# Business Ethics Concepts & Cases

Manuel G. Velasquez

## **Chapter Five**

**Ethics and the Environment** 

## Pollution and Resource Depletion

- Threats to the environment come from two sources:
  - Pollution: The undesirable and unintended contamination of the environment by human activity such as manufacturing, waste disposal, burning fossil fuels, etc.
  - Resource Depletion: The consumption of finite or scarce resources.

## Major Types of Air Pollution

- Greenhouse gases: carbon dioxide, methane, nitrous oxide.
- Ozone depleting gases: chlorofluorocarbons
- Acid rain gases: sulfur oxides.
- Airborne toxics: benzene, formaldehyde, toluene, trichloroethylene, and 329 others.
- Common air pollutants: carbon monoxide, sulfur oxides, nitrogen oxides, airborne lead, ozone, particulates.

## Major Types of Water Pollution

- Organic wastes: human sewage, animal wastes, bacteria, oil.
- Inorganic pollutants: salt brines, acids, phosphates, heavy metals, asbestos, PCBs, radioactive chemicals.

## Major Types of Land Pollution

- Toxic substances: acids, heavy metals, solvents, pesticides, herbicides, and phenols.
- Solid wastes: residential garbage, industrial wastes, agricultural wastes, and mining wastes.
- Nuclear wastes: high level, transuranic, lowlevel.

# Depletion of Non-Renewable Resources

- Extinction of species through destruction of natural habitats.
- Natural resources depleted at peaked rate, not exponential rate.
- Fossil fuel depletion:
  - Coal in 150 years
  - Natural gas in 30–40 years
  - Oil between 2010 and 2040
- Mineral depletion:
  - Copper and mercury in 2100
  - Aluminum during 21st century
  - Indium and antimony in 10 years
  - Tantalum in 20–116 years.

### The Ethics of Pollution Control

- Ecological Ethics = The ethical view that nonhuman parts of the environment deserve to be preserved for their own sake, regardless of whether this benefits human beings.
  - The "Last Man" Argument
    - Asks us to imagine a man who is Earth's last survivor.
    - We recognize it is wrong for the last man to destroy all nonhumans.
    - So we must recognize some nonhumans have intrinsic value apart from humans.

## **Environmental Rights**

- Humans have a right to fulfill their capacities as free and rational and a livable environment is essential to such fulfillment.
- So humans have a right to a livable environment and this right is violated by practices that destroy the environment.
- Such environmental rights can lead to absolute bans on pollution even when the costs far outweigh the benefits.

#### Private and Social Costs

 Private cost: The cost an individual or company must pay out of its own pocket to engage in a particular economic activity.

 Social cost: The private internal costs plus the external costs of engaging in a particular economic activity.

### Markets and Pollution

- Total costs of making a product include a seller's internal private costs and the external costs of pollution paid by society.
- A supply curve based on all costs of making a product lies higher than one based only on sellers' internal private costs.
  - The higher supply curve crosses the demand curve at a lower quantity and a higher price than the lower supply curve.
- When sellers' costs include only private costs, too much is produced and price is too low.
  - This lowers utility, and violates rights, and justice.

## Ethical Approaches to Environmental Protection

- Ecological approach.
  - nonhumans have intrinsic value
- Environmental rights approach.
  - humans have a right to a livable environment
- Market approach.
  - external costs violate utility, rights, and justice;
     therefore, they should be internalized.

# Internalization of the Costs of Pollution

- Absorption of external costs by the producer, who then takes them into account when determining the price of goods.
  - But this process leads to environmental injustice because the external costs of pollution are borne largely by those who do not enjoy a net benefit from the activity that produces the pollution.

# Optimal Level of Pollution Removal (Utilitarian Approach)

- Costs of removing pollutants rise as benefits of removal fall.
- Optimal level of removal is point where its costs equal its benefits.
- But when costs and benefits are not measurable, utilitarian approach fails.
- When costs and benefits are not measurable some use the precautionary principle, others the maximin rule.

## Precautionary Principle

 The principle that if a practice carries an unknown risk of catastrophic and irreversible consequences, but it is uncertain how large that risk is, then the practice should be rejected until it is certain the risk is nonexistent or insignificant.

### Maximin Rule

 When risks cannot be measured, the most rational procedure is to first assume that the worst will happen and then choose the option that leaves us best off when the worst happens.

### Alternative Approaches to Pollution

- Social Ecology
  - Get rid of social systems of hierarchy and domination
- Ecofeminism
  - Change male pattern of dominating nature and women
- Other feminists
  - Extend the ethic of care toward nature

### Conservation Based on Ethics

#### Rawls:

Leave the world no worse than we found it.

#### Care Ethic:

Leave our children a world no worse than we received.

#### Attfield:

Leave the world as productive as we found it.

## Sustainability

- We must deal with the environment, society, and economy so that they have the capacity to continue to meet the needs of present generations without compromising the ability of future generations to meet their own needs.
- Environmental sustainability, economic sustainability, and social sustainability are interdependent.

## **Environmental Sustainability**

- Not depleting renewable resources faster than their replacement.
- Not creating more pollution than environment can absorb.
- Not depleting non-renewable resources faster than we find replacements.

#### **Economic Growth**

#### Schumacher

 We must abandon the goal of economic growth if we are to allow future generations to live as we do.

#### Others

 We must achieve a "steady state" where births equal deaths and production equals consumption and these remain constant at their lowest feasible level.

## Club of Rome Projections

 Suggest that continued economic growth will deplete resources and increase pollution until industrial output, food production, and services decline, causing catastrophic population loss sometime during the twentyfirst century.

# Moral Questions Related to Economic Growth

 It is troubling that current economic growth policies that have led to high rates of energy and resource consumption in developed nations while developing nations are left to consume at low rates.