

Worksheet 4, October 17, 2017

I advise you to work through the following problems /questions well and as a group (make sure though that no one is free-riding); it's the ticket to performing reasonably well on the exams. Number of points indicates the expected scope of the answer (should roughly correspond to time in minutes).

1. **[15 points]** What distinguishes the second phase of the EU ETS from the first phase? Discuss in light of incentives for efficiency on both micro and macro level. Do you think that the third phase, as it is proposed now, can do even better job in enhancing innovation and investment into cleaner technologies? Explain why.
2. **[10 points]** Why is auctioning off (rather than free-allocation) EUAs not necessarily a bad thing, even if that means that consumers might have to pay higher prices (initially) for, say, electricity? How auctioning off helps to improve incentives for innovations (provide at least two explanations of possible effects, as in Schleich et al. and explain).
3. **[5 points]** Assume that there are three bidders that have willingness to pay of 10, 8, and 6 for a homogeneous good of which two units (inelastic supply) are being offered. Explain why the expected revenue of a (first-price) sealed-bid auctions and a standard ascending (English) clock auction might lead to different revenue predictions. Looking at this simple example, which seems to be the preferable auction style (from the perspective of the supplier)?
4. **[10 points]** Briefly explain the purpose of the Virginia NOx allowance auction. Summarize, in your own words, which are the most important lessons that we can learn from this article.
5. **[10 points]** Do you think that in the real world a third party certification is a way to improve environmental quality? How good a job can cheap-talk signals from companies with well established reputation do?
6. **[20 points]** Briefly summarize the main objectives and the main findings in Cason and Gangadharan (2002). Also
 - a. Why do you think the initial periods of REPUTATIONS ONLY are not significantly different than BASELINE but then, in later periods the production of SUPERS increases (in REPs ONLY)?
 - b. Explain intuitively why the cheap-talk signals in early periods increase the production of SUPERS but then in time the effect disappears?
 - c. Is there any problem in the last period of REPUTATIONS ONLY? Why does this problem not exist with certification?
 - d. Why do you think certification is much more efficient in increasing the production of SUPERS?