

P2: Pollution Prevention

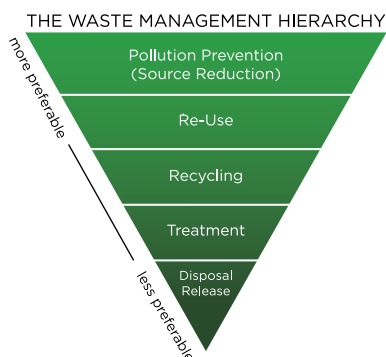
Technical assistance for businesses to be environmentally sustainable and reduce costs



Help Your Business Be Environmentally Friendly AND Save Money

The Environmental Protection Agency's (EPA) Pollution Prevention (P2) Program provides grants to states and tribes to provide technical assistance services to American businesses to help them prevent pollution at its source before it is even created.

There are significant opportunities for businesses to reduce or prevent pollution through cost-effective changes in production, operation, and use of raw materials. This can save your business money. It is often cheaper to prevent pollution from being created than to clean it up afterwards or pay for control, treatment, and disposal of hazardous waste products. Addressing pollution at its source can reduce operating, regulatory and liability costs, protect the environment and public health, and give your company a market advantage by showing your community and customers that your business is a responsible environmental steward.



What Can P2 Technical Assistance Do For You?

A P2 Technical Assistance Provider located in your [state](#) can consult with your business to help you identify P2 opportunities. Depending on your needs and goals, they can provide services such as:

- Expert-led educational workshops, webinars, and one on one assistance
- Support for carrying out an in-depth Chemical Footprint Survey
- Technical assessments that can identify opportunities to reduce the use or release of hazardous chemicals
- Energy use assessments, including compressor and HVAC efficiency and lighting effectiveness
- Assistance with sustainable supply chain procurement tools

What is P2?

Pollution Prevention (P2), also called “source reduction,” is any practice that reduces, eliminates, or prevents pollution at its source and prior to recycling, treatment, or disposal. Some examples of P2 are substituting the use of hazardous materials for less hazardous alternatives, implementing process changes to improve the efficient use of materials and resources such as energy or water.

Delivering Results

Between 2011-2020, EPA issued P2 grants that helped American businesses identify P2 approaches that resulted in*:



\$2 BILLION
dollars savings for business



814 MILLION POUNDS
hazardous materials reduced



45.5 BILLION GALLONS
water saved



18.6 MILLION METRIC TONS
greenhouse gases eliminated



28.4 BILLION KILOWATT HOURS
energy savings

* Calculated over a 4-year rolling period to account for recurring benefits

Resources to get started:

- Identify and contact your state or tribal P2 Technical Assistance Provider:
<https://www.epa.gov/p2/p2-resources-business#tech>




P2 in Action

Pfizer, Inc. • EPA Region 2

Pfizer, Inc. is a pharmaceutical company, with multiple facilities within EPA's Region 2 in New York, New Jersey, and Puerto Rico. Like many drug companies, Pfizer relies on the use of large quantities of solvents in the manufacture of important drugs and medicines.

Pfizer collaborated with Rowan University to improve its processes and significantly reduced its solvents use and saved money. With assistance from an EPA P2 grant, Rowan University created R.SWEET (Recovery of Solvent Waste Environmental and Economic Toolbox), a software tool that allows drug manufacturers to assess solvent use and recovery within their production processes. Using R.SWEET, Pfizer screened its waste production stream, substituted environmentally-friendly practices for more harmful ones, and examined ways to implement purification, recycling, and reuse applications for its products.

Pfizer was able to:

-  reduce generation of 8.84 million pounds of hazardous materials
-  reduce 3,160 metric tons of CO₂eq (carbon dioxide equivalent) emissions
-  save a total of \$2.3 million

Pfizer's success using the tool demonstrates that other pharmaceutical companies in the United States and abroad can use R.SWEET for solvent recovery operations.

For more information on this project, contact Walter Schoepf, EPA Region 2, at schoepf.walter@epa.gov.



Lakeland Tool & Engineering Inc. • EPA Region 5





Lakeland Tool & Engineering Inc., which was based in Anoka, Minnesota, built thermoplastic and thermoset custom molds used to produce plastic parts such as phone cases and car door panels. In 2014, with the help of an EPA P2 grant, the University of Minnesota's Technical Assistance Program (MnTAP) worked with Lakeland Tool to explore options for incorporating safer chemical solvents into its degreasing processes to help reduce both its environmental footprint and regulatory burden.

MnTAP conducted an onsite evaluation of the facility and provided recommendations for how Lakeland Tool could implement P2 solutions. The company replaced its use of a heavy-duty lacquer thinner, a solvent that contains several hazardous air pollutants and Minnesota 'Chemicals of Concern', with acetone in its paint gun cleaning system.

Incentivized by Lakeland Tool's success, 11 other facilities in Minnesota have switched to the use of environmentally safer degreasing solvents.

Acetone has lower health risks, does not emit volatile organic compounds (VOCs) and is available at the same price point. Employees at the Lakeland Tool facility supported this change, reporting a noticeable improvement in air quality at the shop.

Lakeland Tool also replaced three solvent-based aerosols used for mold cleaning with a water-based cleaner. This simple action allowed the company to:

-  save \$7,000 annually
-  eliminate more than 900 pounds of VOCs
-  reduce 1,500 pounds of smog-producing ozone
-  eliminate 1,600 aerosol cans from solid waste

This P2 action reduced Lakeland's regulatory burden and fees under the Resource Conservation and Recovery Act (RCRA). By using P2 strategies, Lakeland Tool saved money, protected the health of its employees, reduced its regulatory burden, and reduced its environmental impact.

To learn more, contact Christine Anderson, EPA Region 5, at anderson.christine@epa.gov.