

*PSI is a policy advocate and consulting nonprofit that pioneered product stewardship in the United States. Since 2000, PSI has helped enact 131 extended producer responsibility (EPR) laws across 16 product categories in 33 states — the bedrock of the circular economy. We work with governments, academia, nonprofits, and business to ensure that products are responsibly managed from design to end of life. Join us at [www.productstewardship.us](http://www.productstewardship.us).*

*Pyrolysis emits toxic chemicals like benzene, mercury and arsenic.*

Chemical recycling is a term that encompasses many technologies, one of which is pyrolysis, which typically produces fuel. Our state and local government members consider pyrolysis as disposal. They don't want to burn more materials; they want to return them to the circular economy.

*The EPA should be strictly regulating the chemicals emitted by pyrolysis plants because of the harmful effect they have on human health and the environment.*

We absolutely agree. While researching our 2022 report: “Making Sense of Chemical Recycling: Criteria for Assessing Plastics-to-Plastics and Plastics-to-Fuel Technologies,” [<https://productstewardship.us/wp-content/uploads/2023/01/2022-11-Report-Packaging-PSI-Chemical-Recycling-Paper.pdf>] we found that our government members want *all* chemical recycling technologies to be regulated as to whether they are environmentally sound and protect public health. They are unified against plastics-to-fuel technologies but they do not want to close the door on other technologies that can produce plastics with viable end markets and still meet stringent environmental standards.

We produced the report because more than 40 companies are now working to develop or manage chemical recycling projects in the United States, and 20 states — including, most recently, Missouri and New Hampshire — have enacted laws that allow chemical recycling facilities to be permitted as manufacturing facilities under less stringent guidelines. A main point of our report is that we need clear criteria by which plastics-to-plastics technologies can be evaluated for *potential* permitting. Our report proposed draft criteria, developed with our members, to start a different type of conversation.

Currently, we are only hearing two voices – those who want to fast-track all chemical recycling technologies and treat them as manufacturing plants under less stringent guidelines and those who want to prohibit all of these technologies. What's missing is a reasoned conversation.

The chemical recycling debate is undermining the real change that communities desperately need right now: Extended Producer Responsibility, or EPR. These laws shift financial

responsibility from taxpayers to the companies that produce materials – like plastic -- in the first place. PSI's Extended Producer Responsibility (EPR) model legislation for packaging, which informed laws enacted in Maine, Oregon, Colorado, and California, specifies that incineration and "waste to fuel" or "waste to energy" technologies, which burn material for energy, should be considered disposal, not recycling.

The inclusion of plastics-to-plastics and plastics-to-fuel technologies in EPR systems is currently being addressed state-by-state. A more consistent evaluative approach should be developed, which could be applied not just to packaging but to all products containing plastics, including construction waste, electronic waste, textiles, and medical waste.

*Most pyrolysis or chemical recycling plants use most of the energy they generate to power the plants themselves.* We do not have the information to comment on this.

*Pyrolysis plants barely generate meaningful amounts of reusable material.* Again, we do not have the information readily available to comment on this statement.