

Environmental Tools:

Product fees and taxes

What is a product fee and why are they imposed?

A product fee is a charge imposed on a product believed to have harmful effects on the environment. Fees are imposed to influence purchasing habits by reducing the demand for a product and/or to raise revenue for funding environmental protection programs associated with product/packaging recycling, reuse and/or safe disposal. They are best applied to products consumed in large quantities and in diffuse patterns (e.g. fertilizers, pesticides, lubricant oils, energy products, and motor vehicles).

Tax rate differentiation, a special type of product fee, can be applied to discourage the use of polluting products and encourage the use of cleaner alternatives. Product fees can act as a substitute for emission charges when it is impractical to apply direct fees to a non-point pollution source. The purpose of this type of product fee is to internalize societal and environmental costs associated with the production and consumption of certain products.

How are fees determined and where does the money go?

Ideally, fees reflect the environmental costs associated with each step of the product life cycle. The effectiveness of a fee on polluting products or product inputs depends on product demand. Usually rates are fixed, but they can be re-calculated if the charge is insufficient. In some applications, fees or marginal tax rates increase as the consumption of product increases to promote social equity in the accessibility of a product, and discourage unnecessary consumption. This is also known as “block pricing”. Revenues can be used to treat pollution from the product directly, to provide for recycling of the used product or for other budgetary purposes.

Where are they used?

In North America, the most common and successful application of product fees and taxes is the environmental handling fee imposed on products that are difficult to dispose of, including lubricating oil, tires and pesticides. In Europe this tool is applied to similar products, but has also been used to discourage motor vehicles with poor fuel efficiency and environmentally degrading energy sources. In most circumstances, many charges and taxes have been coupled with fiscal incentives to promote the more environmentally friendly substitutes such as hybrid vehicles and alternative energy sources.

These applications are not necessarily intended to influence purchasing habits but to raise revenue for recycling/reuse programs. Alberta Environment has achieved success with:

Tires: A recycling fee is imposed on new tires. [The Alberta Recycling Management Association](#) collects a disposal surcharge to provide or pay for:

- A scrap tire waste minimization and recycling program.

- Education programs about scrap tire minimization and recycling programs.
- Expenditures on collection, transportation, storage, processing and disposal of scrap tires.
- Research and development activities related to scrap tire management.
- Promotion of the uses of recycled scrap tire materials and products.

Lubricating Oil: A recycling (environmental handling) fee is imposed on the initial sale of lubricating oils and associated products. [The Alberta Used Oil Management Association](#) collects environmental handling charges that form the basis of the Lubricating Oil Material Recycling and Management Fund. The AUOMA is also authorized to disburse those funds in the administration and management of its recycling programs.

Electronics Recycling in Alberta

Televisions, computers and other household electronics contain materials such as lead, mercury, cadmium, beryllium and PVC plastics that can cause significant environmental and health risks if they end up in landfills. However, the metals, glass and plastic in these used items can be recycled into valuable products. Nominal fees are meant to cover the costs of collection, transportation and recycling of electronic materials, education and awareness programs and research into electronics recycling.

Other examples include:

Superfund Taxes: The United States federal government imposed taxes on oil, chemicals and business profits to fund cleanup of inactive hazardous waste sites designated under the superfund.

Taxes on Gas Guzzlers: In the United States federal taxes are imposed on the sale of new automobiles with a fuel efficiency of less than 22.5 miles per gallon. Revenue from this tax contributes to the Highway Trust Fund. Europe has also been progressive in implementing charges and taxes upon vehicles that have poor fuel efficiency, which contributed to the improvement in auto fleet fuel efficiency.

Tool Performance:

Pros

Product fees and charges are useful tools for managing the environment because they create an explicit cost for polluting activities or harmful products. Fees support the principle of “polluter pays” and:

- Incorporate disposal costs into the product sale.
- Influence a wide number of users.
- Remain relatively easy for governments or agencies (DAOs) to develop, impose and administer.
- Support environmental stewardship.

Funds collected through product fees are frequently applied towards the development of innovative recycling and product reuse initiatives.

Cons

- There are limits on when product charges should be applied. For example, when a product is highly toxic to the environment or human health, a product/substance ban may be preferable to decrease unacceptable exposure.
- Where behaviour changes in purchasing habits are desired, it is sometimes difficult to predict the fee amount that will result in the desired effect and therefore there is some uncertainty as to the influence a tax or fee will have.
- If fees and charges are set inappropriately (regressive taxation) it can create inequities amongst product users; those who can afford to pay the fee versus those who cannot. If regressively designed, it will be important to provide tax relief for those in low-income situations or to consider applying no fees/taxes for a sustenance level of consumption.
- Administrative costs to operate recycling and safe disposal programs can be substantial, in comparison to traditional approaches to waste management