



**THE PROCTER & GAMBLE COMPANY:
Disposable and Reusable Diapers--a Life-Cycle Analysis
Teaching Note**

Discussion Questions

For more than a decade, WRI's Sustainable Enterprise Program (SEP) has harnessed the power of business to create profitable solutions to environment and development challenges. BELL, a project of SEP, is focused on working with managers and academics to make companies more competitive by approaching social and environmental challenges as unmet market needs that provide business growth opportunities through entrepreneurship, innovation, and organizational change.

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1. Put yourself in the position of the leader of the Arthur D. Little project team that must recommend one type of diaper over the other. Are all of your assumptions correct? Which diaper would you recommend, based on the data?

The assumptions made by the researchers were not necessarily correct. First, because fewer disposable diapers are used weekly, on average, than reusables, the environmental impact of disposables may be overstated. Second, although the researchers assumed that incineration is the preferred waste management alternative, this opinion is not universally accepted. Significant opposition exists to the use of incineration, which could preclude this waste management option from becoming the primary method of disposal. Today, the vast majority of disposable diapers are landfilled. Therefore, the environmental impact of disposable diapers attributable to waste disposal could differ greatly from the researchers' estimates.

Disposable diapers consume more raw materials than reusables. Reusables consume more non-renewable energy resources and water. On a global scale, it is difficult to choose one diaper over the other. However, in regions such as New York where solid waste is the most pressing environmental problem, reusables could be considered superior. In contrast, water-poor regions like California might consider disposables the better choice for the environment.

2. To provide an accurate estimate of the cost of reusable diapers to consumers, the home labor necessary to wash reusables should be valued at least at the minimum wage, as this wage rate represents the lowest estimate of the opportunity cost incurred. Furthermore, the information given does not indicate whether any cost was estimated for use of a diaper service, which presumably represents a real cost to many consumers of reusable diapers. According to one study, a reusable diaper costs 7 to 9 cents when laundered at home and 13 to 17 cents when obtained through a service.

Neither the health nor economic assumptions directly affect the environmental impact of diaper use. However, both of these assumptions do affect consumer preferences, and would presumably influence the decision of P&G managers.

3. P&G has taken several actions to combat the negative publicity surrounding disposable diapers. In 1990, the company created a \$20 million fund to study solid waste issues and promote diaper composting projects. In the same year, the company also began a diaper recycling project in Seattle and mailed pamphlets to 30 million households explaining these efforts.

The company hired Burson-Marsteller to manage a lobbying campaign in which the Arthur D. Little study was sent to key legislators. Information from the study was also included in all product and sample packages.