**Why is this an important area of study? [0.5 points]**

Reducing carbon emissions made by ML research and applications is important because the energy consumption is huge and they do have significant impact on global warming.

**Describe two different techniques/approaches discussed [0.5 points]**

1. Reducing the carbon footprint: Examples: R&D for low-carbon technologies, policy design, monitoring, and enforcement, system operation and efficiency, etc. These methods can reduce the carbon emission of running ML models.
2. Use ML to accelerate scientific discoveries that can help global warming

**Discuss relative strengths [0.5 points] and weaknesses [0.5 points] of the two techniques described above. [1 point total]**

Reducing carbon emissions of ML applications is the most straightforward method but it involves participation of many parties and could take a long time. The second method is less straightforward and can fail, but a breakthrough in scientific discovery could be more effective than the first method.