



# Group 5

**Identify and outline the main features of the polluter pays principle. Show how PPP may be the most effective instrument for ‘greening’ (rejuvenating) the current global economy, and identify any limitations of the PPP.**



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A large pile of discarded plastic bottles and cans, including brands like Coca-Cola and Pepsi, scattered on a paved surface. The bottles are of various colors (clear, blue, green, red) and are densely packed.

**2 000 000**

**5 minutes**

**1 out of 5 is recycled**

# **More wealth, More products**

## **More products, More waste**

There is more pollution as people become wealthier.

Moving to cities and an improving standard of living are both signs of economic progress. But even if these demographic shifts continue, the projected rates of waste aren't entirely inevitable.

The quantity of garbage we generate reflects the amount of new products we buy and the energy, resources and upstream waste that are involved in producing those items.

# Rylands v Fletcher (1868)

This case was decided well before environmental law was heard of, it developed the concept that “the polluter pays”

A mill owner (Mr Rylands) employed a contractor to build a reservoir on rented land

The contractor filled in some disused mine shafts on the land which was to become part of the reservoir

The reservoir was then filled with water

The reservoir flooded adjacent mines owned by Mr. Fletcher

Mr. Fletcher sued

The first hearing

Mr Fletcher succeeded on the basis of trespass over and nuisance to his land by Mr. Rylands

The case went to appeal

The first appeal hearing

The court overturned the judgment arguing that “intent” needs to be proved in trespass or nuisance cases and there was no “intent” by Mr. Rylands to flood Mr. Fletcher’s mines

The court also said “there is nothing offensive to the senses about water” and “Mr. Rylands had been involved in lawful act” (i.e. building a reservoir, water is not a poisonous or noxious substance of itself). It was a bad luck

Mr. Fletcher appealed

The Court of Appeal:

“a person who for his own purposes brings on his land and collects or keeps there, anything likely to do mischief if it escapes, must keep it at his peril. He is answerable for all the damage which is the natural consequences of its escape”

i.e. if you have done it and caused damage, you are liable

i.e. Mr. Fletcher (the mine owner) won

Mr. Rylands appealed, but the House of Lords agreed with the Court of Appeal

This case was constantly followed ever since this decision

“polluter pays” was developed

# **“Polluter pays” principle (PPP)**

Popular in recent times

“you make a mess you clean it up”

The parties who generate pollution, whether governmental or not, should bear the cost of abatement

Received the strongest support from OECD and EC

# **Guiding Principles Concerning the International Economic Aspects of Environmental Policies (May 1972)- OECD Council Recommendation**

*“In order to ensure that the environment is in an acceptable state, the polluter should bear the expenses of carrying out the pollution prevention and control measures. And such costs of the measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption”*



# Origin of the PPP: OECD document

OECD (1972), “Environment and Economics: Guiding Principles Concerning International Economic Aspects of Environmental Policies”

The basis of the principle- the polluter should bear the expense of implementing measures imposed by public agencies to ensure that the environment is protected.

The internalization of costs should be reflected in the cost of goods and services which cause pollution during production and/or consumption

Although the OECD consists of official government representations, the recommendation was never formally ratified by any government.

# Main Features of the PPP

Expenses that polluter should bear are decided by public authorities (whether in by preventive measures, restoration, or a combination of both)

Polluter's expenses include pollution prevention and control measures.

Polluter pays for pollution control and prevention measures in any case (imposition, charges, other economic mechanisms, or direct regulation). The private cost of goods and services should reflect the scarcity of environmental resources.

Different environmental policies and standards

# What PPP is not?

Compensation

Prevention measure

A tool for fully internalizing the pollution costs

A tool for bringing pollution to an optimum level

# **PPP in International Law**

The Rio Declaration (1992)

Agenda 21 (1992)

# The Rio Declaration (1992)

The 1992 Rio Declaration on Environment and Development

Principle 16:

“National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment”

Principle 13:

States should develop “national law regarding liability and compensation for the victims of pollution and other environmental damage”

# Agenda 21 (1992)

Implicitly recognized PPP in several of its provisions

Section 5 (d) of Agenda 21:

*“To introduce or strengthen policies that would encourage self-sufficiency [include] pricing mechanisms which internalize environmental costs”*

# Regional development of the PPP

EU:

-Treaty of Rome (1957 amended in 1987 by the Single European Act (1987))

-Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (1993)

Caribbean

- The Revised Treaty of Chaguaramas

# Treaty of Rome (1957)

- Article 174 (2) of the Treaty of Rome provides:
- “environmental damage should as a priority be rectified at source and [...] the polluter should pay”



# **Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (1993)**

*“Having regard to the desirability of providing for strict liability in this field taking into account the Polluter Pays Principle”*

Convention that speaks specifically to the “polluter pays” principle

Objective: ensure adequate compensation for damage from activities which pose a danger or threat to the environment

# The Revised Treaty of Chaguaramas

Article 65 – Environmental protection:

*“Community shall promote measures to ensure [among others ] the principle that the polluter pays”*

# The PPP in national jurisdictions

US

UK

Canada

India

# US

1. The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (1980)
2. The Resource Conservation And Recovery Act (RCRA)
3. The Clean Air Act (1970)
4. The Clean Water Act (1977)
5. National Pollutant Discharge Elimination System

# The Clean Water Act (1977)

Prohibits “discharge of any pollutant by any person” into waters of the US

Regulated the discharge of pollutants through a permitting program

Requires each state to adopt water quality standards for the water bodies located within its borders which serve as the basis for treatment controls and water quality protection strategies.

# UK

*Regina v Secretary of State for the Environment and another, Ex Parte Standley and others (National Farmers Union, Intervener) (1999)*

*“It must be understood as requiring the person who causes the pollution, and that person along, to bear not only the costs of remedying pollution but also those arising from the implementation of a policy of prevention”*

*“The person responsible for the harmful effect will then be required to make good or bear the cost of that harm”*

# Canada

Court cases (The Queen v Hydro-Quebec)

Canadian provincial jurisdictions

Federal environmental legislation

Imperial Oil Ltd. v Quebec (Minister of Environment) (2003)

# Imperial Oil Ltd. v Quebec (Minister of Environment)

From 1920 to 1973 Imperial Oil Ltd. Had owned and operated a petroleum depot on property subsequently sold in 1979.

Minister of Environment of Quebec decided to issue an order against Imperial Oil to study and assess the contamination of lands which it formerly used and owned.

The study revealed that the land was contaminated

The Minister of Environment issued an Order against Imperial Oil to cover the costs of contamination caused by the company's previous use of the property

Imperial Oil sued the Minister on the ground of bias

What do you think the outcome was?



The Court found that the Minister had in fact followed the procedural requirements and in issuing judgment against Imperial Oil, applied the “polluter pays” principle, one of the main environmental principles in Quebec’s legislation

The Imperial Oil had to pay

# India

## 1. Vellore Citizens Welfare Forum v Union of India (1991):

The court ruled that: *“Remediation of the damaged environment is part of the process of “Sustainable Development” and as such polluter is liable to apply the cost to the individual sufferers as well as the cost of reversing the damaged ecology”*

## 2. Mehta v . Union of India (1996):

*“if rights were violated by the disturbance of the environment, damages could be awarded not only for the disturbance of the ecological imbalance, but also for the victims who have suffered due to that disturbance”*

# ⇒ Polluter Pays!

As an effective principle for 'greening' the current global economy



This section will show how **Polluter Pays Principle** is the *most effective* guiding principle for applying the **economic instruments** to *rejuvenate* the current global economy.

**Economic instruments** aim to institute **full cost pricing** by costing and charging full scarcity cost for resource depletion and full damage cost for environmental degradation (T Panayotou:1994).

**Full cost pricing** is given by the formula:  **$P = MPC + MUC + MEC$**

Where,  **$P$**  = price

**$MPC$**  = marginal (or incremental) production cost

**$MUC$**  = marginal user (or depletion) cost

**$MEC$**  = marginal environmental (or damage) cost.

At **A**:  $P^* = MSOC \equiv MPC + MUC + MEC$

where  $P^*$  = optimal price, **MSOC** = marginal social opportunity cost, **MPC** = marginal production cost; **MUC** = marginal user (or depletion) cost; **MEC** = marginal environmental (damage) cost.

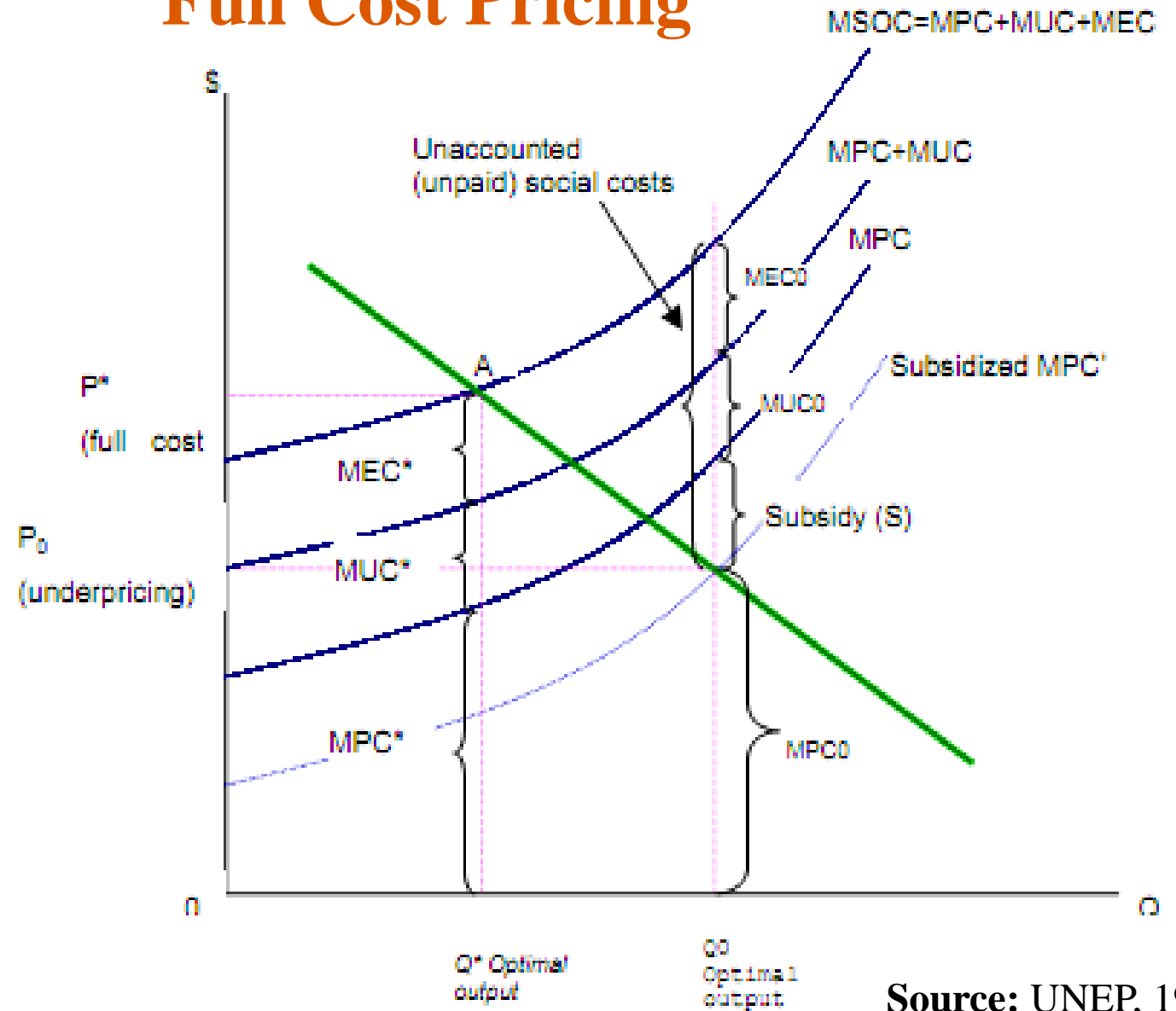
$Q^*$  = optimal output; resources freed by the reduction of the polluting output from  $Q_0$  down to  $Q^*$  move to other products with lower social costs (e.g., resource saving and environment-friendly).

**MPC\*** internalized by removal of distortionary subsidies.

**MUC\*** internalized through secure property rights

**MEC\*** internalized through taxes, charges, tradeable permits or other economic instruments

# Full Cost Pricing



Source: UNEP, 1994

Figure 1. Unaccounted social costs ( $S + MUC_0 + MEC_0$ ), underpricing and overproduction ( $P_0, Q_0$ ) vs. internalizing of external costs ( $P^*, Q^*$ )

# Internalizing External Costs Through Economic Instruments

Principle 16 of the Rio Declaration states that:

“National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution with due regard to public interest and without distorting international trade and investment (UN, 1992).”

In other words, polluters should not become free riders at the expense of the collectivity.



# PPP (Economic Instruments)

Economic instruments may be classified into seven broad categories:

- ✓ Property Rights
- ✓ Market Creation
- ✓ Fiscal Instruments
- ✓ Charge Systems
- ✓ Financial Instruments
- ✓ Liability Instruments
- ✓ Performance Bonds And Deposit Refund Systems

## ➔ Property Rights

Excessive resource depletion and environmental degradation results from the absence (or thinness) of markets in resource and environmental assets due to open access. So therefore, With secure property rights, resource depletion is internal to the owners/users (T Panayotou:1994).



# ➔ Market Creation

In the case of environmental pollution, property rights are technically impossible.

Therefore, one solution is for the state to provide the desired level of environmental quality (like other public goods) and pay for it through general taxation.

This can be effected through a combination of pollution control regulations, incentives, and public investment in pollution abatement (Pearman, 2003). An alternative is to try and mimic the market, in fact, to create a market in environmental quality. This approach treats the environment as a scarce, yet unmarketed and unpriced resource which is overused because it is free (Kete, N, 1994).



# Fiscal Instruments

Fiscal instruments such as taxes and subsidies could be used to bridge the gap between private and social costs/benefits.

For example, the prices of polluting products such as gasoline or pesticides do not incorporate the social costs of damage to peoples' health and other activities which arise from their use because these costs are external to the decision maker (producer or consumer).

Hence, polluting inputs and final products are generally underpriced, both absolutely (in terms of social costs) and in relation to non-polluting or less polluting products. This results in overproduction and overconsumption which in turn result in environmental damage at a higher than socially optimal level.

## ➔ Charge Systems

Charges are defined as payments for use of resources, infrastructure, and services and are similar to market prices for private goods. One way of thinking of charges is as “prices” for public goods or publicly provided private goods.

They differ from market prices for private goods because they are *not market determined* but are *administratively set by a government agency*, a public utility, or other types of regulated natural monopoly.

# ➔ Financial Instruments

Financial instruments have many similarities with subsidy and tax incentive systems and share many of their limitations as well.

Financial instruments are distinguished from fiscal instruments because they are often *extra-budgetary* and *financed from foreign aid, external borrowing, debt for nature swaps*, and the like.

Financial instruments such as revolving funds, green funds, relocation incentives and subsidized interest or soft loans are used for projects with significant positive externalities e.g. reforestation.



# Liability Instruments

This class of instruments aims to induce socially responsible behavior by establishing legal liability for;

- (a) natural resource damage,
- (b) environmental damage,
- (c) property damage,
- (d) damage to human health or loss of life,
- (e) non-compliance to environmental laws and regulations, and
- (f) non-payment of due taxes, fees or charges.

# ➔ Performance Bonds And Deposit Refund Systems

Environmental performance bonds and deposit refund systems are economic instruments that aim to shift responsibility for controlling pollution, monitoring, and enforcement to individual producers and consumers who are charged in advance for the potential damage.

Example: bills for cleaning up oil spills and contaminated land, for collection and treatment of hazardous waste, for reclamation of abandoned land after mining, for reforestation after logging, and for man-made “natural” disasters.

## **PROPERTY RIGHTS**

Land titles, Water rights  
Mining rights  
Use rights-stewardship and  
licensing

## **MARKET CREATION**

Tradeable emission permit,  
tradeable water share,  
tradeable resource shares, etc

## **FISCAL INSTRUMENT**

Pollution taxes: effluent taxes,  
emission taxes  
Input taxes, product taxes,  
export taxes, import tariffs,  
etc

## **CHARGE SYSTEMS**

Pollution charges, user  
charges, betterment charges,  
impact charges, access fees,  
road tolls, administrative  
charges

## **LIABILITY SYSTEMS**

Legal liability, non-  
compliance charges, liability  
insurance, natural resource  
damage liability, enforcement  
incentives, etc

## **FINANCIAL INSTRUMENT**

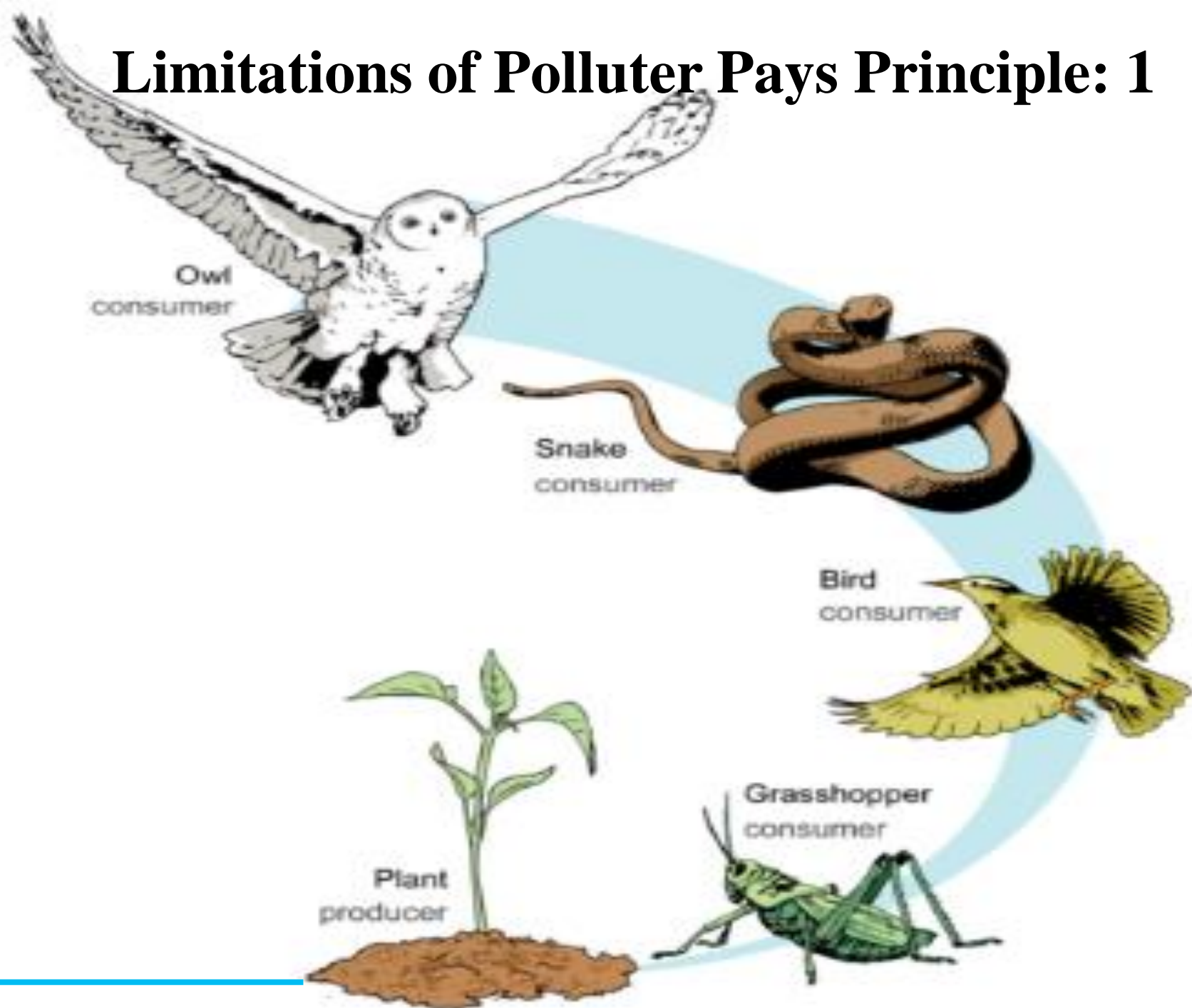
Soft loans, grants, subsidized  
interest, location/relocation  
incentives, revolving funds

## **BONDS AND DEPOSIT REFUND SYSTEMS**

Environmental performance  
bonds, land reclamation bond,  
waste delivery bonds,  
environmental accident  
bonds, etc

# Limitations of Polluter Pays Principle: 1

Elusiveness of the term 'Polluter' — Q. is it possible to measure pollution? mimicking the food chain (more than one agent contributing to the nuisance), the person who causes pollution is always not easy to identify. Solution is to establish clarity and transparency in identifying the polluter which seems problematic. For example: charges placed on bottles should be paid by producers and importers, rather than charging the consumers.





## → Limitations of Polluter Pays Principle 2

2. Elusiveness of the term 'Pay'—After identifying the polluter, how much should he pay?  
Solution: Redistribution approach according to the intensity of pollution and the proportionality of cost of prevention and control borne by local authorities.

Q. What if the local authorities are corrupt, will there be fairness??

3. It can be difficult to impose regulations or tax on firms from other countries. For example, when we contribute to global warming, the problem affects everyone around the world, but it can be difficult to create international agreements to impose penalties on those polluting.

## → Limitations of Polluter Pays Principle 3

4. Pollution havens. These are countries which have weaker environmental legislation, as a result, firms can escape taxes and regulations on pollution by shifting production to those countries.
5. Administration costs of collecting information and implementing tax.

# ➔ **Criticism of Polluter Pays Principle**

Some may argue that certain types of environmental pollution are so bad that they should just be banned rather than taxing them even if the polluter pays or is willing to pay some financial cost.



# Conclusion

The limitations of implementing the Polluter Pays Principle doesn't undermine its validity. It just means in the real world it will be very difficult to get a perfect approximation of the external cost. Yet still, as long as we get closer to the social cost, there will be an increase in economic welfare.

At this juncture, I will like to state categorically that, the Polluter Pays Principle is the most effective instrument for greening the current global economy despite its limitation.---I rest my Case.

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