[**The Consumer Environmental Index (CEI)**](http://www.ecy.wa.gov/beyondwaste/pdf/CEI_Background_4-23-12.pdf)

The Washington State Department of Ecology[[1]](#footnote-1) (Ecology) has developed a tool that tracks the environmental impacts associated with production, use and disposal of the goods and services that are consumed each day. The tool can be used by individuals, businesses or governmental agencies to guide efforts at reducing their environmental footprints. Ecology currently uses the tool to:

1. track how consumption patterns influence pollution releases observed, and
2. measure success in reducing the amount of pollution associated with the purchase of goods and services.

The CEI is an index similar to the Consumer Price Index (CPI), except it tracks environmental impacts rather than prices, and encompasses all retail purchases rather than just a fixed subset of product purchases. The current tool focuses on the potential to cause climate change (measuring GHG emissions), harm to human health (measuring environmental pollutants that are harmful to humans) and ecosystems toxicity (measuring pollutants that could impact the environment and wildlife). It is based on economic life cycle relationships combined with actual consumer spending patterns. As toxicity, waste or other pollution associated with consumption of goods and services go down, the CEI decreases as well.

Ecology has developed two performance measurement indicators based on data from the CEI to measure progress toward the State’s Beyond Waste Plan that use CEI data (Consumer Climate Change Index and Consumer Ecosystem Toxicity Index) <http://www.ecy.wa.gov/beyondwaste/bwprogMRW.html> and <http://www.ecy.wa.gov/beyondwaste/bwprogMeasure.html>.

**A couple of pros/cons**

One of the recent challenges they faced is that the manufacturing emissions data model that parts of the CEI is based on was not available until recently from Carnegie Mellon University.

Ecology sees a use for the CEI in indexing the pollution footprints of agencies, businesses and even individuals based only on their spending. Additionally, certain products can be pulled out and tracked separately. The CEI is specifically designed for Washington State and based on consumer spending patterns. It does not yet include impacts from government spending, or new housing costs.

One of its benefits is the ability to track relative impacts of consumer spending which gives a great deal of information of what projects and regulations may be working and where the best “bang for the buck” is in reducing pollution and impacts that relate to the environmental impacts tracked.

**Current Status**

They are working on purchasing the most recent data from Carnegie Mellon University and then will complete an update for 2008 through 2010 data to continue to support and develop the indices.

1. Gretchen Newman, Washington Department of Ecology, (360) 407-6097, [gretchen.newman@ecy.wa.gov](mailto:gretchen.newman@ecy.wa.gov) [↑](#footnote-ref-1)