

ECONOMICS OF THE ENVIRONMENT: WRAPPING UP



Attendance Questions

In your own words, what do you consider to be the 5 big ideas of this course?

Was there anything that surprised you? Anything especially interesting?

What would you have liked to learn more about?

COURSE GOALS



Course Goals and Learning Outcomes

By the end of this course, you will be able to...

1. Explain and analyze the socially optimal level of environmental quality
 - a. Calculate efficient market outcomes
 - b. Assess methods for non-market valuation
2. Explain and analyze sources of market failure around environmental issues
 - a. Explain externalities, public goods, and common pool resources
 - b. Explain market failure for depletable and renewable resources
3. Prescribe and assess policy interventions for market failures around environment
 - a. Evaluate private interventions
 - b. Evaluate and compare public interventions
4. Explain and analyze environmental policy applications
 - a. Analyze green growth and international environmental policy
 - b. Describe and explain key problems around climate change

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COURSE GOALS

THREE PARTS OF THE COURSE:

**HOW DO WE
DETERMINE OPTIMAL
ENVIRONMENTAL
QUALITY?**

**HOW DO WE
DESIGN POLICY
INTERVENTIONS**

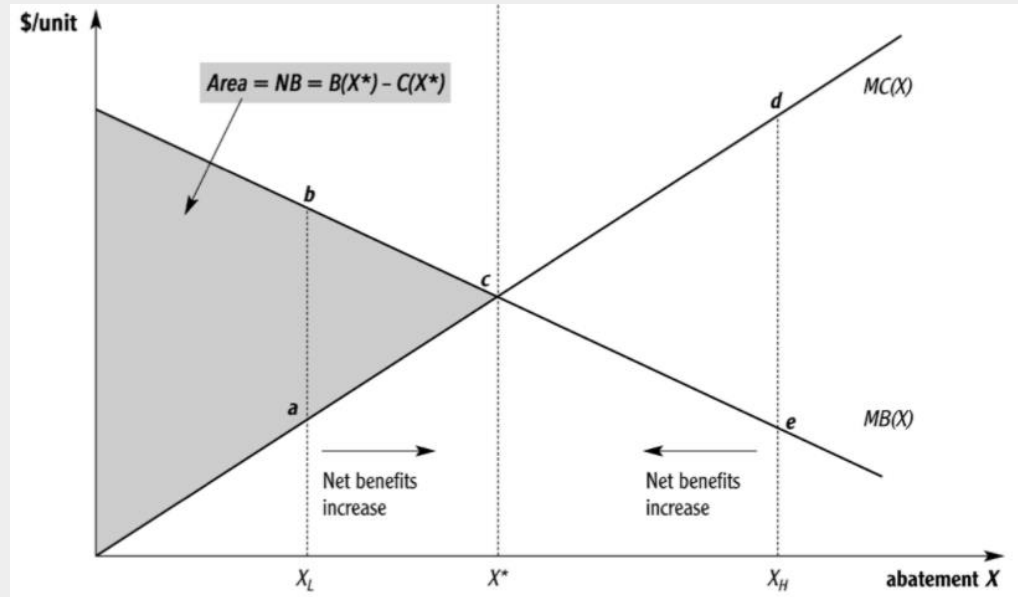
APPLICATIONS



PART I: HOW DO WE DETERMINE OPTIMAL ENVIRONMENTAL QUALITY?

SOCIALLY OPTIMAL ENVIRONMENTAL QUALITY

Economics provides an answer in the form of an efficient level of environmental quality



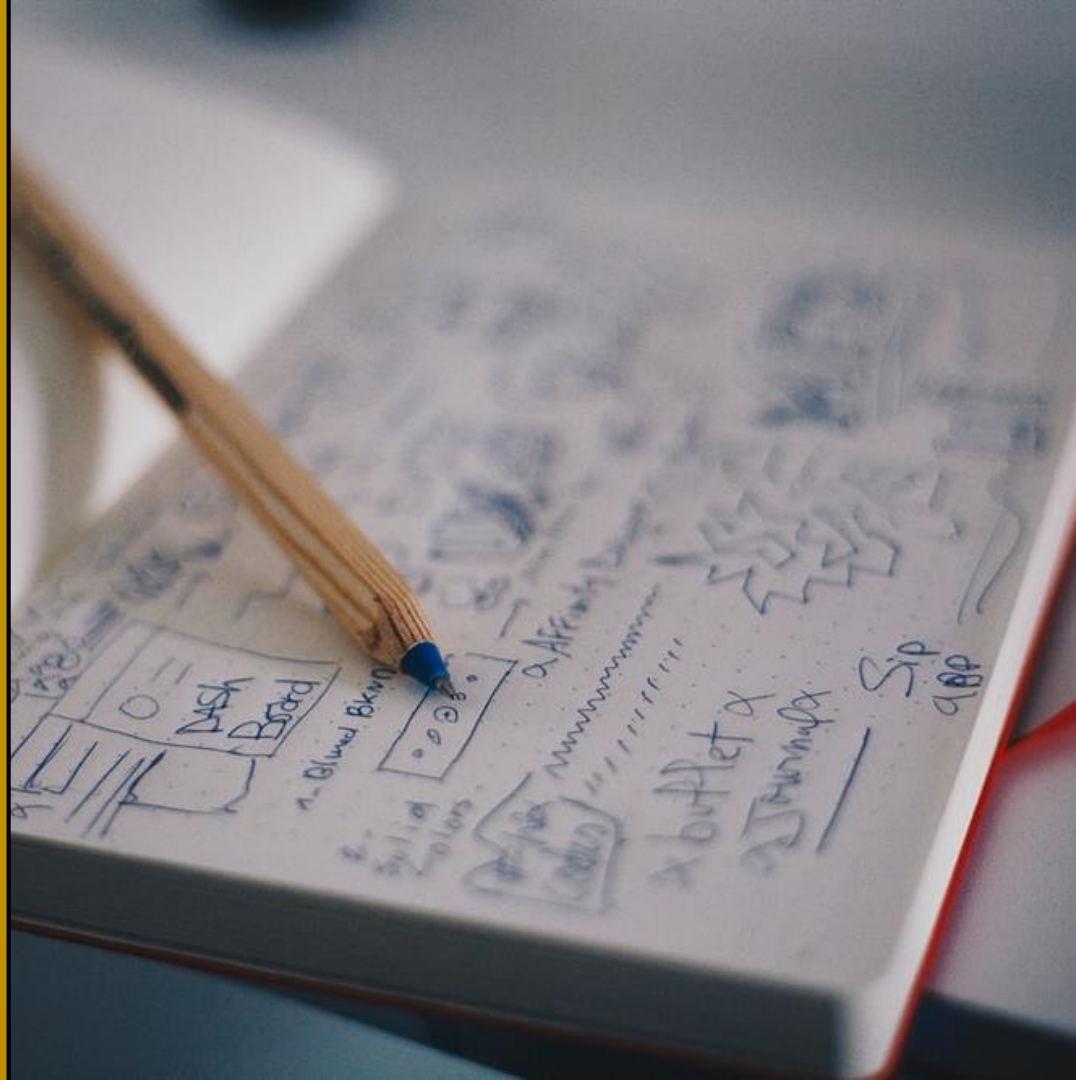
ISSUES WITH FINDING EFFICIENCY

**HOW MUCH DOES
SOCIETY VALUE
THE TREE OUTSIDE
YOUR WINDOW?**

**HOW MUCH ARE
YOU BE WILLING TO
PAY TO BE ABLE TO
GO TO PIEDMONT
PARK?**

**HOW MUCH WOULD
IT COST TO SHIFT
TO 100%
RENEWABLE
ELECTRICITY
GENERATION?**

**PART 2:
HOW DO WE
DESIGN POLICY
INTERVENTION?**



CAUSES OF ENVIRONMENTAL ISSUES

Before we can design policy to correct environmental issues, we need to understand what is driving the problem.

The absence or incompleteness of markets can lead to market failure.

How can we create markets or market instruments to correct market failure?

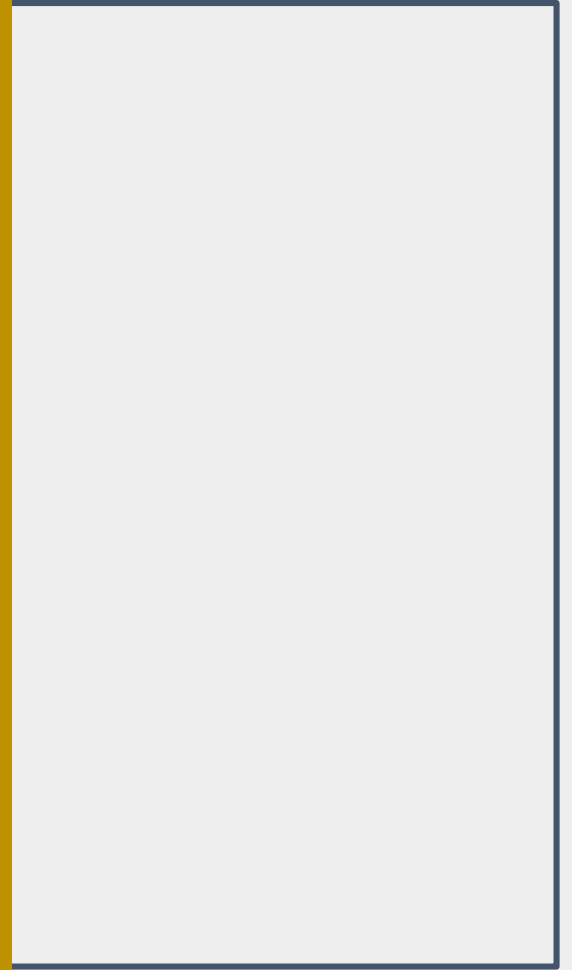
HOW TO DESIGN POLICY

**NOT ALL
POLICIES ARE
THE SAME**

**WE'LL LEARN
ABOUT THE DESIGN
OF “MARKET-
BASED” POLICY**

**WE'LL COMPARE TO
ALTERNATIVE POLICY
APPROACHES, SUCH AS
STANDARDS VS. TAXES**

PART 3: APPLICATIONS



TYPES OF QUESTIONS WE'LL ASK...

How should we manage
renewable resources?

Does it matter if we use tax
vs. standard?

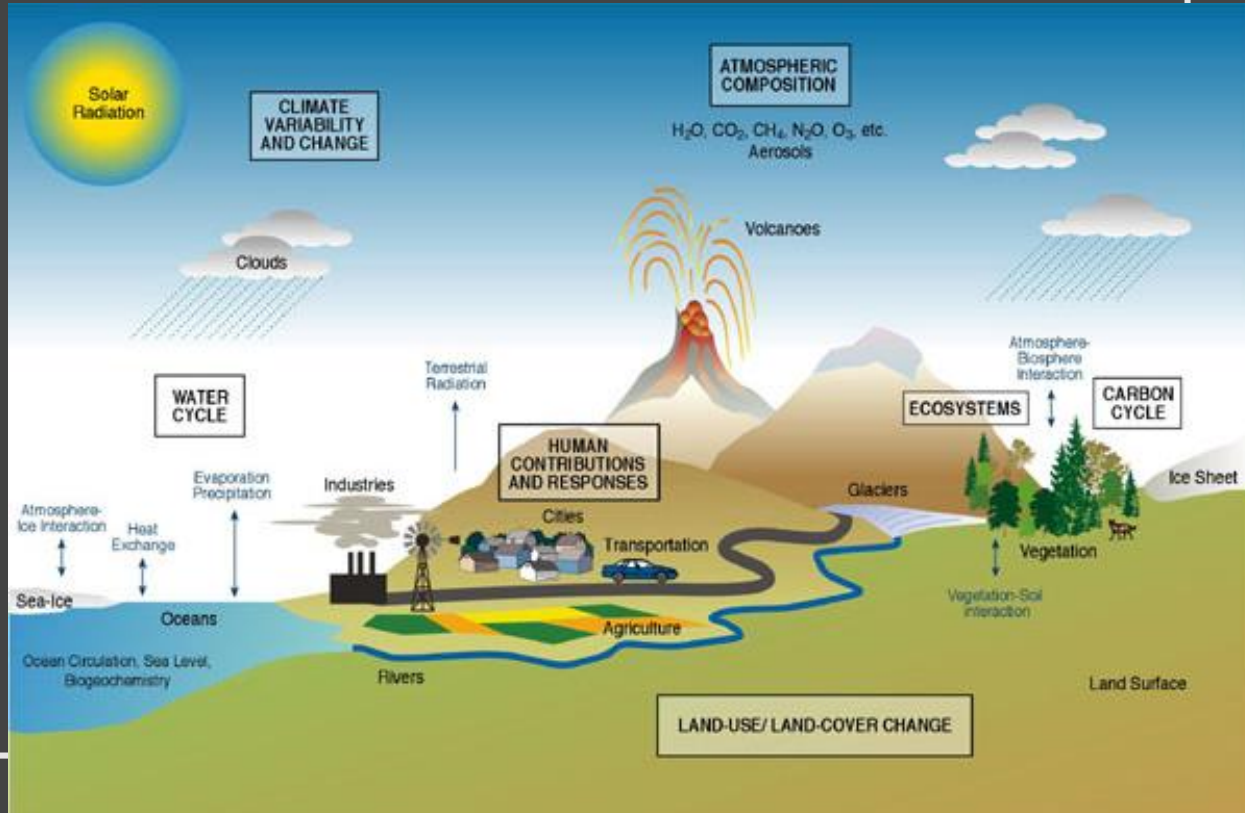
What are the equity impacts?

What are possible
unintended consequences?

ISSUES WE'LL LOOK AT...

CLEAN AIR ACT
ACID RAIN PROGRAM
FISHERIES
CLIMATE CHANGE

...



THANK YOU!

