

Attachment “7”

Clothes Washers Life Cycle – Cost and Environmental Performance

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Green Purchasing Project

Worksheet for Item IV

Math

Create the Presentation

Your goal is to create a presentation for your business liaison (who may be me).

You should create:

- A graph with “Life-Cycle Cost in \$” as the x-axis, and “Lifetime CO₂ (or CO₂-equivalent) emitted in lbs” as the y-axis. Each washing machine should be a point. So if you have 3 clothes washers, your graph will only have 3 points on it.
 - Think about where on this graph the “best” washing machine will be.
 - This ideally should be done on a computer, using a program such as Excel. However, a *nice* hand-drawn graph on graph paper is acceptable if no one in your group knows how to use a spreadsheet.

- An outline of a presentation for your business liaison. If you feel comfortable filling in the outline with more details, feel free. The copy that you turn in should be typed and look nice.

- (Extra Credit) A “metric” spreadsheet which takes in the inputs you’ve discussed as a group (energy use in kWh/year, cost of water in \$/gallon, perhaps cost of electricity, etc) and spits out the life-cycle cost and lifetime CO₂ emissions of the washer. For an example, look at <http://tinyurl.com/yjo79zn> which is a spreadsheet put out by the Energy Star folks.

In the presentation, you will:

- Explain the mathematics in layman’s terms, including
 - Inputs
 - Outputs

- The algebra (to be explained as much as possible)
- Any judgments/assumptions you made
- Show the graph.
- Answer any questions your business liaison might have.
- NOT decide which washing machine to buy (even though it might be obvious). That's their job. Sometimes the executives make decisions that disregard the advice of those more knowledgeable on the subject. They get to do that because they have to take the responsibility for their decisions. If something goes wrong, they're the ones who have to testify before Congress and get their millions of dollars in bonuses cut in half. You can suggest which one to buy though.

Presentation Confirmation

- Make sure they sign the paper on the following page.

Presentation Confirmation

I have been shown the presentation
by the group consisting of

The washing machine I chose

was: _____

Signed: _____

PRINT NAME: _____