

Lab: Emissions Trading

The color white is a new pollutant. For each item of visible clothing that has ANY white on it, you must pay 1 ticket. Each student is allowed 2 tickets and a packet of Smarties. If you do not have enough tickets to cover your “white pollution”, you will lose 5 points on this assignment PER white pollutant. You may attempt to “buy” (with Smarties), trade, etc. to gain tickets if you need.

Analysis Questions:

1. How many items of clothing with the color white are you wearing?
2. Do you have a surplus, deficit, or equal amount of tickets in order to cover your White Pollution?
3. If you have a surplus, what did you do with the tickets? If you had a deficit, what did you do with the tickets? If you were equal, just write “equal”.
4. Ask those who had to “buy” tickets What seemed to be the going rate for purchasing White Pollution Allowances?
5. If this experiment were continued for a week, how would that affect your willingness to trade if you had a surplus?
6. If this experiment continued for a week, how would that affect your clothing choice each morning?
7. How might this relate to the trading of pollution credits in the real world?

Refer to the EPA website, <http://www.epa.gov/airmarkets/allowance-markets> to answer the following questions.

8. How much pollution emission is one allowance under the EPA Clean Air Market?
9. What is allowance trading?
10. Who may participate in allowance trading?
11. How are allowances used for compliance of air quality regulations?

Click on the “SO₂ Allowance Auctions” tab near the top of the page then click “see the results of the annual auction” and select the most recent year available.

12. What is SO₂ and where does it come from? (not given on website)
13. What do you think a spot auction is? What is the benefit to a company of participating in a spot auction? (not given on website)
14. What percentage of total allowances were bought for the spot auction?
15. What was the total amount paid for spot auctions?
16. What do you think a 7-year advance auction is? What is the benefit to a company of participating in a 7-year advance auction? (not given on website)
17. What percentage of the total allowances were bought for the 7-year advance auction?
18. What was the total amount paid for 7-year advance auctions?
19. Look back through the last couple of year of data. Do you notice a significant increase or decrease in allowance trading? (the answer is yes! (you’re welcome)) What do you think would cause increases or decreases in the amount of trading taking place in the U.S.?
20. Explain several examples of limitations to the cap and trade system for pollution control.