

## Worksheet 5, March 31-April 7, 2020

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).

**PLEASE SUBMIT VIA EMAIL BY APRIL 7, CLASS TIME.**

1. **[10 points]** “Even though command and control may be more effective than no regulation, its high costs suggest there might be other tools such as voluntary programs that can supplement command and control.” [P&P AJPS] Discuss.
2. **[5 points]** Voluntary programs can be theoretically conceptualized as club goods. Explain.
3. **[10 points]** A strong-sword program is, in theory and in practice, the only possibility to ensure high environmental standards adopted and lived up to by participating companies. True or false? Explain.
4. **[10 points]** What is the ISO 14001 and why, in Potoski & Prakash’s terminology, can it be considered a weak sword? (Summarize Table 1 in their article.)
5. **[20 points]** There are important direct and indirect costs (recall the “check list for implementing ISO 14001 management systems”) to being certified by ISO 14001.
  - a. What are the benefits of ISO 14001 certification that might justify those costs?
  - b. What are main factors influencing participation in ISO 14001 program? What is the intuitive causality for each of these factors?
  - c. What are main factors influencing time out of compliance for ISO 14001 participants? What is the intuitive causality for each of these factors?
  - d. Can you think of possible problems with P&P’s conjecture that participation in ISO14001 improves environmental performance of participating companies?
6. **[10 points]** “Trade creates disincentives for firms to voluntarily adopt regulations that increase their cost of production and coordination.” Discuss in light of the article that we reviewed.