

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (25 points) Draw the MAC/MEC diagram. Explain why it takes its shape and why the point the lines cross is the optimal point. Use it to explain why the way the EPA does things (telling companies an amount of pollution they cannot exceed) will not reduce the pollution optimally.

2) (15 points) How would marketable (tradable) permits to pollute result in the same amount of pollution as a tax? Explain your logic.

3) (15 points) There was a movement of some stockholders of Exxon/Mobil to publish the amount of greenhouse gasses they create. (It failed.) Suppose a law was written which required that type of reporting. How would that affect the amount of pollution? Explain your logic.

<https://www.reuters.com/sustainability/exxon-shareholders-reject-climate-proposals-activist-annual-meeting-2023-05-31/>

4) (15 points) What are public goods? Why do they need a government to provide them?

5) (15 points each) Answer each part in separate paragraphs. For each of these parts of a government budget, give an example of it. Explain economists generally say that countries spend too much on it.

A) State owned enterprises (SOEs)

B) Subsidies.