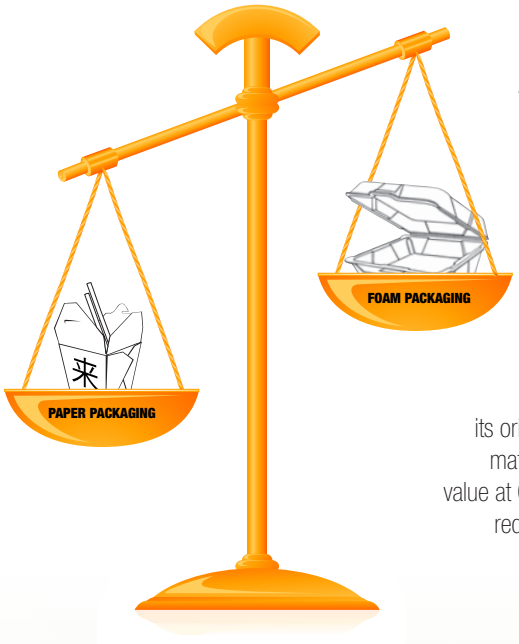
Foam Packaging FACTS

from Genpak®

Foamed Polystyrene Supports U.S. Jobs

Foamed polystyrene products not only play a critical role in food packaging by protecting and preserving food quality, but the foam polystyrene industry also plays a vital role in the United States economy. According to the US Census Bureau, in 2010 the manufactures of foamed polystyrene products in the US currently directly supports well over 20,000 domestic jobs. Now consider the downstream flow of indirect supporting jobs that are linked to this industry and you can quickly see the production of foamed polystyrene is a driving force in the economy. At a time when jobs are scarce and the economy is struggling, is it really the best solution to ban products produced right here in America in favor of products that are mainly produced overseas? Not only are many alternative products imported, but they are much more expensive than foam foodservice products, which puts undo pressure on small business owners trying to stay profitable.



Polystyrene Requires Less Energy To Produce

An average-weight polystyrene foam cold cup requires approximately half as much total energy to produce than a representative-weight wax-coated paperboard cup[1]. If all polystyrene packaging were replaced with corrugated cardboard, paper, wood, molded fiber etc., compared with current figures raw material requirements would rise to 560%, power consumption to 215% and the landfill volume to 150%[2]. Polystyrene packaging requires less energy than many other material of similar design.

Polystyrene Uses Less Raw Material

Foam packaging is 98% air. Polystyrene feedstock is converted into a finished product 32 times its original volume—virtually turning air into a strong and efficient packaging material[3]. Polystyrene is an efficient material to manufacture using minimal material to produce a finished product. The drive for efficiency is a core value at Genpak. Efficiency is defined as producing effectively with a minimum of waste. Not only is little polystyrene required to make a finished good versus other materials, the manufacturing scrap material can be used again. Genpak recycles all foam scrap back into the production process for a closed loop..

Polystyrene Is Safe & Healthy Throughout Its Life Cycle

Clean to produce. Innovations in manufacturing technologies ensure polystyrene production minimizes energy consumption with mold cavities that cool quickly and manufacturing processes that recycle water and meet all EPA guidelines for emissions. Our foam packaging is not manufactured with chlorofluorocarbons (CFCs).

Polystyrene Is Safe In Food Service

Polystyrene meets stringent U.S. FDA standards for use in food contact packaging and is safe for consumers. Health organizations encourage the use of single-use food service products, including polystyrene, because they provide increased food safety[4]. The use of single-use packaging is a major step toward preventing food borne illness. Used only once, these products significantly reduce food contamination and the spread of diseases. According to a 2003 survey of food service operations in Las Vegas conducted by the Clark County, Nev., Health District and analyzed by Silliker, Inc., "reusable food service items had higher microbiological levels than disposable items." It helps eliminate possible cuts and scratches caused by chipped or broken crockery and glassware. Disposable packaging also eliminates the need for dishwashing requiring detergent and the possibilities of spill-overs of water which could result in potential workplace hazards[5].

Polystyrene For Use As Energy

Polystyrene packaging burns cleanly in modern municipal Energy-from-Waste facilities. Polystyrene foam is composed of carbon and hydrogen. When properly incinerated, polystyrene foam leaves only carbon dioxide, water, and trace amounts of ash. In modern waste-to-energy incinerators, the energy generated by the incineration of polystyrene packaging and other solid waste can provide heat and light for neighboring communities[6].

Polystyrene For Use as a Recycled Material

Recycled polystyrene is used in both closed-loop and open-loop processes to make a variety of items from recycled-content foam packaging to durable goods and innovative new building products. In 2010, more than 50% of all polystyrene collected for recycling was used to make recycled-content packaging[7]. The rate of recovery for recycling of polystyrene disposables and protective packaging more than doubled from 1989 to 1994 and the 2010 Polystyrene Recycling Rate Report shows that over 71 million pounds of polystyrene were recycled, including 37.1 million pounds of post-consumer packaging and 34.2 million pounds of post-industrial packaging[8].

Polystyrene Foam Packaging Is Received At Some Recycling Centers

Check your local municipality for a recycling center near you. In Canada, foam cups and containers can be and are currently being recycled. In fact, in Ontario, approximately 90 municipalities, representing over 50 percent of all households in the province, have access to Blue Box recycling programs (both curbside and depot collection) that collect post-consumer foam cups and containers. Also, the City of Toronto added foam cups and food containers to their Blue Box program in December 2008.

Accounts For Less Than 1% of Total Landfill Waste

Compared with many other packaging materials, polystyrene represent less than 1% of all products generated, by weight, in municipal solid waste. Of this total, polystyrene food service packaging accounts for approximately 0.4 percent, by weight, of all polystyrene products generated. This category includes items such as cups, plates, bowls, trays, clamshells, meat trays, egg cartons, yogurt and cottage cheese containers, and cutlery[9].

Polystyrene is Stable & Safe In Landfills

Polystyrene is an inert material which does not produce gas or leachates during its use or disposal. Polystyrene, like most plastics, does not biodegrade. Engineers design modern landfills to discourage biodegradation by removing oxygen, sunlight, and water. The lack of biodegradation may be a positive feature of foam/plastics, according to archaeologist Dr. William L. Rathje, professor emeritus of anthropology at the University of Arizona and one of the nation's foremost authorities on solid waste and landfills. "The fact that plastic does not biodegrade, which is often cited as one of its great defects, may actually be one of its great virtues. When polystyrene foam products are buried in landfills, they are as stable and harmless as rocks, concrete, and other inert materials[10].

Foam Facts Summary

- Foam industry directly supports over 20,000 domestic jobs.
- Foam products require less raw materials versus alternative packaging.
- Foam products are a low cost, high functioning option.
- Foam products are completely safe to use and have many end of life scenarios.inert materials10.

Sources:
1 Franklin Associates, a Division of ERG, Life Cycle Inventory of Foam Polystyrene, Paper-Based, and PLA Foodservice Products, February 2011, Table 2-2 Total Column.Comparing the production processes of a 9" foam plate to a 9" paper plate. **2** www.epspackaging.org. **3** Final peer-reviewed report: Life cycle inventory (LCI) of foam and coated paperboard plates, Franklin associates, ltd., May 2008. LCI study compares 4.7g polystyrene foam plates and 12.1g poly-coated paper plates. Comparing the production processes of a 9" foam plate to a 9" paper plate. **4** Disposables versus Reusables: A Study of Comparative Sanitary Quality." Dairy Food and Sanitation. January 1985. **5** Food Packaging Institute- www.fpi.org/EXPAGES/sensiblesolution.asp **6** The Polystyrene Packaging Council, Polystyrene and Its Raw Material, Styrene: Manufacture and Use, November 1993, pp. 27–28 and Franklin Associates, Ltd., Solid Waste Management at the Crossroads, December 1997, p. 1-24. **7** The Alliance of Foam Packaging Recyclers (AFPR) **8** EPS Packaging – Recycling is Already In Action. www.epspackaging.org.Based on data received from fifty-eight EPS manufacturers and independent recyclers in twenty states. **9** Franklin Associates, Ltd., Municipal Solid Waste in the United States 2003 Facts and Figures (Prepared for the U.S. Environmental Protection Agency, April 2005 **10** William L. Rathje, "Rubbish!" The Atlantic Monthly, December 1989, p. 103 and William Rathje and Cullen Murphy, "Five Major Myths About Garbage, and Why They're Wrong," Smithsonian, July 1992, p. 3 & 5

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