



Economic Consequences

ASSIGNMENT

In this assignment, you will examine fair value to charge someone for an essential good. The essential good in this case study is a simple, solar-powered lantern used for residential illumination at night in impoverished, developing world, rural, or other off-grid communities.

Many people living off-grid around the world still use kerosene lamps to provide light at night. However, kerosene is often expensive or over-priced and produces a hugely disproportionate amount of greenhouse gas emissions. As a result, there is a strong interest in providing off-grid and often poor communities with a solar powered alternative to kerosene - a solar powered lantern. Imagine you work for an LED Lantern development company. Your supervisor has asked you to determine the fair price of an LED based, solar-powered lantern for poor, off-grid communities of people around the world.

1. Determine a price for this product using the cost pricing model. Assume materials and supplies are \$12 and overhead and typical profits for the product are consistent with those in the diversified consumer electronic products industry.
2. Determine the maximum price you could charge assuming that the lantern will last at least six years and that most people in your target customer population are using kerosene wick lamps.
3. How would you determine a fair price between the answers you gave in (1) and (2)? It may be helpful to know that people in developing countries typically spend 8-10% of their income on energy while Americans spend 5% of their income on energy.
4. You suddenly find that there is a competing product to your design made by a company called d.light ([here --Links to an external site.](#)). How does that change your answer to (3), if at all?

For this assignment, submit a response to each of the above questions that is single spaced with 1" margins and font no larger than 12 pt. Any sources should be cited in APA format and a formal APA bibliography should be included at the end of the document. Your document should be submitted in .pdf format.

Sources that may be helpful:

[Kerosene Lamps vs. Solar Lanterns \(Links to an external site.\)](#), Stanford University