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# O1 Introduction



# To all our valued stakeholders



**Taso Arima**CEO & Managing Director

IperionX was founded with a mission to build an end-to-end, low-cost, and sustainable titanium supply chain in the United States.

In this third annual Sustainability Report we share our continued journey to revolutionize the metals and minerals industry. Low-carbon and low-cost titanium is fundamental to a sustainable future for our planet and to that end, sustainability is embedded into our culture, business planning, and operations.

This past year has been transformative for both our Metals Technology and Critical Minerals divisions. We continued our rapid growth of our Metals Technology business, as we built our new Titanium Manufacturing Campus in Virginia, where we are scaling our portfolio of patented titanium technologies to produce 100% recycled low carbon titanium.

We plan to disrupt the metals supply chain with these proprietary technologies and accelerate the adoption of sustainable titanium in advanced industries, including consumer electronics, aerospace, defense, medical, micromobility, hydrogen and automotive. With our patented titanium technologies, we can combine our low-cost HAMR titanium powder with HSPT 'forging' technology to produce forged near-net shape titanium components. These near-net shape titanium components reduce waste and increase total production, supporting a titanium circular economy.

Our Critical Minerals division also achieved an important milestone this past year with the approval of key permits for our Titan Critical Minerals Project in Tennessee. The Titan Project is a world-class asset that can play a pivotal role in reducing America's acute reliance on critical mineral imports and re-build a sustainable domestic supply chain.

Our commitments to continued engagement with our stakeholders, including our investors, customers, and the communities in which we operate, are paramount to achieving our mission, enabled by our exceptional team.

Thank you for joining us on the IperionX journey, as we help create a more sustainable future with titanium.

**Taso Arima** CEO & Managing Director

# IperionX FY2024 in numbers



#### **Environment**

#### 100%

Recycled Content
Percentage Validated by
UL for IperionX Titanium
Powder Produced
in Utah for the second
year in a row

### >90%

Estimated decrease in carbon footprint of IperionX 100% Recycled Spherical Titanium Powder compared to conventional titanium powder production per our LCA

### 57%

Renewable energy percentage of total operational electricity demand



#### Social



Recordable safety incidents

29

Global health and safety policies rolled out to all employees

44

Community events IperionX participated in

\$27,500

Scholarships awarded to support STEM education

\$28,730

Community donations made to support local initiatives

#### >100

Employee volunteer hours supporting our communities



#### Governance

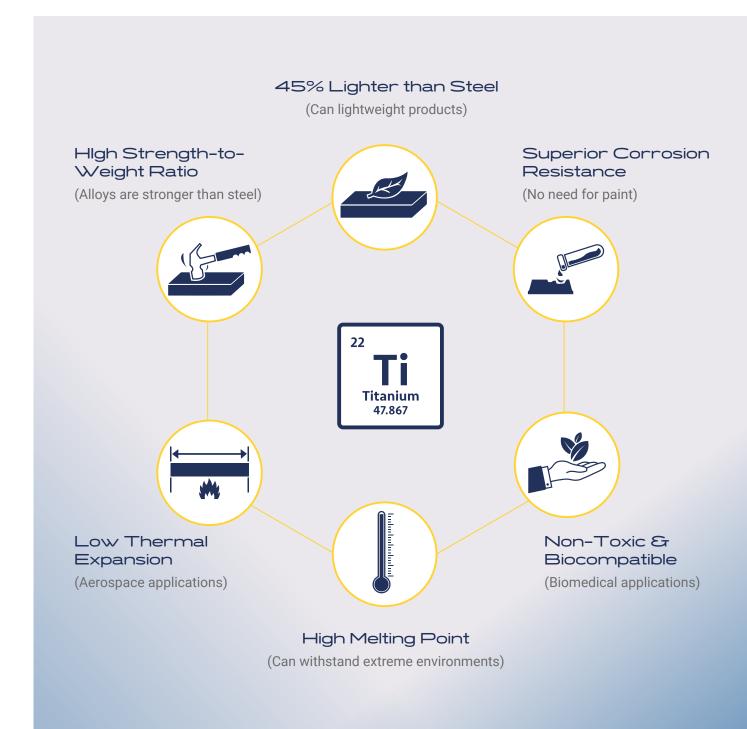
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Meetings of the ESG Committee

### 100%

Percentage of IperionX employees and Board Directors who completed Code of Conduct and ethics training

# Titanium is a superior metal due to its material properties



06

# Our technologies revolutionize titanium processing

# IperionX's titanium technologies can provide a sustainable solution for wider adoption.

Proprietary sustainable technologies provide IperionX with the potential to disrupt the global titanium supply chain by cutting carbon emissions and costs and bringing a fully circular titanium supply to the U.S. market.



#### Low-Carbon

(Zero Scope 1 and 2 emissions)



#### **Circular Supply Chain**

(Scrap and end-of-life recycling)



#### **No Melt Process**

(Lowers energy use)



#### 100% Recycled

(UL Validated, infinitely recyclable)



#### **Low Cost**

(Competitive with stainless steel)



#### **U.S. Mineral Supply**

(Vertically integrated)





# The current Kroll process is energy, carbon, and cost intensive.

The Kroll process, while a breakthrough in the 1940s, has limited titanium's wide-scale adoption and potential, largely due to its high economic and environmental price tag.



#### **High Carbon Emissions**

(Petroleum coke as direct carbon source)



#### **Chemical Intensive**

(Hazardous chemicals used)



#### **High Melt Temperatures**

(Increases energy use)



#### **Recycling Limited**

(Kroll process relies on virgin minerals)



#### **High Cost**

(Has historically limited titanium applications)



#### **High Energy Use**

(Increases carbon emissions and cost)

Contents

### Welcome to IperionX

At IperionX, we are on a mission to build an end-to-end, low-cost, and sustainable titanium supply chain in the United States.

IperionX is a public company with its U.S. headquarters in North Carolina, listed on both the Nasdaq (Nasdaq: IPX) and the Australian Stock Exchange (ASX: IPX).

Sustainability helps guide our business planning and operations. We are working to facilitate the transition towards a more sustainable and circular titanium metal supply chain for advanced industries including consumer electronics, aerospace, defense, medical, micromobility, hydrogen, and automotive.

For IperionX, our commitment to sustainability isn't limited to the production of 100% recycled low-carbon titanium.

Through the vertical integration of our operations including both our patented metal technologies and the Titan Critical Minerals Project, we can produce low-cost and low-carbon titanium metal from both scrap titanium and domestic titanium minerals.



### Our U.S. operations

IperionX is proud to bring domestic production of titanium back to the United States.

Our Titanium Manufacturing Campus is located in Halifax County, Virginia, where we are rapidly and efficiently scaling up our commercial titanium production process.

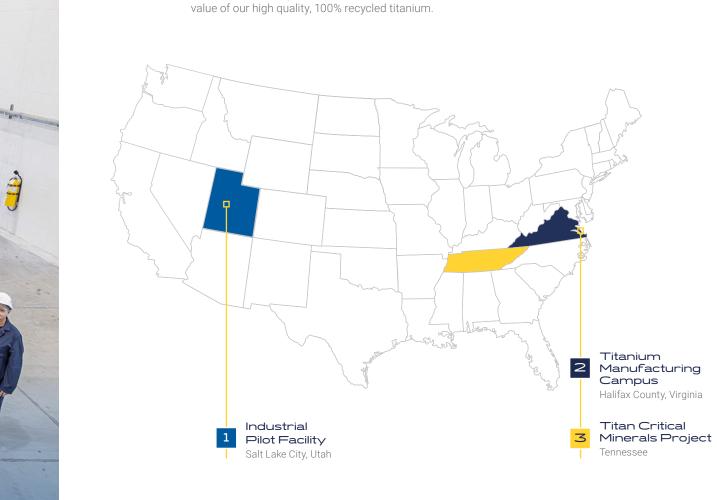
Our Industrial Pilot Facility in Utah has been producing titanium metal powder with proprietary technologies since 2019 and will continue to serve as a research and development center.

Our Titan Critical Minerals Project in West Tennessee will provide vertical integration for our company as a source of titanium and other critical minerals.

Over the past year, we have forged new and ongoing collaborations with a diverse set of partners in industries ranging from aerospace to luxury goods to defense. These collaborations have enabled us to prove the commercial value of our high quality, 100% recycled titanium.

We see major opportunities across the automotive, aerospace, consumer electronics, and defense sectors that need titanium products to meet their demanding performance specifications.

The significant demand for a low cost, sustainable, and secure source of titanium is becoming increasingly apparent, with growth in titanium usage for applications such as consumer electronics and renewable energy. IperionX is positioned to provide a sustainable domestic source of titanium to meet this growing demand.



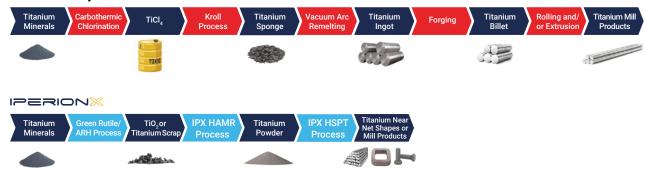
Introduction

# Breakthrough titanium technologies that can revolutionize the global titanium industry

IperionX's breakthrough titanium metal technologies have the potential to substantially decarbonize the global titanium industry, facilitate a circular titanium supply chain, and re-shore U.S. titanium for national security interests. These technologies can produce titanium products that are lower in cost, energy, and carbon emissions than traditional titanium processes.

IperionX's simple, low waste, vertically integrated solution for producing titanium near net shapes or mill products

#### **Current Industry**



#### **HAMR and HSPT Technologies**

Hydrogen Assisted Metallothermic Reduction (HAMR™), a core patented technology, effectively deoxygenates titanium scrap to produce low-oxygen titanium powders. Using this proprietary technology, IperionX can recycle scrap titanium to produce 100% recycled titanium powders – spherical powder for use in additive manufacturing or angular powder for use in powder metallurgy.

Notably, these technologies use no direct carbon sources and therefore produce no direct carbon emissions during the process, unlike the Kroll process. Low temperature processing results in much lower energy use than the Kroll process, which greatly reduces the electrical requirements and associated indirect carbon emissions of the patented technologies.

Additionally, the patented Hydrogen Sintering and Phase Transformation (HSPT™) technology process enables the low-cost production of near-net-shape and additively manufactured titanium parts with similar properties to traditional forged or wrought parts. By combining powder metallurgy or additive manufacturing with the HSPT processing technology, IperionX can produce near-net-shape titanium parts with an ultra-fine-grain microstructure. These parts have the potential to be produced at significantly lower cost and with greatly reduced scrap generation, while achieving material performance properties similar to those produced by forging. By producing titanium parts with reduced scrap generation, these technologies further enable a titanium circular economy.





#### **Green Rutile & ARH Technologies**

IperionX's proprietary mineral upgrading technologies, Green Rutile™ and Alkaline Roasting and Hydrolysis (ARH™), can add value to titanium minerals to produce low-cost, sustainable, and high-purity titanium feedstock for use at HAMR titanium production facilities.

The patented Green Rutile process upgrades lower grade titanium minerals into higher-grade synthetic rutile titanium product plus a co-product of purified iron oxide powder that could be used for metal alloying or produced as a pre-cursor for lithium-iron-phosphate (LFP) batteries.

The scope 1 and 2 greenhouse gas emissions from the current production of synthetic rutile and titanium slag are significant, as they use coal as a reductant with high energy intensity. In contrast, IperionX's Green Rutile process does not use coal, and when combined with renewable electricity, has the potential to result in high-quality titanium product with low carbon emissions.

IperionX's patented ARH™ technology can further upgrade rutile titanium minerals, including Green Rutile, resulting in +99% titanium dioxide ( ${\rm TiO_2}$ ) feedstock, a high-purity feedstock for the HAMR titanium production process.



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## Titanium Manufacturing Campus Virginia

IperionX continued the expansion of our operations in Virginia this past year with the introduction of the Titanium Manufacturing Campus, which includes the Titanium Production Facility (TPF) and the Advanced Manufacturing Center (AMC), with operations scheduled to commence in Q4 2024.



The Titanium Manufacturing Campus represents an important step forward in our mission to build a sustainable domestic titanium supply chain in the U.S.

Commissioning of the Titanium Production Facility is underway, where high-quality and low-cost angular and spherical titanium powders will be produced. Development of the TPF will facilitate IperionX's production of 100% recycled titanium powder on a commercial scale, from recycled titanium scrap feedstocks using our breakthrough titanium technologies. These titanium metal powders will be marketed to a wide range of customers for use in additive manufacturing and powder metallurgy. Production is targeted to commence at the facility in fiscal year 2025. Once successfully in operation, there are plans for a simple modular expansion of the facility to larger scales of production. The development of the facilities will position IperionX as a global supplier of 100% recycled, low-cost and low-carbon titanium metal powders.

The high-quality titanium powders will also be an important low-cost internal feedstock for the Advanced Manufacturing Center, where they will be utilized to manufacture a wide range of higher value titanium products such as semi-finished traditional mill products, near-net-shape forged titanium components and high-value titanium products using additive manufacturing, also known as 3D printing. By using near-net-shape forging and additive manufacturing, IperionX can produce titanium parts with significantly less titanium waste than is produced using traditional subtractive manufacturing techniques. This low-waste titanium part production using our 100% recycled titanium powders further enables a titanium circular economy.



As part of the IperionX sustainability commitment at the Titanium Manufacturing Campus, we utilize 100% renewable energy on site. This renewable energy is procured via wind and solar renewable energy certificates from local energy provider Dominion Energy.

We are building out a diverse team of engineers, operators, technicians, and administrative staff at the Titanium Production Facility. We will continue to grow our exceptional team as we scale in Virginia.

As part of the IperionX sustainability commitment at the Titanium Manufacturing Campus, we utilize

100%

renewable energy on site.

### Titan Project

IperionX's Titan Critical Minerals Project in West Tennessee is the largest JORC-compliant mineral resource of titanium, rare earth and zircon minerals sands in the U.S.

Introduction



An important milestone was achieved in fiscal year 2024 with the approval of key permits for the Titan Project.

The Titan Critical Minerals Project is controlled by IperionX, enabling the potential to both vertically integrate with our proprietary titanium metals technologies, and provide a U.S. source of titanium minerals to our customers. The Titan Project can play a pivotal role in reducing America's acute reliance on critical mineral imports and re-build a sustainable domestic supply chain that is essential for advanced U.S. industries. Once operational, this world-class asset will supply critical minerals including titanium, zircon, and rare earth minerals for decades.

The Titan Project aims to serve as a global model of sustainability and land stewardship throughout its lifecycle. Once operational, mineral extraction activities at the Titan Project will be low impact, requiring no drilling or blasting. Completing the project in a phased approach with progressive reclamation will minimize our active operations to a small footprint at any given time. We are working with the University of Tennessee Institute of Agriculture to research methods of restoring the land in ways that will improve soil fertility and benefit a biodiverse ecosystem. We are committed to having a net positive impact on the land in all our operations.

# 02 Our Governance



### Our sustainability governance

#### **Our Approach to Sustainability**

IperionX was founded with sustainability as a core tenet of our mission to revolutionize the U.S. titanium supply chain. Our goal is to set the standard of sustainability practices in the metals and minerals industries. We strive to embed sustainability into every level of the organization, our operations, and our products as we grow.

#### The Board of Directors

The IperionX Board of Directors determines the company strategy and oversees its implementation. Comprising six members, the Board meets quarterly to monitor and assess significant business opportunities as well as risks. Its goal is to ensure the company is equipped with the resources and tools needed to accelerate a domestic titanium circular economy. The Board adopted its charter in 2021, which was designed around a commitment to build shareholder value, and an emphasis on responsible governance and ethical leadership.

The Board of Directors has established three standing committees and their charters are available here:

- 1. Audit Committee
- 2. Remuneration and Nomination Committee
- 3. ESG Committee

#### **Board of Directors**



**Todd Hannigan**Executive Chairman



**Anastasios Arima**Executive Director



Melissa Waller Independent Non-Executive Director



Lorraine Martin Independent Non-Executive Director



Beverly Wyse
Independent Non-Executive
Director



Vaughn Taylor
Independent Non-Executive
Director

#### A Diverse Board

As an industry leader, IperionX takes pride in achieving 50% female representation on our board, showcasing our commitment to diversity and inclusion. We believe that diverse perspectives throughout our governance structure will drive innovation and excellence across all levels of the company.

#### **ESG Committee**

IperionX established an ESG Committee during fiscal year 2022. This dedicated committee reflects our commitment to sustainability and responsible business practices throughout the organization. By holding ourselves accountable through the ESG Committee, we prioritize long-term sustainable strategies that benefit our business, the environment, and society at large.

Our vice president of sustainability continues to oversee the daily management of our sustainability initiatives and updates the ESG Committee on a quarterly basis.

## Progressing Sustainability Reporting Standards

Our ESG Committee Chair. Melissa Waller. was honored to be a member of the multi-stakeholder expert working group that developed a new Mining Sector Standard for GRI (Global Reporting Initiative), the global standard setter for impact reporting. This global group of 20 members brought diverse perspectives and expertise to help ensure that the new sector standard enables organizations to transparently disclose how they contribute, or aim to contribute, to sustainable development. The GRI Mining Sector Standard was released in February 2024 and comes into effect for reporting starting in January 2026. IperionX has referenced this new Mining Sector Standard in our GRI Appendix as applicable to our current operations.



female board representation



independent directors



**Video Link** Learn more about our sustainability program and goals in this short clip featuring our Board Director Beverly Wyse.



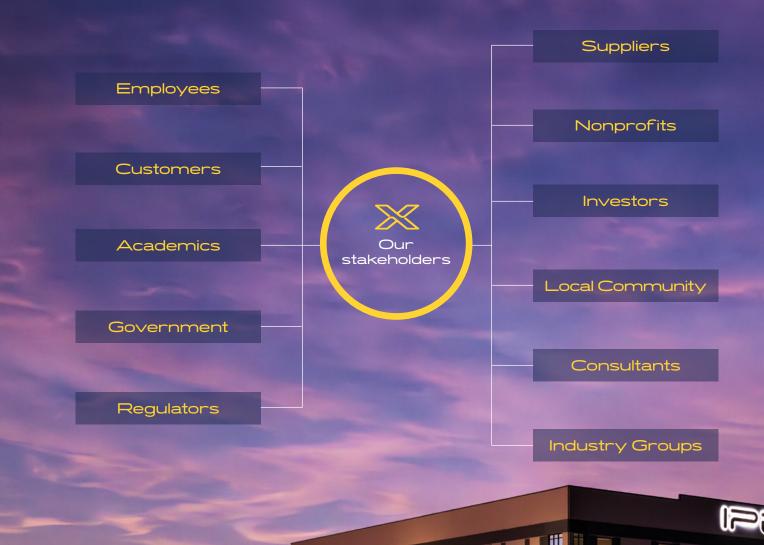
"It has been an honor to be part of the diverse stakeholder expert working group for the GRI Mining Sector Standard and to be part of the February release of this important standard this year. As Chair for the ESG committee at IperionX, it was meaningful to see the committee and company begin to integrate the new GRI Mining Sector Standard as part of the annual sustainability reporting process as an early adopter. These additional sector standards will increase transparency in reporting around these critical mineral mining standards, supply chain issues, and the circular economy impacts of mining that all continue to be at the forefront for this sector."

#### Melissa Waller

Independent Non-Executive Director

# Our stakeholders are important partners

The IperionX baseline materiality assessment completed in 2021 was an important early milestone in our sustainability journey, setting the framework for our initial sustainability strategy. Our materiality assessment identified the most important economic, environmental, governance, and social topics to the company as guided by our stakeholders (both internal and external) and where we are positioned to have the most significant impacts.



### Our sustainability strategy

The rapid evolution associated with a quickly growing company necessitates vigilance to identify and address the shifting landscape of our material topics and ensure continued alignment of our priorities with those of our valued stakeholders. In fiscal year 2025 we will focus on the following priority material topics to guide IperionX's sustainability strategy:



# Progressing our sustainability initiatives

IperionX develops annual goals and initiatives aligned with our material ESG and sustainability focus areas. These annual goals and initiatives are reviewed on a quarterly basis by management and the ESG Committee to confirm continued business alignment. We made progress towards each of our fiscal year 2024 goals and have updated our fiscal year 2025 initiatives to reflect our next steps as we grow and evolve to become a leader in sustainable practices in the metals and minerals industry.

#### **FY2024 PROGRESS**

#### Governance

100% of IPX employees & Board completed online Code of Conduct & Ethics Training

#### **FY2025 INITIATIVES**

- Continue Governance Training Series
- Implement Supplier Code of Conduct Program



#### Environment

- Completed comparative LCA on IperionX spherical titanium powder
- Progressed work on native grass test plots and carbon sequestration opportunities in TN
- Published Corporate Statement on Sustainable Development
- Implemented centralized travel management

- Obtain UL validation of 100% recycled content at the Titanium Manufacturing Campus in VA
- Continue rehabilitation studies in TN
- Consider feasibility of Green Building Certification for Titanium Production Facility in VA



#### **FY2024 PROGRESS**

#### Health and Safety

- Trained all employees on Global Environmental Health and Safety (EHS) policies
- Implemented training management software

#### **FY2025 INITIATIVES**

- Continue implementation of Global EHS polices at operational locations
- Implement Contractor
  Management
  Program



#### Workforce and Community

- Hired two sustainability interns and multiple metals technology interns
- Awarded \$27,500 in STEM scholarships to 14 high school and college students in our local communities
- Donated \$28,730 to our communities in VA and TN
- Our employees volunteered at total of over 100 hours in UT, TN, and NC

- Continue to support the next generation of STEM leaders through scholarships and internships
- Continue to support our communities through donations and volunteer efforts
- Develop our corporate Responsible Business Policy



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# We are committed to supporting the SDGs

The United Nations Sustainable
Development Goals (UN SDGs)
were adopted by all UN Member
states in 2015 and aim to be
a call to action to end poverty,
protect the planet, and ensure that
by 2030 all people enjoy peace and
prosperity. The 17 goals provide
a framework for organizations
to address environmental and
social issues, such as climate
change and gender equality.

At IperionX, we strive to help advance the achievement of these SDGs through our business actions and initiatives. IperionX's ESG efforts align in support of the UN's SDGs, including our commitment to resource efficiency and the low-carbon transition, and protection and enhancement of the environment.

As shared in the IperionX Statement on Sustainable Development on our website, we will focus our support of the UN SDGs on those that are relevant to our business operations and that align with our priority material topics. We have identified eight SDGs for which IperionX will initially focus and can meaningfully contribute to:

We are focused on aligning our sustainability program objectives and our operations with the eight identified SDGs and strive to affiliate our corporate charitable giving with efforts that align with these identified SDGs. We will evaluate our focus on the SDGs on an annual basis to ensure continued alignment with our business operations and will enhance and expand our focus as applicable. Throughout this annual sustainability report we've included details regarding IperionX's progress and continued support of the SDGs and the associated targets.

#### **IperionX supports the Sustainable Development Goals**



















# Our values of ethics and compliance

IperionX maintains a culture of business ethics and legal compliance in our mission to become the leading developer of a sustainable U.S. titanium supply chain. As an industry leader, we know that the value we produce for shareholders, customers, and other stakeholders depends upon our employees' dedication to taking care of each other, and the communities in which we work and operate.

At IperionX, we take pride in conducting our business with honesty, integrity, and in accordance with ethical principles and legal requirements.

Our Code of Conduct was developed to guide the standards of conduct for all IperionX officers and employees. In addition, IperionX carefully complies with the laws and regulations that apply to its business as a publicly listed company in both the U.S. and Australia. Compliance with these standards is overseen by our Chief Legal Officer, the Company Secretary, and the various committees of our Board. During fiscal year 2024, we had no incidents of non-compliance, corruption, ethical violations, fines, sanctions, or legal actions taken against us.

100%

of our employees and Board Directors completed our Code of Conduct training course in FY2024.

We support our employees through training and communication efforts to keep our commitment to ethics and compliance at the forefront of everything we do. As part of our employee onboarding, all new hires are required to understand and adhere to the IperionX Code of Conduct and take our mandatory training courses on both our Code of Conduct and Ethics and Insider Trading prevention.

We are driven by our values in our mission to build a low-cost and sustainable titanium supply chain in the U.S.



### Cybersecurity at IperionX

## As a future facing organization, we understand that cybersecurity is an integral component of our governance and sustainability strategy.

Our cybersecurity focus ensures the integrity of our data and systems, the confidentiality of our proprietary intellectual property, and the availability of resources that our employees require to be as productive and effective as possible. Our commitment to cybersecurity is a company-wide initiative starting from the Board of Directors and extending to every individual within the organization, inclusive of contractors and consultants. Our cybersecurity best practices ensure that we are doing everything possible to protect our systems and data and provide our users the cybersecurity awareness and training they need to strengthen our human firewall. Through continuous improvement and innovation, we strive to protect our digital environment.

#### FY2024 Cybersecurity Highlights:

- Hired a Head of IT to lead all IT and cybersecurity initiatives.
- Deployed 24/7 Managed Detection and Response (MDR) services and Managed Security Services Provider (MSP) services to monitor our cyber landscape and ensure proper detection and response methods are in place to respond to potential threat actors.
- Initiated full IT system and software impact assessments for all existing and new software to ensure full impact understanding and compliance of all software and systems.
- Implemented least-privileged access security measures to ensure that users only have access to the data and tools required for their specific roles and job-related tasks.
- Trained 100% of our employees via a robust cybersecurity training program that starts with new employee onboarding and includes a minimum of quarterly deployed trainings to all employees.

- Deployed ongoing phishing simulation emails to increase our employee's knowledge and email scrutiny.
- Received a Security Awareness
   Proficiency Assessment (SAPA) score
   for our employees that exceeds the industry benchmark score by over 10%.
- Began implementation of NIST 800-171 cyber requirements to obtain full Cybersecurity Maturity Model Certification (CMMC) Level 2 compliance during fiscal year 2025 to meet U.S. government requirements.
- Engaged several new IT partners
  to ensure proper resources are in place
  to assist with our rapid company growth
  and ever-changing IT landscape.



"At IperionX, we recognize that cybersecurity is a critical component in protecting our operations and data as well as playing a crucial role in our commitment to sustainability. A secure cyber environment is the foundation of our cyber initiatives and protecting not only our digital assets and intellectual property, but our stakeholder's data as well, is critical to our company's overall success."

**Kristopher Echols** Head of IT

# O3 Our people and communities



Governance

### Our world-class team

Introduction

As we continue to build a world-class team at IperionX, we aim to foster a culture of inclusivity by recognizing the uniqueness of every member of our team.

As a company that is innovating and growing, we value how every team member contributes to and advances our shared mission. We know that diversity accelerates innovation, and we are committed to building a diverse team within our management and workforce. Our growth strategy to achieve our mission relies on empowered IperionX employees and the culture we build together.

During fiscal year 2024, we grew from 38 to 47 full-time staff, including employees, independent contractors, and temporary workers. Today, 25% of our senior leadership is female and 35% of our remaining full-time workers are female. As we continue to grow, diversity, equity, and inclusion (DEI) policies and practices are being developed to help us create the inclusive work environment needed to continue to innovate and lead.













By supporting women in leadership roles, IperionX supports the UN SDG Goal 5: Achieve gender equality and empower all women and girls. Specifically, target 5.5 aims to ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

By providing inclusive employment opportunities, lperionX supports the UN SDG Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Specifically, target 8.5 aims that by 2030, full and productive employment is achieved and decent work for all women and men, and equal pay for work of equal value.

# Safety is a core value at IperionX

Introduction

Protecting the health and safety of all our stakeholders, including our employees, contractors, visitors, and communities, is a core value of IperionX and fundamental to our future success. We take providing a safe workplace seriously, by going beyond compliance with all applicable occupational and environmental health and safety laws and regulations governing our operations, and taking proactive steps to improve workplace safety and employee wellbeing.

IperionX aims to foster a culture of workplace empowerment where employees have the training, knowledge, and tools they need to safely complete their work, as well as to identify, assess, and control risks of occupational illness or injury. We have created a work environment where it is safe to speak up and stop work to assess potential workplace hazards. Our commitment is to continually improve our practices to attain the highest possible levels of safety for all our valued stakeholders.

We are proud to continue to report

Zero

recordable health and safety incidents involving our employees and communities to date.





"By comprehensively rolling out our Global Health and Safety policies this year, our goal is to ensure all our employees are actively engaged in our overall Safety Management program and have the tools, resources, and training they need to work safely."

**Mari Gilmore**VP of Sustainability

We are continuing our journey of establishing an Environmental Health and Safety (EHS) Management System at IperionX. This system helps us identify, assess, and control risks that could impact the health and safety of our employees and our communities. Ongoing improvements to this system are made with oversight by our Chief Operating Officer and the ESG Committee.

In fiscal year 2024 we made the following progress in our Environmental Health and Safety Management System development:

- EHS Committee This internal group of management and staff continued to meet every month to oversee our corporate EHS program.
- Global Corporate EHS Policy Trainings In fiscal year 2024 we trained all our employees on our complete set of 29 corporate global policies developed in fiscal year 2023.
- Safety Trainings Our staff participated in targeted safety trainings as applicable to their specific roles this year.
- Process Hazard Analysis This effort included detailed assessments on our operations at the Titanium Manufacturing Campus in Virginia as part of our proactive planning for safety.

Looking ahead to fiscal year 2025, we are focused on the following initiatives:

- Global EHS Policy Implementation –
  We are identifying priority areas of focus
  to implement our global EHS policies
  in all our operational areas.
- Contractor Safety Program In accordance with our global Contractor Management Policy, we will focus on implementing a comprehensive Contractor Management Program.

# IperionX employees logged over

1,000 hours of EHS trainings in FY2024.





**Video Link** Learn more about our EHS Program in this short clip featuring our Board Director Lorraine Martin and our VP of Sustainability.

# Our commitment to the community

At IperionX, we aim to build meaningful relationships within the communities where we operate to foster sustainable environments and thriving local economies. Operating in distinct regions of the U.S., our community support is tailored to meet the specific demographics, needs, and opportunities within each place. Fostering relationships of trust and mutuality are at the core of our community engagement efforts.

IperionX can be found giving back throughout the year in each of the communities where we operate. From attending the county fair to sponsoring the local YMCA youth aquatics team, we meet people where they gather and invest in community needs that matter most to our stakeholders. In fiscal year 2024, IperionX was proud to donate over \$28,500 to our local communities and our employees devoted over 300 hours to volunteer efforts and community outreach events.

At IperionX, we believe that taking good care of the people, places, and future of our communities creates reciprocity of trust and support needed for healthy on-going relationships with them.



IperionX was proud to continue to partner with the Native American Indian Association (NAIA) of Tennessee by supporting the NAIA's 42nd Annual Education Pow Wowheld in 2023.





### Third annual IperionX Xtreme Halloween event







#### Over

# 500

costumed trick-or-treaters enjoyed ice cream, candy, and a spooky stroll through our glowing office.

On October 31, 2023, IperionX held its third annual Halloween celebration in Camden, Tennessee. More than 500 costumed trick-or-treaters joined the celebration to indulge in ice cream, Halloween candy, and stroll through our eerie glowing office. Community members eagerly await this event each year, as it provides a free and safe space to celebrate Halloween with families of all ages. Our team works to ensure every community visitor feels included and welcome at this event, and all our community events throughout the year.

IperionX was pleased to provide the trick-or-treaters with free safety tips and supplies, such as glow sticks and other reflective materials, to ensure everyone in the community had the necessary knowledge and tools to stay safe all night long.

We are grateful to the West Tennessee community for their continued engagement with the IperionX Xtreme Halloween event and look forward to future years!

# We support STEM education

At IperionX we believe that access to inclusive and equitable quality education will power the innovation needed to ensure a sustainable and economically vibrant future. Creating pathways for the next generation to develop skills in science, technology, engineering, and mathematics (STEM), results in a pipeline of leaders positioned to advance our work, and our industry.

In fiscal year 2024, IperionX awarded \$27,500 in scholarships to support access to 14 students' STEM education, including high school students in West Tennessee and Halifax County, Virginia, college engineering students in Utah and Virginia, and college geology students in Tennessee. IperionX is honored to have partnered with the Native American Indian Association (NAIA) of Tennessee to award one of the 14 scholarships to a Native American student in Tennessee pursuing a career in STEM.

#### Congratulations to our 2024 Scholarship Recipients!



Kayleigh Freeman Halifax County High School Halifax County High School STEM Scholarship



**Genevieve Krass** University of Tennessee Knoxville

Minerals and Metals Diversity Scholarship



**Griffin Say** University of Tennessee Chattanooga

Native American Indian Association STEM Scholarship



Remington Omdahl
Brigham Young University
Sustainability in the Titanium
Age Scholarship







Ali Alejandro Camacho Araujo University of Utah Engineering Diversity Scholarship



Ariana Torres Nieves University of Tennessee Knoxville Metals Supply Chain Scholarship



Andrew Wan University of Utah Metals Supply Chain Scholarship



**Eric Reed**Virginia Commonwealth
University
Metals Supply Chain
Scholarship

### Proud members of the business community

IperionX participates in both industry associations and in local chambers of commerce and economic development organizations in the communities where we operate. We are members of global and regional organizations that advance our industry.

















#### **Local Chamber Memberships:**



Halifax County Chamber of Commerce, VA



Tennessee Chamber of Commerce



Carroll County Chamber of Commerce, TN



Paris-Henry County Chamber of Commerce, TN



McKenzie Chamber of Commerce and Industry, TN



Benton County - Camden Chamber of Commerce, TN

# Recognized for sustainable innovation and reporting

IperionX was pleased to be recognized in fiscal year 2024 for our sustainable titanium innovation and sustainability reporting.

#### R&D 100 Award

In August 2023, IperionX along with Dr. Zak Fang won a prestigious R&D 100 Award for its innovative Hydrogen Assisted Metallothermic Reduction (HAMR) titanium production process - a low cost and sustainable process for producing titanium metal powder used for both additive manufacturing and traditional powder metallurgy manufacturing methods. The R&D 100 Awards is the only global science and technology competition that recognizes new commercial products, technologies and materials for their technological significance. The R&D 100 Awards are recognized in industry, government, and academia as a mark of excellence for the most innovative ideas of the year.

#### **SEAL Sustainable Innovation Award**

In May 2024 IperionX was honored to accept the 2024 SEAL Sustainable Innovation Award in recognition of our sustainable and transformative titanium production. SEAL (Sustainability, Environmental Achievement & Leadership) is an environmental advocacy award that honors leadership through business sustainability.

#### **AMGTA Recognition**

In June 2024, IperionX was honored to accept the Additive Manufacturer Green Trade Association (AMGTA) 2024 Sustainability Impact Recognition in both Environmental Sustainability Research for our LCA work and in Sustainability Reporting for our 2023 Annual Sustainability Report. The AMGTA is a global advocacy group focused on promoting sustainable additive manufacturing industry practices.



# 04 Our Environment



# Our environmental responsibility



IperionX is deeply committed to environmental responsibility and leaving a legacy of positive impact. This is central to our mission to be the leading developer of low carbon, sustainable, critical material supply chains here in the U.S.

The proprietary titanium technologies we are scaling reflect our environmental responsibility, fundamentally reducing energy requirements and chemical and carbon intensity, and enabling full circularity and 100% recycled content. We aim to lead the decarbonization of the metals supply chain and help meet our global and national climate goals.

Our commitment to environmental responsibility has been at the forefront of our business from the beginning. We are passionate about the diverse ecosystems of the communities where we operate, and proactively plan our future

operations to minimize our impact. We evaluate our operations' potential impacts on the air, land, and water critical to the biodiversity of the environments in which we work.

We aim to create the least invasive and most sustainable processes and operations by performing life cycle assessments and environmental studies. We validate our environmental claims with independent reviews and third-party certifications.

Every aspect of our work in fiscal year 2024 at IperionX reflected in this report is aligned with one key intention: to have a net positive impact on the global, national, and local level, in all environments in which we operate.

# Titanium supports industrial decarbonization

IperionX was pleased to be recognized in fiscal year 2024 for our sustainable titanium innovation and sustainability reporting. Our proprietary technologies can decarbonize the titanium metals industry at scale by producing titanium metal with zero associated Scope 1 and 2 emissions.

By making titanium cost competitive with other metals like stainless steel, we can do even more by leveraging its superior properties for expanded applications that support decarbonization of other industries.

#### **Automotive**

The potential application of titanium for lightweighting vehicles, including electric vehicles, provides a very large prospective market for widespread use of titanium to improve fuel economy and extend battery range, therefore helping to decarbonize the automotive industry.

#### Aerospace

The aerospace industry is a leading market for high-performance titanium alloys. Titanium's exceptional weight-to-performance ratio, fatigue strength, and resistance to high temperatures enhance fuel efficiency and boost the overall lifespan of aerospace components, helping to decarbonize the aerospace industry.

#### Industrial

Titanium's exceptional resistance to corrosion by chemicals makes it a preferred material for applications in high-performance chemical processing, such as reactors, heat exchangers, and desalination. The use of titanium in these industrial applications helps to increase the lifespan of the industrial equipment components and therefore reduce the equipment's embodied carbon footprint.

#### **Energy**

Green hydrogen is an energy source that can help decarbonize a range of sectors including heavy industry, long-haul transport, and chemical production, as it replaces fossil fuels, which produce significant greenhouse gas emissions. Titanium is a key component in the formation of hydrogen via the electrolysis of water as it is commonly used in many proton exchange membrane (PEM) electrolyzers. This is dubbed "Green Hydrogen" when this electrolysis process is powered with renewable energy. Titanium is the main material for porous transport layers in both PEM electrolyzers and fuel cells. Titanium alloys are also used in nuclear reactors for components that need to withstand demanding corrosive environments.



"After many decades of promise dwarfing practicality, green hydrogen's inflection point has arrived. The temporal nature of both solar and wind energy necessitates vast investments in energy storage. Batteries alone are insufficient, particularly for mobility applications. Storing renewable energy as hydrogen is critical to a successful green energy transition and will be one of the largest long-term sources of titanium demand."

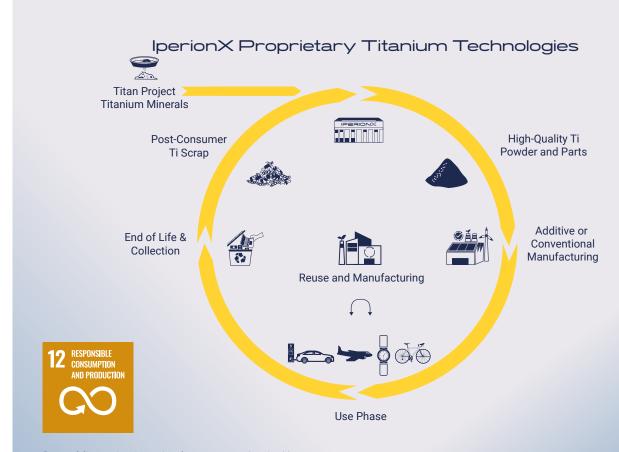
Michael Spath Head of Market Research

# Our technologies enable a titanium circular economy

IperionX can revolutionize the titanium industry by enabling a truly circular titanium supply chain. Proprietary technologies can utilize 100% titanium scrap, including low-quality (and high-oxygen) titanium scrap that other processes can't recycle. Our resulting 100% recycled, high-quality (and low-oxygen) titanium powder and parts can be used for a wide variety of applications and industries. Once those products have come to the end of their useful life, the technologies can be used to recycle

the post-consumer titanium again, enabling a true "closed-loop" and low-carbon titanium supply chain at scale.

By diverting valuable titanium from downcycling – or from yesterday's waste stream – and upcycling it for new titanium products, we help meet today's needs for sustainable, domestically sourced critical minerals and help our customers achieve their product circularity and sustainability goals.



By enabling a titanium circular economy, IperionX supports the UN SDG Goal 12. Ensure sustainable consumption and production patterns. Specifically, targets 12.2 and 12.5 aim that by 2030, achieve sustainable management and efficient use of natural resources and substantially reduce waste generation through prevention, reduction, recycling and reuse.

# Circular titanium partnership

In July 2024, IperionX and Aperam signed an agreement to apply IperionX's fully circular and sustainable titanium supply chain solution to the consumer electronics sector. IperionX will use its patented titanium technologies to upcycle titanium scrap from the consumer electronics sector to manufacture a range of high-performance titanium products.

Aperam is focused on advancing the circular economy and is a global leader in stainless, electrical, and specialty steel markets and environmental sustainability. ELG, part of Aperam Recycling, is a leading global specialist in sourcing and processing titanium, stainless steel and super alloys, processing over 1 million tons of metal annually.



**Appendices** 

Titanium is currently sourced over long distances from high-cost supply chains with traceability issues. Titanium manufacturing generates high volumes of titanium scrap metal, such as cuttings and turnings, that is often downcycled to the ferro-titanium market. IperionX's innovative 'end-to-end' titanium supply chain solution can unlock new sources of titanium feedstocks, including scrap titanium and U.S. titanium minerals, to re-shore domestic titanium production and manufacture lower cost and more sustainable high-performance titanium products.

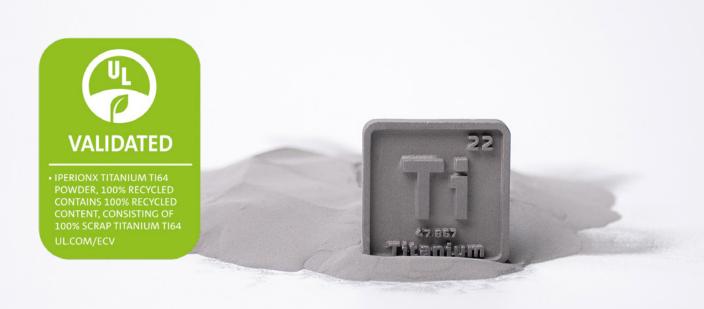


"This important partnership with ELG Utica Alloys, a U.S. subsidiary of Aperam, will advance a more sustainable, fully circular and traceable U.S. titanium supply chain for the consumer electronics industry. Our new Titanium Manufacturing Campus in Virginia provides us with the full capability to process titanium scrap feedstocks and manufacture high-performance titanium products for advanced industries."

**Taso Arima** CEO of IperionX



# Our titanium is third-party validated for 100% recycled content



IperionX recognizes that third-party certifications provide important independent validation of the sustainability benefits of our products and showcase our unique product benefits to our customers.

UL Solutions (UL) is one of the world's most trusted names in third-party product safety and standards development. In fiscal year 2024, we were proud to achieve UL Environmental Claim Validation Procedure (UL ECVP 2809-2) for the second year in a row for our 100% recycled titanium metal powder.

IperionX 100% recycled titanium metal powders produced at our Industrial Pilot Facility in Utah can continue to showcase the globally recognized UL Environmental Claim Validation Mark.

#### **Looking Ahead**

In fiscal year 2025 we aim to achieve UL validation of 100% recycled content for titanium produced at our Titanium Production Facility in Virginia.

This continues to set lperionX's powder apart as the first commercial titanium metal powder to achieve UL validation for

100% recycled content.

# Our lifecycle assessments

As a leader in sustainable titanium manufacturing, IperionX must consider all potential impacts of our processes and products.

A Life Cycle Assessment (LCA) is a systematic analysis of the potential environmental impacts of products during their entire life cycle. In fiscal year 2023 we completed an LCA on our proprietary titanium recycling technology to produce spherical powder, the innovative Granulation Sintering Deoxygenation (GSD) process. In fiscal year 2024 we completed a comparative LCA to quantify the benefits of our 100% recycled spherical titanium powder compared to other commonly used metal powders for additive manufacturing, including conventional titanium, stainless steel, and aluminum. Both LCAs were conducted by EarthShift Global, an independent expert LCA consultancy, in compliance with international environmental management standards of ISO 14040 and 14044 and included independent third-party critical review.

The objective of the LCAs was to quantify the environmental impacts throughout the entire life cycle of producing spherical powders for additive manufacturing. Throughout the lifecycle assessment, we focused on multiple impact categories including climate change, human health, ecosystems, cumulative energy demand, resources, and water use.

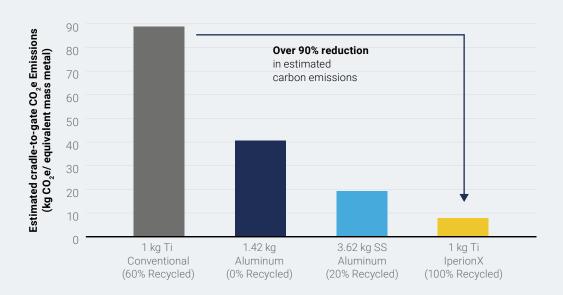
IperionX's first LCA highlighted that spherical titanium powder produced at the planned Titanium Production Facility in Halifax County, Virginia has the potential for a life cycle carbon footprint of as little as 7.8 kilograms (kg) of carbon dioxide equivalents ("CO<sub>2</sub>e") per kg of spherical powder.

7.8 kg

CO<sub>2</sub>e per kg is the potential carbon footprint for titanium powder from IperionX's Halifax facility.



## Estimated Cradle-to-Gate Life Cycle Carbon Emissions of 1 kg of IperionX Recycled Spherical Ti Powder Compared to Conventional Spherical Ti, Al, and SS Metal Powders Based on Strength-to-Weight Equivalency



### IperionX recycled titanium powder provides a low-carbon option to disrupt the metals sector.

IperionX's second LCA completed in fiscal year 2024 highlights that 100% recycled titanium spherical powder produced at IperionX's Titanium Production Facility in Virginia has the potential for a life cycle carbon footprint that is over 90% lower than competing titanium spherical powders produced via plasma atomization.

Additionally, the LCA indicated that IperionX's 100% recycled titanium spherical powder has an estimated 80% lower carbon footprint than a strength-equivalent amount of spherical aluminum alloy powder and an estimated 60% lower carbon footprint than a strength-equivalent amount of stainless steel 316L powder.

The two LCAs confirm the compelling sustainability advantages for companies that design and manufacture products with IperionX titanium, and the opportunity it has to disrupt the metals sector, including the aluminum and stainless steel markets. Although titanium is strong, lightweight and offers superior corrosion resistance - it has been hindered by its historically higher cost, high carbon footprint and limited recyclability. IperionX titanium offers leading companies an opportunity to reduce their impact on the environment with a superior 100% recycled low-carbon metal, with greater durability and strength, and that can be sustainably recycled at the end of the product life.



## Our energy use

Introduction

IperionX proprietary technologies can revolutionize titanium production by substantially lowering the energy required to process titanium vs the conventional Kroll process. This is one of the primary sustainability advantages of our patented technologies. We actively monitor and track our corporate energy footprint and this is the second year we are sharing our complete operational energy use.

As a growing company we know our energy demand will increase as our operations expand. We are committed to ensuring we monitor and limit the growth of our energy use and our corresponding Scope 1 (direct fuel use) and Scope 2 (indirect electrical use) carbon impacts by using alternative energy sources and designing our operations to both electrify our processes and use energy efficiently.

#### **Our FY2024 Energy Use**

			5,		
Energy Source	Energy Use	Type of Associated Carbon Emissions	Total Quantity in FY2024	Equivalent GJ of Energy	Data Source
Gasoline	Company Fleet of 3 Vehicles	Scope 1 - Direct Fuel Use	708 gallons	93.3	Estimate based on miles driven
Diesel \$	Generator	Scope 1 - Direct Fuel Use	83 gallons	12.2	Data from supplier bills
Natural Gas	Heating for leased spaces	Scope 1 – Direct Fuel Use	4,817 therms	510.6	Data from utility bills and estimated based on square footage of office space
Electricity	Power for all operational locations and leased spaces	Scope 2 – Indirect Electricity Generation	553,929 kWh	1,994	Data from utility bills and estimated based on square footage of office space and for equipment

#### Looking ahead:

- At our Titanium Manufacturing Campus in Virginia we are exploring options to generate a portion of our future energy demand on site through the installation of solar panels.
- For future operation of the Titan Critical Minerals Project in Tennessee we will continue to work with the local utilities and the Tennessee Valley Authority to procure renewable energy sources to power our operations.

# Renewable Energy Powers our Operations

Our goal is to power all IperionX operations using renewable energy to reduce our Scope 1 and Scope 2 GHG emissions. In fiscal year 2024 we expanded our portfolio of renewable energy procurement. We are working with our local utility providers to procure Green-e® Energy

certified renewable energy certificates (RECs) to match our current electrical use in our main operational locations with zero-carbon wind and/or solar energy. In Utah we are also supporting the production of renewable natural gas (RNG) for our natural gas needs. Through participation in these voluntary programs, IperionX is supporting the future growth and development of new renewable energy projects in our operational areas.

# 57% of the electricity and 44% of the natural gas procured by IperionX in FY2O24 came from renewable sources.



# Our carbon footprint

Climate change is an urgent global challenge that demands solutions from governments, businesses, and individuals. To support our mission to help decarbonize the titanium industry and be the leading developer of low-carbon, sustainable titanium, we measured our corporate greenhouse gas (GHG) emissions for fiscal year 2024, our fourth year of voluntary carbon accounting. We measured the following scopes of GHG emissions in units of metric tons of carbon dioxide equivalents (mt CO<sub>2</sub>e) following the GHG Protocol:

- Scope 1 direct emissions from our use of fuels (natural gas, diesel, and gasoline); and
- Scope 2 indirect emissions related to our facility electricity use.
- Certain Scope 3 indirect emissions related to our employees and supply chain:
  - Fuel- and energy-related emissions not included in Scopes 1 or 2;
  - Upstream transportation and distribution;
  - Business travel;
  - Waste generated in operations; and
  - Employee commuting and telework.

As IperionX scales its operations, we will actively work to limit the growth of our GHG emissions. We will also continue to focus on expansion of our carbon footprinting efforts into additional Scope 3 categories as they become relevant to our business practices and we have credible data to support the additional categories.



We plan to baseline our operational carbon footprint once the Titanium Manufacturing Campus and Titan Critical Minerals Project are both in full commercial operation. We will then set science-based emission reduction goals relative to our initial commercial production baseline. We plan to set future reduction targets based on an emissions intensity basis (e.g., tons GHG per ton of titanium powder or parts produced).

To further our mission of developing a low carbon titanium supply chain, carbon footprint data guides our development of internal policies around climate change and management of our operations and our supply chain.

Scope	Category	FY2024 (mt CO <sub>2</sub> e)
Scope 1	Stationary Fuel (natural gas and diesel)	26.0
	Mobile Fuel (company fleet mileage)	6.1
Scope 2	Location Based Electricity (grid electricity)	159.2
	Market Based Electricity (includes RECs)	69.6
Scope 3	Fuel- and Energy-Related Emissions Not Included in Scopes 1 or 2	14.3
	Upstream Transportation and Distribution	82.5
	Waste Generated in Operations	100.6
	Business Travel	322.1
	Employee Commuting and Telework	49.8
	Scope 1 Emissions total (mt CO <sub>2</sub> e)	32.0
	Scope 2 Emissions total – Market based (mt CO <sub>2</sub> e)	69.6
	Scope 3 Reported Emissions total (mt CO <sub>2</sub> e)	569.4
	FY2024 Total Reported Emissions (mt CO <sub>2</sub> e)	671.0

# Fostering biodiversity and land stewardship



IperionX is deeply committed to caring for the land on which we work and fostering biodiversity. Our vision as a global leader in the sustainable titanium metals industry includes building a legacy of land stewardship that plans for future generations.

To ensure a positive outcome for the land and biodiversity, IperionX is:

- · Performing baseline environmental studies.
- Partnering with the University of Tennessee Institute of Agriculture to research rehabilitation plans including testing usage of native grasses to sequester carbon and rebuild the soil.
- Supporting pollinators with our local beehives and native bee hotels.

IperionX is working with its partners at the University of Tennessee Institute of Agriculture to research methods of restoring the land in ways that will improve soil fertility and benefit a biodiverse ecosystem. Through this research we envision the land having the capacity for meaningful carbon sequestration through the use of beneficial soil amendments like biochar and gypsum. Additionally, we are testing the use of returning native grasses, naturally conditioned to thrive in the hot, dry summers of West Tennessee. These native grasses prevent erosion, and have the ability to sequester carbon deep beneath the soil through their extensive root systems.

At IperionX, our commitment to sustainability envisions healthy lands that support communities and enhance biodiversity.



# Sustainable water management at IperionX

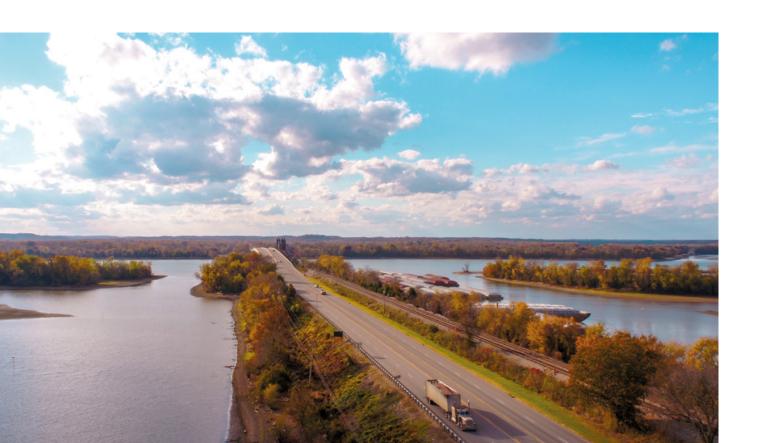
At IperionX, we know that water is a finite resource requiring diligent management and use. We are focused on planning our operations in a way that uses water efficiently with as little impact as possible. Fiscal year 2024 was the second year that IperionX measured our water consumption based on utility bills for our operational locations. We used approximately 3.4 million gallons of water in our operational locations in fiscal year 2024, a reduction of 25% from the 4.6 million gallons used in fiscal year 2023, due to process improvements at our Industrial Pilot Facility in Utah. At that facility, water is used in our proprietary titanium technologies to both cool the furnaces using recirculated water and to clean the final powder, using only what is necessary to ensure our titanium powder quality. In our offices and leased residential spaces, water is used for general purposes including sanitation and landscaping.

As we scale up our metals production at the Titanium Manufacturing Campus in Virginia, we have made rigorous calculations in our process design to ensure that we use only the amount of water necessary in our production. We have chosen equipment that reduces water requirements and are developing water recycling

options for some process steps to minimize the water needed in our overall process. All of our three main operational locations (VA, UT, and TN) are in areas considered to have Low (TN) to Low-Medium (VA and UT) Baseline Overall Water Risk per the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.

At our Titan Critical Minerals Project in Tennessee, we have completed preliminary proactive hydrologic studies conducted by an independent consulting firm. These studies evaluated the potential impacts of our future water use on the local water system including streams, wetlands, and wells. The plans for our process include recycling water from our extraction locations as process water and then returning it following our permit conditions to nearby streams. The effects from the planned water use noted in the hydrologic studies were found to be mostly minimal, transient, and short lived. The study results indicate that our future operations should not have any lasting impact on local water supply or quality in Tennessee.

We will continue to proactively manage our current and future operational water use to protect water resources in our communities.



# 05 Appendices



# Reporting standards and guidance

Building a sustainable business requires transparency and the sharing of IperionX ESG policies, initiatives, and metrics. Our voluntary ESG disclosures and sustainability reporting are informed by guidance and standards from the organizations included here:



#### The United Nation Sustainable Development Goals (UN SDGs)

were adopted by all UN Member states in 2015 and included in the 2030 Agenda for Sustainable Development. These 17 goals provide a framework for organizations to address environmental and social issues, such as climate change and gender equality. At IperionX, we strive to help advance the achievement of these SDG goals through our business actions and initiatives. In this year's report we've shared how IperionX activities contribute to specific targets of the eight UN SDGs that we are focused on.

https://sdgs.un.org/goals



The Global Reporting Initiative (GRI) is the independent international organization – headquartered in Amsterdam with regional offices around the world – that helps businesses, governments, and other organizations understand and communicate their sustainability impacts. GRI provides the world's most widely used standards for sustainability reporting – the GRI Standards. Our GRI Content Index included herein references the 2021 Universal Standards and the recently released Sector Standard GRI 14: Mining Sector 2024 that is relevant to IperionX.

https://www.globalreporting.org



The Sustainability Accounting Standards Board (SASB), now part of the International Financial Reporting Standards (IFRS) Foundation's International Sustainability Standards Board's (ISSB), is a global nonprofit organization that offers resources designed to help businesses and investors develop a shared understanding of enterprise value—how it is created, preserved and eroded. Our SASB Content Index included herein references the Metals & Mining Standard (EM-MM, version 2023-12) that is relevant to IperionX, which is defined by SASB's Sustainable Industry Classification System® (SICS®).

https://sasb.ifrs.org



The Task Force on Climate-Related Financial Disclosures (TCFD) is a reporting framework established by the Financial Stability Board (FSB) to develop recommendations on the types of information that companies should disclose to support financial markets in appropriately assessing and pricing a specific set of risks and opportunities related to climate change. Our TCFD strategy, risk management, metrics, and targets. In June 2023, the IFRS Sustainability Disclosure Standards were released by the International Sustainability Standards Board (also known as the ISSB Standards), including IFRS S2 Climate-related Disclosures. IFRS S2 will be used in future reporting to provide all the information previously covered by the TCFD recommendations.

https://www.fsb-tcfd.org/

# GRI Content Index FY2024

	IperionX has reported the information cited in this G June 30, 2024 with reference to the GRI Standards.	, , , ,	
GRI 1 used	GRI 1: Foundation 2021.		
GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE	
GRI 2: General Disclosures 2021	2-1 Organizational details.	Corporate Office: 129 West Trade Street, Suite 1405 Charlotte, NC 28202 Welcome to IperionX Section, P. 08	
	2-2 Entities included in the organization's sustainability reporting.	IperionX Limited, including subsidiaries of IperionX Critical Minerals, LLC and IperionX Technology LLC	
	2-3 Reporting period, frequency and contact point.	Reporting period: July 1, 2023 through June 30, 2024; Reporting frequency: Annual; Contact Point: sustainability@iperonx.com	
	2-4 Restatements of information.	Not applicable for the FY2024 report.	
	2-5 External assurance.	Not applicable for the FY2024 report.	
	2-6 Activities, value chain and other business relationships.	Annual Report 2024, available at www.iperionx.com	
	2-7 Employees.	Our World Class Team, P. 26.	
	2-8 Workers who are not employees.	At the end of FY2024 IperionX had 3 workers who are independent contractors and this number did not change significantly from FY2023.	
	2-9 Governance structure and composition.	Our Sustainability Governance Section, P. 16-17.	
	2-10 Nomination and selection of the highest governance body.	Corporate Governance Statement 2023, availabl at www.iperionx.com.	
	2-11 Chair of the highest governance body.	Todd Hannigan is the Executive Chairman Our Sustainability Governance Section, P. 16.	
	2-12 Role of the highest governance body in overseeing the management of impacts.	Our Sustainability Governance Section, P. 16-17.	
	2-13 Delegation of responsibility for managing impacts.	Our Sustainability Governance Section, P. 16-17.	
	2-14 Role of the highest governance body in sustainability reporting.	Our Sustainability Governance Section, P. 16-17.	
	2-15 Conflicts of interest.	Business Ethics Section, P. 23.	
	2-16 Communication of critical concerns.	Business Ethics Section, P. 23.	
	2-17 Collective knowledge of the highest governance body.	Corporate Governance Statement 2023, available at www.iperionx.com.	
	2-18 Evaluation of the performance of the highest governance body.	Corporate Governance Statement 2023, available at www.iperionx.com.	
	2-19 Remuneration policies.	Remuneration and Nomination Committee Charter, 2023, available at www.iperionx.com.	
	2-20 Process to determine remuneration.	Remuneration and Nomination Committee Charter, 2023, available at www.iperionx.com.	

GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE
	2-22 Statement on sustainable development strategy.	Statement on Sustainable Development Section, P. 22.
	2-27 Compliance with laws and regulations.	Business Ethics Section, P. 23.
	2-28 Membership associations.	Our Memberships Section, P. 34.
	2-29 Approach to stakeholder engagement.	Our Stakeholders Section, P. 18.
	2-30 Collective bargaining agreements.	No workers were covered by collective bargaining agreements in FY2024.
GRI 3: Material	3-1 Process to determine material topics.	Our Stakeholders Section, P. 18.
Topics Section 2021	3-2 List of material topics.	Our Sustainability Strategy Section, P. 19.
2021	3-3 Management of material topics.	Our Sustainability Governance Section, P. 16-17.
GRI 101: Biodiversity 2024	101-1 and 14.4.2 Policies to halt and reverse biodiversity loss.	Not applicable to IperionX operations in FY2024
and GRI 14 Topic	101-2 and 14.4.3 Management of biodiversity impacts.	No current operations have the potential to significantly impact biodiversity.
- Mining Sector	101-3 Access and benefit-sharing.	Not applicable to IperionX operations in FY2024
Standard 2024: Topic 14.4	101-4 and 14.4.4 Identification of biodiversity impacts.	Not applicable to IperionX operations in FY2024
Biodiversity	101-5 and 14.4.5 Locations with biodiversity impacts.	No operational sites are in or adjacent to protected areas or areas of high biodiversity value.
	14.4.5 Information on the ecologically sensitive areas for all mine sites.	Not applicable to IperionX operations in FY2024
	101-6 and 14.4.6 Direct drivers of biodiversity loss.	Not applicable to IperionX operations in FY2024
	14.4.6 Direct drivers of biodiversity loss for all mine sites.	Not applicable to IperionX operations in FY2024
	101-7 and 14.4.7 Changes to the state of biodiversity.	Not applicable to IperionX operations in FY2024
	Sector disclosures: Changes in the state of biodiversity for all mine sites.	
	101-8 and 14.4.8 Ecosystem services.	Biodiversity and Land Stewardship Section, P. 48.
	Sector disclosures: Information on ecosystem services for all mine sites.	
GRI 201: Economic Performance 2016	201-1 and 14.9.2 and 14.23.2 Direct economic value generated and distributed	Annual Report 2024, available at www.iperionx.com.
and GRI 14 Topics	Sector disclosures: Report community investments by mine site.	Investments by mine site not yet applicable.
– Mining Sector Standard 2024:	201-2 and 14.2.2 Financial implications and other risks and opportunities due to climate change	Disclosures per TCFD – Appendix
Topic 14.2 Climate adaptation and resilience and	Sector Disclosures: How the substantive changes in operations, revenue, or expenditure due to	No substantive changes in operations, revenue, or expenditure were realized in FY2024 due to climate change.
Topic 14.9 Economic impacts and	climate change affect or could affect the organization's workers and suppliers, its contributions to economic development, and its payments to governments.	
Topic 14.23 Payments to governments	and the professional to governments.	

GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE
GRI 205: Anti-corruption	205-2 and 14.22.3 Communication and training about anti-corruption policies and procedures.	Business Ethics and Compliance Section, P. 23.
2016 and GRI 14 Topic	205-3 and 14.22.4 Confirmed incidents of corruption and actions taken.	There were no (0) confirmed incidents of corruption in FY2024.
- Mining Sector Standard 2024: Topic 14.22 Anti-corruption		Business Ethics and Compliance Section, P. 23.
GRI 14 Topic  – Mining Sector Standard 2024: Topic 14.22 Anti-corruption	14.22.5 Approach to contract transparency, including: whether contracts are made publicly available and where published, or the reason for them not being public and actions taken to make them public in the future.	IperionX contracts are not made publicly available.
	14.22.6 Information about the organization's beneficial owners, including joint ventures.	Annual Report 2024, available at www.iperionx.com.
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices.	There were no (0) legal actions for anti-competitive behavior, anti-trust, or monopoly practices in FY2024.
		Business Ethics and Compliance Section, P. 23.
GRI 207: Tax 2019	207-1 and 14.23.4 Approach to tax.	Annual Report 2024, available at www.iperionx.com.
and GRI 14 Topic  - Mining Sector Standard 2024: Topic 14.23 Payments to governments	207-2 and 14.23.5 Tax governance, control, and risk management.	Annual Report 2024, available at www.iperionx.com.
GRI 301: Materials 2016	301-2 Recycled input materials used.	100% of the input titanium used to create IperionX titanium powder came from recycled feedstock in FY2024, as validated by UL.
		Our UL Validation Section, P. 41.
GRI 302: Energy 2016 and	302-1 and 14.1.2 Energy consumption within the organization.	Our Energy Use Section, P. 44-45.
GRI 14 Topic  - Mining Sector	302-2 and 14.1.3 Energy consumption outside of the organization.	IperionX does not currently track energy consumption outside of the organization.
Standard 2024: Topic 14.1 GHG	302-3 and 14.1.4 Energy intensity.	IperionX does not currently calculate an energy intensity metric.
emissions	302-4 Reduction of energy consumption.	IperionX is currently in scale up growth stage so expects that its energy use will grow as the company grows. Reduction of energy consumption is not relevant to the company at this time.
	302-5 Reductions in energy requirements of products and services.	IperionX technologies can significantly reduce the energy requirements to produce titanium metal, as confirmed by LCA studies.

GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE
GRI 303: Water	303-1 Interactions with water as a shared resource.	Sustainable Water Management Section, P. 49.
and Effluents 2018 and	303-2 Management of water discharge-related impacts.	Sustainable Water Management Section, P. 49.
GRI 14 Topic	303-3 Water withdrawal.	Sustainable Water Management Section, P. 49.
<ul><li>Mining Sector</li><li>Standard 2024:</li></ul>	303-4 Water discharge.	IperionX does not currently track water discharge.
Topic 14.7 Water and effluents	303-5 Water consumption.	IperionX does not currently track water consumption.
GRI 305: Emissions 2016 and	305-1 and 14.1.5 Direct (Scope 1) GHG emissions.	Scope 1 direct emissions in FY2024 totaled 32.0 metric tons of carbon dioxide equivalents (mt $\rm CO_2e$ ).
GRI 14 Topic		Our Carbon Footprint Section, P. 46-47.
– Mining Sector Standard 2024: Topic 14.1 GHG emissions and	14.1.5 Additional sector disclosures: Include land use change emissions and a breakdown of the Scope 1 GHG emissions by mine site.	There were no GHG emissions in FY2024 related to land use change, and the Scope 1 GHG emissions were calculated on a company-wide basis, as there are no active mine sites in FY2024.
Topic 14.3 Air emissions	305-2 and 14.1.6 Energy indirect (Scope 2) GHG emissions.	Scope 2 location-based and market-based indirect emissions in FY2024 totaled 159.2 and 69.6 metric tons of carbon dioxide equivalents (mt $\rm CO_2e$ ), respectively.
		Our Carbon Footprint Section, P. 46-47.
	14.1.6 Additional sector disclosures: Report breakdown of the gross location-based and market-based Scope 2 GHG emissions by mine site.	The Scope 2 gross location-based and market-based GHG emissions were calculated on a company-wide basis, as there are no active mine sites in FY2024.
	305-3 and 14.1.7 Other indirect (Scope 3) GHG emissions.	Relevant scope 3 indirect emissions in FY2024 totaled 569.4 metric tons of carbon dioxide equivalents (mt $\mathrm{CO}_2\mathrm{e}$ ).
		Our Carbon Footprint Section, P. 46-47.
	305-4 and 14.1.8 GHG emissions intensity.	IperionX does not yet calculate a GHG emission
	14.1.8 Additional sector disclosures: Report a breakdown of the GHG emissions intensity by mine site.	intensity metric, either company wide or by mine site as there are no active mine sites in FY2024.
	305-5 and 14.1.9 Reduction of GHG emissions.	IperionX is currently in scale up growth stage so expects that its GHG emissions will grow as the company grows. Reduction of GHG emissions is not relevant to the company at this time.
	305-6 Emissions of ozone-depleting substances (ODS).	IperionX currently does not have significant emissions of ODS to track.
	305-7 and 14.3.2 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions.	IperionX currently does not have significant emissions of NOx, SOx, or other significant air emissions to track.
	14.3.2 Significant air emissions for each mine site in kilograms or multiples.	IperionX currently does not have any active mine sites.

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GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE	
GRI 306: Effluents and Waste 2016 and	306-3 and 14.15.2 Significant spills.	There were zero (0) significant spills in FY2024.	
GRI 14 Topic  - Mining Sector Standard 2024: Topic 14.15 Critical incident management			
GRI 14 Topic  – Mining Sector	403-1 and 14.16.2 Occupational health and safety management system	Health and Safety Section, P. 28-29.	
Standard 2024: Topic 14.15 Critical incident	403-2 and 14.16.3 Hazard identification, risk assessment, and incident investigation	Health and Safety Section, P. 28-29.	
management	Sector disclosures:		
	<ul> <li>Report how the organization ensures the provision of gender-appropriate personal protective equipment for workers.</li> </ul>		
	<ul> <li>Describe the processes used to identify work-related incidents due to sexual and gender-based violence, and to determine corrective actions.</li> </ul>		
	403-4 and 14.16.5 Worker participation, consultation, and communication on occupational health and safety.	Health and Safety Section, P. 28-29.	
		The IperionX Health and Safety Committee consists of 8 members of management and	
	Sector disclosure: Report how the organization seeks to ensure women's participation in formal joint management-worker health and safety committees, and the percentage of women represented in these committees.	workers, 25% of which are women.	
	403-5 and 14.16.6 Worker training on occupational health and safety.	Health and Safety Section, P. 28-29.	
	403-6 and 14.16.7 Promotion of worker health.	Health and Safety Section, P. 28-29.	
	403-7 and 14.16.8 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships.	Health and Safety Section, P. 28-29.	
	403-8 and 14.16.9 Workers covered by an occupational health and safety management system.	Health and Safety Section, P. 28-29.	
	403-9 and 14.16.10 Work-related injuries.	There were zero (0) recordable injuries in FY2024 Health and Safety Section, P 28-29.	
	403-10 and 14.16.11 Work-related ill health.	There were zero (0) work-related ill health occurrences in FY2024. Health and Safety Section, P 28-29.	

GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE
GRI 406: Non-discrimination 2016 and	406-1 and 14.21.7 Incidents of discrimination and corrective actions taken.	There were no (0) incidents of discrimination in FY2024.
GRI 14 Topic  – Mining Sector Standard		
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.	IperionX is not aware of any operations or suppliers where there is risk to the right to freedom of association or collective bargaining.
GRI 14 Topic  - Mining Sector Standard 2024: Topic 14.20 Freedom of association and collective bargaining	14.20.3 Report the number of strikes and lockouts involving 1,000 or more workers lasting one full shift or longer, and their total duration in worker days idle.	There were zero (0) strikes or lockouts in FY2024 of any size or duration.
GRI 408: Child Labor 2016 and	408-1 and 14.18.2 Operations and suppliers at significant risk for incidents of child labor.	IperionX is not aware of any operations or suppliers where there is risk of child labor.
GRI 14 Topic  - Mining Sector Standard 2024: Topic 14.18 Child labor		
GRI 409: Forced or Compulsory Labor 2016 and	409-1 and 14.19.2 Operations and suppliers at significant risk for incidents of forced or compulsory labor.	IperionX is not aware of any operations or suppliers where there is risk of forced or compulsory labor.
GRI 14 Topic  – Mining Sector Standard 2024: Topic 14.19 Forced labor and modern slavery		
GRI 410: Security Practices 2016 and	410-1 and 14.14.2 Security personnel trained in human rights policies or procedures.	Not applicable – IperionX does not hire security personnel.
GRI 14 Topic – Mining Sector Standard		
GRI 411: Rights of Indigenous Peoples 2016	411-1 and 14.11.2 Incidents of violations involving rights of indigenous peoples.	There were no (0) incidents of violations involving the rights of indigenous peoples in FY2024.

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GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE		
GRI 14 Topic  – Mining Sector Standard 2024: Topic 14.11 Rights	14.11.3 List the locations of operations and proven reserves where Indigenous Peoples are present and are or may be affected by the activities of the organization.	There are zero (0) operational locations or prove reserves where Indigenous Peoples are present or may be affected by the activities of IperionX.		
of Indigenous Peoples	14.11.4 Report whether the organization has been involved in a process of seeking free, prior, and informed consent (FPIC) from Indigenous Peoples for any of the organization's activities.	IperionX has not been involved in a formal FPIC process from Indigenous Peoples for the organizations activities.		
GRI 14 Topic  – Mining Sector Standard 2024:	14.12.2 List the mine sites where involuntary resettlement is planned, ongoing, or has taken place.	Resettlements are not applicable to IperionX operations.		
Topic 14.12 Land and resource	For each mine site listed:			
rights	<ul> <li>report the number of persons who have been or will be displaced, and a breakdown by gender; and</li> </ul>			
	describe how peoples' livelihoods and human rights are or could be affected and restored.			
	14.12.3 List the locations of operations where conflicts or violations of land and resource rights (including customary, collective, and informal tenure rights) occurred, and describe the incidents and the stakeholders whose rights are or could be affected.	Not applicable to IperionX operations.		
GRI 14 Topic  - Mining Sector Standard 2024:	14.13.2 List the mine sites where Artisanal and small-scale mining (ASM) occurs on or in close proximity to the site.	Artisanal and small-scale mining is not applicable to IperionX operations.		
Topic 14.13 Artisanal and small-scale mining	14.13.3 Report the total number and nature of incidents involving ASM and actions taken to address them.	Artisanal and small-scale mining is not applicable to IperionX operations.		
GRI 14 Topic  - Mining Sector Standard 2024: Topic 14.25 Conflict-affected and high-risk areas	14.25.2 List the locations of operations in conflict-affected or high-risk areas and how these were identified.	There are no IperionX locations in conflict-affected or high-risk areas.		
GRI 413: Local	413-1 and 14.10.2 Operations with local	Our Community Section, P. 30.		
Communities 2016 and GRI 14 Topic	community engagement, impact assessments, and development programs.	IperionX has no formal community development agreements in place.		
- Mining Sector Standard 2024: Topic 14.10 Local communities	Sector Disclosure: Report any formal community development agreements made by the organization by mine site.	agreements in place.		

GRI STANDARD	DISCLOSURE (BOTH STANDARD DISCLOSURES AND SECTOR STANDARD REFERENCES)	FY2024 SUSTAINABILITY REPORT LOCATION AND/OR DIRECT RESPONSE
GRI 415: Public Policy 2016 and	415-1 and 14.24.2 Political contributions.	IperionX made zero (0) political contributions in FY2024.
GRI 14 Topic  – Mining Sector Standard 2024: Topic 14.24 Public policy		
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data.	There were zero (0) breaches of customer privacy or losses of customer data in FY2024.

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# SASB Content Index FY2024

Table 1. Sustainability Disclosure Topics & Metrics

TOPIC	CODE	METRIC	CATEGORY	UNIT OF MEASURE	FY2024 RESPONSE
Greenhouse Gas Emissions	EM-MM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO <sub>2</sub> -e, Percentage (%)	Gross global Scope 1 emissions for FY2024 equaled 32.0 metric tons of CO <sub>2</sub> e. Zero percent (0%) of emissions are covered under emissions-limiting regulations.
					Carbon Footprint Section, P. 47.
	EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	NA	Carbon Footprint Section, P. 46-47.
Air Quality	EM-MM-120a.1	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	Quantitative	Metric tons (t)	Not yet applicable or measured for IperionX operations.
Energy Management	EM-MM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, and (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	The total energy consumed in FY2024 was 2,640 GJ, with 76% of total energy use from grid electricity, and 52% of total energy use was renewable. Our Energy Use Section, P. 44-45.

TOPIC	CODE	METRIC	CATEGORY	UNIT OF MEASURE	FY2024 RESPONSE
Water Management	EM-MM-140a.1	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m³), Percentage (%)	The total water withdrawn for FY2024 was approximately 12.9 thousand cubic meters. The total water consumed was not yet measured. No (zero) water withdrawals happened in regions with High or Extremely High Baseline Water Stress.
					Our Water Use Section, P. 49.
	EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	Number	Zero (0) incidents in FY2024 of non-compliance associated with water quality permits, standards, and regulations.
Waste & Hazardous Materials	EM-MM-150a.4	Total weight of non-mineral waste generated	Quantitative	Metric tons (t)	Not yet applicable to IperionX operations.
Management	EM-MM-150a.5	Total weight of tailings produced	Quantitative	Metric tons (t)	Not yet applicable to IperionX operations.
	EM-MM-150a.6	Total weight of waste rock generated	Quantitative	Metric tons (t)	Not yet applicable to IperionX operations.
	EM-MM-150a.7	Total weight of hazardous waste generated	Quantitative	Metric tons (t)	Zero (0) metric tons of hazardous waste was generated during FY2024.
	EM-MM-150a.8	Total weight of hazardous waste recycled	Quantitative	Metric tons (t)	Not applicable to IperionX operations as no hazardous waste was generated in FY2024.
	EM-MM-150a.9	Number of significant incidents associated with hazardous materials and waste management	Quantitative	Number	Zero (0) incidents in FY2024 associated with hazardous materials and waste management.
	EM-MM-150a.10	Description of waste and hazardous materials management policies and procedures for active and inactive operations	Discussion and Analysis	NA	Not yet applicable to lperionX operations.

### SASB Content Index FY2024 continued

TOPIC	CODE	METRIC	CATEGORY	UNIT OF MEASURE	FY2024 RESPONSE
Biodiversity Impacts	EM-MM-160a.1	Description of environmental management policies and practices for active	Discussion and Analysis	NA	Our Environmental Responsibility Section, P. 37.
		sites			Biodiversity Section, P. 48.
	EM-MM-160a.2	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	Quantitative	Percentage (%)	Not applicable to IperionX operations.
	EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	Percentage (%)	Not applicable to IperionX operations.
Security, Human Rights & Rights of Indigenous Peoples	EM-MM-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Quantitative	Percentage (%)	Not applicable to IperionX operations.
	EM-MM-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Quantitative	Percentage (%)	Not applicable to IperionX operations.
	EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Discussion and Analysis	NA	Introductory meeting held with the Native American Indian Association (NAIA) of Tennessee in June 2022 and ongoing communications and support in FY2023 and FY2024. No operations in areas of conflict.
Community Relations	EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and Analysis	NA	Our Community Section, P. 30-31.
	EM-MM-210b.2	(1) Number and (2) duration of non-technical delays	Quantitative	Number, Days	Zero (0) days of non-technical delays in FY2024.

### SASB Content Index FY2024 continued

TOPIC	CODE	METRIC	CATEGORY	UNIT OF MEASURE	FY2024 RESPONSE
Labor Practices	EM-MM-310a.1	Percentage of active workforce employed under collective agreements	Quantitative	Percentage (%)	Zero percent (0%) of IperionX workforce in FY2024 were employed under collective agreements.
	EM-MM-310a.2	(1) Number and (2) duration of strikes and lockouts	Quantitative	Number, Days	Zero (0) days of strikes or lockouts in FY2024.
Workforce Health & Safety	EM-MM-320a.1	(1) All-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) direct employees and (b) contract employees	Quantitative	Rate	1) Zero (0); 2) Zero (0); 3) Not yet quantified for IperionX operations; 4) a & b) over twenty (20) hours of health and safety training on average for both direct and contract employees during FY2024. Health and Safety Section, P. 28-29.
Business Ethics & Transparency	EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and Analysis	NA	Business Ethics Section, P. 23.
	EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Metric tons (t) saleable	Zero (0) – No production outside of the U.S.

### SASB Content Index FY2024 continued

TOPIC	CODE	METRIC	CATEGORY	UNIT OF MEASURE	FY2024 RESPONSE
Tailings Storage Facilities Management	EM-MM-540a.1	Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific EPRP	Quantitative	Various	Not applicable to IperionX operations as no tailing storage facilities in operation in FY2024.
	EM-MM-540a.2	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	Discussion and Analysis	NA	Not applicable to IperionX operations as no tailing storage facilities in operation in FY2024.
	EM-MM-540a.3	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	Discussion and Analysis	NA	Not applicable to IperionX operations as no tailing storage facilities in operation in FY2024.

### Table 2. Activity Metrics

TOPIC	CODE	METRIC	CATEGORY	UNIT OF MEASURE	FY2024 RESPONSE
Activity Metric	EM-MM-000.B	Total number of employees, percentage contractors	Quantitative	Number, Percentage (%)	IperionX ended FY2024 with 47 employees, with 6% being independent contractors.
					Our People Section, P. 26.

Note: These tables of Sustainability Disclosure Topics & Metrics and Activity Metrics is from the SASB Standards (now part of IFRS Foundation), Metals & Mining Sustainability Accounting Standard, Extractives & Minerals Processing Sector, Sustainable Industry Classification System® (SICS®) EM-MM, Under Stewardship of the International Sustainability Standards Board, Industry Standard Version 2023-12.

## Disclosures per TCFD

#### Climate Change and IperionX

We see climate change as a significant challenge which poses risks to, and demands solutions from, our company. Numerous economic and societal comments about climate change were voiced during interviews in 2021 with 58 of the key stakeholders of IperionX as part of the independently conducted Materiality Assessment.

Using the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD), we have considered both the risks and opportunities that a changing climate can have on IperionX. We will actively govern the identified risks, and aim to mitigate aspects of climate change for our stakeholders, and by extension all of society. We will also keep focused on the opportunities afforded by the transition to a low-carbon economy, as our sustainable low-carbon domestic supply of titanium can help reduce and mitigate the effects of climate change by offering alternatives to higher emission metals and by helping to decarbonize industries that use titanium and other critical minerals.

AREA	TCFD DISCLOSURE TOPIC <sup>1</sup>	IPERIONX FY2024 RESPONSE
Governance	a) Describe the board's oversight of climate-related risks and opportunities.	Our ESG Committee includes members of the board directors, including those who are subject matter experts in ESG, health and safety, and risk management. Each quarter, the ESG Committee will review our progress along with the IperionX ESG goals, and will update our climate change risk strategy as needed. The board and executives will leverage both internal and external experts to understand new threats to the business from climate change, plan to mitigate these threats, and hone the company's products and processes to help reduce the impacts of climate change. Our ESG Committee Charter details the committee's roles, duties, responsibility, authority, and reporting lines.
		The overall Board of Directors will continue to review and guide strategy and provide oversight of future risks and opportunities for the Company related to transition to a lower-carbon economy and where IperionX can leverage its low-carbon critical mineral offerings to meet those emerging needs.
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	Management executives continue to engage with key stakeholders to predict and position IperionX for the opportunities that a transition to a lower-carbon economy offers. In FY2023, the company hired a Vice President of Sustainability who has the responsibility to advise upon climate-related risks and opportunities and report quarterly to company executives and the ESG Committee.

AREA	TCFD DISCLOSURE TOPIC <sup>1</sup>	IPERIONX FY2024 RESPONSE	
Strategy		Risk or Opportunity Category	Potential Impacts
		TRANSITION RISKS: Risks related to policy, regulatory, or public perception changes due to climate change	POLICY: Policies or regulations limiting commercial activities in which IperionX is engaged due to future climate change policies
			TRANSPARENCY: Customers or regulators increasing demand for suppliers' transparency about and reductions in greenhouse gas (GHG) emissions
			CARBON REGULATIONS: Future carbon tax or cap and trade type system implemented in U.S. or in areas of global operations
	a) Describe the climate-related risks and opportunities the		COMMUNICATIONS: Reputation erosion from misrepresenting our product or company's environmental attributes, aka "greenwashing"
	organization has identified over the short, medium, and long term		REPUTATION: Reputation erosion owing to changing perceptions of the mining sector due to ESG and climate factors
		ACUTE PHYSICAL RISKS: Risks related to the acute physical impacts of climate change	EXTREME WEATHER EVENTS: Damage to facilities from extreme weather (storms, floods, wildfires, etc.) that impacts operations and/or generates significant costs due to insurance deductibles and damage not covered by insurance
			TRANSPORTATION: Employees' inability to get to work, owing to breakdown of ground transportation or other causes
			SUPPLY CHAIN: Impacts to supply chain owing to extreme-weather transportation failures/delays and/or global pandemics

Tir	meframe <sup>2</sup>	Possible Interventions to Avoid Risks or Maximize Opportunities
All	l terms	Leveraging IperionX internal and external expert legal counsel and government affairs professionals to predict and prepare for such legislation. IperionX supply of critical-to-the-nation materials should allow for exemptions to commercial-only restrictions.
All	l terms	Continue to measure and report on IperionX GHG Scope 1, 2, and 3 emissions annually. Continue to prepare life cycle assessments for major business processes and products.
Mi	iddle and long terms	Forecast risk of future carbon pricing or capping scenarios into long-term financial planning.
All		Clearly and transparently communicate the sustainable attributes of our products and processes using third party verification services like critically-reviewed life cycle assessments and third-party validations. Collaborate and internally review all communications materials to ensure our communications are accurate and transparent.
All	l terms	Communicate clearly that IperionX is a vertically-integrated company that creates a circular economy for titanium metal and products, in addition to extracting titanium minerals.  Communicate that mineral extraction processes will be sustainable and low carbon, with an end state plan for not only restoration but enhancement of the local ecosystems.
All	l terms	Design buildings and grounds to mitigate flooding and protect employees and operations from wind, fire, and other extreme weather events. Currently, none of the IperionX facilities are at risk of flooding owing to sea-level rise.
All	l terms	Training for employees in safe and effective work from home as possible. Selection of production sites that are least vulnerable to impassible routes (public and private transportation). Business continuity planning.
All	l terms	Source scrap titanium and other critical supplies from within 1,000 miles of Southern Virginia, when possible, for recycled-powder production. Use reliable rail transportation when possible when shipping titanium minerals to facility and/or Ti products to customers. Diversify suppliers as possible.

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AREA	TCFD DISCLOSURE TOPIC <sup>1</sup>	IPERIONX FY2024 RESPONSE			
Strategy		Risk or Opportunity Category	Potential Impacts		
		CHRONIC PHYSICAL RISKS: Risks related to the longer-term physical impacts of climate change	CHANGING PRECIPITATION: Changes in precipitation patterns and extreme variability in weather patterns that impacts operations		
			EXTREME HEAT: Impacts to facilities and employees due to extreme heat events		
			WATER SUPPLY: Increased water scarcity		
			FOSSIL FUEL SUPPLY: Petroleum fuel availability and cost		
			ELECTRICITY SUPPLY: Energy-grid blackouts and brownouts		
	a) Describe the climate-related risks and opportunities the organization has identified over	TRANSITION OPPORTUNITIES: Opportunities related to the transition to a lower-carbon economy	ENERGY RESILIENCE: Use of lower-emission sources of energy		
	the short, medium, and long term.		MARKETS: Access to new and emerging markets via increased demand for lightweighting of transportation and other sectors and renewable energy production		
			PRODUCTS & SERVICES: Development and/or expansion of low carbon goods and services		
			CONSUMER DEMAND: Shift in consumer preferences to more sustainable products		
			DIVERSIFICATION OF MATERIALS: Resource substitutes and diversification		
	b) Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.		e risks and opportunities, climate change e continuously identified, communicated,		
	c) Describe the resilience of the organization's strategy, taking into account different climate scenarios, including 2°C or lower scenario.	the future as it pertains to our b	tive and quantitative scenario analysis in business strategy. In the future we plan to the most material climate-related risks		

Timeframe <sup>2</sup>	Possible Interventions to Avoid Risks or Maximize Opportunities
Middle and long terms	Have contingency plans in place for how to operate titanium extraction process in TN with potential increased precipitation and how to quickly recover operations after extreme weather events.
Middle and long terms	Locate facilities in areas where temperature peaks are still relatively livable, as global temperatures increase. Include clear guidelines for safely working in heat in corporate health and safety policies.
Middle and long terms	Minimize water use and maximize water recycling in titanium extraction and recycling processes. Consideration of rain-capture systems for rooftop and grounds.
Middle and long terms	Consider use of electric vehicles or hydrogen fuel cell as available in all operations. Consider electrifying all facilities rather than relying on natural gas or diesel equipment.
Middle and long terms	Consideration of micro-grid installations for larger operations and leveraging on site renewable energy generation and storage.
All terms	IperionX's low-carbon mission includes the procurement of renewable energy for our operations. IperionX supports renewable energy projects, with about 57% of the company's energy from renewable sources in FY2024, and has opportunities to grow this to 100% renewable energy in the coming years.
All terms	As the world electrifies its transportation and other sectors the demand for lightweighting of vehicle components will increase while still needing high strength materials. As green hydrogen production increases more electrolyzers will be required. Titanium's unique material properties make it a prime material for these applications.
All terms	Increasing demands from customers and regulations for companies to decrease their carbon emissions poses an opportunity for IperionX in the development and expansion of its low-carbon circular titanium offerings. Providing a sustainable domestic low-carbon titanium supply will help customers meet their own sustainability goals and mandates while complying with stricter regulations for low-carbon products and supply chains.
All terms	Shifts in consumer preferences to more sustainable and circular products poses an opportunity for IPX as it will likely increase demand for sustainable mineral extraction and low-carbon circular titanium products for consumer goods (sports equipment, consumer electronics, luxury goods, etc.).
All terms	Proprietary technologies allow for the adoption of low-cost sustainable titanium to serve as a substitute for other higher carbon-emission metals. IperionX offers the only low-carbon 100% recycled circular titanium powder on the market today and the vertical integration of our business with the Titan project will provide an ongoing source of titanium minerals as demand increases.
financial planning on an c low-carbon, sustainable, c	cludes the potential impact of climate-related risks and opportunities in our business, strategy, and ongoing basis through our governance structure. Given our mission to be the leading developer of critical material supply chains focused on advanced industries including aerospace, electric vehicles, great opportunity to help mitigate climate-related risks through unique technology and product offerings.
in precipitation patterns a We will account for the p and engineering design.	nessee has an expected lifetime of 25 to 30 years, therefore climate scenarios that indicate changes and extreme variability in weather during that time would have an impact on our Titan project operations. possible effects of different climate scenarios during the project lifetime in all our planning activities perionX will include certain provisions in our contractual agreements to help lessen the impacts of other climate-related events on our operations.



#### **IPERIONX FY2024 RESPONSE**

#### Risk Management

**AREA** 

a) Describe the organization's process for identifying and assessing climate-related risks.

TCFD DISCLOSURE TOPIC1

- b) Describe the organization's processes for managing climate-related risks.
- c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

As with long-standing corporate risks, climate change risks must be continuously identified, communicated, and managed internally. The materiality of climate-related risks is identified alongside our other ESG risks through our materiality assessment, which considers the insights from various internal and external stakeholders to help prioritize our ESG topics.

IperionX's ESG Committee includes members of the board directors, including those who are subject matter experts in ESG, health and safety, and risk management. Each quarter, the ESG Committee reviews IperionX progress against its ESG strategies and goals, and updates our climate change risk strategy as needed. The board and executives will tap both internal and external experts to understand new threats to the business from climate-related risks, will plan to mitigate these threats, and hone the company's products and processes to help reduce the impacts of climate change. Management strategies to reduce climate change risks to meet our ESG goals toward mitigating climate change.

#### **AREA** TCFD DISCLOSURE TOPIC1 **IPERIONX FY2024 RESPONSE** Metrics a) Disclose the metrics The first metric we will use to assess climate-related risks and opportunities will be our own corporate carbon footprint (Scope 1, 2, and 3 GHG emissions) which used by the organization and we will track and report on an annual basis. We will also determine the embodied **Targets** to assess climate-related risks and opportunities in life cycle carbon footprint of our products and processes by performing life cycle assessments following ISO standards. Starting in FY2023 we have additionally line with its strategy and tracked and reported on the metrics of our corporate energy, fuel, and water risk management process. consumption in our annual sustainability report. As we ramp up our titanium recycling and processing at our Titanium Production Facility in VA and eventually our titanium extraction operations in TN, we will incorporate additional metrics as relevant to assess climate-related risks and opportunities (e.g., tracking waste management, tracking any potential downtime due to extreme weather delays or loss of power due to extreme climate events, tracking investment in low-carbon alternatives, etc.). b) Disclose Scope 1, Scope In the first IperionX Sustainability Reports for fiscal year 2022 and 2023 we 2, and, if appropriate, released GHG footprints for our first three fiscal years of operation, 2021, 2022, Scope 3 greenhouse gas and 2023. In this year's Sustainability report for fiscal year 2024 we released our (GHG) emissions, and the fourth GHG footprint, which includes accounting for Scope 1, 2, and material related risks. Scope 3 GHG emissions related to our business operations following the GHG Protocol methodology. We will continue to track and report our carbon-equivalent emissions on an annual basis and report them in our annual sustainability reports. As our operations scale and expand, we will institute climate change policies in line with our business objectives, and will forecast future financial impacts from the risk of future potential carbon pricing or trading regulations. In line with IperionX's mission to produce a domestic low-carbon sustainable c) Describe the targets used by the organization titanium supply chain, we will endeavor to decarbonize our business operations to manage climate-related to the maximum extent practicable as we continue to grow. We have started this risks and opportunities endeavor by quantifying our own corporate carbon footprint annually and and performance working to minimize the growth of our corporate footprint as our operations against targets. expand. Once we have baselined our full production-level carbon footprint, we will set emission reduction targets and carbon offset strategies and will report annually on performance against those targets in our sustainability reports. We will complete life cycle assessments (LCAs) to help us continue to reduce the impacts of our own products and processes. We are developing internal policies around climate change for our own operations and for our supply chain.

#### Notes

- 1. This table follows the June 2017 "Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures", including the supplemental disclosures recommended for the Metals and Mining industry as included in the "Materials and Building Group", as summarized in the June 2017 "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures".
- 2. Short term risk is defined in these disclosures as risks relevant in 0 to 5 years. Medium term risk is defined as risks relevant in 5 to 30 years. Long term risk is defined as risks relevant in over 30 years.

## Forward looking statements

Information included in this report constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words. Forward-looking statements in this report may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates, expected costs or production outputs, or sustainability goals Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance, and achievements to differ materially from any future results, performance or achievements.

Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions, including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation, as well as other uncertainties and risks set out in filings made by the Company from time to time with the Australian Securities Exchange and the U.S. Securities and Exchange Commission ("SEC").

Forward looking statements are based on the Company and its management's assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be correct affected in any material manner by these or other factors not foreseen or foreseeable by the Company's control.

There may be other factors that could cause actual results, performance, achievements, or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in this report speak only at the date of issue. Expect as required by applicable law or stock exchange listing rules, the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions, or circumstances on which any such statement is based.

The information in this report that relates to Exploration Results and Mineral Resources is extracted from IperionX's ASX Announcement dated October 6, 2021 ("Original ASX Announcement") which is available to view at IperionX's website at www.iperionx.com. IperionX confirms that a) it is not aware of any new information or data that materially affects the information included in the Original ASX Announcement; b) all material assumptions and technical parameters underpinning the Mineral Resource Estimate included in the Original ASX Announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the Original ASX Announcement.



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