

## Too Many Blankets: The Greenhouse Effect & Global Carbon Emission



<https://www.youtube.com/watch?v=Hi3ERes0h84>

1. In the video, it's mentioned that without the natural greenhouse effect planet Earth would be an icy wasteland. Why would that be true?

2. If the greenhouse effect is a part of Earth's natural systems, why are we so concerned about its affect on the global climate now?

3. The video mentioned that since the late 1800s the amount of methane gas ( $\text{CH}_4$ ) that we release into the atmosphere has more than doubled. Cow and pig farms are a major source of this greenhouse gas as are some of the crops needed to feed them. What could a possible solution to this issue be?

NASA's "A Year in the Life of Earth's CO<sub>2</sub>"



<https://www.youtube.com/watch?v=x1SgmFa0r04>

4. The red and purple areas of the model show incredibly high concentrations of CO<sub>2</sub>.  
a) Where on the globe do these areas appear to be?

- b) What are the characteristics of the locations where CO<sub>2</sub> concentrations are highest?

5. If we look at the northern hemisphere, we can see that CO<sub>2</sub> levels are much higher in the winter than in the summer. What could some reasons for this be?