conservatism
- Judaism

Theories & Ideology

- Feminism
- Veganism
- Buddhism
- Eco-socialism
- Techno-centrism
- Eco-centrism
- Eco-feminism



Interactions Amongst Values, Ideologies & Strategies

➤ Values

- Individual, cultural, social, spiritual, moral
- Definable sets of values constitute

➤ Ideologies

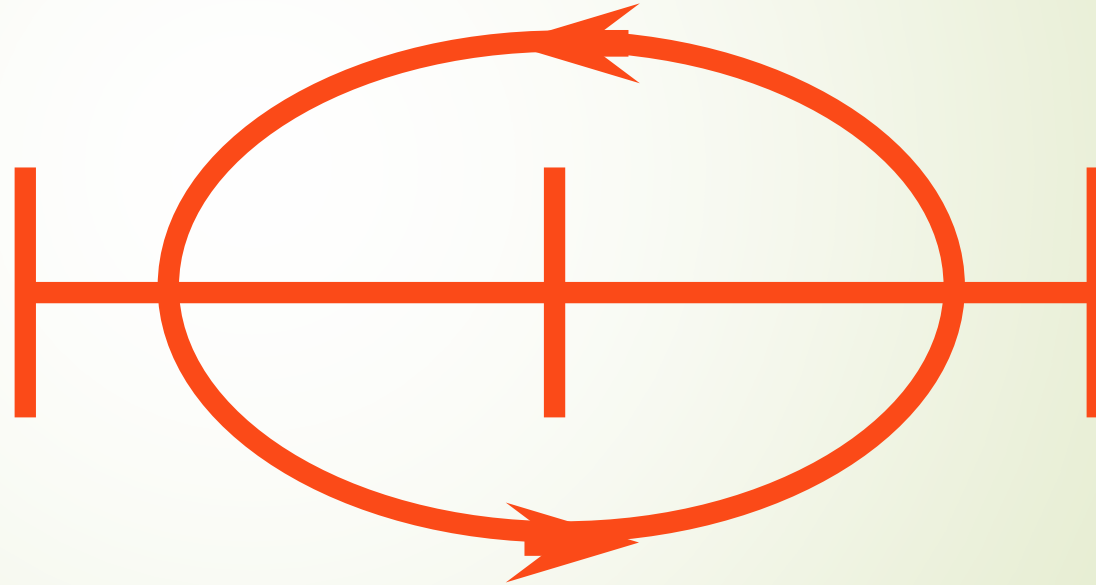
- e.g. Industrial Capitalism, Marxism, Christianity, Liberalism, Socialism, Conservatism, Judaism
- ...which give rise to

➤ Strategies

- practical applications of ideologically consistent ideas, actions, policies and programs

Interactions Amongst Values, Ideologies & Strategies

- ▀ Values
- ▀ **Ideology**
- ▀ **Strategies**





Environmental Values

Values – Ideology - Strategies

- Holistic perspective
 - everything is connected to everything else
 - parts can only be understood in the context of the whole
- Nature as a living organism or system

(Taken from Macdonald, 199, p.33)



Environmental Values

Values – Ideology - Strategies

- Humans living within nature
 - inherent value of other organisms and inanimate objects
- Limits to growth

(Taken from Macdonald, 199, p.33)



Environmental Values

Values – Ideology - Strategies

- Appropriate technology
 - matching the scope and scale of technology
 - to the task at hand
 - principles of durability
 - and efficiency recognition
 - that new technology brings
 - both benefits and problems

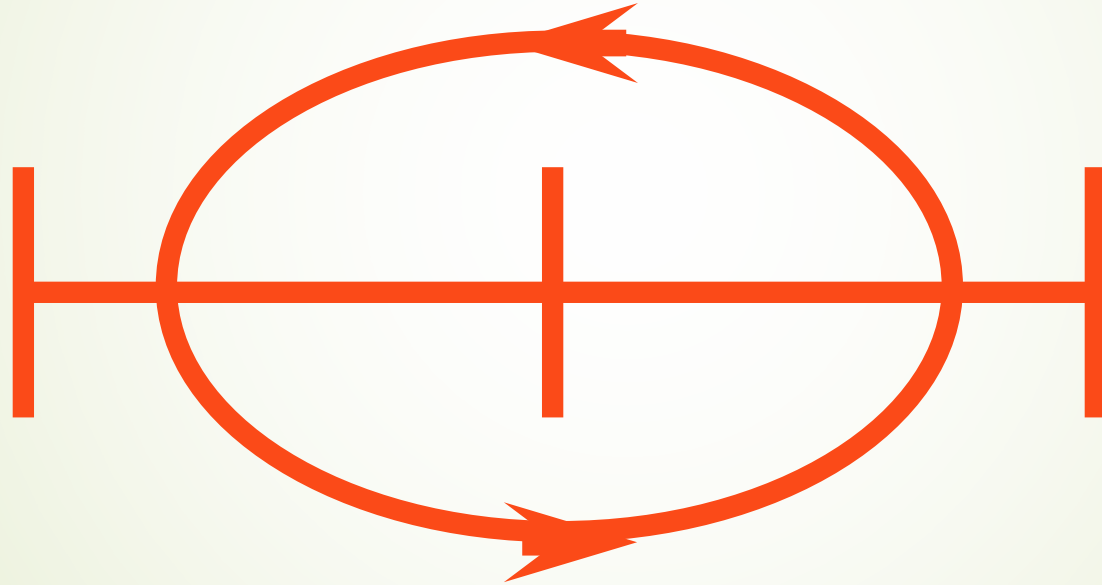


Environmental Values

Values – Ideology - Strategies

- Appropriate scale
 - Appropriate sizes for
 - Institutions
 - social organizations
 - communities accessible
 - and accountable decision-making
 - in public and private sectors

Interactions amongst **Values – Ideology - Strategies**



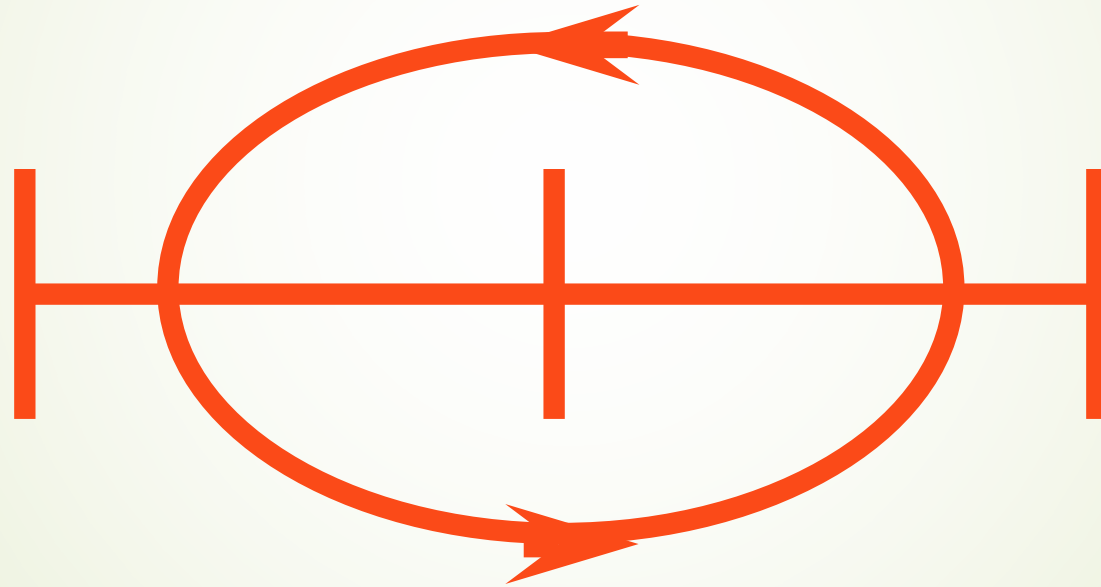


Environmental Ideologies

Values – Ideology - Strategies

- ▶ Technological optimism / techno-centric
 - ▶ Sustainable development
 - ▶ Brundtland Commission
 - ▶ Social ecology / Eco-socialism
 - ▶ Murray Bookchin
 - ▶ Deep ecology /eco-centric
 - ▶ Arne Naess
 - ▶ Ecofeminism
 - ▶ Françoise D'Eaubonne
- ▶ Various 'green' political parties
 - ▶ many variants: e.g., alliances with socialism, feminism, peace movement, etc.

Interactions Amongst **Values – Ideology - Strategies**

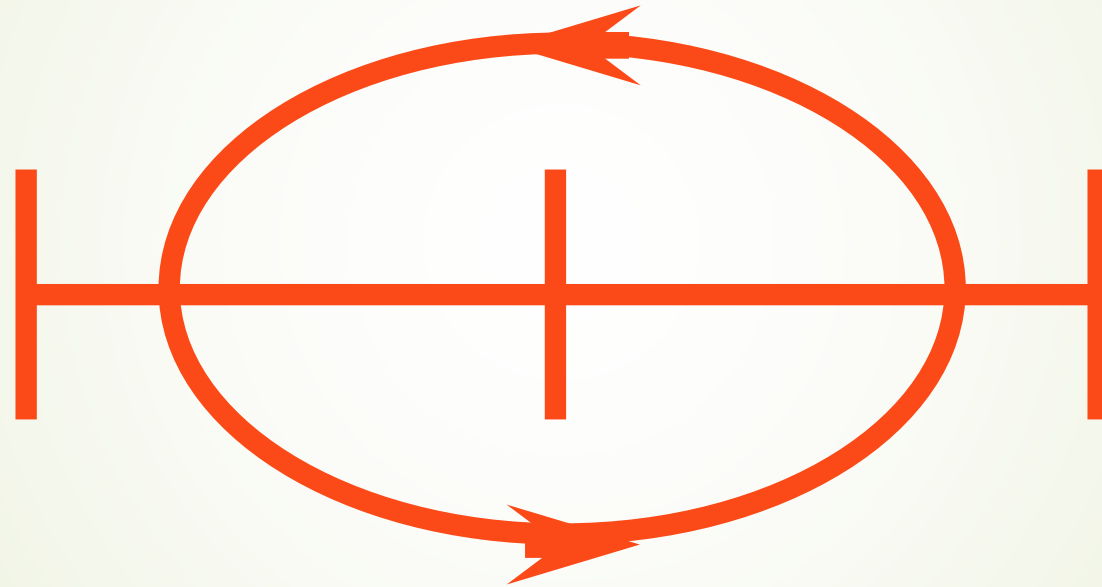




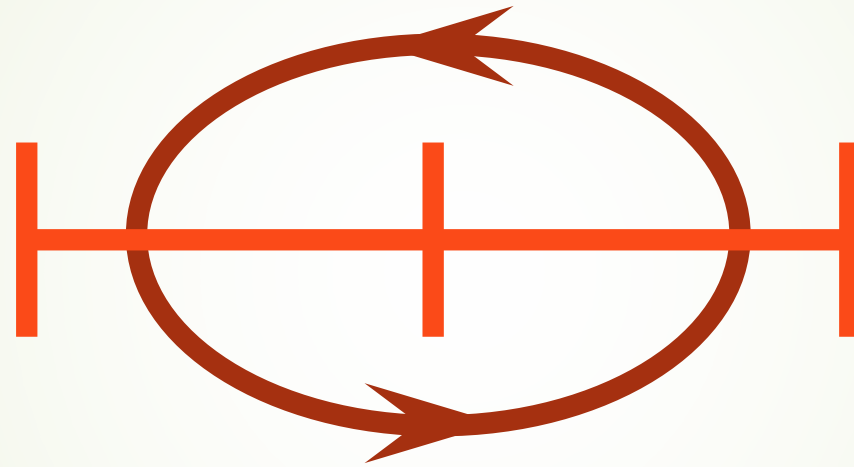
Environmental Values – Ideology - Strategies

- Reform environmentalism
 - traditional bureaucracies and political action
- Direct action and intervention
 - e.g. Earth First!
- Single-issue lobbying / intervention groups
 - e.g., Save the Rouge Valley System
- Permanent organizations
 - e.g., Greenpeace
- Alliances and coalitions
 - e.g., Canadian Coalition on Acid Rain
- Round tables, forums
 - e.g., National Round Table on the Environment and the Economy

Interactions amongst **Values – Ideology - Strategies**

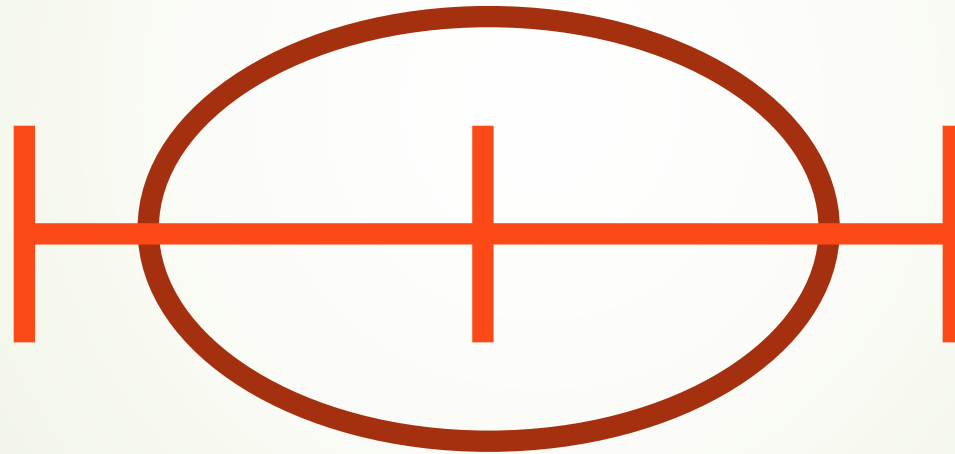


Interactions Amongst **Values – Ideology - Strategies**



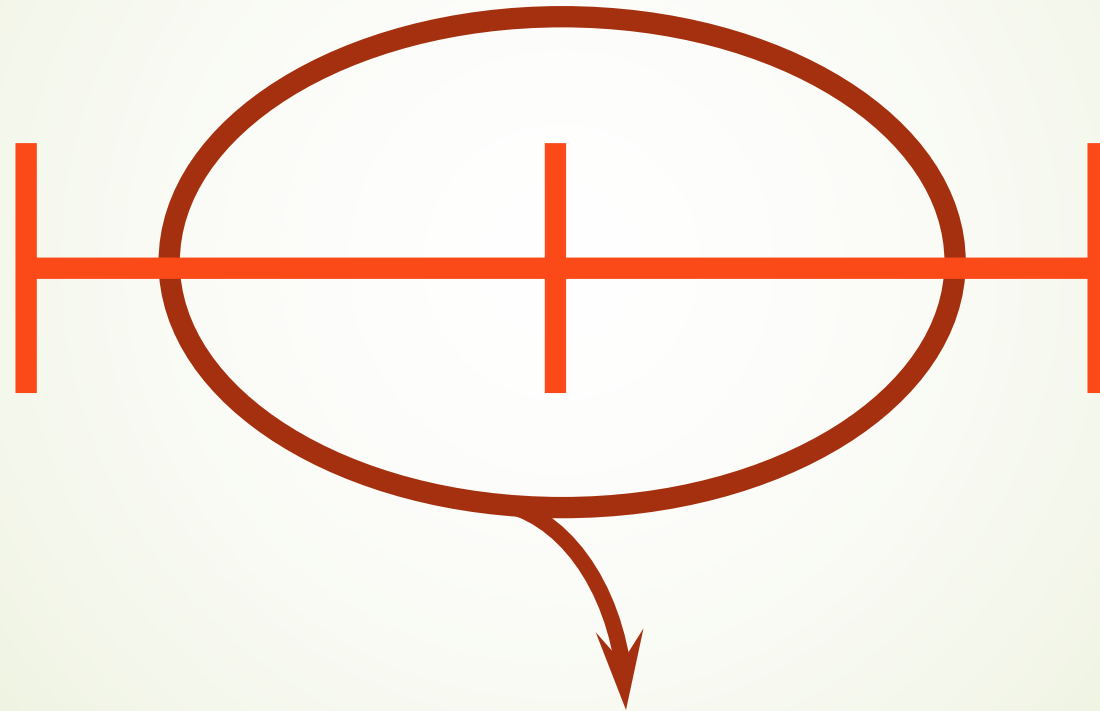
feedback loop allows for
reflection, re-evaluation, adaptive management

Interactions amongst **Values – Ideology - Strategies**



if no feedback loop:
inflexible, unresponsive

Interactions amongst **Values – Ideology - Strategies**



Results in dogma



Sustainability: PROBLEMS

- ▀ Depletion of finite resources
 - ▀ fuels, soil, minerals, species
- ▀ Over-use of renewable resources
 - ▀ forests, fish & wildlife, fertility, public funds
- ▀ Pollution
 - ▀ air, water, soil
- ▀ Inequity
 - ▀ economic, political, social, gender
- ▀ Species loss
 - ▀ endangered species and spaces

(UN World Commission on Environment & Development, 1987)



Sustainability: SOLUTIONS

- Cyclical material use
 - emulate natural cycles; 3 R's (reduce, reuse, recycle)
- Safe reliable energy
 - conservation, renewable energy, substitution, interim measures
- Life-based interests
 - health, creativity, communication, coordination, appreciation, learning, intellectual and spiritual development



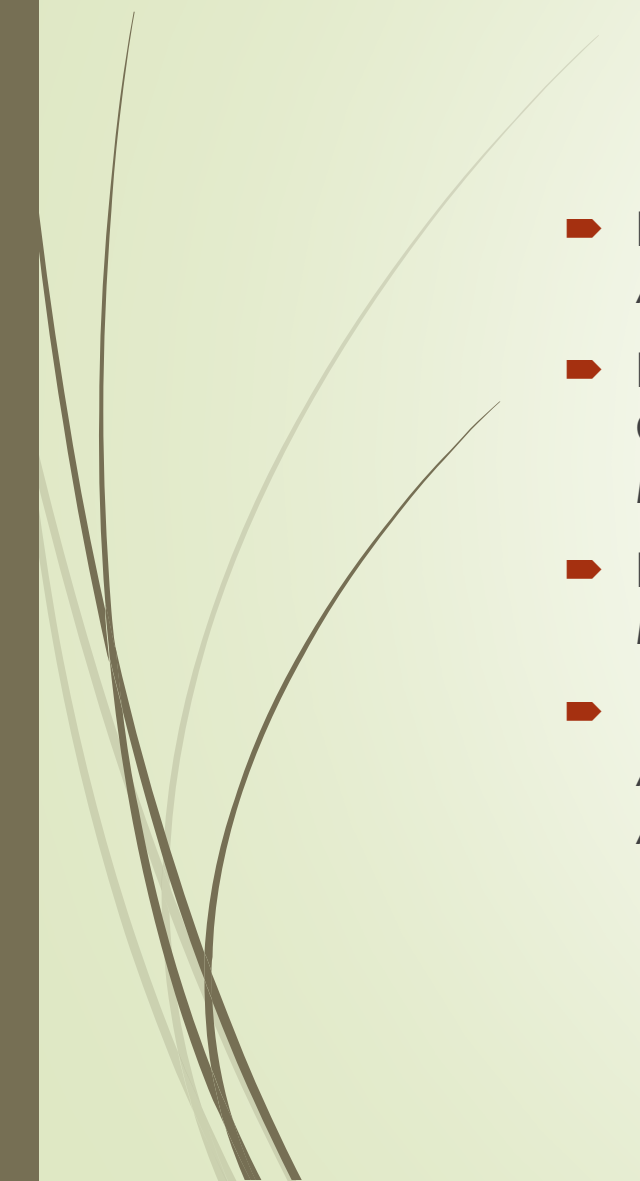
Evaluating Sustainability Issues

Questions to Consider

- ▶ Scale
 - ▶ How far do the effects of this issue reach i.e. local, regional etc.?
- ▶ The Three Elements
 - ▶ which of these are affected and how?
- ▶ Decision Making
 - ▶ Is the decision making
 - ▶ 'reactive',
 - ▶ 'anticipatory'
 - ▶ or 'radical'?
- ▶ Values and Ideologies
 - ▶ Can you detect any ideology at work in this issue?
- ▶ Can you identify an examples of
 - ▶ Greenwashing?



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