World Resources Institute

Sustainable Enterprise Program
A program of the World Resources Institute

BAYERISCHE MOTOREN WERKE AG (B)

Abstract

As Franze and Wolf considered BMW's options, they knew that any evaluation of a vehicle take-back and secondary materials strategy had to incorporate an assessment of that strategy's economic impact. This was particularly important for two of the options under consideration for the management of secondary materials; both the decision to use recycled polymers in BMW vehicles and the decision to incorporate design for environment (DFE) methodologies into the overall design process called for the use of recycled polymers instead of virgin plastics. Franze and Wolf needed to determine the economic viability of such a substitution.

To estimate the cost to BMW of using recycled polymers in its vehicles, Franze suggested that they choose one automobile component for examination. They decided to focus upon the bumpers in BMW's new 3-series in order to determine materials flows and costs, recycling costs and recycling logistics.

It is assumed that a dismantler will take off bumpers from returned cars and send them to processors for cleaning and pelletizing. These processors will then return the material to the plastics suppliers for testing and reuse. Actors pay for and exact margin on transportation costs.

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.

Permission to reprint this case is available at the BELL case store. Additional information on the Case Series, BELL, and WRI is available at: www.BELLinnovation.org