

## SUMMARY OF SUSTAINABILITY PRACTICES APRIL 2024

LEVERAGING **DISRUPTIVE TECHNOLOGIES** TO FIND AND DEVELOP CRITICAL METALS FOR AN ELECTRIC ECONOMY



## **TABLE OF CONTENTS**



# 66

We are committed to the sustainable development of our projects and embed strict ESG criteria in the earliest stages of the decisionmaking framework of project evaluation and execution.

## A MESSAGE FROM OUR PRESIDENT & CEO

We are pleased to present our 2024 Summary of Sustainability Practices. This report is intended to provide our investors and other stakeholders with important information about our efforts to deliver on our identified priorities related to Environmental, Social and Governance (ESG) principles. As our Company has grown, we have made important additions to our leadership team to ensure that we have the right people and practices in place to promote active engagement with the communities in which we operate, and prioritize the health and safety of our people.

Ivanhoe Electric is a United States minerals exploration company that combines advanced technologies with a portfolio of electric metals projects predominantly located in the United States. We believe the United States is significantly underexplored for critical metals and has the potential to yield major new discoveries. We are applying the disruptive power of our Typhoon<sup>™</sup> and Computational Geosciences technologies to accelerate the exploration process at our projects. We are searching for new discoveries of the critical metals the U.S. needs to support supply chain independence, the transition to cleaner energy and the electrification of the economy. At our Santa Cruz Copper Project in Arizona, we are advancing studies for a modern, high-grade, underground copper mine on private land with an estimated 20-year mine life. Our Initial Assessment study, published in September 2023, incorporates renewable energy, modern mining methods and an electric fleet of mining equipment, resulting in low estimated operating costs and projected carbon dioxide equivalent emissions per pound of copper produced that are among the lowest in the global mining industry.



We are committed to the sustainable development of our projects and embed strict ESG criteria in the earliest stages of the decision-making framework of project evaluation and execution. We continue to build on our team's strong ESG record for leveraging best practices to achieve our goal of establishing Ivanhoe Electric as a leader in responsible mining. Key considerations that will influence our decision making include, but are not limited to, using clean and renewable energy in our future mining operations, efficiently and responsibly managing our water resources, following best practices in health, safety and environmental matters, protecting local cultural heritage and biodiversity, minimizing our environmental footprint, ensuring workforce diversity and hiring from local communities. Importantly, the minerals that are the focus of our exploration and future development efforts play a critical role in improving our environment by supporting electrification and enabling the clean energy transition.

Ivanhoe Electric is committed to pursuing the highest ESG standards throughout our operations and at all stages of the mining life cycle. We look forward to collaborating with our stakeholders to responsibly advance our portfolio of mineral exploration projects for a cleaner, brighter future.

### TAYLOR MELVIN

President & Chief Executive Officer

3

Our two material mineral projects are the Santa Cruz Project in Arizona and the Tintic Project in Utah. We also hold a portfolio of exploration projects throughout the United States, including projects in Montana, North Carolina, Nevada, and Oregon.

4

In September 2023, Ivanhoe Electric completed an S-K 1300 Initial Assessment and Technical Report

Summary<sup>1</sup> for the Santa Cruz Project. Efforts are underway to advance environmental, technical, and economic studies for an underground high-grade copper mining operation and the publication of an S-K 1300 Prefeasibility Study. The Santa Cruz Project is preliminary in nature and is in the early planning stages of mine design, engineering, and construction.



**PROJECT LIST AND** 

**STAGE OF DEVELOPMENT** 

Summary of operational assets: Supporting our projects is an inventory of exploration assets. These include administrative offices, structures related to drilling operations, and diesel-powered equipment such as generators and vehicles. Our environmental and social footprint is minimal; however, we are developing our methodology to account for an evolving Company and future reporting.

This summary of sustainability practices focuses solely on Ivanhoe Electric's Santa Cruz Project. Ivanhoe Electric recently conducted an internal materiality assessment which will inform our strategy, policies, management systems, metrics, and future reporting. We are working to collect data and measurements for such reporting. Therefore, any data reported in this document is projected and is estimated.

Mining activities have yet to commence at the Santa Cruz Project. However, as we progress toward a Prefeasibility Study, Ivanhoe Electric

will collaborate with leading engineering mine development consultants, including those specializing in environmental and water resources, process technology and recovery, health and safety, design/geotechnical, power (including renewable energy), mechanical, piping, control systems, electrical, material handling, civil, structural, and architectural and interactive 3D and 4D modeling – to integrate best practices for optimized extraction and processing operations. The practices discussed here will be applied across our portfolio as projects advance.

1 A preliminary technical and economic study of the economic potential of all or parts of mineralization to support the disclosure of mineral resources.

**TIMELINE & MILESTONE OF PROJECT PORTFOLIO** 



OTHER U.S. EXPLORATION PROJECTS



## MATERIALITY ASSESSMENT

The foundation for an environmental, social and governance (ESG) strategy is rooted within its sustainability materiality assessment which helps companies identify, prioritize, and manage relevant ESG topics that can have an impact on society, the environment, and their businesses.

To commence our ESG/sustainability strategy and foundation, Ivanhoe Electric conducted an internal materiality assessment. Ivanhoe Electric is in the exploration stage of various projects, and mine production and revenue will not be realized for several years.

## DETERMINING MATERIAL TOPICS

Our current stage of exploration is the primary influence on our sustainability strategy. As we grow from an exploration mining company through construction and into production, so will our material topics and strategy. Therefore, Ivanhoe Electric's current material topics focus on matters aligned with investor-related concerns over the

next 3 - 5 years. For our baseline assessment, we adopted the recommended material topics by the Sustainability Accounting Standards Board (SASB) - Metals & Mining sector, which covers economic, environmental, social, and human rights topics. The Global Reporting Initiative (GRI) and its Mining sector will be considered in future assessments.

## ASSESSING THE SIGNIFICANCE OF POTENTIAL IMPACTS

The assessment incorporated a combination of investor and internal perspectives of material topic importance.

- SASB topics are specifically cited, however, specific metrics may not be material due to our stage of development.
- Ivanhoe Electric supplemented the SASB topics with investor-facing sustainability topics identified in the mining sector of MSCI, S&P Global and Institutional Shareholder Services (ISS-ESG).
- Ivanhoe Electric conducted internal surveys and discussions to rank each material topic. A survey was deployed across all main functional areas at Ivanhoe Electric. The results were scored based on their potential impact on society, the environment, and our business. Following the survey, an engagement workshop was held between executive management and cross-functional roles such as finance, operations, exploration, environmental, health and safety, human resources, investor relations, and legal. We discussed each SASB topic, its metric and future reporting criteria relative to our current stage of growth. The workshop facilitated dialogue to enhance awareness and rank the importance of topics. Finally, topics were benchmarked to peers to check for reasonability.

### MATERIALITY MATRIX



• The topic "Climate Strategy" was internally created by combining SASB Energy Management and Greenhouse Gas Emission topics. • References to materiality refer to such terms in the context of ESG strategy and reporting and do not directly correspond to the concept of financial materiality.

## **NEAR-TERM STRATEGY**

Our interim focus is on governance & oversight, policy development, identifying management systems, and methodologies to eventually collect data for each applicable material topic. As we continue our development and growth,

we will augment our material topics with other reporting frameworks, i.e., the Global Reporting Initiative (GRI) via another materiality assessment once we realize mine extraction and production activities.



Our corporate governance structure is disclosed in our Annual Reports, Proxy Statements, and our <u>Corporate Governance</u> website. Ivanhoe Electric's Board of Directors (BOD) is responsible for the oversight and monitoring of management's assessment of major risks and strategy for risk management. This includes the Board performing periodic review of the Company's Corporate Governance Guidelines and its Code of Business and Ethics. The Board has a Health, Safety and Environmental (HS&E) Committee to oversee the Company's key health, safety, environmental and social policies and related risks, opportunities and matters affecting the Company's business. The HS&E Committee will also ensure accurate reporting of ESG matters of the Company.

Ivanhoe Electric's management includes a specialized position, Director of ESG, reporting to Executive Management through the Company's General Counsel and Corporate Secretary.





## BUSINESS ETHICS, CONDUCT & TRANSPARENCY

Ivanhoe Electric has various policies to demonstrate our commitment to a culture of honesty, integrity, accountability, and respect for the communities where we operate.

Ivanhoe Electric's Code of Business Conduct and Ethics, Anti-Corruption, Whistleblower, Insider Trading, and other corporate policies set forth the guiding principles by which we operate our Company.

The Legal Department, including the General Counsel and Corporate Secretary, oversees compliance with these policies.

Upon new hire onboarding and each year, employees are required to review and confirm compliance with the policies, and we encourage our employees to share the policies with our business partners and community members, so they are aware of our commitment in every circumstance. Ivanhoe Electric provides ongoing employee training, which is focused on key ethical dilemmas, including antibribery, conflicts of interest, insider trading, the U.S. Foreign Corrupt Practices Act, and HR-related matters such as harassment and hiring practices. Ivanhoe Electric utilizes eCompliance, a third party cloud-based software, for managing employee understanding of all company policies including Business Conduct and Ethics.

FOR MORE INFORMATION:

## **ETHICS REPORTING**

Ivanhoe Electric has adopted a Whistleblower Policy to set out the procedure and contact information for employees, directors, officers, contractors, consultants, and other stakeholders to report, directly or anonymously, any wrongdoings or suspected wrongdoings, including any violations of the Code of Business Conduct and Ethics or illegal activity without fear of reprisal. It is illegal for the Company to retaliate against any person who reports violations or illegal activity. Ivanhoe Electric urges any person reporting an incident to contact their supervisor, the Corporate Secretary or Chair of the Audit Committee directly. For those who wish to report an incident anonymously, Ivanhoe Electric has established an alternative reporting mechanism. An independently operated web reporting portal and 24-hour telephone service is available for all stakeholders to report unethical behavior, including fraud. Any person can make a report directly at ivanhoeelectric.ethicspoint.com

or call the Company's Whistleblower Hotline at 1-844-680-3966 to submit a verbal report.

FOR MORE INFORMATION:



## EXTRACTIVE SECTOR TRANSPARENCY OF GOVERNMENT PAYMENTS

The Extractive Sector Transparency Measures Act (ESTMA) advances transparency to reduce corruption in the extractive sector. In compliance with ESTMA, Ivanhoe Electric reports payments made to governments.

FOR MORE INFORMATION:

## CORRUPTION PERCEPTIONS INDEX

Ivanhoe Electric operations are in various stages of exploration, and saleable minerals will not be realized for several years. However, with primary assets in the United States, Ivanhoe Electric is not operating in a country with the lowest rankings per the Transparency International's Corruption Perceptions Index (CPI).

FOR MORE INFORMATION:



Copper mining operations often require significant water resources for ore processing and other mining activities. In arid regions like Arizona, where water scarcity is a concern, sustainable water management is critical.

According to World Resources Institute's

Aqueduct's Water Risk Atlas tool, the Santa Cruz Project area is at high risk for water stress<sup>1</sup>. Without mitigating factors, the water stress in this area is expected to increase to an extremely high level of risk by 2050. As such, any impact of construction, mining and process operations on local water resources must be addressed.

To date, the Santa Cruz Project primarily consumes water for drilling operations and in buildings. The local utility supplies water resources for our buildings. Water for drilling operations is sourced from a water well on-site where Type 1 water rights are utilized. All associated water from drilling is either treated and infiltrated back into the groundwater system or reused in the drilling process.

From a water resource withdrawal perspective, the Initial Assessment outlines a large water surplus at the Santa Cruz Project due to the amount of water that must be pumped to dewater the underground ahead of and during mining operations. When mine and process operations commence, Ivanhoe Electric will source water from (1) Type 1 water rights, which account for approximately 3,600 acre-ft/year, (2) non-contact dewatering water, and (3) contact water. The primary source of water will come from non-contact dewatering water originating from an inflow of groundwater located approximately 150 meters below the surface near the deposit. The dewatering water will be approved for use under an Arizona Department of Water Resources 513 Dewatering Permit. Surface water resources at the Santa Cruz Project include the Santa Cruz Wash Canal and the North Branch of the Santa Cruz Wash. The Project does not expect to impact these surface water features.

Water consumption studies are being advanced. The primary consumers and recyclers of water will be related to:

- Underground mining/drilling,
- Tailings storage facility,
- Paste backfill, and
- Dust control.

The Initial Assessment of water balance for the Santa Cruz Project postulates a surplus of water from the Project from dewatering of the underground operations. The mining and processing operations will consume approximately 3.5 million cubic meters (Mm<sup>3</sup>) of water per year, while water supplies from dewatering will range from 20 million to over 30 million cubic meters per year (Mm<sup>3</sup>/y). The amount of water for re-injection or distribution to local stakeholders during operations could average 27 Mm<sup>3</sup>/y. The water balance excludes the water rights associated with the surface title of the Project. Simultaneously, baseline groundwater and surface water monitoring is being conducted to assist with water allocation decisions.



#### FOR MORE INFORMATION:

Section 1.10: Project Infrastructure (Water) Section 23.2.2: Conclusions and Recommendations (Hydrogeology) Section 13.3: Hydrogeology Figure 13-31: Annual average residual passive inflow rates by year, for the active dewatering scenario Section 13.4: Dewatering Section 15.7: Estimates for water withdrawal, consumption, reuse, and discharge

<sup>1</sup> Baseline water stress measures the ratio of total water demand to available renewable surface and groundwater supplies. Water demand includes domestic, industrial, irrigation, and livestock uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate more competition among users. Source: Aqueduct 4.0



The extraction and processing of copper demands substantial energy, and the reliance on nonrenewable energy sources can contribute to environmental impacts. Transitioning to renewable energy sources or improving energy efficiency presents a sustainability challenge for the industry.

Energy consumption is inseparable from carbon emissions. Ivanhoe Electric integrated SASB topics Energy Management and Greenhouse Gas Emissions under the title of Climate Strategy and will consider potential applicable regulations.

## **ENERGY**

The Initial Assessment postulates the total power consumption at the Santa Cruz Project will be primarily a combination of diesel and electricity. Forecasting a brief surge of diesel for mine access and construction, energy consumption levels will shift towards electricity for the remaining life of the mine (LoM).

The highest consumption of power once the Santa Cruz mine is expected to be:

• Underground infrastructure, including mobile equipment, ventilation fans, dewatering pumping system, material conveyance system, battery recharging station for electric equipment, and the paste backfill plant.

The largest consumers of power for process plant and surface facilities are expected to include:

• Grinding mills (SAG and ball mills), leach tank agitators, electrowinning of copper, regrinding and flotation, slurry pumping to various facilities and unit operations, and the ventilation chiller units.

Ancillary consumers of power may include:

• Auxiliary and standby generators (diesel), administrative/support mobile vehicles (gasoline) and offices/structures (electricity).

Shared between underground and surface facilities, the Santa Cruz Project anticipates on average 590,000 gallons of diesel and 450,000 MWh of electricity use for each year (approximately 1.70 million gigajoules per year). Energy consumption is expected to be 95% from electricity and 5% from diesel.

The goal of the mine development is to achieve most of the energy supply from renewable sources such as solar or geothermal, and battery storage either at the start or through a phased-in approach during the mine operation. Every effort to solely utilize renewable electricity consumption across all sources of energy demand is in research. Also, the Project is investigating a battery electric fleet for underground activities. The use of battery electric equipment is a newer technology not widely used in the mining industry.

In the Initial Assessment, the base case of the Project states that the mine will operate using 70% renewable power by the third year of construction and operation.

### **GREENHOUSE GAS (GHG) EMISSIONS**

Currently, none of the project locations are subject to GHG emissions regulations. Although SASB's primary metric is Scope 1 GHG emissions, Ivanhoe Electric will quantify both Scope 1 and Scope 2 GHG emissions. Due to our business phase of growth and the stage of development, Ivanhoe Electric does not currently have emissions quantified. We are investigating our sources of emissions and are working to develop a methodology for carbon accounting in the future.

However, Ivanhoe Electric conducted a comprehensive carbon impact assessment for the Santa Cruz Project. The assessment evaluates

## SCOPE 1 AND SCOPE 2 CO, e EMISSIONS AND CUMULATIVE AVOIDED EMISSIONS

Assuming a power generation profile and emission factors similar to nearby utility commitments.



(TONNES)

EMISSIONS

the expected Scope 1 and Scope 2 emissions associated with the Project over its lifetime and compares these emissions to the average carbon intensity for copper mining.

Aligning with energy uses, primary direct Scope 1 emissions will come from diesel fuel when operating mining equipment, excavation, and underground transportation of the extracted ore. Also included are emissions from the explosives used to access the ore body. Primary indirect Scope 2 emissions will mostly result from the crushing and grinding of ore, dewatering pumping system, ventilation, and material handling.

2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048

### YEAR

Annual Scope 2 Emissions

Cumulative Annual Scope 2 Emissions Avoided by Renewable Generation

We are conducting ongoing research to determine the feasibility of renewable energy, storage, and battery powered underground equipment. As noted in the Energy section, considering a long-term strategy to manage GHG emissions, the Santa Cruz Project is forging an innovative path by planning to use 70% renewable energy generated by solar and/or geothermal-driven

microgrid. This system will enable the Project, by the third year of construction and operation, to drastically reduce Scope 2 emissions. This plan not only aligns with environmental best practices, but also demonstrates leadership in sustainable energy and will allow the Santa Cruz Project to produce copper with one of the industry's lowest carbon intensities.

## ANNUAL CO, e EMISSIONS AND INTENSITIES (MAX 70% RENEWABLE)



#### Note regarding GHG emissions:

Extraction of natural resources, i.e., copper, is the beginning of all supply chains. When considering Ivanhoe Electric's supply chain, it will consist mostly of capital equipment and consumables to process mineral resources and backfill-mined areas. Therefore, Ivanhoe Electric has decided that Scope 3 emissions, such as upstream supply chain impacts, are non-material for our initial short-term strategy. We may reconsider this in the future.

CO2e Intensity (2029-2048 Average): 0.45 tonne CO2e / tonne Cu

Olvanhoe FOR MORE INFORMATION: Section 1.10: Project Infrastructure (Power) Section 13.8.7: Equipment, including Table 13-37 Section 15.6.3: Power Consumption, including Table 15-3 Section 17.1.7: Carbon Intensity, including Figures 17-1 and 17-2





#### MATERIAL TOPIC

## WASTE & HAZARDOUS WASTE MANAGEMENT

The mining process generates substantial amounts of waste, including tailings and other by-products. Ensuring proper waste management, including containment and remediation, is crucial for minimizing environmental harm.

The Initial Assessment incorporated characterization studies for potential waste materials that will be generated on-site at the Santa Cruz Project. Additional studies are ongoing, and the results will help develop the site environmental conceptual model and to understand both long-term material environmental behavior and environmental risks associated with various planned waste facilities.



Anticipated mine materials include:

- Mine access material includes both overburden and bedrock material that must be removed to develop the Project.
- Mine area material refers to mineralized bedrock and minor waste rock that will be excavated as ore for processing.
- Ore processing residuals are the leftovers, i.e., tailings and heap leach spent ore.

A large portion of these mined materials will return underground to fill the voids created during mining.

Another potential source of waste generation is from the reagents used to process ore into a copper product. Many of the reagents that strip copper from the ore are hazardous. Characterization of waste will continue during mine development engineering, through construction engineering and throughout LoM, to ensure regulatory compliance.

#### FOR MORE INFORMATION:

Section 14.3.7: Reagents and consumables

Figure 14-3: Santa Cruz Plant Primary Reagents and Consumables

Section 17.1.10: Material Characterization

Section 17.3: Requirements and Plans for Waste and Tailings Disposal, Site Monitoring, and Water Management During Operations and After Mine Closure

Mining operations can contribute to air pollution through dust and emissions. Implementing technologies to control emissions and dust is essential for reducing the environmental impact of copper mining.

Not all listed air pollutants (i.e., lead, mercury) will be reported because they are negligible to our operations. However, the Santa Cruz Project is committed to responsible environmental management, with a particular focus on minimizing air quality impacts.

The Initial Assessment incorporated a preliminary assessment of potential air emissions with additional studies ongoing. The Initial Assessment anticipates the Project to be categorized as a "synthetic minor source". This means that while potential uncontrolled emissions may be above major source thresholds, effective mitigation will reduce levels below thresholds through the implementation of strategies including operational restrictions, and emission control technologies and practices.

The Santa Cruz Project will employ engineering controls and a multifaceted approach to air quality management. Focusing on both the prevention and mitigation of emissions, the primary sources of air pollutants include:

Particulate Matter (PM) and Dust: Generated from mining activities, material handling, transportation, stockpiling, and windblown dust. The challenges of operating in an arid climate are of particular concern, especially since the Project falls within the West Pinal County PM10 Nonattainment Area.

• Control of PM and dust: Recognizing the specific requirements of the West Pinal PM10 nonattainment area, the Project will take specific measures to control and effectively mitigate dust. Dust control measures will be designed to comply



with all applicable regulations and guidelines for this specific nonattainment area. For material handling activities, water sprays and enclosures will be strategically utilized to control and mitigate dust emissions, especially during exposure to high winds. Other dust suppression techniques using water or chemical suppressants may be needed as well as paving high-traffic areas, or the potential implementation of operational restrictions (e.g., reduced speed limits or pausing work during high wind events).

**Combustion Emissions:** Emissions (CO, NO, SO, VOCs) from the operation of generators, mobile equipment, and other fuel burning equipment.

• Control of combustion emissions: Non-emergency generators will be equipped with Selective Catalytic Reduction (SCR) systems, a technology that converts nitrogen oxides (NO) into nitrogen and water. This technology is highly effective in reducing emissions associated with combustion activities. Alternatively, Ivanhoe Electric is investigating mobile underground electric vehicles and battery storage to potentially eliminate NO, SO, CO, and VOC emissions.



Section 17.1.6: Air Quality

Table 13-34: Provides a list of potential electrically operated mobile equipment

Table 13-37: Estimated mobile equipment 19



Environmental, Closure and Permitting

Permits and Authorizations

Threatened and Endangered Species

Migratory Bird Treaty Act

Material Characterization

Environmental, Closure, and Permitting

![](_page_11_Picture_8.jpeg)

Impact to the land's surface can have a direct impact on local ecosystems and wildlife habitats. A key aspect of the Santa Cruz Project is the plan for underground mining operations which will have

## PROTECTED CONSERVATION STATUS OR ENDANGERED SPECIES

While various flora and fauna species are present within the boundary of the Project, there are no known occurrences of federally listed threatened species, and no potential occurrences of species listed under the "Endangered Species Act". No federal designated or proposed critical habitat occurs on the property. A State of Arizona search found no records of Endangered Species Act listed special-status species within three miles (5 km) of the property. A review of public records indicates sightings of bald eagles perching on transmission poles and irrigation pivots of the property. However, there are no known nests in the area.

## ACID ROCK DRAINAGE

The Initial Assessment material characterization provides insight regarding acid generating material. Characterization and testing are needed, but preliminary analysis indicates varied pH of mined materials, including tailings, such as:

- All overburden (access material) material is non-acid-generating and contains considerable neutralization potential that makes it potentially useful as borrow/construction material that would not generate acidic and/or metalliferous drainage.
- For the mine area, mineralized bedrock is a mix of acid-generating and non-acid-generating.

![](_page_11_Picture_18.jpeg)

## MATERIAL TOPIC **BIODIVERSITY IMPACTS**

a significant reduction on surface disturbance, and therefore minimize impact to the site's ecosystem during operation as well as during closure and restoration.

Migratory birds are present, and a portion of the site is a known nesting area for burrowing owls. In accordance with the Migratory Bird Treaty Act (MBTA) and the U.S. Fish and Wildlife Service, we have, and will continue to implement best practices to avoid and minimize impacts to birds. All employees and contractors are trained in MBTA requirements and migratory bird survey and monitoring protocols. Pre-construction clearance surveys and implementation of beneficial practices and procedures to protect migratory bird species will continue throughout the life of the Project.

Finally, there are no planned impacts to potential federally regulated waters of the U.S.

Although exact proportions are currently unknown, characterization studies continue.

- Spent ore and tailings are both likely to be non-acid-generating based on preliminary test results. Tailings process water is expected to be alkaline, contain high sulfate and likely very high chloride. However, spent ore process water will likely be acidic.
- Once all materials are characterized, Ivanhoe Electric will develop a metal leaching/acid rock drainage management plan.

![](_page_12_Picture_0.jpeg)

## MATERIAL TOPIC TAILINGS STORAGE FACILITY MANAGEMENT (TSF)

Ivanhoe Electric is actively conducting studies relating to TSF management, including engineering and design construction considerations, tradeoffs and long-term benefit analysis of storage and physical impacts, i.e., location, seismic, rain events, and closure. The Initial Assessment outlines the TSF will be located within the Project's boundary to avoid transportation impacts to the local community.

The TSF will be designed to meet stability, water management and closure criteria that align with ADEQ and internationally recognized guidelines i.e., Global Industry Standard on Tailings Management (GISTM). As well, other criteria regarding operating life, maximum storage capacity estimates, material characterization and reuse, design features,

embankment stability, duration for maximum flood volume, emergency preparedness and response, and closure management is under investigation.

The proposed site for the tailings facilities is within the 500-year flood plan, and adjacent to the Federal Emergency Management Agency's (FEMA) 100-year flood event. The location will influence construction methods. Preliminary calculations estimate the TSF impoundment will have capacity to store the 72-hour probable maximum flood (PMF) volume above the assumed operating pond volume, while maintaining a minimum 1.0 m freeboard to the embankment crest, thereby reducing risk to embankment structural instability.

### FOR MORE INFORMATION:

Section 1.10: Section 17.3: Project Infrastructure (Tailings Storage Facility) Requirements and Plans for Waste and Tailings Disposal, Site Monitoring, and Water Section 1.15: Management During Operations and After Conclusions and Recommendations Mine Closure

(TSF Design)

Table 15-2: TSF Target and Calculated FoS

Figure 15-7: Site Location, General TSF Layout, and Flood Risk

Section 15.5: Tailings Disposal (entire)

![](_page_12_Picture_12.jpeg)

Section 17.7: Mine Closure

Section 17.7.2: Tailings Closure and **Reclamation Approach** 

Section 23.4.3: **Tailings Storage** 

![](_page_13_Picture_0.jpeg)

Process Plant OPEX Summary by Category

Table 13-35: Management and Technical Staff Labor Estimate Table 13-36: Operating and Maintenance Labor Estimate

Table 18-11: Process Plant OPEX Summary by Category

Table 18-13: Life-of-Mine General and Administration Cost Detail Section

![](_page_13_Picture_5.jpeg)

Our workforce is the foundation of our success. As of December 2023, Ivanhoe Electric and its subsidiaries had 244 full-time employees, of which approximately 50 were supporting the Santa Cruz Project. We consider our relationship with our employees to be strong. None of our employees are represented by a labor union or are party to a collective bargaining agreement.

When forecasting our labor pool, we believe the cities of Casa Grande, Maricopa, and Phoenix supply sufficient skilled labor for the Santa Cruz Project. Onsite personnel will be a combination of contractors and Ivanhoe Electric employees.

Once operational, the estimated management and technical staff for Ivanhoe Electric is approximately 50 salaried positions, and operating and maintenance personnel is approximately

![](_page_13_Picture_10.jpeg)

![](_page_13_Picture_12.jpeg)

## MATERIAL TOPIC LABOR RELATIONS

274 hourly positions comprised of supervision, operations, maintenance, administrative, etc. Employee compensation is expected to exceed average local labor rates, and is significant to the operating cost profile.

As workforce perspectives for employment are evolving, our Board oversees our policies and implementation programs that govern our approach to management of our human capital. The Compensation and Nominating Committee has oversight of human capital matters, including those relating to executive recruitment, retention, and development, pay equity, and inclusion and diversity. These efforts are intended to minimize the risk of labor disputes, including protests, blockades, and strikes, which could have an adverse effect on our business and results of operations.

![](_page_14_Picture_0.jpeg)

# WORKFORCE HEALTH & SAFETY

Ivanhoe Electric's objectives include protecting the health and safety of our employees and partners, operating responsibly, and conducting all business activities with respect and integrity at each of our projects. Ivanhoe Electric is committed to promoting the health, safety and well-being of our workforce and keeping its workplaces free from unnecessary hazards and effectively managing health and safety risks. Our Board oversees our policies and implementation programs that govern our approach to management of our human capital, with the HS&E and Compensation and Nominating committees having oversight of human capital matters, including those relating to health and safety. At each project location, we undertake a robust, diligent process to thoroughly assess specific risks and to implement appropriate measures to:

- 1) Protect the health and safety of our employees, contractors, partners, and communities,
- 2) Contribute to successful, responsible operations, and
- Conduct all business activities with respect and integrity

All Ivanhoe Electric employees and Company representatives are responsible for maintaining a safe workplace, and empowered to report accidents, injuries, unsafe equipment, practices or conditions to a supervisor or other designated person. Wherever we operate, we are committed to:

- Ensuring everyone understands their tasks and is equipped to perform them.
- Meeting or exceeding all applicable regulations and health, safety and environment objectives and targets.
- Ensuring a workplace free of alcohol and recreational drugs.
- Implementing protection measures to effectively manage environmental hazards in all aspects of our operations.

![](_page_14_Picture_11.jpeg)

- Maintaining vigilance and readiness to prevent harmful incidents and, when needed, promptly lead responses, and effectively manage any such incidents.
- Setting health, safety and environment objectives and targets.
- Developing and implementing continual improvements in all activities.
- Maintaining "Zero Harm" as our required standard of operational performance.
- Ensuring our employees and contractors are treated fairly and equally.
- Ensuring that our host communities are informed of safety risks and equipped with the necessary knowledge to avoid harm.

Eventually, the U.S. Department of Labor's Mine Safety and Health Administration (MSHA) will also play a role, but since Ivanhoe Electric does not have underground activities, the Occupational Safety and Health Administration (OSHA) will govern our current H&S practices. Ivanhoe Electric currently has a health and safety management system in compliance with applicable regulations. In addition to staff safety personnel, we utilize eCompliance as a repository and an online tool for safety management, policies, procedures, training, reporting incidences, analytics, and performance.

As Ivanhoe Electric proceeds with mine design, construction and eventually operations, safety management will intensify. At this stage, our foundation is being developed in preparation.

#### FOR MORE INFORMATION:

Section 13.8.7: Mine Services (Health and Safety)

• Health and Safety Policy (available upon request)

![](_page_15_Picture_0.jpeg)

## SECURITY, HUMAN RIGHTS AND RIGHTS OF INDIGENOUS PEOPLES

MATERIAL TOPIC

The surrounding area of the Project location has a rich cultural history, including Native American communities with deep connections to the land. Our ongoing and future success depends on developing and maintaining productive relationships with the communities surrounding our mineral projects.

As codified in our Code of Business Conduct and Ethics, Ivanhoe Electric has the privilege of operating in a diverse range of local communities and is committed to the support of, and appreciation for, the customs and traditions of these communities. Ivanhoe Electric representatives are expected to show respect for the culture and people of the communities in which they work and to observe project-specific best practices when visiting work sites.

Ivanhoe Electric completed a Class III Cultural Survey to reassess 20 previously recorded sites and their eligibility for listing in the National Register of Historic Places (NRHP). Of the 20 sites reassessed, five sites were recommended eligible for listing in the NRHP. Despite there being no federal permitting or requirements under Section 106 of the National Prehistoric Preservation Act for private lands, the Santa Cruz team is committed to collaborating directly with descendant communities to help preserve and protect places of important cultural value.

Ivanhoe Electric, specifically the Santa Cruz Project, recognizes the need to keep stakeholders well informed about the Project's potential economic and community benefits and Ivanhoe Electric's commitment to safety and the environment. To achieve this, the Santa Cruz team has initiated meetings with various key groups, including local community leaders, neighboring communities, and regional- and statelevel representatives. Consistent communication will continue through the development of a Community Working Group (CWG). This group provides a forum for stakeholder involvement and will allow interested community members to engage with the team as the Project progresses.

A Tribal Engagement Strategy will be the primary pathway for engagement with descendant Native American communities to assure their input and to acknowledge their concerns. In particular, the Ak-Chin community is located northwest of the Project site but exceeds the SASB threshold of 5 km/3 miles.

In reference to the Uppsala Conflict Data Program (UCDP), the Project site is not in proximity to active conflict areas.

![](_page_15_Picture_9.jpeg)

Section 17.1.5: Cultural Heritage Section 17.6: Local Individuals and Groups

• Stakeholder Engagement Plan (available upon request)

28

![](_page_15_Picture_14.jpeg)

![](_page_16_Picture_0.jpeg)

Mining activities can impact nearby communities in terms of noise, air quality, water availability, and changes to the local landscape. Establishing and maintaining positive relationships with all stakeholder groups is a high priority for Ivanhoe Electric. Wherever we operate, we value the input and cooperation of local stakeholders and both national and local government representatives.

In alignment with Ivanhoe Electric's community engagement and partnership standards, the Santa Cruz Project is being developed with a strategy to establish and uphold the support of the surrounding communities. Ivanhoe Electric recognizes the need to keep stakeholders well informed about the Project's potential economic and community benefits and Ivanhoe Electric's commitment to safety and the environment.

To achieve this, the Santa Cruz team has initiated meetings with various key groups, including local community leaders, neighboring communities, and regional- and state-level representatives. Consistent communication will continue through the development of a Community Working Group. This group provides a forum for stakeholder involvement and will allow interested community members to engage with the team as the Project progresses. We place high value on obtaining and maintaining the trust of the communities surrounding our projects, through:

- Open and transparent engagement from the outset of our projects during the earliest exploration phases.
- Ongoing engagement about risks and opportunities that might result from Ivanhoe Electric's activities in local areas.
- Development of a Community Working Group (CWG) that informs, educates, and encourages project advocacy.
- Participation in sponsorships and charitable giving within the community.
- Maintaining an "open door" policy for any stakeholders who wish to engage with the lvanhoe Electric team to discuss the Project(s).
- Providing opportunities to local communities to participate in social development initiatives, cocreated by local stakeholders and Ivanhoe Electric.

#### FOR MORE INFORMATION:

Section 17.6: Local Individuals and Groups

• Stakeholder Engagement Plan (available upon request)

- Focusing our recruitment activities, where feasible/possible, on residents of the communities in the vicinity of our projects.
- Endeavoring to procure goods and services from businesses situated in our community footprint area.

Our goal is to proactively engage with our communities to provide sustainable, long-term mutual benefits for the Company, our shareholders, and the communities in which we operate.

Accompanying the CWG, Ivanhoe Electric plans to create an all-encompassing environmental, social, and governance framework designed to effectively address any community concerns and ensure that the Santa Cruz Project operates in a socially responsible manner.

Currently, there have been no community-related technical delays on the Project.

## **CORPORATE INFORMATION**

6

### CORPORATE HEADQUARTERS

450 E Rio Salado Parkway, Suite 130 Tempe, Arizona 85281

CASA GRANDE OFFICE 501 N Florence Street, Suite 102

Casa Grande, Arizona 85122

## VANCOUVER OFFICE

606 - 999 Canada Place Vancouver, British Columbia Canada V6C 3E1

**INVESTOR RELATIONS** 

E info@ivanhoeelectric.com T +1-480-656-5821

STOCK EXCHANGE LISTING NYSE AMERICAN: IE | TSX: IE

## AUDITOR

**Deloitte LLP** 8 Adelaide Street West, Suite 200 Toronto, Ontario Canada M5H 0A9

## REGISTRAR AND TRANSFER AGENT

## Computershare Trust Company

E web.queries@computershare.com
T 1-800-564-6253 (Toll Free North America)
T 1-514-982-7555 (International)
T 1-888-838-1405 (Broker Queries)

WEBSITE

![](_page_17_Picture_16.jpeg)

This paper has been certified to meet the environmental and social standards of the Forest Stewardship Council<sup>®</sup> (FSC<sup>®</sup>) and comes from responsibly managed forests and other controlled sources.

![](_page_17_Picture_18.jpeg)

![](_page_17_Picture_20.jpeg)

![](_page_18_Picture_0.jpeg)

## ivanhoeelectric.com

NYSE AMERICAN | TSX: IE