



Environmental Consequences

ASSIGNMENT, PART 4, TRANSPORT

Consider the following situation:

You are employed by Acme Electronics in Omaha, Nebraska. The product you have designed is being assembled in Knoxville, Tennessee. Each product weighs 2.1 pounds and the packaging weights 0.2 pounds. Your net annual volume of product is about 50,000 units.

- Estimate the amount of greenhouse gas emissions (in CO₂ equivalent) that you incur every year by transporting your product from Knoxville to Omaha via (a) truck; and (b) rail.
- Estimate the particulate emissions you generate every year by transporting your product from Knoxville to Omaha via (a) truck; and (b) rail.
- One of your packaging engineers has redesigned the packaging to weigh half as much. What % do you save in greenhouse gas emissions ever year for transporting by (a) truck; and (b) rail?
- Discuss at least one other environmental consequence of transporting your goods by truck. Would the consequence be less if you chose to transport your products by rail?

You may use any sources you wish to answer the above prompts, including the lecture notes on the environmental consequences of transport, but be sure that any information you do use is reputable and comes from a source that is not obviously biased (i.e. prone to providing information skewed in a particular direction).

For this assignment, submit a response that is a minimum of one page long, single spaced, with 1" margins and font no larger than 11 pt. The length requirement can include equations and calculations, but does not include title, graphs, figures, extra white space, or other additions that are not text). Please provide a list of sources used to answer the above prompts at the end of your assignment in an APA or IEEE style bibliography. No citations in text are required. Engaging photos or other figures are appreciated, but should be cited appropriately to give credit to the author/creator of these visual aids.