Worksheet 3 (for lecture 3) – Environmental Policy in the Central European Context course

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. **[10 points]** "Among economists at least, the use of tradable emission allowances under an aggregate emission cap is generally considered a mature policy technology. It has become the default policy option in controlling a variety of large scale air emissions and is being increasingly considered for replacing inefficient source-specific regulation of water pollutants." [Porter et al. p.190] Discuss.

2. **[10 points]** What is the EU ETS? Briefly describe how it works, what are the main features.

3. **[5 points]** What happened in 2006/2007 to the prices of EUAs and why did it happen?

4. **[10 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.

5. **[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 examples of possible effects, as in Schleich et al.)

6. **[5 points]** In the case of the Virginia NOx allowance auction, why did the 2004 allowances end up being less expensive than the 2005 allowances? Does that make any sense?

7. **[5 points]** Assume that there are three bidders that have WTP 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 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)?

8. **[5 points]** Briefly explain the purpose of the Virginia NOx allowance auction. What is the policy advice would you generally give based on experimental results?

9. **[10 points]** Based on Godby & Shogren's article, explain why, intuitively, buyer liability in carbon emission trading should result in higher compliance and greater climate protection than seller liability. Do the experimental results confirm this intuition? Why do you think that [whatever your answer to previous question] is?