BACCALAURÉATS GÉNÉRAL ET TECHNOLOGIQUE SESSION 2017

ÉPREUVE SPÉCIFIQUE MENTION « SECTION EUROPÉENNE OU DE LANGUE ORIENTALE »

Académies de Paris - Créteil - Versailles

Anglais / Sciences Industrielles

Sujet n°2

Thème: développement durable / environnement

Apple's carbon footprint



<u>Document 1</u>: APPLE DATA CENTERS NOW 100 PERCENT RENEWABLE POWERED, BUT EMISSIONS RISE 34 PERCENT!

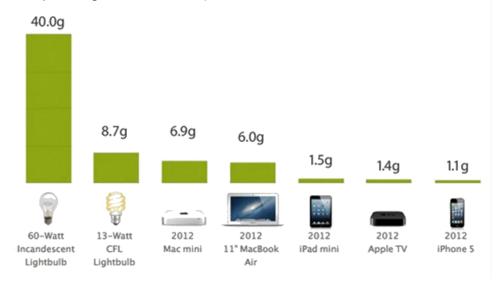
Apple's data centers are 100 percent powered by renewable energy, and its corporate facilities are increasingly green, but a new report from the company shows that its greenhouse gas emissions actually increased by 34 percent in 2012.

- The *Apple and the Environment* report aims to explore Apple's environmental impact from the production and transport of its products to their use by consumers, as well as the environmental costs associated with the support features Apple provides. The data centers that provide online services to Apple customers, the company says, are now completely powered by renewable energy (wind, hydroelectric, geothermal, and solar energy).
- In total, Apple estimates that its operations produced 30.9 million metric tons of greenhouse gas emissions in 2012, up 34 percent over the company's 2011 estimates. The increase in emissions, the report notes, is due to the expanding sales of Apple devices. Since 2008, Apple has decreased by 21.5 percent the amount of greenhouse gases it emits per dollar of revenue.
- The other sizable contributor to Apple's environmental impact is the lifetime use of its products, accounting for 30 percent of the company's carbon footprint.

The company has been successful in reducing carbon emissions associated with many of its products. Emissions for the 2012 Apple TV are 90 percent lower than they were for the 2007 model.

Apple also says it established and met a goal to achieve a worldwide recycling rate of 70 percent. This rate is calculated by assuming a seven-year product lifetime for Apple wares and comparing the weight of the materials Apple recycles each year to the weight of the materials it sold seven years earlier.

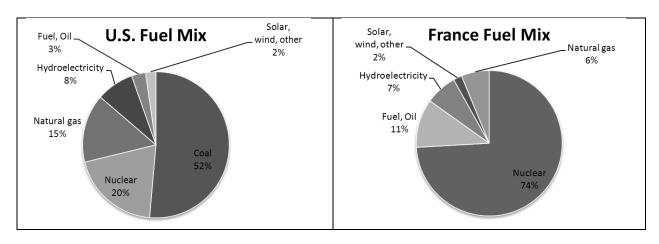
<u>Document 2</u>: CO₂ Emissions per Hour of Product Use (assumes CO₂ emissions generated from an average mix of power grids in the U.S.)



Document 3:



Document 4: Comparison of the electricity generation fuel mix in the U.S. and in France



Adapted from:

http://appleinsider.com/articles/13/03/21/apple-claims-data-centers-100-renewable-powered-75-for-corporate-facilities

To make your presentation, you may use the following suggestions:

- 1) Present the environmental footprint of Apple's products.
- 2) What are the different elements you have to take into account when you analyse the environmental impact of a product?