



# SUSTAINABILITY STORIES

FALL/WINTER 2021



# WE BELIEVE A SMARTER WORLD WILL BE MORE SUSTAINABLE

TECHNOLOGIES AND SOLUTIONS THAT ANTICIPATE AND AUTOMATE  
CAN ENABLE PEOPLE TO USE LESS AND ACCOMPLISH MORE



## Smart Mobility

As vehicular transportation shifts to electrification, NXP enables world-leading battery management systems and motor control solutions.

## Edge Processing

NXP's unique edge processing portfolio enables automotive, industrial and IoT users to use more devices for longer.



## Smart Buildings

Buildings account for nearly 1/3 of the world's final energy use. NXP develops the systems and components that can make them smarter.

## Less Power for 5G

In 2020, NXP opened the U.S.'s most advanced fab dedicated to 5G RF power amplifiers, which use energy more efficiently.



## Energy Efficiency

Hundreds of millions of devices use power adapters. Our latest resonant tech aims to achieve world-class efficiency.

## Responsible Operations

We're constantly upgrading the energy savings, materials recycling, and related programs at our facilities worldwide.



**NXP IS ON A JOURNEY WITH OUR CUSTOMERS, STAKEHOLDERS, AND PARTNERS TO ACCELERATE THOSE BREAKTHROUGHS THAT WILL ADVANCE OUR WORLD. #WEARENXP**



*We're committed to innovating products and solutions that support the sustainability goals and objectives of our stakeholders.*

Welcome to the inaugural issue of NXP's *Sustainability Stories* magazine.

At NXP, we're committed to enabling a smarter, more sustainable world. This goes beyond our operations to innovating products and solutions that support the sustainability goals and objectives of our stakeholders.

Last year, we faced a series of unprecedented challenges that required all of us to work differently; engage more closely with our employees, partners, and customers; and play an even greater role in supporting our communities.

I am proud of our team's accomplishments throughout the year, and the stories that follow represent just a small sample of the sustainability efforts that are a part of what we do at NXP every day.

In addition to these stories, I encourage you to take a look at our [2020 Corporate Sustainability Report](#), which details our commitment to sustainability and highlights our measurable year-on-year progress toward our goals.

For us, sustainability is a journey, not a destination, one we continue on with our employees and partners. We invite you to join us as we endeavor to create a smarter, more sustainable world.

Kurt Sievers  
President and CEO, NXP Semiconductors

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*Sustainability is a journey, not a destination.*

# NXP PUSHES AHEAD ON GREEN TECH

*"For us, the certification phase is an integral component of the green technology journey."*

Robin Davidson, ECO-Products Chemist for NXP, Austin, Texas

TO MAKE SURE OUR PRODUCTS CONTRIBUTE TO THE SUSTAINABILITY OF OUR CUSTOMERS' SOLUTIONS TOMORROW, WE INCORPORATE GREEN TECH INTO THEM TODAY.

New environmental regulations across the world's markets can mean risk for customers seeking green products for their applications. That's why NXP has added the step of anticipating future requirements during the design and development phase of new customer solutions before they are certified.

# NXP PUSHES AHEAD ON GREEN TECH

Already, many of our efforts are public and most of our product portfolio's compliance documentation is searchable on our website, or available from the NXP ECO-Products team upon request. In technical terms, this documentation includes environmental compliance status (e.g. RoHS, Lead Free, and Halogen Free), Product Content Declarations, and full RoHS Test Reports. You can explore the database of compliance documentation through the NXP.com [Product Content Search](#).

Our internal certification process supports the generation and publication of compliance documentation to coincide with new product introductions. This proactively timed approach supports and protects the success of green technology in NXP business units and for their customers.

*"For us, the certification phase is an integral component of the green technology journey," explained Davidson. "Just as important is our focus on future regulatory direction and review of our customer trends. We work to incorporate both requirements into our products."*

The NXP ECO-Products team's multi-year effort continues to increase involvement with both new product introduction (NPI) and new technology introduction (NTI) without interrupting or delaying business unit developments. The process includes checklists of prohibited substances and a regularly updated list of substances that NXP has identified as potentially problematic for particular markets, now and in the future. The program is attempting to proactively ensure that materials being used in R&D testing can be incorporated into future green technology.

The regulatory environment is diverse and challenging. The European Union drives many of the current requirements, continually moving them forward with new legislation. California is a regulatory leader in the United States, while China, Japan, and India continue to evolve regulatory requirements in Asia. NXP constantly monitors developments of global green technology legislation by tracking current discussions, development timelines, and the likelihood of new implementations.

*"Simply certifying products isn't enough because global regulatory requirements will change. Compliance surprises aren't good for business, which is why our team process is so proactive."*

Robin Davidson

*"Determining compliance becomes more complicated when you consider temporary exceptions for individual substances and product usage, which may or may not exist by the time a new product gets to market," Davidson said. "Building assessments of those requirements into our design choices translates to resiliency for NXP and marketable products for our customers."*

"Risk mitigation is a key outcome," according to Davidson, who advocates for the team's involvement as early as possible in the design process. "Simply certifying products isn't enough because global regulatory requirements will change. Compliance surprises aren't good for business, which is why our team process is so proactive."

"We want to keep our customers profitable and their products ahead of coming regulatory changes," concluded Davidson.

# BUILDING GREEN FROM THE GROUND UP

OUR NEW PLANT IN TOULOUSE, FRANCE IS MORE SUSTAINABLE BY DESIGN



WHEN THE ORIGINAL CENTRAL HEATING AND COOLING PLANT WAS BUILT FOR NXP'S PRODUCTION FACILITY IN TOULOUSE, FRANCE, THE WORLD WAS A DIFFERENT PLACE.

[Some scientists](#) thought the climate was cooling, not heating up. Governments had started passing new [regulations](#) to limit and monitor environmental impact. An energy crisis encouraged efficiency but most facilities were [mechanical](#), as programmable [digital thermostats](#) were still a decade away in the future; for instance, the design of the plant made it physically impossible to reduce its energy consumption which meant that its chillers ran at 5x the actual demand in the winter.

So, when the Toulouse facility's production of semiconductors ended in 2014, the oversized, inefficient chillers that would now be used for only labs and offices, were unable to run at the desired lower values that were needed. The production factory was demolished in 2016 and the design of a more efficient central plant began.

Toulouse's test and measurement lab equipment generates heat, requiring cool air, even during winter, so chillers operate all-day, everyday. The team also elected to recover the heat generated by the chillers and use it to warm the human environments in the offices and labs, which also reduces gas consumption necessary for heating.

Another major consideration when replacing the old cooling towers was the old system's reliance on large amounts of warm water that can be breeding grounds for bacteria if not properly disinfected and maintained (they're also quite unsightly). The team opted instead for heat exchanger technology (dry cooler), which eliminated the health risks and need for using chemicals to treat the water. Dry coolers also reduce the overall water consumption.

The new plant became operational in January 2021 and is expected to deliver meaningful benefits on several fronts:



### REDUCED ELECTRICITY CONSUMPTION

as the new, more efficient chillers use less electricity. During the winter, for example, the estimated savings are 1,145 MWh/year.



### REDUCED WATER CONSUMPTION

which will save approximately 11,000 m<sup>3</sup> of water/year.



### REDUCED GAS CONSUMPTION

through the heat recovery system of the chillers, estimated to save 336 MWh/year.

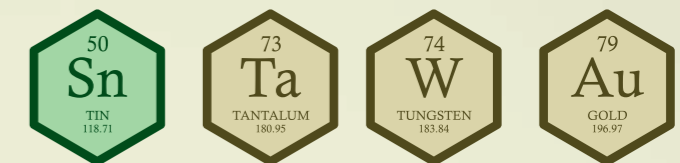
The area around the facility in Toulouse has also changed since the 1970s and is now heavily residential. The new central plant is designed to reduce noise as much as possible, to make living there more sustainable, too.



# NXP LOOKS TO THE FUTURE OF RESPONSIBLE MINERALS SOURCING



NXP HAS A LEADING VOICE  
IN RESPONSIBLE MINERALS  
SOURCING STANDARDS  
AND COMPLIANCE TOOL  
DEVELOPMENT.



NXP's responsible sourcing of minerals is an important part of our ongoing efforts to minimize the environmental and social impact of each product we design and produce. It is, therefore, a top priority to avoid the use of minerals in our products that may come from an unethical source.

*"We go beyond compliance because protecting people is the right thing to do."*

Eszter Kiss, Responsible Minerals Sourcing Program Manager at NXP Budapest, Hungary



As a responsible company, we must go beyond what is required by local, regional, and global laws. It is our duty to conduct due diligence to ensure the minerals we use in our products aren't from mines that exploit child labor, have unsafe working conditions, or are linked to human trafficking or civil war — also known as “conflict” or “blood” minerals.

*“We go beyond compliance because protecting people is the right thing to do,” explained Kiss. “By operating as a responsible company, our customers can be sure that they, too, are contributing to social well-being.”*

Since 2013 when we began chairing the World Semiconductor Council's conflict minerals team, NXP has been working to have a leading voice in the conflict minerals world. A year later, we joined the Responsible Minerals Initiative (RMI), and we currently chair the European Partnership for Responsible Minerals (EPRM), which brings together members of government and institutions, supply chains, and civil society organizations. We've also had a voice in the development of standards and compliance tools beyond our industry.

Tracking down data for conflict minerals requires ongoing vigilance. Our due diligence activities are based on the [OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas](#). The four commonly known conflict minerals are Tin, Tungsten, Tantalum, and Gold (3T&G) and, since we do not use minerals in their raw form or purchase them directly from mining companies or smelters, we engage with our suppliers to track and report the minerals' sourcing chain. (Supply chains from mine to smelter/refiner are on average 2-3 tiers deep, but some are eight tiers deep.)

Since 2017, our systems and processes in place have certified our supply chain status as Conflict-Free. With the help of our global procurement team and their engagement with our suppliers, our ECO-Products team frequently releases our list of smelters and their regions that are used in our products. We continuously engage and educate our suppliers while maintaining a comprehensive record of our actions and due diligence efforts.

We are going beyond what is legally required of NXP by collaborating with governments, Civil Society Organizations (CSOs), and many companies among various industries within the EPRM. The goal is to create better social and economic conditions for mine workers and local mining communities. NXP, as a strategic partner, supports other companies so they too can responsibly source and support the mine sites with responsible production. We openly share our knowledge on our supply chain due diligence, provide insights to get others started on responsible sourcing, and actively assist to support artisanal and small-scale miners on their journey to becoming responsible supply chain participants with greater access to the global market.

We also strive to be transparent on our continuing journey by [publishing](#) our policy for Responsible Mineral Sourcing on our website, along with various reports such as our Conflict Minerals Reporting Template (CMRT), Cobalt Reporting Template (CRT), Conflict Minerals Specialized Disclosure Form (Form SD), and any updated information that we're able to share.

*“We work closely with our procurement and New Product Introduction (NPI) teams to keep them informed of current requirements, but also what may be coming down the road,” Kiss added.*



# NXP'S DIVERSITY, EQUALITY, AND INCLUSION JOURNEY

FOCUSING ON DIVERSITY, EQUALITY AND INCLUSION (DE&I) TO FOSTER THE COMPANY'S CULTURE AND FUEL INNOVATION

*"Diversity of thought, perspective and experience increases exponentially when it spans across ethnicity, gender, age and sexual orientation. Such diversity fuels innovation, creativity and better decision making."*

Sherry Alexander, Head of Diversity, Equality and Inclusion, NXP Semiconductors

As an international company with nearly 30,000 employees in a variety of markets across the globe, NXP's focus on diversity, equality and inclusion (DE&I) is central to the culture we want to foster at NXP. DE&I enables our personal and professional success, and fuels the innovation our stakeholders expect from us.

Meet Sherry Alexander, NXP's new head of diversity, equality and inclusion. Alexander has a long history in the tech industry and a varied background that's tailor-made for her new role. As an experienced electrical engineer, Alexander understands the needs of technologists. Through her MBA and several years as a global quality director working with NXP's business lines, as well as global sales and marketing, and operations, she has hands-on experience with NXP across the globe. Alexander has 20+ years of active engagement in a variety of affinity groups, and spearheaded professional development and mentorship programs at several industrial firms. And as an African American woman, she's faced her own workplace diversity issues head-on.

"The opportunity to collaborate with NXP management and colleagues across the globe on the journey to establish

a more diverse, equal and inclusive culture at NXP is beyond exciting for me personally," said Alexander. "Diversity of thought, perspective and experience increases exponentially when it spans across ethnicity, gender, age and sexual orientation. Such diversity fuels innovation, creativity and better decision making." And the proof is in the numbers.

A [McKinsey report](#) found that companies in the top quartile for racial and ethnic diversity were 35% more likely to have financial returns above their respective national industry medians. Those in the top quartile for gender diversity were 15% more likely to have above-average returns. And employees also support DE&I, with [61%](#) believing diversity and inclusion strategies are not only beneficial, but essential.



*Sherry Alexander, NXP's head of diversity, equality and inclusion is expanding NXP's DE&I programs and initiatives to meet the needs of today's multicultural workforce and to establish NXP as the technology company where the most talented employees across the globe choose to work.*



## A more equal NXP

This year, Alexander has defined three strategic priorities to help make NXP a more diverse, equal and inclusive company:

### Demonstrating leadership commitment and accountability.

NXP's commitment begins at the top, starting with our President and CEO Kurt Sievers. In 2021, Kurt joined the Board of Directors for the Global Semiconductor Alliance (GSA), and signed the [GSA Women's Leadership Initiative CEO Pledge](#). Alexander notes that in terms of accountability, for the first time ever, NXP's [2020 Corporate Sustainability Report](#) includes a breakdown of NXP employees' ethnic and gender representation. Internally, NXP announced long-term representation targets and plans to drive more inclusion across the company and at every level.

### Fostering a more diverse, equal and inclusive culture through behaviors and the words we use.

NXP has been creating more awareness among its team members regarding unconscious bias and inclusive behaviors, the latter of which are at the forefront of fostering a more inclusive culture. Additionally, NXP's Inclusive Language Project kicked off more than a year ago with the goal of systemically eliminating and replacing offensive and insensitive terminology with industry aligned alternate terms. Ultimately, the goal of these efforts is to create and sustain a culture where everyone feels welcomed, valued, respected and accepted as they are, uniquely.

### Building and sustaining a qualified, diverse talent pipeline and support process.

This includes expanding initiatives to engage and recruit more diverse students, recent college grads and new talent in the marketplace, as well as fostering employee engagement through employee resource groups to give NXP team members a voice and support their growth and development. NXP aims to further diversify at all levels of the company and recently added two new members to its Board of Directors who meet this important criteria.

"NXP's DE&I focus includes providing all employees with a sense of belonging," Alexander said. "Being part of a caring, collaborative community, contributes to making what we do every day so rewarding."

## A more equal world

When asked what today's global workforce should do to be more conscientious of DE&I in their everyday work life, Alexander gave some practical advice.

*"Our company consists of thousands of unique individuals, each with a different background, history and experiences," Alexander said. "It is imperative that we create an inclusive culture to leverage this diversity. Part of achieving this is educating and encouraging employees to appreciate diversity within our own company and in society as a whole."*

*"Understanding our multicultural world, recognizing and challenging personal biases and a willingness to talk, listen and learn will lead to greater equality," she continued. "As a result, our hope is that employees will benefit not only professionally, but personally as well. A thoughtful, meaningful, focused approach on DE&I will undoubtedly lead to healthier and more productive lives."*





# NXP'S COVID-19 RESPONSE: EARLY, GLOBAL & EMPLOYEE- FOCUSED

*“As the pandemic spread, we implemented additional levels of our plan to respond and stay ahead of it.”*

In early January 2020, three weeks before the World Health Organization (“WHO”) [announced](#) that the coronavirus outbreak was a global public health emergency, NXP’s corporate crisis management team activated our pandemic preparedness plan, developed in response to our experiences during U1N1, as well as WHO and CDC guidance for governments.

Employees were encouraged to stay home if they felt ill and were not required to take vacation or sick time. Also, distancing and cleaning regimes were instituted.

*We were able to take immediate action once the crisis was declared, such as stopping business travel and severely curtailing access to our manufacturing facilities and offices, as well as instituting health assessments at entry for those who needed to be on-site.*

Considering our global footprint consists of approximately 80 manufacturing, design, and office facilities, it was imperative to quickly activate local crisis communication teams to stay in close contact with relevant government and health authorities as well as with one another. The priority was to communicate early and openly with our people and these local teams were key



to achieving this goal. Our corporate-level crisis management team was fully engaged as well, which included senior representatives from key departments who committed to initial daily meetings.

Some of the earliest actions took place at our facilities in China, which were closest to ground zero. A company-wide survey identified all employees and contractors who had recently visited Wuhan or Hubei province, and they were instructed to quarantine at home. The local crisis management team in China kept track of conditions and established a WeChat group to enable same-day decisions and communications with local employees. At the same time, individual departments established contact lists, sometimes referred to as “contact trees,” so that employees could be tasked with reaching each other, as needed.

As the pandemic spread, we implemented additional levels of our plan to respond and stay ahead of it.

When we closed our offices across the globe, we sent employees home, often with the equipment they needed to effectively work remotely. Meanwhile, ensuring the continued operation of our critical manufacturing sites required more robust and detailed work, starting with assessments to identify areas of criticality in terms of employee availability and cross-trained temporary



stand-ins. This informed our mitigation procedures, which ranged from altering employees' work schedules (identifying the minimum number of people necessary to keep operations running), installing physical barriers to limit exposure, and increasing the cleaning frequency of high-touch areas.

It also led us to recruit backup staff for key manufacturing positions, allowing us to provide the necessary 1.5+ months of training so they were in place if employees needed to stay home to recuperate or quarantine.

Another outcome of our planning was the quick purchase of personal protective equipment (PPE) which put us in a position, especially in the early days of the pandemic, to move supplies between facilities to meet the greatest needs.

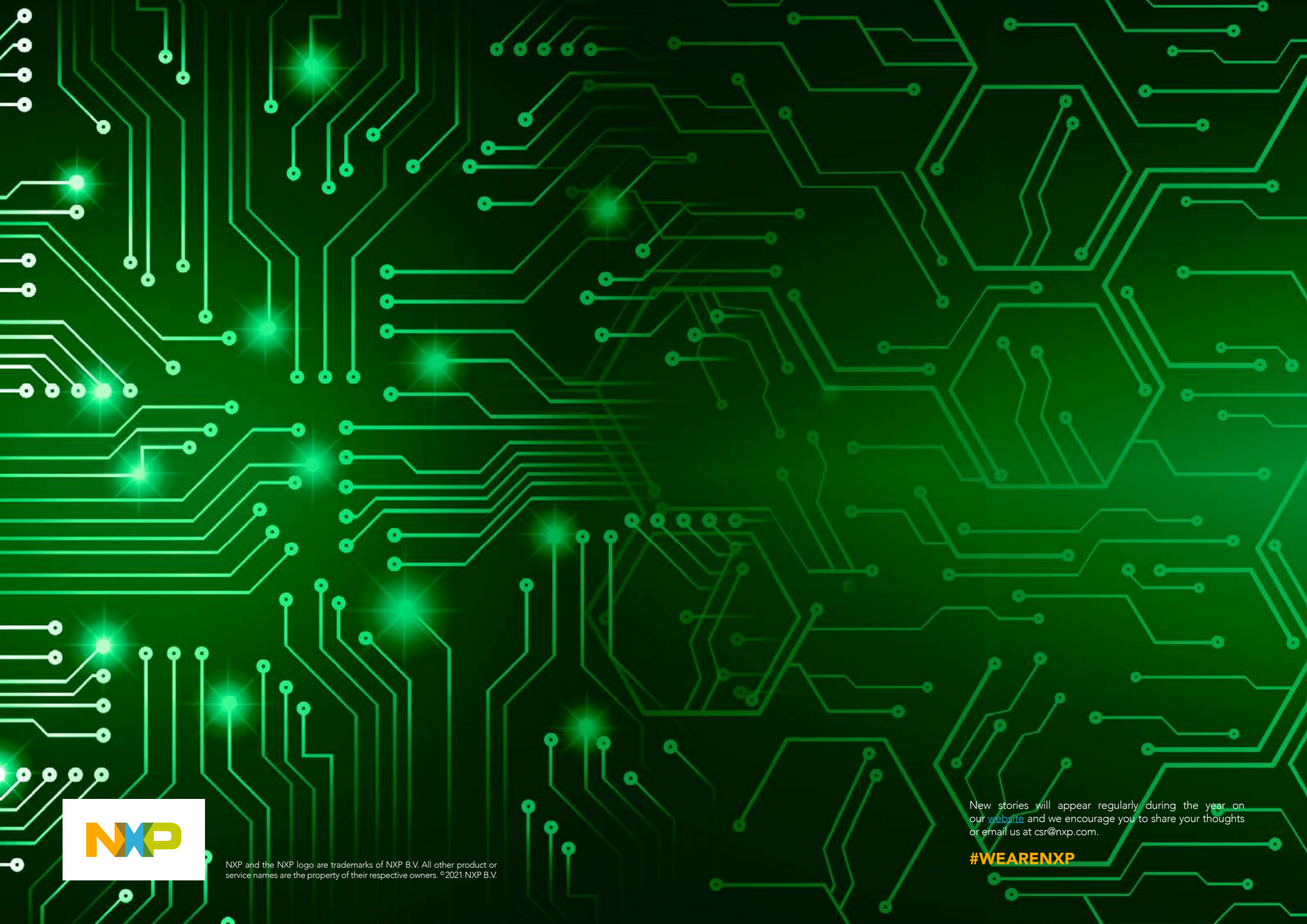
Environment, Health, and Safety (EHS) staff at each site implemented plans to keep the workplaces safe (overseeing sanitation, etc.) and provided health advisory services to employees (including a nursing hotline). Health self-assessments augmented with body temperature screening ensured that

potentially sick employees got the care they needed and that they and those they were in contact with quarantined at home.

At our employee call center in Austin, Texas the team hosted several intensive development events to work through the detailed requirements and processes for tracking COVID-19 cases and managing employee inquiries. The team maintained a 24/7 communications service to support employees' needs, whether it was about close contact, direct exposure, or what to do if you receive a positive test. Our CEO and

other senior leaders of the company even reached out to employees who were ill to offer support and encouragement.

Looking back, it's obvious to us that our preparedness plan provided the framework for us to weather the storm of the pandemic, but what made it real – what truly mattered – was the commitment and passion of our people. The plan would have failed had they not embraced and implemented it, and their intelligence, flexibility, and conviction not only preserved NXP's business but made it even stronger.



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New stories will appear regularly during the year on our [website](#) and we encourage you to share your thoughts or email us at [csr@nxp.com](mailto:csr@nxp.com).

**#WEARENXP**