

**TOWARD  
ZERO EXPOSURE**  
Clean Electronics Production Network

**2024/25**

Fourth Annual Report

A COMMITMENT PROGRAM TO PROTECT WORKERS  
FROM CHEMICAL HAZARDS IN THE ELECTRONICS SUPPLY CHAIN



# Welcome

**Focusing on  
elimination and  
substitution is the  
key to making  
actionable progress  
to protect workers.**

As the Toward Zero Exposure (TZE) program completes its 4th year, **Founding Signatories Apple, Dell, HP, and Fairphone** have remained steadfast in their commitment to protect workers from exposure to hazardous chemicals in the electronics supply chain. We are grateful to these industry leaders for their collaboration and support.

This year has been centered around strengthening our focus. TZE Signatories concentrate on one primary commitment:

**Eliminate Exposures to Priority Chemicals.** Protect workers from exposure to Priority Chemicals in the electronics supply chain, prioritizing elimination or substitution with safer alternatives and protecting workers until that is achieved.

This focused approach has enabled TZE to better integrate with other electronics industry chemical management leadership programs and initiatives, streamlining the collective effort to protect workers. The **publication of TZE V3.0 (May 2025)** represents the next stage in this evolution, with a refined framework aligned with the Responsible Business Alliance's new Chemical Management Leadership Program.

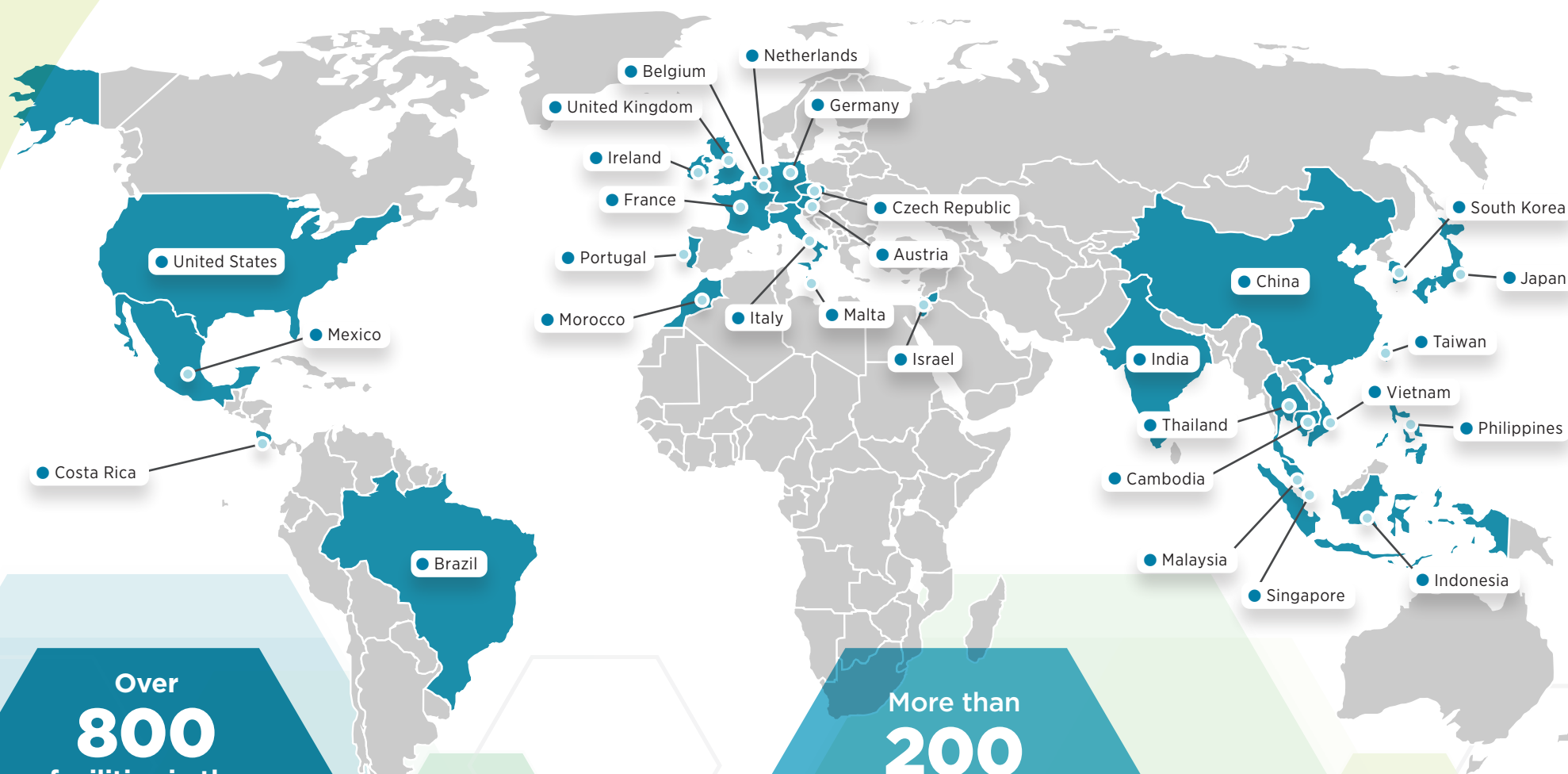
**3.0**

TZE V3.0 delivers  
a more streamlined  
leadership  
program.

**We look forward to continuing to support our program Signatories and expanding TZE's reach in the coming year.**

Eliminating hazardous process chemicals or substituting them with safer alternatives is the most effective strategy to support worker safety when handling chemicals. Elimination prevents upstream exposure throughout the chemical's lifecycle and avoids the limitations of ventilation systems, which may simply transfer the hazards outside the facility.

## Signatory and program influence extends to facilities in at least 29 countries around the world...



Over  
**800**  
facilities in the  
Signatories'  
manufacturing supply  
chains are estimated to  
have already substituted  
the 1st Round of  
Priority Chemicals.

Well over  
**100,000**  
employees  
work in production  
in those facilities.

More than  
**200**  
distinct supplier  
companies have been  
influenced to improve  
worker chemical safety  
by TZE Signatories.

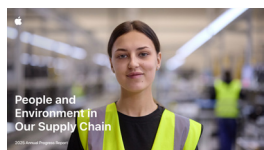
**Fairphone**  
has become the first  
Signatory to eliminate  
the 2nd Round of Priority  
chemicals at in-scope  
facilities.

## TZE Signatories' Sustainability and Social Responsibility Reporting

The TZE program is fueled by the commitment and leadership of our four founding Signatories — Apple, Dell, Fairphone, and HP. Each have worked to minimize workers' exposure to hazardous chemicals by substituting and/or eliminating Priority Chemicals identified by CEPN.

They have each gone above and beyond the program requirements. Their efforts in the TZE program and more can be found in their public reporting:

### Apple

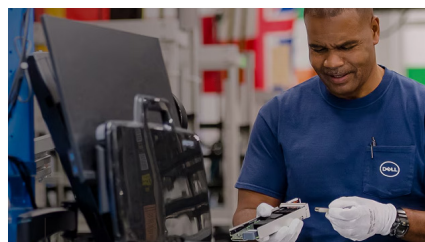


People and Environment  
in our Supply Chain, 2025



Environmental Progress Report  
Covering fiscal year 2024

### Dell



Dell Technologies  
Sustainability in the supply chain

### HP



HP Inc. Sustainable Impact Report, 2024

### Fairphone



Fairphone's Impact Report, 2024



## Our Signatories have also supported efforts to develop a central hub for the industry's publicly available Manufacturing Restricted Substances Lists

Each Founding Signatory has also provided their Manufacturing Restricted Substance Lists (MRSLs). CEPN has compiled these lists, as well other publicly available MRSLs from electronics companies, to facilitate greater collaboration, alignment, and information sharing across the electronics manufacturing sector.

# Looking Forward

**The Toward Zero Exposure program moves into its fifth year with a heightened focus, dedicated to scaling our impact across the global supply chain.**

Through alignment with RBA's Chemical Management Leadership Program (CMLP), new tools and resources, and ongoing collaborations with partners, the momentum around efforts to protect workers from exposure to toxic chemicals continues to grow.

## What's on the horizon?



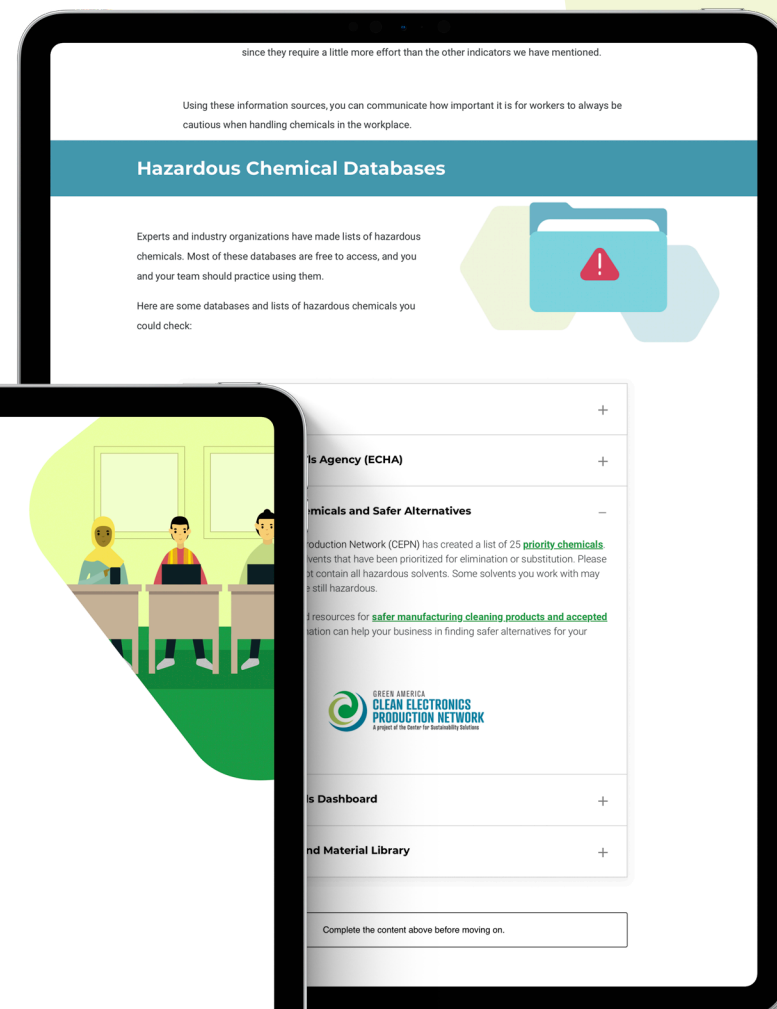
**CEPN is now working to identify the next round of Priority Chemicals.**

These will be available in 2026 and will equip TZE Signatories, as well as the broader electronics manufacturing industry, with critical knowledge to support efforts to continue improving worker safety.

Meanwhile, **CEPN's Chemical Safety Training Program** has moved out of the beta phase and the [training materials](#), are now available in 6 languages on the CEPN website. Currently, 9 local training organizations have become [Qualified Trainers](#) and are available to provide in-person and live webinar training in 6 countries! And more to come.



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# Join the Journey

CEPN invites all companies in the electronics industry to join the journey as TZE Signatories. Participation in TZE offers a platform for connecting with peers, establishes a framework for communication, and fosters greater cooperation between industry leaders.

As part of the CEPN program, TZE provides resources, tools, and guidelines. These efforts are driven and supported by a multi-stakeholder innovation network that includes industry leaders, NGOs, labor advocates, and other experts.

**BY MAKING THE COMMITMENT TO JOIN TZE,**

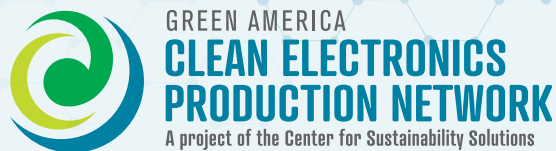
companies publicly indicate that they value worker safety.

**BY FOLLOWING THE TZE PROGRAM GUIDELINES,**

they demonstrate it.



Companies interested in joining the effort to improve worker safety by becoming a TZE Signatory should contact [info@towardzeroexposure.org](mailto:info@towardzeroexposure.org)



## **ABOUT THE CLEAN ELECTRONICS PRODUCTION NETWORK (CEPN)**

[The Clean Electronics Production Network](#) unites diverse stakeholders to understand, address, and eliminate workers' exposure to toxic chemicals in the electronics supply chain. The collaborative multi-stakeholder innovation network launched in 2016 as part of the Center for Sustainability Solutions at Green America. The Network addresses complex workplace health and safety challenges in the electronics supply chain, and developed the Toward Zero Exposure program to integrate and accelerate their work.

[More than 20 member organizations make up the network](#), including electronics brands and suppliers, environmental NGOs, labor and worker representatives, ecolabels and representatives from academia and government agencies.

CEPN members commit to working together in the service of a shared goal of moving toward zero exposure of workers to toxic process chemicals in electronics manufacturing.



## **ABOUT GREEN AMERICA'S CENTER FOR SUSTAINABILITY SOLUTIONS**

[Green America's Center for Sustainability Solutions](#), CEPN's parent organization, brings together diverse groups of stakeholders to solve the complex sustainability problems that no individual business, organization, or leader can solve alone. The Center's goal is to shift whole industries and sectors toward social, environmental and economic sustainability.



[towardzeroexposure.org](http://towardzeroexposure.org)



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