

Spring 2019

M-W 10:30 – 11:50

Office Hours: Monday, 1-3 PM

ENVIRONMENTAL MARKETS

(Practice of Environmental Markets) –Practice of environmental amenity trading, with particular focus on carbon trading practice – (ABA skills course; ABA simulation course)

Professor Victor Flatt, 713-743-6437, vflatt@central.uh.edu

Course Prerequisites: None, but I recommend environmental law as a pre or co-requisite.

Textbook: None – handed out notebooks with assignments and occasional additional readings on Blackboard; recommended: WEST, Selected Environmental Statutes (you can get a used version of this for any date after 2010)

This class will explore the evolving markets in environmental amenities, particularly using carbon trading as an example, and how this relates to skills in practice. We will study how some of these markets work, and the legal/ regulatory environment that surrounds them. **In this class the student will learn how current environmental law authorizes environmental markets, how environmental markets work, why they are used, potential problems, and application to real world legal issues. The student will also gain experience by participating in an environmental market auction, advising a law firm on law in relation to an environmental market, and drafting of an environmental contract for buying, selling, and/or trading an environmental amenity.**

Grades will be based on end of term **project** paper (15 + pages) – 45%, a contract drafting exercise concerning an environmental amenity (25%); one preparation for bidding assignment (15%) and an internal firm memorandum (email) piece (2-3 pages) analyzing assigned reading and possible implications in legal practice (15%). The end of term project paper should replicate a formal internal memorandum addressing how a particular environmental market issue would interact with an existing law and one of several real world problems that will be presented in class (such as satisfying TMDLs for an impaired water body).

Students may consult with each other on project ideas, and (with permission of the instructor) students can work on certain projects together that are appropriate for that treatment (work load should be similar to doing an individual project for each person involved).

Assignments for the week should be prepared on the first class day.

For classroom purposes, the practice of markets in environmental amenities is a relatively new topic. Though assignments for class will be given and practice problems will be

identified, because many of the laws and policies are emerging, students should anticipate doing research on their own for every class session. Students who learn the material in the class and even more importantly the process by which emerging laws are affecting the real world will be well prepared for work in the environmental and related energy space.

There is no published textbook. There will be a class reading packet handed out with pertinent pieces for the class. A copy of environmental law statutes (such as used in the environmental law class) will also be most helpful and is recommended: WEST Selected Environmental Law Statutes.

Per University of Houston policy, I want to inform you that Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to the demands of a professional program, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

The first two classes will provide an overview for students on some basic ideas of property, economics, valuation, markets and environmental markets, with carbon trading and other trading systems that will be explored in the future. We will also discuss the projects, grading, and answer general questions.

Week 1 (Jan. 14, 16)

- I. Introduction to property, environmental law, environmental externalities, market based solutions and objections

Assignment: – E&E News, “Market Systems to Protect Forests: Can Trading save the Amazon,” May 2016; Garrett Hardin, Tragedy of the Commons (excerpt); Victor B. Flatt, Chapter on Environmental Markets.

Week 2 (Jan. 23 EXTENDED class through 12:50, lunch provided – no class on Jan. 21 (Dr. Martin Luther King Holiday)

- II. Environmental Markets in Practice – 1990 Clean Air Act Amendments for Acid Rain; concept of ecosystem services; cap and trade

Assignment: E&E News, “Carbon Markets: The Epic Journey of a Modest Proposal,” May 2016; Review of relevant sections of CAA

EXPLANATION OF FIRST ASSIGNMENT - Regional Greenhouse Gas Initiative (RGGI) – Identifying and Completing Requirements for bidding

Week 3 (Jan. 28 and Jan. 30)

- III. Commodity Trading Primer
 - a. What is a commodity?
 - b. Standardization, measurement, and enforcement of commodity transactions
 - c. Creation and enforcement of property rights by private entities (e.g., commodity exchanges)
 - d. Creation and enforcement of property rights by government (e.g., sulfur allowances)
 - e. Basic trading instruments: spot, forwards, futures, swaps, options
 - f. Basic trading mechanisms: organized exchanges and over-the-counter markets
 - g. The roles of commodity trading: price discovery, resource allocation, and risk transfer (hedging and speculation)
 - h. Contract performance in commodity markets: centralized clearing and counterparty credit issues
 - i. Legal risks in new commodity markets (possible examples: early interest rate swaps, credit derivatives—regulatory uncertainty might be a major issue to consider here)

Assignment – week 3 – Craig Pirrong, *The Efficient Scope of Private Transactions- Cost Reducing Institutions: The Successes and Failures of Commodity Exchanges*, 34 J. Legal Stud. 229 (1995)

Week 4 (Feb. 4 and 6)

FIRST ASSIGNMENT DUE AT BEGINNING OF CLASS

- IV. The International Legal Background of Carbon Trading
 - a. The UNFCCC and the Kyoto Protocol
 - b. The Flexibility Mechanisms – ETS and offsets (CDM/JI)

- V. Introduction to Existing and Emerging Carbon Markets – CO₂ trading
 - a. Voluntary markets
 - b. Europe
 - c. California
 - d. RGGI
 - e. Other Nations – New Zealand, Australia, Japan, China

Assignments: : Lesley McAllister, Carbon Trading chapter on UNFCCC, Kyoto Protocol, and flexibility mechanisms; View and Explore website registering the voluntary carbon

market (www.climateregistry.org/). Ellerman et al., Lessons from the European Trading Scheme;

DISCUSSION OF FIRST ASSIGNMENT

Week 5 (Feb. 11 and 13)

- VI. OTHER MARKETS - Renewable Energy Credits, Biofuels Market, Nutrient Trading in Water Pollution, Wetlands Trading; Ecosystem Services Market (USDA)

Assignment: Renewable Energy Credit Law from North Carolina; Womble and Doyle, the Geography of Trading Ecosystem Services: A Case Study of Wetland and Stream Compensatory Mitigation Markets, 36 Harv. Envtl. L. Rev. 229 (2012); Melissa Powers, "King Corn," 11 J. Vermont Envtl. L. 2 (2010) (edited excerpt)

Week 6 (Feb. 18 and 20)

- VII. Problems with Environmental Markets (standardizing the commodity; irreversible loss)

Assignment:; Flatt, "C(r)ap and Trade," 52 Hou. L. Rev. 321 (2014) (excerpt); Victor Flatt and Michael Pappas, "The Costs of Commodification," 9 U.C. Irvine L. Rev. (forthcoming 2019)

Week 7 (Feb. 25 and 27)

- VIII. Introduction to specific issues common to these environmental markets
- a. Allocations – market set-up – safety valves
 - b. Offsets – definition/review/co-goods and bads; leakage; additionality
 - c. Federalism/scale
 - d. Impact on financial markets

Guest speaker for part of class – Development of California Offset Market and offset contracts – Gardner Altman

Victor B. Flatt, "The Legislative Temperature for Climate Change, 102 Northwestern University Law Review Colloquy 123 (2007) (excerpt); Alice Kaswan, Decentralizing Cap and Trade? The Question of State Stringency, 1 San Diego Journal of Climate & Energy Law 103, 124-132 (2009) (excerpt); Flatt, "Offsetting Crisis," 39 Pepperdine L. Rev. (2012) (excerpt); Doug Cullenwald, "Leakage in the California Carbon Market"

(FEB 25)EXPLANATION OF SECOND ASSIGNMENT (impact of International Emissions Trading Association suggested linkage of world systems on offsets in California Cap and Trade System)

Week 8 (March 4 and 6)

SECOND ASSIGNMENT DUE AT BEGINNING OF CLASS

- IX. regulation of greenhouse gases by the EPA under the CAA
-legal basis for market possibilities

Assignment:

Excerpt from
UTILITY AIR REGULATORY GROUP v. ENVIRONMENTAL PROTECTION
AGENCY, et al., 134 S.Ct. 2427

Summary of EPA proposed rule regulating existing sources under the CAA Sec. 111(d);
Nicholas Institute Paper, Trading under the CPP/ Paris Accord

Discussion of contract drafting tools at end of class

March 11 and 13 SPRING BREAK

Week 9 (March 18 and 20)

- X. – Stacking – how environmental amenity property rights affect one
another; can one project provide credits in more than one market, and if
so, how? Additionality revisited

Assignment on Stacking of environmental services (EPA internal document); Karen
Bennett, Additionality, the Next Step for Ecosystem Services Markets, 20 Duke Env'tl L
& Pol'y Forum 417 (2010); David Cooley, Lydia Olander, Stacking Ecosystem Services
Payments: Risks and Solutions, 42 Env'tl. L. Rep. news & Analysis 10150 (2012)

DISCUSSION OF SECOND ASSIGNMENT AT END OF CLASS

Week 10 (March 25 and 27)

- XI. Oversight and Enforcement
 - a. Government
 - b. Insurance
 - c. Reserves
 - d. Bond
 - e. Project developer

- f. Regulatory systems for implementation of carbon trading and big issues in trading

Assignment: Craig Pirrong, Brookings piece; Allinson, Dunand, Puryear, and Tarr, International avoided Deforestation Offset Projects...published by CE3 (then CLEAR), at <http://www.law.unc.edu/documents/ce3/adoffsetreversalpenaltyinsurance.pdf>; Olander and Galick: "Markets and Mitigation; Impacts of Early Action," Land Use Policy 72 (2018).

Week 11 (April 1 and 3)

ENVIRONMENTAL AMENITY CONTRACT DUE

DISCUSSION OF FINAL PROJECTS

Week 12 (April 8 and 10)

XII. Pricing of Environmental Amenities in the Private Sector

Assignment: Sarah Light, "The New Insider Trading: Environmental Markets Within the Firm," 34 Stan. Env'tl. L. J. 1 (2015) (excerpt)

Last 3 classes (April 15, April 17, and April 22)

DISCUSSION OF ENVIRONMENTAL AMENITY CONTRACT

DISCUSSION OF FINAL PROJECT

The best of these final projects will be posted on the website of EENR and shared with policy developers