

From: [REDACTED]
Sent: Friday, December 16, 2022 6:10 PM
To: [REDACTED] (ENV) [REDACTED]@ec.europa.eu>
Cc: [REDACTED] (GROW) [REDACTED]@ec.europa.eu>
Subject: How could we signpost [REDACTED] suppliers to participate in relevant Horizon 2020 research and development projects to develop alternative technologies that may be able to replace PFAS

Dear [REDACTED]

It was good to catch up with you over lunch at the FPP4EU PFAS meeting on Monday 12 December. As discussed, please could you introduce me to your RTD colleague who is engaging with Horizon 2020 as envisaged in the following comment on page 20 of the Commission Staff Working Document on PFAS

"Supporting the search for alternatives to PFAS could also be done through the next Framework Programme for Research and Innovation, Horizon Europe, under Cluster 3 "Digital and Industry"."

As mentioned in the below white paper which details [REDACTED] commitment to phase out our use of PFAS, [REDACTED] is committing to drive innovation to develop solutions for prioritized applications by funding the needed research to develop alternative technologies that may be able to replace PFAS

[REDACTED]

We would like to know more about your RTD colleague's engagement with Horizon 2020 and specifically how could we signpost our suppliers to participate in relevant research and development projects. Participation in relevant Horizon 2020 projects and receiving the disseminated results from these projects could be helpful to our suppliers who have less funds to invest in their own research and development activities in the same way that we can.

An example we can use to inspire our suppliers to engage in research and development of alternative technologies that may be able to replace PFAS is the below project funded by the Toxics Use Reduction Institute (TURI). This multidisciplinary project lead by University of Massachusetts Lowell has developed PFAS-free etching solutions for

semiconductor chip manufacturing which are now being supplied commercially by [Transene Company](#)

<https://www.uml.edu/news/stories/2022/transene-research.aspx>

Thanks and best regards



TURI Collaboration Leads to Alternative Etching Solution Free of PFAS

A research team from CEPN member Toxics Use Reduction Institute (TURI) and UMass Lowell has developed etching solutions for semiconductor customers of Transene Company, a manufacturer of advanced materials for the electronics industry that do not contain toxic per- and polyfluoroalkyl substances (PFAS).

The research project that led to this solution, now in its' second year, is a result of a grant awarded to UMass Lowell plastics engineering Professor Ramaswamy Nagarajan from TURI. According to Greg Morose, TURI Research Manager, the multidisciplinary aspect of the project, which brought together experts in chemistry, engineering, and public health, helped lead to this unique solution. Since the development of the new formula, dozens of Transene's customers have begun switching over to this etching alternative free of PFAS.

PFAS have properties that can be difficult to replicate in other products. For chip development, their properties are particularly advantageous because they allow materials to spread uniformly across semiconductor material surfaces. However, PFAS, often referred to as "forever chemicals" never fully break down in the environment and are associated with numerous health risks such as cancer, liver damage, decreased fertility and increased risk of asthma and thyroid disease.

[Learn more](#) about this successful collaboration developing a safer alternative etching solution for the semiconductor industry free of PFASs.

