

### A closer look: TSCA does not impede innovation—it protects Americans from toxic chemicals

## What is TSCA and how has it made a difference for our health?

The Toxic Substances Control Act—or TSCA—is a law enacted in 1976 that regulates chemicals in everyday products like cleaners, furniture, electronics and more—covering their full lifecycle from manufacture to disposal. It also helps keep harmful chemicals out of our air, water, soil and communities.

After decades of inadequate protection, Congress strengthened TSCA in 2016 with the bipartisan Lautenberg Act, broadly supported by industry, health and environmental groups. Thanks to the Lautenberg Act, cancer-causing chemicals like trichloroethylene (TCE), methylene chloride and asbestos are being phased out. Today chemicals must also clear a safety standard before reaching the market, a requirement that did not exist before.

# Industry is attacking TSCA not because it is broken, but because it is working

The chemicals industry is working to dismantle TSCA's safety protections that are crucial to protecting our homes and communities from toxic chemicals, placing their profits over Americans' health. The industry is spreading long-debunked disinformation about TSCA on Capitol Hill to convince Congress to weaken the law. TSCA as written is designed to keep Americans safe—that's why it's under attack.

#### Myths and facts on TSCA and innovation

In this fact sheet, we're taking a closer look at a bewildering set of myths that industry is spreading about TSCA's effect on innovation. First, we'll show why TSCA does not hinder innovation—and why true innovation must consider safety. Then we'll explain how industry's touted "safe substitutes" for toxic chemicals aren't nearly as safe—or as ready to go—as they claim.



Thanks to the Lautenberg Act, cancer-causing chemicals like trichloroethylene (TCE)—used in products such as degreasers—are now being phased out.

### **Reality Check: EPA does not impede innovation**

Myth: EPA impedes the development of innovative chemicals.

Fact: Truly innovative chemicals are both functional and safe. When industry develops chemicals, safety typically takes a backseat to function. Many new chemicals raise significant concerns for toxicity and may present unreasonable risks at low levels of exposure. Risk is a function of toxicity (hazard) and exposure. When there are significant concerns for the toxicity of a new chemical, the only way to prevent the identified unreasonable risk is by controlling exposure. However, the information needed to determine the exposure is often lacking in industry's new chemical submissions—adding time to the review process. And controls needed to mitigate the unreasonable risk that the chemical may present, such as limiting exposure either through worker protections, limits on releases or restrictions on uses are things that industry often argues with EPA about—again adding time to the review process.

If the industry were developing chemicals that were truly innovative by being safe as well as functional, the level of exposure would be less critical and there would need to be fewer restrictions.

Myth: EPA is holding up chemicals critical to green energy (e.g., EV batteries, solar, wind), including chemicals critical to producing microchips.

**Fact:** EPA routinely approves the chemicals used to make microchips and in green energy. For example, EPA has approved about 50 photoacid generators (including PFAS photoacid generators) used in etching microchips, even though they are persistent bioaccumulative toxic (PBT) chemicals. EPA also continues to approve other PFAS and other chemicals for use in solar and wind, despite the availability of safer and/or environmentally less harmful alternatives. While the risks of many of these chemicals warrant "may present" determinations and section 5(e) orders, these orders do not block or delay the chemicals' use and EPA's limitations on exposure provide important protections to workers and other exposed populations.

EPA routinely approves highly toxic mixed metal oxides that are used in the production of EV batteries. EPA has a special program to facilitate approval of these chemicals: <a href="Integrated Approach for Mixed Metal Oxides New Chemicals Review">Integrated Approach for Mixed Metal Oxides New Chemicals Review</a>.

#### EPA routinely approves chemicals used in green energy technology

Despite their toxicity and persistence, most new chemicals used in green energy technologies have been approved by EPA under TSCA.



#### **Microchips**

E.g. photoacid generators used in microchip etching



#### Wind & solar technology

E.g. PFAS used to promote durability and flexibility



#### **Electric vehicles**

E.g. mixed metal oxides used in EV batteries

Myth: TSCA puts a high priority on innovation by stating that the "authority over chemical substances and mixtures should be exercised in such a manner as not to impede unduly or create unnecessary economic barriers to technological innovation."

Fact: That quote is incomplete. TSCA explicitly recognizes that innovation cannot occur at the expense of health and the environment. TSCA further states that this should be done "while assuring that such innovation and commerce in such chemical substances and mixtures do not present an unreasonable risk of injury to health or the environment."

Most importantly, the law clearly lays out a process for new chemicals and for existing chemicals that is based on risk and should not be weakened or compromised.

**Myth: Significant New Use** Rules (SNUR) are stifling innovation. Nobody wants to use or buy a chemical with a SNUR attached.

Fact: Many new chemicals that raise significant concerns for toxicity may present unreasonable risks at low levels of **exposure.** While they may be used safely under certain restrictions required by a section 5(e) order, they may present unreasonable risks under other unintended uses or reasonably foreseen uses. Even if the unreasonable risk can be controlled for industrial or commercial uses, they often cannot be controlled for consumer uses. The requirements of the consent order only apply to the new chemical submitter, not other companies that may produce or use the new chemical. In these circumstances, SNURs that mirror the section 5(e) consent order are intended to address a gap in protection and level the playing field for the company subject to the section 5(e) consent order.

Disregarding a chemical's potential unreasonable risks and failing to put a warranted SNUR on the chemical will not foster innovation and the development of safe alternatives.

In addition, failing to put a warranted SNUR on a chemical will not simply displace an existing chemical alternative that poses unreasonable risks. It will just add another chemical on the market that may present an unreasonable risk. It is much more costly to deal with a chemical after it becomes an existing chemical without a SNUR than to address the potential unreasonable risks via a SNUR. True innovation would be to develop a chemical that is both functional and safe.

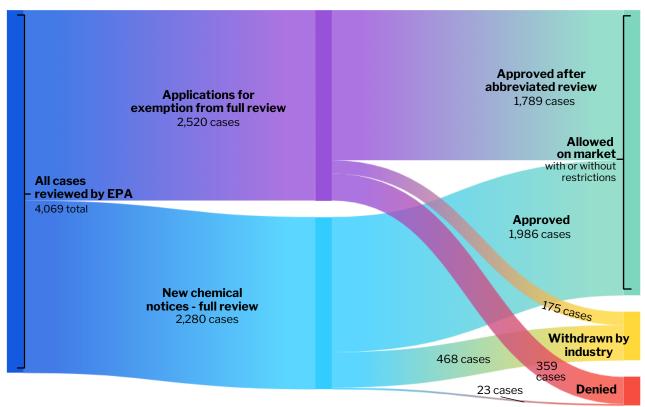


## The chemical lobby has not provided objective economic data or credible real-world examples of a link between the program and a decline in U.S. competitiveness.

**Myth: Delays in reviews** are harming the U.S. chemical industry's global competitiveness.

Fact: The chemical lobby assertions that U.S. manufacturers are losing out to foreign competitors because of the new chemicals program must be examined skeptically. The chemical lobby has not provided objective economic data or credible real-world examples of a link between the program and a decline in U.S. competitiveness. Instead, its claims are based solely on unscientific, anecdotal surveys of companies which are unverifiable and cannot be taken as objective or broadly representative.

EPA approves the vast majority of new chemical submissions under TSCA



Source: EPA data on chemicals submitted for review from 6/22/2016-4/2/2025

Myth: EPA's new chemical program stifles innovation by its long delay in approving new chemicals.

Fact: EPA has approved the overwhelming majority of new chemicals, including both premanufacture notices and low-volume exemptions, allowing a steady stream of new chemicals to be commercialized. Some of these approvals are without restrictions. Most approvals are section 5(e) orders with restrictions that protect against the unreasonable risks the new chemical may present, while allowing the chemical to be commercialized. If the industry were developing chemicals that were truly innovative by being safe as well as functional, there would need to be fewer restrictions. Also, in contrast new drugs take 5–20 years for approval.

Myth: EPA is limiting the use of important existing chemicals such as TCE, methylene chloride and NMP that are used to make electric vehicles and semiconductors. Restricting their use is delaying innovation in advanced technologies.

Fact: Allowing continued use of harmful substances is not "innovation" under any definition of the term. These chemicals are based on outdated technology and are not innovative. They are highly toxic for their functionality. EPA determined—under the first Trump administration—that they pose unreasonable risks to human health. These determinations are consistent with long-standing concerns about their risks that have been understood for decades by virtually any non-industry observer. Congress specifically included a provision in 2016 to expedite regulation of particular uses of all three highly toxic chemicals. There are many effective substitutes on the market. The limitations and prohibitions in EPA's risk management rules drive innovation to develop safer substitutes.

## Reality Check: EPA does not prevent truly safe substitutes from entering the market

**Myth: Significant New Use** Rules (SNUR) are stifling innovation. We cannot replace old dirty chemicals with new clean, safe, climate-friendly chemicals.

Fact: SNURs are not a black mark on a new chemical. New chemical SNURs mirror the restrictions in new chemical submitter-specific consent orders, identify the parameters defining the safe use of the new chemical and level the playing field for the new chemical submitter subject to the consent order.

If the substitute chemical is truly clean and safe, it will not present an unreasonable risk. In that case, EPA would make the determination that the chemical is "unlikely to present an unreasonable risk" and it would enter production without a TSCA section 5(e) order.

Further, approving a slightly less toxic chemical that may present an unreasonable risk does not remove the more toxic chemical from commerce. The more toxic chemical will still be on the market joined by the slightly less toxic chemical that may present an unreasonable risk. Thus, no meaningful reduction in risk replacement occurs. While EPA's risk management rules under the amended law are making progress in restricting dangerous existing chemicals, they only address a small fraction of the toxic substances that are in widespread use. Without effective action to address this much larger universe of chemicals of concern, meaningful incentives will not exist for replacement of old substances with genuinely safe substitutes.

Myth: EPA is keeping safer substitutes for existing harmful chemicals off the market.

Fact: Industry makes this claim but cannot back it up—they do not have examples of chemicals that are unlikely to pose an unreasonable risk, but EPA has blocked from production.

Industry would like to assert that their new chemicals are safer, without having EPA evaluate or verify those claims, which is what TSCA requires. Industry continues to argue that new PFAS are safe despite compelling evidence that many PFAS cause an increased risk of kidney, testicular, prostate, bladder, breast and ovarian cancers, reduce the ability to fight infections, including a reduced response to vaccines, decreased fertility or increased high blood pressure in pregnant women and low birth weight, accelerated puberty, bone variations, or behavioral changes in children.



**Contributing organizations:** Environmental Defense Fund (edf.org)