



TURI has helped businesses adopt safer chemicals and prevent pollution for more than 30 years.



“It all started with our training in Toxics Use Reduction planning that has become pervasive throughout Analog Devices, while saving 90 million gallons of water per year. The planning framework gives our team a tool to constantly analyze and improve everything we do. **Our mindset is relentless pursuit of perfection. And it’s worked.** We’ve been able to increase production, save money, improve safety and become more competitive.”

BETH TSHUDY

Environmental, Health and Safety Manager at Analog Devices

Working in close collaboration with businesses of all sizes, as well as government agencies, local communities, and international organizations, TURI helps identify actions companies and communities can take to protect workers, public health, and the environment.

OUR MANDATE

The Toxics Use Reduction Institute (TURI) is an independent government agency with a mandate to help protect workers, communities and the environment from toxic chemicals and pollution. Established by the Commonwealth of Massachusetts in 1989, we have a track record of helping manufacturers successfully substitute hazardous substances with safer alternatives.



WE ARE A TEAM OF INNOVATORS

TURI's innovators, including scientists, engineers, and policy experts, have been helping companies successfully reduce the use and emission of toxic chemicals across a range of industries for over 30 years.

Our research and development team ensure that solutions meet strict safety and performance standards. TURI staff collaborate with professors of chemistry, engineering, public health, and other related fields to identify, invent, and test alternatives to some of the most challenging toxic chemical uses today.

Many businesses need assistance adopting safer alternatives. TURI's laboratory experts work closely with companies to evaluate the performance of safer alternatives. We work onsite with companies to successfully implement their preferred solutions.

At TURI, we train and equip substitution experts to work with businesses across a range of industries using the process of Toxics Use Reduction planning. When needed, TURI provides grants and technical assistance to small and medium-sized business, as well as local communities, to help overcome financial and technical obstacles.

TOXICS USE REDUCTION DEFINED

A systematic process that helps companies reduce toxic chemical use at the source rather than managing or treating the waste. Planning for Toxics Use Reduction helps companies avoid regrettable substitutions, evaluate the performance of safer alternatives, and assess financial implications.

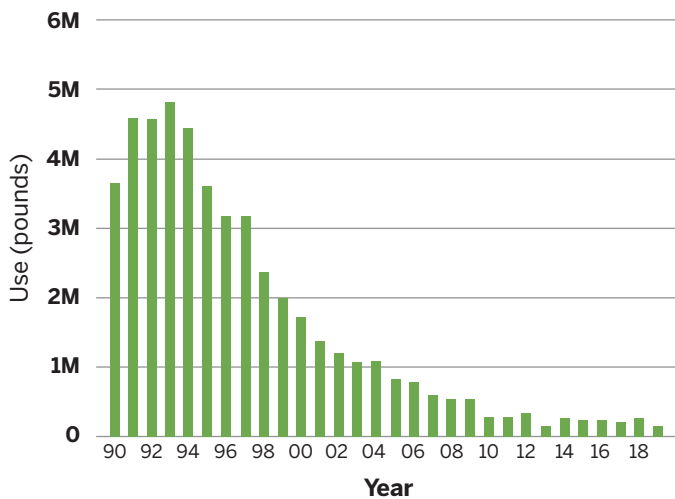


A TRACK-RECORD OF SUCCESS

Our systematic approach of Toxics Use Reduction has improved the competitiveness of businesses, while reducing substances linked to cancer, birth defects, neurological damage and other adverse health impacts from our water, our food, our air, as well as the places we work and call home.

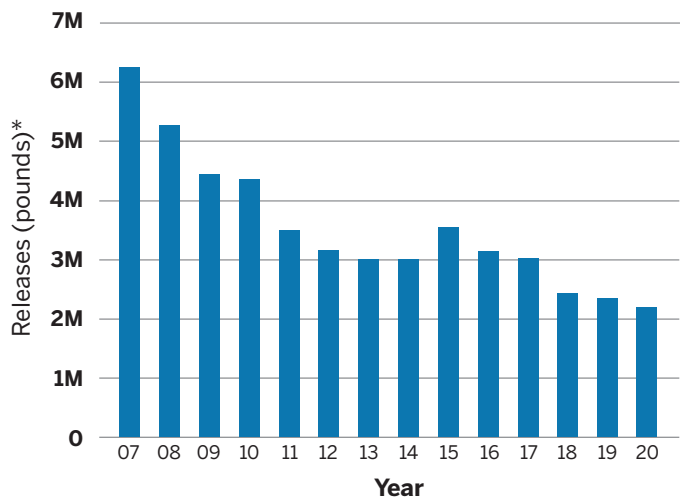
THE BENEFITS OF TOXICS USE REDUCTION: EXAMPLES FROM MASSACHUSETTS

Reduced use of a carcinogen (Trichloroethylene or TCE)



Source: TURAdata.org

Reduced pollution



* Core filers, production adjusted

TEARING DOWN THE TOXIC DIVIDE

Social and environmental justice lies at the heart of our work. Individuals and communities marginalized by society often bear the additional burden of being on the frontline of toxic exposures. Social and environmental justice can be advanced through Toxics Use Reduction. Our efforts strengthen the protection of workers, children, minorities, and other groups at greatest risk from the use and release of toxics in their communities.



Global Community Monitor

SOME TOXICS REDUCTION SUCCESS STORIES



Eliminates the use of a carcinogen

Manufacturer of capacitors replaced n-propyl bromide (nPB) with a new aqueous cleaning process, saving \$46,000 per year while protecting worker health.



Eliminated the use of neurotoxin and likely carcinogen

Electronic component manufacturer found a safer alternative to use in a vacuum degreaser, eliminating the use of perchloroethylene.



Reduced the use of a cocktail of hazardous substances

Manufacturer of wire mesh developed a dual brush roll system that significantly reduced the use of toxics, improved the work environment and increased cost savings.



Eliminated the use of a hormone disrupter

Diagnostic equipment maker found a safer alternative to surfactants subject to international restrictions.



Eliminated use of carcinogen and likely mutagen

Manufacturer of ceramic feedthroughs for medical and aerospace industries eliminated the use of trichloroethylene (TCE) used in a vapor degreaser.



Protected workers from a hazardous acid

Metal finisher reduced the use of sulfuric acid and as a result improved worker safety, reduced hazardous waste and is saving \$5,000 annually.



Reduced use of neurotoxins

Manufacturer of automotive, industrial and household cleaning products reduced the use of various toxic chemicals by 19,000 pounds.



Reduced the use of chemicals that harm the nervous system

Biotechnology company reduced the use of toxics, resulting in improved manufacturing efficiency and a savings of \$215,000.



Reduced the use of strong acids and bases

Semiconductor company met the demand from brand name electronics customers who prefer working with socially responsible companies.



Pollution prevention techniques saved millions of dollars per year while expanding production

Supplier of school furniture and metal fabricated products and assemblies, recovers, and reuses 98 percent of the nickel and chromic acid plating chemistry from a modern,



Reduced the use of air pollutants linked to cancer, asthma and neurological damage, among other health impacts.

Manufacturer of precision optics and laser measurement instrumentation cut the use of volatile organic compounds by 70 percent, saving \$15,000 per year.



Eliminated the use of a carcinogenic solvent

Working with the Office of Technical Assistance, the provider of high-performance soft-materials solutions saved \$1 million per year by eliminating the use of TCE.

Franklin Paint

Eliminated the use of substances that can impair mental health

Manufacturer of traffic marking and athletic field paints reduced the use of toxics with a new, safer formulation that receives positive customer feedback.



Eliminated the use of 35,000 pounds of a carcinogen and likely mutagen

Advanced materials company found a water-based cleaning solution to significantly reduce solvent use and reduced lead use in solder as well.



Reduced the use of toxic solvents by 80 percent

Life sciences company implemented a solvent-recovery system and continually innovated to reduce the use of toxics.



Conserved resources while protecting human health and the environment

Life sciences company implemented solutions to reduce consumption of toxics, energy and water, while increasing production and meeting strict customer requirements.



Eliminated the use of hazardous substances to protect the climate and human health

Defense company reduced the use of ozone-depleting solvents, as well as toxic heavy metals lead, cadmium and hexavalent chromium.



Reduced the use of chemicals that can cause severe burns and other injuries

Maker of small batch soups for restaurants found a safer alternative to clean processing tanks.



Eliminated the use of a chemical suspected to cause cancer and damage the heart and nervous system

Small business protected its workers by adopting a safer alternative paint stripper to methylene chloride.

Workshop Auto

Reduced the use of a substance toxic to reproduction and other toxic substances

Small auto shop adopted a water-based system for cleaning car parts, replacing the use of acetone, methanol and toluene.

REDUCING TOXIC CHEMICAL USE REQUIRES COLLABORATION

Global pressures continue to shift the burdens of toxic chemical use and pollution to communities where systems of governance for the protection of workers and the environment are far weaker. TURI has the capacity to help partners around the world, including those in low- and middle-income countries, prevent pollution and protect workers. Working with businesses, industry coalitions, governments, scientists, international organizations, trade unions and other partners, TURI can build collaborations to expand the success of Toxics Use Reduction. International value chains are an increasing focus of our efforts, including how chemicals are used and released throughout the lifecycle.



WE WANT TO
COLLABORATE
WITH YOU

Whether your efforts are focused on preventing pollution or protecting worker health, TURI is interested to hear how we may be able to help.

CONTACT US

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“The health impacts of the triple planetary crisis of climate change, nature and biodiversity loss, and pollution and waste are clear. [...]

We are a species in peril, living on a planet in peril. But if we act urgently on the triple planetary crisis and pull the planet out of the emergency room, we can save lives and reduce the burden on healthcare systems.”

INGER ANDERSON
UNEP Executive Director

TURI
TOXICS USE REDUCTION INSTITUTE
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