



Great Bear

Great Bear Gold Project Impact Statement

Appendix W-1:

Net-zero Plan



GREAT BEAR RESOURCES LTD.

GREAT BEAR PROJECT NET-ZERO PLAN

SEPTEMBER 2025





GREAT BEAR PROJECT NET-ZERO PLAN

GREAT BEAR RESOURCES LTD.

PROJECT NO.: OMEMA2303
SEPTEMBER 2025

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ABBREVIATIONS

CDR	carbon dioxide removal
CEC	clean energy credit
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
GHG	greenhouse gas
Great Bear Resources	Great Bear Resources Ltd.
kg	kilogram
kt-CO ₂ e	kilotonnes of carbon dioxide equivalent
kWh	kilowatt-hour
Mt-CO ₂ e	million tonnes of carbon dioxide equivalent
MWh	megawatt-hour
N ₂ O	nitrous oxide
Project	Great Bear Project
R100	renewable diesel (unblended, 100%)
REC	renewable energy credit
SACC	Strategic Assessment of Climate Change, 2020
SACC Technical Guide	Draft Technical Guide Related to The Strategic Assessment of Climate Change, 2021
t-CO ₂ e/kg-gold	tonnes of carbon dioxide equivalent per kilogram of gold equivalent
TISG	Tailored Impact Statement Guidelines
WSP	WSP Canada Inc.

GLOSSARY OF TERMS

<p>Avoided Domestic Greenhouse Gas (GHG) Emissions</p>	<p>GHG emissions that are reduced or eliminated in Canada as a result of the project. The avoided GHG emissions only apply to the project’s net GHG emissions. The generation and sale of surplus energy is an example of avoided domestic GHG emissions if the energy displaces that of a higher-emitting source.</p>
<p>Carbon Dioxide Equivalent (CO₂e)</p>	<p>A unit of measure used to allow the addition of, or the comparison between, gases that have different global warming potentials (GWPs). Since many GHGs exist and their GWPs vary, the emissions are added in a common unit, CO₂e. To express GHG emissions in units of CO₂e, the quantity of a given GHG (expressed in units of mass) is multiplied by its global warming potential.</p>
<p>GHG Reservoir</p>	<p>A component, other than the atmosphere, that has the capacity to accumulate GHGs and to store and release them, such as oceans, soils, and forests (ISO 14064-1:2018).</p>
<p>Global Warming Potential (GWP)</p>	<p>Calculated as the ratio of the time-integrated radiative forcing (i.e., the amount of heat-trapping potential) that would result from the emission of 1 kilogram (kg) of a given GHG to that from the emission of 1 kg of CO₂.</p>
<p>Operational Boundary</p>	<p>The extent and parameters within which an organization measures, reports, and manages its GHG emissions. Can be applied to a specific project.</p>
<p>Net-Zero</p>	<p>Project net GHG emissions will equal 0 tonnes of carbon dioxide equivalents.</p> <p>Net GHG Emissions = Direct GHG emissions + Acquired energy GHG emissions – Avoided domestic GHG emissions – Offset measures</p>
<p>Net-Zero Plan</p>	<p>A credible plan for the project to achieve net-zero by 2050. A net-zero plan does not need to describe every technology or practice the project will implement over time to achieve net-zero emissions. It is a process to follow in order to make the decisions and investments needed to achieve net-zero emissions by 2050.</p>
<p>Great Bear Project or the Project</p>	<p>The Great Bear Project is a proposed mine with supporting facilities that includes construction, operations, and closure and decommissioning phases.</p>
<p>Tailored Impact Statement Guidelines</p>	<p>Guidelines for the Preparation of an Impact Statement pursuant to the <i>Impact Assessment Act</i>, 2019 for the Great Bear Gold Project, dated August 1, 2024.</p>
<p>Temporal Boundary</p>	<p>The time period within which an organization measures, reports, and manages its GHGs. Can be applied to a specific project.</p>



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A Net Zero Plan Scenarios

1 INTRODUCTION

1.1 OVERVIEW

Great Bear Resources Ltd. (Great Bear Resources) is planning to develop, operate, and reclaim a gold mine (the Great Bear Project, or Project) on the Great Bear Property (the Property). The Project will consist of two open pits, underground mining activities, an onsite ore processing facility, and auxiliary operations and administrative activities will also take place on the Property. The Property is located approximately 25 kilometres southeast of the Municipality of Red Lake (Figure 1-1) in northwestern Ontario.

An Impact Assessment pursuant to the *Impact Assessment Act* is required to be completed for the Project. This Net-Zero Plan is one of a series of Technical Support Documents prepared by WSP Canada Inc. (WSP) on behalf of Great Bear Resources to describe the predicted environmental impact of the Project. Assessment of climate change and climate action are needed to support the impact assessment process and require a greenhouse gas (GHG) assessment as well as a determination of best available technologies / best environmental practices (BAT / BEP) and the development of credible paths to achieving net-zero by 2050. The GHG Assessment and BAT / BEP Determination are provided under separate cover.

1.2 OBJECTIVE

As a part of Canada's efforts to avert the impacts of climate change, the federal government enacted the Canadian Net-Zero Emissions Accountability Act in June 2021. This legislation outlines the Canadian commitment to achieve net-zero GHG emission by 2050. This Net-Zero Plan demonstrates Great Bear Resources' commitment for climate action and GHG mitigation that aligns with the Net-Zero Emissions Accountability Act and fulfils the requirements of the *Impact Assessment Act*, 2019.

A GHG inventory was prepared for the Project as a component of the Impact Statement that provides a quantitative analysis of the GHG emissions associated with all phases of the Project. This inventory already includes decarbonization measures that are integrated into the design, such as the use of natural gas for onsite power generation in lieu of diesel generators. Interim GHG reduction targets set using the annual emissions established in a baseline scenario allow for tracking of progress and the agility to modify the Net-Zero Plan in the event that achievement of the interim targets is at risk.

The Net-Zero Plan outlines technologies, energy source options, operating practices, and environmental practices to be implemented for the reduction of GHG emissions from all phases and all activities at the Project. Where residual GHG emissions cannot be mitigated using current technologies, carbon offset credits may be used to bring the GHG emissions to net-zero.

The implementation of the Net-Zero Plan involves the planning, evaluation, and implementation of mitigation technologies and environmental practices throughout the Project lifetime, and the implementation of offset measures to neutralize residual emissions.

1.3 PROPOSED PROJECT

Great Bear Resources is planning to develop, operate, and eventually reclaim a gold mine comprised of underground workings and two open pits (LP Central pit and Viggo pit) with associated stockpiles, ore processing facilities and infrastructure. To allow for the development and safe operation of the mine, onsite roads will be constructed with accompanying utilities and a water management and treatment system will be established to facilitate controlled dewatering of the mining area. Ore from the open pit will be processed in an onsite ore processing plant and tailings resulting from the processing of ore will be stored in a tailings management facility (TMF) and a re-purposed open pit (the Viggo management facility; VMF).

The main components of the Project include:

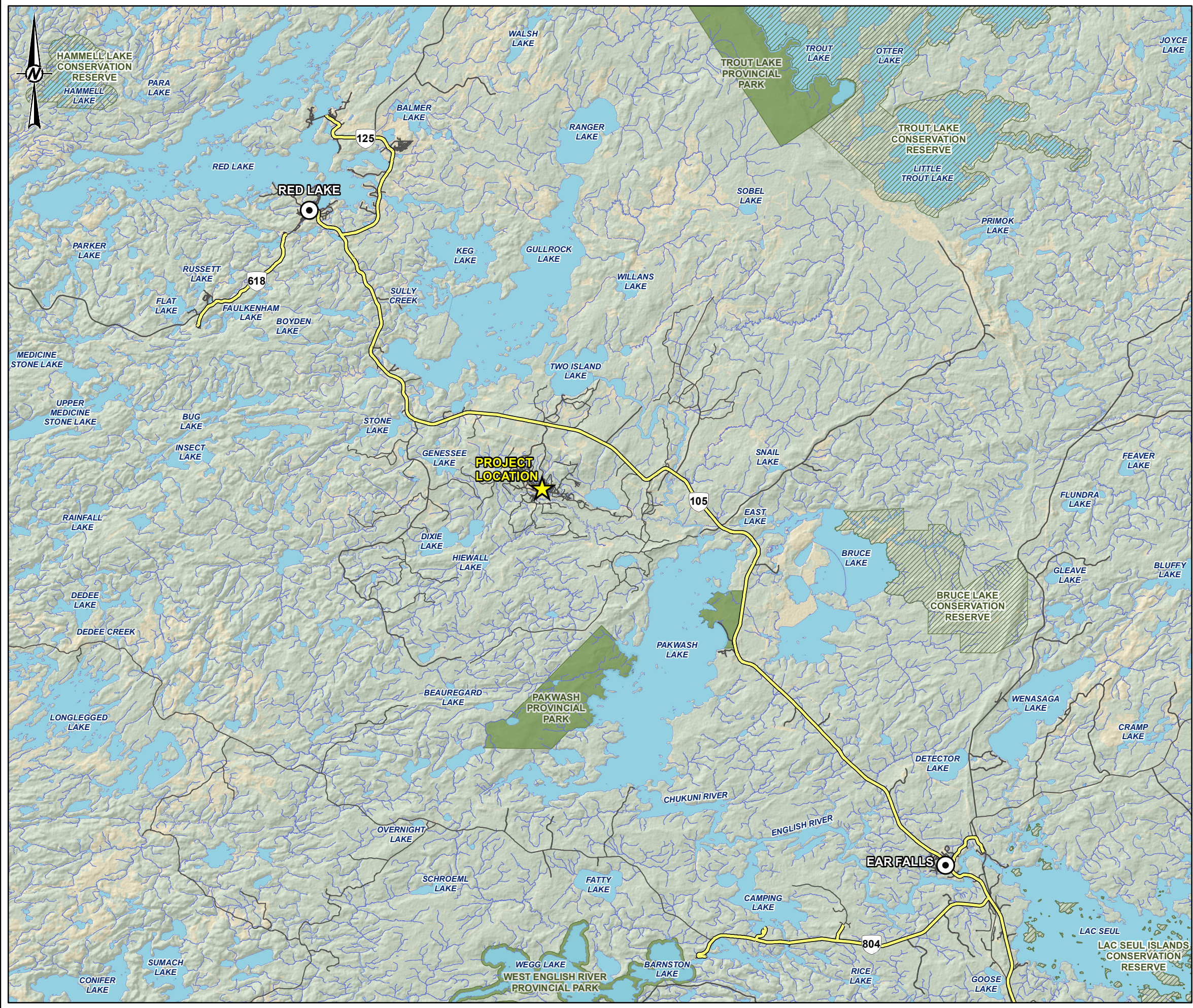
- LP Central pit and Viggo pit
- Underground mine, accessed via portals, ramps and shaft
- Flood protection berm
- TMF
- VMF
- Run of mine stockpile
- Low grade ore stockpile
- Mine rock stockpile
- Overburden stockpile
- Process plant
- Buildings and supporting infrastructure
- Water management and treatment facilities
- Construction camp and permanent camp
- Quarries, and sand and gravel pits

The expected duration of Project phases is approximately:

- Construction (Year -3 to Year -1: three years in length);
- Operations (Year 1 to Year 26: twenty-six years in length);
- Decommissioning and closure (starting in Year 27 and including a three-year period of active closure).

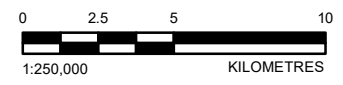
After active decommissioning of the site a period of passive closure and environmental monitoring will follow while the LP Central pit, VMF and underground workings fill with water. Minor decommissioning will occur after that period. GHG emissions associated with the passive closure and final closure phases will be limited and not material.

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SCALE 1:30,000,000

- LEGEND**
- PROJECT LOCATION
 - TOWN
 - CONSERVATION RESERVE
 - PROVINCIAL PARK
 - HIGHWAY
 - LOCAL ROAD
 - RESOURCE/ RECREATION ROAD
 - WATERCOURSE
 - WATERBODY



NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
 1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. WATERCOURSES AND WATERBODY ACQUIRED FROM LAND INFORMATION ONTARIO (MNR) AND MODIFIED TO MATCH AERIAL IMAGERY AND LIDAR.
 3. ROADS INFORMATION PROVIDED BY KINROSS, AUGUST 2022.
 4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 15N

CLIENT
GREAT BEAR RESOURCES

PROJECT
GREAT BEAR GOLD PROJECT

TITLE
PROJECT LOCATION

CONSULTANT	YYYY-MM-DD	2024-10-28
DESIGNED	---	
PREPARED	MD	
REVIEWED	---	
APPROVED	---	



PROJECT NO. OMEMA2303	CONTROL 0001	REV. A	FIGURE 1-1
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

2 FRAMEWORK AND METHODOLOGY

2.1 CANADA'S LEGISLATIVE CONTEXT FOR GHG MITIGATION

The *Canadian Net-Zero Emissions Accountability Act* is legislation that the federal government has enacted as part of their commitment to achieve net-zero GHG emissions by 2050. The Act establishes a legally binding process to set five-year national emissions-reduction targets as well as develop credible, science-based emissions-reduction plans to achieve each target; the 2030 GHG emissions target is set at 40 to 45% below 2005 levels (ECCC 2022).

The 2030 Emissions Reduction Plan (ECCC 2022) details a roadmap of how this 2030 target will be achieved. The economy-wide target for 2030 is a reduction of 40% (to 443 Mt-CO₂e); to achieve this, the target reduction for the heavy industry sector is 39% (to 52 Mt-CO₂e). Decarbonizing the heavy industry sector is essential for meeting Canada's 2030 climate target, and especially net-zero emissions by 2050 (Government of Canada 2022).

2.2 STRATEGIC ASSESSMENT OF CLIMATE CHANGE

The *Strategic Assessment of Climate Change* (SACC) was developed by Environment and Climate Change Canada (ECCC) to enable consistent, predictable, efficient, and transparent consideration of climate changes throughout the impact assessment process for designated projects under the *Impact Assessment Act*.

Section 5.3 of the SACC details the required elements of a credible plan to achieving net-zero emissions by 2050 and thereafter for the remainder of the lifetime of a project.

The net-zero plan to achieve net-zero emissions does not apply to upstream GHG emissions, even if an upstream GHG emissions assessment was conducted.

It is recognized that the net-zero plan does not need to describe every technology or practice that will be implemented to achieve net-zero emissions. However, it demonstrates that there are credible scenarios to achieving net-zero, defines the process that will be followed such that appropriate decisions and investments can be made, and establishes mechanisms to track progress against short- and mid-range GHG reduction targets.

In addition to achieving net-zero emissions by 2050, opportunities to maximize GHG emissions reductions during the early years of the Project's are considered preferable, where practical, to reduce the total lifetime GHG emissions.

2.3 TAILORED IMPACT STATEMENT GUIDELINES

The following requirements are stipulated in the Tailored Impact Statement Guidelines (TISG):

- A credible net-zero plan must be provided that would use and build off the BAT / BEP determination to describe the mitigation measures that will be taken to minimize GHG emissions throughout all phases of the Project and achieve net-zero emission by 2050, and thereafter for the remainder of the lifetime of the Project, as described in Section 5.3 of the SACC.
- Emphasis should be placed on minimizing net GHG emissions as early as possible and throughout the Project lifespan.
- The Net-Zero Plan must follow the principles and include the information in Sections 3.5.1 and 3.5.2 of the SACC Technical Guide.

2.4 PROJECT GHG ASSESSMENT AND MANAGEMENT

The net-zero framework for the Project is summarized as a series of steps presented in Table 2-1. These steps are based on Section 5.3 of the SACC Technical Guide and provide a credible path towards net-zero emissions by 2050. Specifically, the development of a Net-Zero Plan is guided by the following:

- The GHG Assessment which defines the key emissions sources or source groupings and allows for evaluation of the GHG reduction potential of mitigation options against the total GHG emissions.
- A baseline scenario GHG inventory was established for the purposes of evaluating the GHG reduction potential of technologies and practices. The scenario presented in the GHG Assessment, and captured in Table 3-1, represents the baseline GHG emission that serve as starting point for this Net-Zero Plan (WSP 2024a).
- The BAT / BEP Determination with the selected BAT / BEP carried forward to the net-zero emissions scenarios.

Furthermore, and as planning progresses, the Net-Zero Plan will be refined such that it aligns with the relevant disclosure or reporting frameworks and with regulatory requirements for facilities reporting to the government programs, including participation in the Ontario Emissions Performance Standards program for industrial emitters. The Emission Performance Standard is a maximum amount of GHG emissions allowable by an industry without incurring a cost-per-tonne of carbon emitted (Government of Ontario 2024). Once established for the Project, the Emission Performance Standard may affect the economic feasibility of practices and technologies proposed in this Net-Zero Plan. Annual review and refinement of the Net-Zero Plan will allow for the incorporation of regulatory changes as well as advances in GHG mitigation technologies and practices.

Table 2-1 Framework for Net-Zero Plan

Step	Description
Preparation of GHG inventory	Forecast of annual GHG emissions for each year of the Project, the total lifetime GHG emissions, and the GHG emissions intensity per unit of gold produced.
BAT / BEP determination process	Determination of technically feasible mitigation technologies and environmental practices, and selection of BAT / BEP considering Project-specific considerations and constraints.
Establishment of interim targets to achieving net-zero emissions by 2050	Development of scenarios that present credible paths to achieving net-zero emissions by 2050 and thereafter for the remainder of the Project. Great Bear Resources has established corporate GHG reduction targets which will also be taken into consideration along with the implementation of BAT / BEP and the acquisition of carbon offset credits.
Establish a working group to progress the net-zero emissions plan	Preparation of a net-zero plan as an evergreen strategy document to be reviewed and updated on an annual basis.

3 PROJECT GHG EMISSIONS FORECASTS

3.1 SUMMARY OF GHG ASSESSMENT

The Project has the potential to affect climate change through the emissions of GHGs associated with Project activities. As part of the Impact Statement, a detailed assessment of these potential effects was undertaken in the GHG Assessment, documented under separate cover. This included the preparation of a GHG emissions inventory for each year of the Project, estimation of the total lifetime GHG emissions, and determination of the GHG emission intensity.

The GHG inventory considered the emissions sources and removals stipulated in the SACC, which are presented in Equation 1 of Section 2.1 of the SACC Technical Guide.

$$\begin{aligned} \text{Net GHG Emissions} &= \text{Direct GHG Emissions (scope 1)} \\ &+ \text{Acquired Energy GHG Emissions (scope 2)} \\ &- \text{Avoided GHG Emissions (GHG emissions reduced or eliminated in Canada as a result of the Project)} \\ &- \text{Offset Measures (offset credits, CO}_2\text{ captured and stored, and corporate-level initiatives)} \end{aligned}$$

The net GHG emissions are reported in units of carbon dioxide equivalents (CO₂e). The GHGs considered in this CO₂e quantification include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), converted to CO₂e using the global warming potentials set forth by the Government of Canada in Schedule 3 of the *Greenhouse Gas Pollution Pricing Act* (2018). Carbon dioxide is the dominant GHG resulting from the combustion of fossil fuels.

Direct GHG emissions include carbon emissions occurring from sources that are owned or controlled by Great Bear Resources at the Project and are referred to as scope 1 emissions in the GHG Protocol. Carbon Dioxide Removals (CDRs) are deliberate activities that remove and store CO₂ from the air within the Project GHG boundary that would be included in this category as direct GHG emissions (e.g., revegetation, enhanced carbon mineralization, direct air capture, and soil carbon sequestration).

Examples of direct GHG emissions associated with the Project include:

- Mobile combustion from diesel fuel consumption in haul trucks
- Stationary combustion from onsite blasting and camp heating
- Land use changes from land clearing deforestation and biomass decay
- Industrial processes from ore processing, gold refining
- Flaring, venting and fugitive emissions.

Indirect GHG emissions include acquired energy GHG emissions which are emissions from the generation of electricity, heat, steam, or cooling, purchased from a third party by Great Bear Resources for the Project. The acquired energy GHG emissions are referred to as scope 2 emissions as per the GHG Protocol.

Avoided domestic GHG emissions are GHG emissions that are reduced or eliminated in Canada as a result of the Project (e.g., a less energy intensive facility replacing a more energy intensive facility). These are distinct from offset measures and reflect diverted emissions rather than counteractive offset credits.

Offset measures are included as a part of net-zero efforts. Offset measures aim to eliminate, minimize, or mitigate GHG emissions. These GHG emissions are the sum of the following constituents:

- **Corporate-Level Initiatives:** GHG emissions removed due to mitigation measures separate from a project and not reflected in the project's direct GHG emissions;
- **Offset Credits:** GHG emission reductions or removals generated from activities that are additional to what would have occurred in the absence of the offset project. These include Renewable Energy Certificates (REC) or Clean Energy Credits (CEC) which can allocate electricity generated from clean or renewable zero-carbon sources through a purchase agreement, as examples;
- **CO₂ Captured and Stored:** Emissions that are generated by a project and permanently stored in a storage project via CO₂ injection into a geological reservoir in accordance with federal and provincial regulations; and
- **Other Mitigation Measures:** Land-use changes to mitigate carbon sink disturbance through restoration, afforestation, compensation, and conservation, as an example.

In accordance with the SACC, indirect upstream and downstream GHG emissions are those which are released as a consequence of the Project and are referred to as scope 3 emissions in the GHG Protocol. These upstream and downstream emissions are not considered in the total net GHG emissions, nor are they part of the Net-Zero Plan development.

Recognizing that climate action must extend beyond the addressing direct GHG emissions, Great Bear Resources will implement sustainability initiatives such as value chain mapping and setting targets for scope 3 emissions reduction, reducing consumption and increasing circularity, and promoting biodiversity and nature-based solutions.

Great Bear Resources will, however, implement measures to identify and reduce upstream and downstream GHG emissions, as stated in Kinross' Environmental, Social, and Governance Strategic Priority (Kinross 2024).

The life-of-mine GHG emissions for the baseline scenario are presented in Table 3-1. This includes the relevant sources, avoided emissions, and offset measures identified for all phases, as well as the lifetime GHG emissions for each source that was used as the baseline scenario for the Net-Zero Plan.

Annual and life-of-mine GHG emissions are presented in Table 3-2 and Table 3-3, and in Figure 3-1 and Figure 3-2, and reflects the emissions presented in the GHG Assessment.

The key outcomes of the GHG Assessment are listed below. It's important to note that in lieu of more natural gas generation or diesel generation, the project has integrated the maximum available grid power of 13 MW and that is included in net GHG

The net GHG emissions from the Project are estimated at 4,987 kt-CO₂e, which includes direct emissions (combustion, blasting, onsite electricity generation, heating, landfilling ¹ and biomass removal) and acquired energy emissions

- The maximum annual GHG emissions for operations are estimated to be 227 kt-CO₂e, representing 0.14% of Ontario's GHG inventory for 2022 (157 Mt-CO₂e) and 0.03% of the Canadian GHG inventory for that same year (708 Mt-CO₂e)
- Comparisons against the heavy industry inventory for Ontario and Canada are also relevant, and the annual GHG forecasts were found to be 0.2% of the Ontario inventory and 0.07% of Canada's total, respectively

The average and maximum GHG emission intensities of the Project's operations are 13.8 and 19.5 t-CO₂e/kg-gold, respectively. Compared to other gold mines in Canada, the Project will have a

¹ A domestic landfill is not proposed for the Project; however, the potential associated emissions are documented herein as a contingency should a landfill be required in the future.

GHG emission intensity in line with mines that operate using a hybrid of grid power and onsite power generation. This GHG emission intensity is predicted to be higher than that of other gold mining operations that have access to, and maximize the use of, low-carbon intensity electrical grids. Construction of a transmission line to a nearby regional transmission line will connect the Project to Ontario electrical grid to partially satisfy electric energy requirements of the Project, however the electrical grid does not have sufficient supply to fully support the Project at this time. Any increased supply available via Ontario's electrical grid is key in decarbonizing the Project, to reduce (and eventually avoid, if practical) the requirement for generation of power for the Project on the site; however, any regional grid upgrades are outside of this project and proponent's control

Table 3-1: Baseline Scenario Greenhouse Gas Emission Sources, CO₂ Removals, Offsets, and Avoided Emissions

Emission Category	Emission Type	Emission Source / Sink	Source Category	Baseline GHG Emissions Project Lifetime	
				(kt-CO ₂ e)	(% of total)
Direct GHG Emissions	Mobile Combustion	Open Pit Mine Fleet	Diesel Fuel	851.6	17%
		Underground Mine Fleet	Diesel Fuel	971.0	19%
		Quarry, Borrow and Tailings	Diesel Fuel	259.2	5%
	Stationary Combustion	Heating	Natural Gas	672.3	13%
		Onsite Electricity Generation	Natural Gas	1,796.4	36%
		Onsite Electricity Generation – Temporary Construction	Diesel Fuel	56.2	1%
		Onsite Electricity Generation – Remote Operations	Diesel Fuel	140.8	3%
	Blasting	Open Pit Operations	Explosives (Fuel Oil)	28.1	<1%
		Underground Operations	Explosives (Fuel Oil)		
		Quarry Operations	Explosives (Fuel Oil)		
Waste Management	Onsite Landfill ¹	Not Applicable	17.0	<1%	
Biomass Removal ²	Land Clearing during Site Development	Above-Ground Biomass Removal, Dead Organic Matter, Soil Organic Carbon Removed	146.2	3%	
Indirect GHG Emissions	Acquired Energy	Purchased Electricity from Ontario Grid	Ontario Grid	77.4	2%
CO ₂ Removals	Reforestation / Revegetation	Nature-Based Solutions	Not Applicable	–	–
	Soil Enhancements (e.g., biochar)	Enhanced Natural Processes	Not Applicable	–	–
Renewable Energy Credits	Electricity	Electricity Consumption	Renewable, Zero-Carbon Electricity	–	–
Offset Credits	Purchased Credits from Voluntary Carbon Market	Not Applicable	Not Applicable	–	–
	Credits via corporate partnerships or investment	Various	Undetermined	–	–
	Carbon Mineralization (tailings, mine rock)	Enhanced Natural Processes	Not Applicable	–	–
Avoided Domestic GHG Emissions	Microgrid Electricity Generation (solar and / or wind)	Electricity Consumption	Renewable Energy	–	–
	Forest Management and Preservation	Natural Solutions	Not Applicable	–	–
Total Project Baseline GHG Emissions				5,017.9	

Notes:

- 1 A domestic landfill is not proposed for the Project. The potential associated emissions from a landfill are considered in this document as a contingency should a landfill be required in the future.
 - 2 Biomass removals and resultant GHG emissions are not presented and are considered qualitatively in the Net-Zero Plan due to inherent uncertainty in quantifying the GHG emissions associated with the fate of the cleared vegetation.
- is used to indicate that there are no emissions for the source or sink considered for the baseline.

Table 3-2: Baseline Scenario GHG Emissions by Project Phase

Category	Phases			Total ¹ (kt-CO ₂ e)	Percent of Total (%)
	Construction (kt-CO ₂ e)	Operations (kt-CO ₂ e)	Decommissioning and Closure (kt-CO ₂ e)		
Direct - Open Pit - Diesel Fuel	140.0	694.4	17.2	851.6	17%
Direct - Underground Mine Fleet - Diesel Fuel	11.5	956.6	2.9	971.0	19%
Direct - Quarry, Borrow and Tailings - Diesel Fuel	24.3	210.6	24.3	259.2	5%
Direct - Explosives	2.2	25.9	0.0	28.1	<1%
Direct - Heating - Natural Gas	40.4	613.0	18.9	672.3	13%
Direct - Electricity Generation - Natural Gas	0.2	1,796.2	0.0	1,796.4	36%
Direct - Construction Electricity Generation - Diesel Fuel	56.2	0.0	0.0	56.2	1%
Direct - Operations Electricity Generation - Diesel Fuel	13.2	114.4	13.2	140.8	3%
Direct - Domestic Waste Landfill ²	0.2	14.3	2.5	17.0	<1%
Direct - Land Use Changes from Biomass Removal	146.2	0.0	0.0	146.2	3%
Indirect - Acquired Energy	7.6	69.4	0.4	77.4	2%
Net GHG Emissions	442.1	4,496.2	79.6	5,017.9	—
Foregone CO₂ Sequestration ³	59.7	474.3	49.8	583.8	—

Notes:

- Subtotals may not add to totals due to rounding.*
- A domestic landfill is not proposed for the Project; however, the potential associated emissions are documented herein as a contingency should a landfill be required in the future.*
- Foregone CO₂ sequestration due to the loss of carbon sinks is not included in the net GHG emissions and is presented separately per the TISG and the SACC Technical Guide (ECCC 2021).*

Table 3-3: Project GHG Emissions for Maximum Operations Emission Year +4

Category	Maximum Annual GHG Emissions (kt-CO ₂ e) ¹
Direct Greenhouse Gas Emissions ²	222.2
Acquired Energy (Electricity)	4.6
Total Annual Greenhouse Gas Emissions	226.9

Notes:

- Subtotals may not add to totals due to rounding.*
- Direct GHG Emissions include diesel and natural gas fuel usage from mobile and stationary combustion and blasting.*

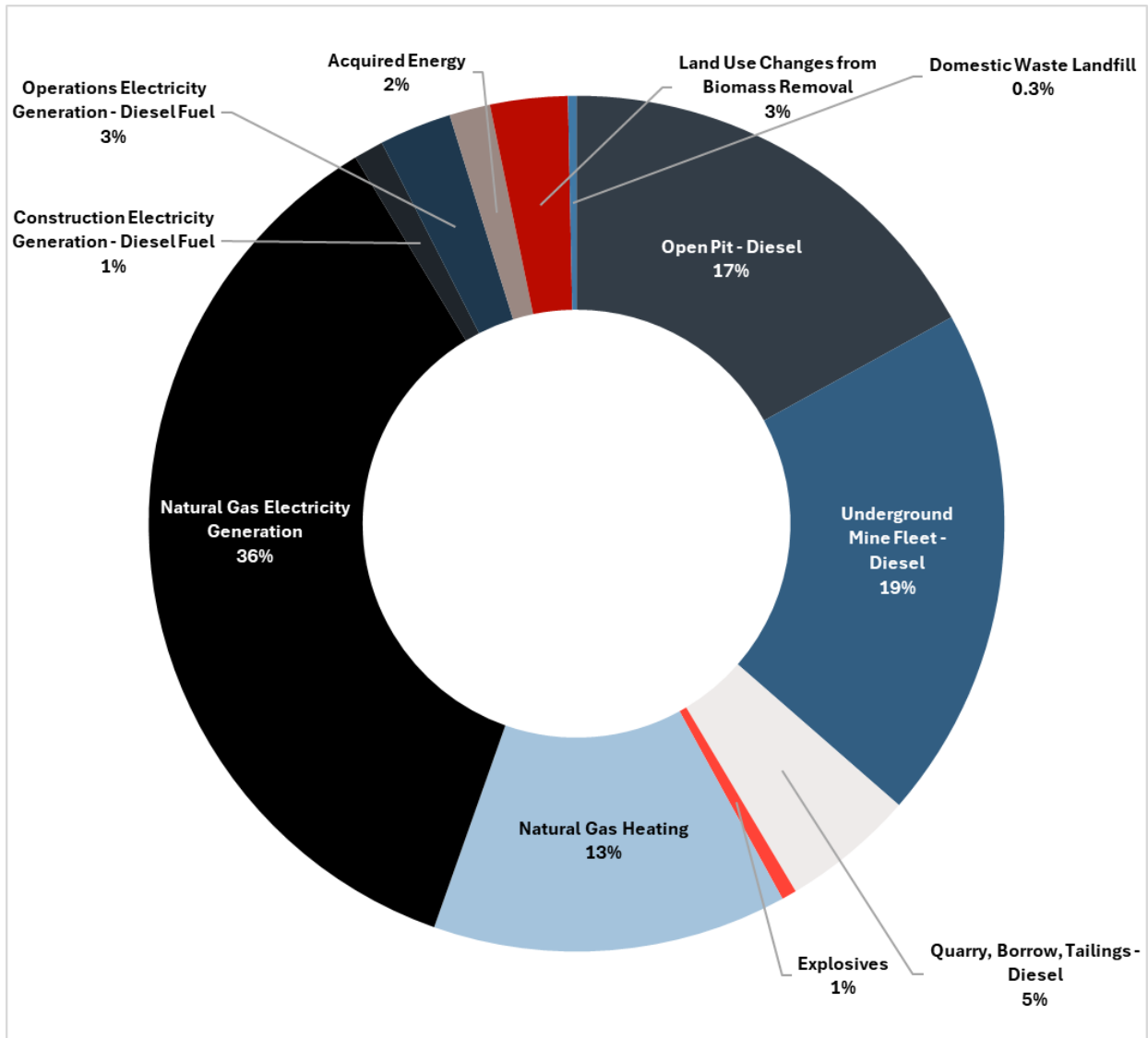


Figure 3-1: Project Greenhouse Gas Emissions Breakdown

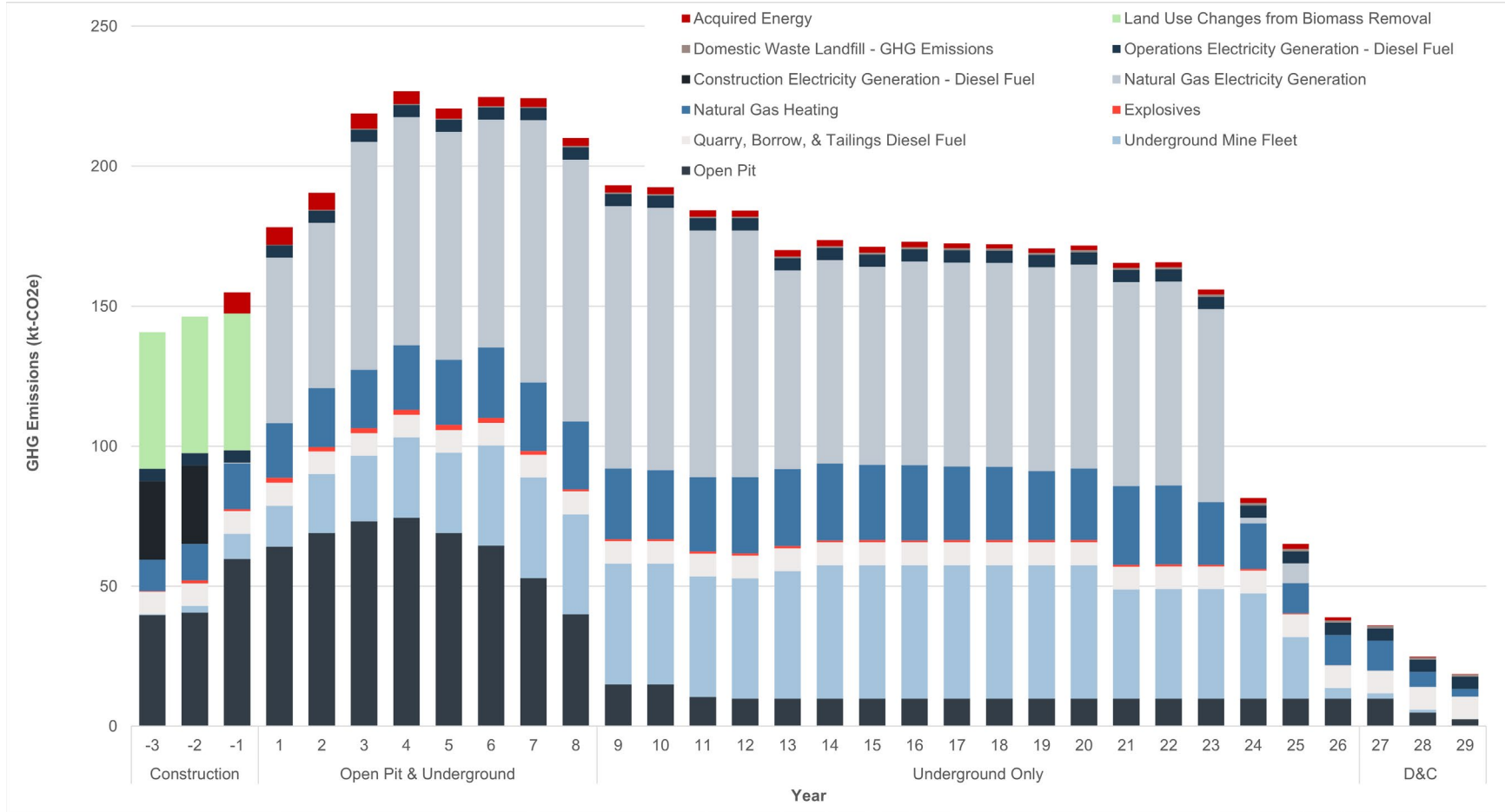


Figure 3-2: Year-to-Year Project Greenhouse Gas Emissions

4 BAT / BEP DETERMINATION PROCESS CONCLUSIONS

Achieving net-zero will require implementation of a range of measures to reduce the GHG emissions which include:

- Management planning
- Process optimization
- Advanced process controls
- Energy and heat conservation and efficiency
- Electrification of fleet vehicles and / or the use of lower emission vehicles
- Incorporating lower carbon energy sources to minimize fossil fuel combustion
- Integrating onsite carbon removals (nature-based solutions, non-nature removals)
- Acquiring carbon offsets to compensate for GHG emissions that cannot be mitigated or generate carbon offsets from onsite offset projects

In this section, technologies and practices to reduce GHG emissions from the identified GHG sources that warrant further consideration are described; it is noted that recommendations for the optimal combination of technologies and practices requires further evaluation of the technical and financial feasibility. Also identified are those technologies or practices that are rapidly developing and may become feasible before the end of the operations phase or over the lifetime of the Project.

These technologies and practices were identified through the BAT / BEP Determination process, which is outlined in a separate document. The process consists of evaluating different technologies and practices based on their technological feasibility, GHG reduction potential, and economic feasibility. Once evaluated, the technologies and practices that are deemed as feasible for the Project are put forward towards a possible scenario.

There are several constraints that will affect the selection of which options to implement and the timeline of implementation. The capacity of the regional electricity transmission line at the Project, technology readiness and commercial availability of low-carbon options, and the availability of renewable fuels and low-carbon hydrogen, are examples of these constraints. The annual updates to the Net-Zero Plan will allow Great Bear Resources to incorporate advances in GHG mitigation technologies and alternative fuels, as well as integrate regional energy infrastructure improvements.

Two scenarios were included as part of this Net-Zero Plan, the first assumes that the transmission constraints are mitigated through an expanded connection to the grid and focusing on electrification of various sources of combustion emissions, prioritizing natural gas electricity generation. The second scenario uses a combination of different decarbonization options to help overcome the transmission line capacity.

The Net-Zero Plan does not explicitly consider upstream or downstream GHG emissions sources.

Table 4-1: Implemented BAT / BEP

Source of Emission	Technology / Practice	Description	Scenario 1	Scenario 2
Surface Fleet	Diesel to Renewable Diesel	Use 100% renewable diesel (R100) or biodiesel blended with fossil diesel. 100% reduction for the diesel displaced by fossil-derived diesel.	N/A	<1% reduction from baseline scenario
Surface Fleet	Tethered Equipment: Electric Shovels and Drills	Tethered electric vehicles do not require battery recharging or refueling and are suitable for equipment that does not require travel.	N/A	5% reduction from baseline scenario
Surface Fleet	Full Fleet Electrification	Diesel engine replacement with electric alternatives with electricity supplied by the Ontario grid	9% reduction from baseline scenario	N/A
Surface Fleet	Fuel Tracking / Optimization / Anti-Idling	Optimization of haul truck movements and cycle times with consideration of fuel consumption.	N/A	1% reduction from baseline scenario, including anti-idling, fuel tracking and optimization
Underground Fleet	Diesel to Renewable Diesel	Use R100 renewable diesel or biodiesel blended with fossil diesel. 100% reduction for the diesel displaced by fossil-derived diesel.	N/A	<1% reduction from baseline scenario
Underground Fleet	Fuel Tracking / Optimization / Anti-Idling	Optimization of haul truck movements and cycle times with consideration of fuel consumption.	N/A	<1% reduction from baseline scenario, including anti-idling, fuel tracking and optimization
Underground Fleet	Electrification (Battery-Electric Vehicles)	Diesel engine replacement with electric alternatives with electricity supplied by the Ontario grid and a portion by onsite renewable generators.	14% reduction from baseline scenario	14% reduction from baseline scenario
Ventilation	Ventilation-on-Demand (Optimized)	An automated system that monitors air quality and personnel location to adjust the volume flow and fan power in real-time to direct airflow precisely where and when needed. This reduces the overall airflow and heat required within underground facilities.	1% reduction from baseline scenario	6% reduction from baseline scenario
Natural Gas Electricity Generation	Renewable Natural Gas	RNG derived from methane produced when biomass degrades in an oxygen-deprived environment (anaerobic).	N/A	1% reduction from baseline scenario
Natural Gas Electricity Generation	Electrification (expanded grid connection)	Expanded grid electricity supply for all site requirements	34% reduction from baseline scenario	N/A
Underground / Building Heating	Renewable Natural Gas	RNG derived from methane produced when biomass degrades in an oxygen-deprived environment (anaerobic).	N/A	1% reduction from baseline scenario
Underground / Building Heating	Electrification (expanded grid connection)	Heating from natural gas replaced by electric heating	5% reduction from baseline scenario	N/A
Diesel Generators	Diesel to Renewable Diesel	Use R100 renewable diesel or biodiesel blended with fossil diesel. 100% reduction for the diesel displaced by fossil-derived diesel.	N/A	1% reduction from baseline scenario

Source of Emission	Technology / Practice	Description	Scenario 1	Scenario 2
Diesel Generators	Electrification (expanded grid connection)	Expanded grid electricity supply for all site requirements	1% reduction from baseline scenario	N/A
Blasting	Optimizing Blasts	Artificial intelligence and advanced optimization tools to minimize the explosive required to blast ore and mine rock for transport from open pit or underground.	N/A	<1% reduction from baseline scenario
Electricity Usage	Hybrid, introducing renewable solar, and wind	Local power generation using renewable energy sources, commonly incorporating energy storage systems	N/A	6% reduction from baseline scenario

Note:

- 1 The technologies / practices in the table may have interdependencies that need to be considered as part of their implementation.

5 ADDITIONAL GHG MITIGATION MEASURES

5.1 CORPORATE-LEVEL SUSTAINABILITY AND GHG COMMITMENTS

Great Bear Resources is a wholly owned subsidiary of Kinross. Kinross has a robust corporate governance framework, with environmental stewardship detailed in the 2022 Sustainability Report (Kinross 2023) and the 2023 Climate Report (Kinross 2024) that aligns with the Task Force on Climate-related Financial Disclosures and the Carbon Disclosure Project, with climate disclosures that followed the Global Reporting Initiative Standards for energy (GRI 302) and emissions (GRI 305). Of significance is Kinross' corporate climate target of achieving net-zero GHG emissions by 2050 (Kinross 2024).

Great Bear Resources position and actions on climate change are consistent with many international organizations' programs and principles, including the World Gold Council's established Responsible Gold Mining Principles and the Mining Association of Canada's Energy Use and GHG Emissions Management Protocol. Great Bear Resources has also aligned itself with the Canada Mining Innovation Council promotion of collaboration and knowledge-sharing to drive innovation (Kinross 2024).

This demonstrated commitment to climate action is reflected in the planning of the Project, with energy and GHG considerations embedded in the proposed design of the mine and mill that focusses on optimization, evaluating options for electrification, and an energy efficient infrastructure (Kinross 2024).

5.2 CARBON DIOXIDE REMOVALS

5.2.1 CARBON MINERALIZATION

The tailings and mine rock produced by the Project has the potential to spontaneously and permanently remove carbon dioxide when exposed to the atmosphere via carbon mineralization. This process happens naturally through weathering, but its potential is enhanced through processes that break up the rock. Though some degree of carbon removals will occur regardless of additional actions taken by Great Bear Resources, research and development around methods for enhanced carbon removal is ongoing at this stage and the potential for sequestration was not determined.

5.2.2 NATURAL CLIMATE SOLUTIONS

Natural climate solutions will be incorporated wherever possible to realize the substantial co-benefits in terms of ecosystem preservation, biodiversity, and opportunities to incorporate Indigenous knowledge, even if the measures may not achieve the International Union for Conservation of Nature Global Standard for Nature-Based Solutions.

Nature can act as a carbon sink capable of storing carbon through natural processes. Managing natural processes to capture and store carbon, can support carbon sequestration, and in some cases can even be quantified as a carbon offset. Furthermore, incorporating measures that use natural systems to support biodiversity and resiliency represent an opportunity for collaboration with communities, asset owners, and other interested parties on initiatives that provide benefits extending beyond the Project boundaries.

Other co-benefits of nature-based solutions include support for biodiversity and habitat protection such as forests. Forests are resilient to climate change impacts, by absorbing heat, regulating water flows, reducing air pollution and heat exposure. Forests also have spiritual values to many people and communities. Any increase in canopy cover is considered beneficial, however species selection should be in favour of a diverse mix of hardy trees native to the area and forecast to be robust to changes in climates over their lifespan. Consideration should also be given to tree shape and canopy size (e.g., incorporating wide spreading shade trees for cooling in hard surfaced areas), potential contribution to biodiversity (habitat and / or food source), and local guidelines.

Nature-based solutions include activities such as tree planting and management (afforestation and reforestation) or installing green roofs on buildings to make buildings cooler (reduce building heating load), reduce heat flux (reduce building cooling load), and increase biodiversity. The leased lands include forest parcels that may have opportunity for avoided GHG emissions through strategic management.

The Net-Zero Plan includes the benefits of progressive revegetating areas onsite to take advantage of the carbon removals; these removals are, however, not explicitly included in the Net-Zero Plan at this time and will be developed as Project planning and design progress.

5.3 RENEWABLE ENERGY CERTIFICATES OR CLEAN ENERGY CREDITS

For the purpose of this Net-Zero Plan, REC refers to the offset from renewable energy such as wind and solar. Conversely, a CEC refers to the offset from clean energy such as hydroelectric and nuclear (in addition to wind and solar). Although there is a slight difference between renewable versus clean, both CECs and RECs are from sources with effectively no emissions.

The REC program is a voluntary, global market-based initiative that represents the trading of rights to environmental, social, and other non-power attributes of renewable electricity generation. Unlike an offset which represents one metric tonne of emissions avoided, a single REC is equal to one megawatt-hour of renewable energy.

The holder of this REC / CEC can claim that their electricity came from a renewable source with little to no emissions, thereby offsetting scope 2 emissions associated with acquired electricity. By purchasing REC / CECs, organizations encourage clean energy production and provide direct financial support to the maintenance or development of renewable and / or clean energy production facilities.

The price of individual credits is set by the seller and are typically updated annually. REC and CECs purchased from sellers within Ontario are preferable for this Project as they demonstrate an energy emission offset within the same province where the Project is taking place. Information regarding pricing within Ontario is limited, however the average price ranges from \$2 to \$11 CAD per credit. Examples of sellers, prices, and mechanisms are shown in Table 5-1.

There is also a mechanism through Enbridge to purchase renewable natural gas at a surcharge and incorporate this zero-carbon option into the Net-Zero Plan, regardless of where the RNG is physically used; if there is no local opportunity to develop an RNG project, this is an option to address the natural gas demands to satisfy Project power and heat requirements. Prices of RNG vary based on how it is produced and used, but conservative estimates put RNG at \$25 to \$35 per gigajoule (Enbridge 2024). In the case of renewable diesel, the cost per litre is highly variable at this time; however, some suppliers can provide for a moderate surcharge compared with fossil diesel (4Refuel 2024).

5.4 CARBON OFFSET CREDITS

A carbon offset represents an emission reduction of one metric tonne of CO₂e. Offset credits are tradeable units representing verified GHG reductions achieved by a project either by reducing GHG emissions or increasing GHG removals from the atmosphere.

A carbon offset refers to a net climate benefit from a reduction in GHG emissions, or an increase in carbon storage, that is transferred from an entity outside of the organizational or project boundary to compensate for GHG emissions generated elsewhere; for the Project, it is the net GHG emissions from the Project that are to be offset. To provide context, a removal offset is generated from projects that pull carbon out of the atmosphere, such as tree growth.

To be accepted as a carbon offset, it must meet specific criteria outlined in the SACC, notably that the credits are to be sourced from a Project that is registered in a Canadian regulatory offset program. Further, the Project activities must be verifiable, quantifiable, and additional to a business-as-usual scenario which already considers legal or regulatory requirements (SACC 2021).

The purchase of carbon offsets linked to carbon removal projects such as reforestation or afforestation would have the co-benefits of supporting biodiversity and ecosystem resilience while also removing carbon dioxide from the atmosphere.

5.4.1 COMPLIANCE OFFSETS – FEDERAL

Canada's Greenhouse Gas Offset Credit System encourages municipalities, Indigenous communities, and other project developers to undertake innovative projects that reduce GHGs compared to business-as-usual practices. Proponents of offset projects can generate federal offset credits if they register and implement projects meeting requirements in the Canadian Greenhouse Gas Offset Credit System Regulations and an applicable federal offset protocol.

Federal offset credits can be sold and can currently be used for compliance by facilities participating in the federal Output-Based Pricing System or sold and used by others who are looking to meet voluntary climate targets or commitments.

An offset tracking system and public registry has been developed federally to support the generation and purchase of offset credits.

There are currently three published carbon offset protocols: Landfill Methane Recovery and Destruction, Reducing Greenhouse Gas Emissions from Refrigeration Systems, and Improved Forest Management on Private Land. Draft protocols for Reducing Enteric Methane Emissions from Beef Cattle, Direct Air Carbon Dioxide Capture and Sequestration, Enhanced Soil Organic Carbon, and Avoidance of Manure Methane Emissions through Anaerobic Digestion and other treatments, are at various stages of development.

5.4.2 COMPLIANCE OFFSETS – PROVINCIAL

Ontario does not currently offer a carbon offsets program for businesses, organizations and institutions that want to reduce their GHGs.

5.4.3 CARBON OFFSET COST CONSIDERATIONS

There are two main categories of carbon offsets: non-forestry offsets and forestry offsets. The costs for carbon offsets vary widely, depending upon the type of carbon offset project; a range of US\$1 to US\$119 per tonne is cited by the World Bank (World Bank 2020). The cost for high-quality offsets is anticipated to rise due to increased demand, with a forecast of \$25 to US\$30 per metric tonne by 2030 (BCG 2023). Higher quality carbon offsets are supported by more robust methodologies and are generally priced higher, and offsets associated with carbon removals are also in greater demand and particularly where there are co-benefits with nature-based solutions.

Table 5-1: Example Renewable and Clean Energy Certificate Programs

Organization / Program	Transaction Mechanism and Price ¹
Ontario Power Generation CECs	Independent Electricity System Operator issues the CECs. Registered on M-RETS Registry upon purchase. \$1.00 per REC (equivalent of 1 Megawatt-hour, MWh)
Bruce Power CECs	Registered on M-RETS Registry upon purchase. \$1 to \$10 per REC (equivalent of 1 MWh)
Hydro Quebec RECs	Letter issued declaring transfer of ownership upon purchase. \$3.50 per REC (equivalent of 1 MWh)
Green-e Program CECs	Varied transaction methods, recommended to confirm selling organization can register transfer on Ontario CEC Registry. Varied pricing depending on individual organizations. On average, cost ranges from \$2 through \$11.

Note:

¹ The costs provided are subject to notable variability and are current as of July 2024.

6 NET-ZERO PLAN

Developing a credible scenario to achieving net-zero is a required element of both the SACC and the TISG which also reflects Great Bear Resources' commitments to environmental stewardship and climate action.

The first scenario, referred to as Scenario 1, assesses Great Bears Resources' preferred strategy for GHG reductions, where the limitations to electricity access are mitigated by improvements to the regional electricity line, outside of this project's scope, and thereby allow for full electrification of all sources of fossil fuel emissions. The acquisition of REC / CEC credits will be used to address residual GHGs from acquired energy GHG emission that cannot otherwise be mitigated.

The alternate scenario, referred to as Scenario 2, assumes that GHG reductions will be achieved primarily through implementation of the selected BAT / BEP to reduce GHG emissions, which include practices and technologies to reduce energy demand, and measures to eliminate or substitute GHG emissions sources with lower carbon alternatives, reductions in energy demand, and technologies to mitigate GHG emissions. The acquisition of offset credits, carbon capture and/or storage technology will be used to address residual GHGs that cannot be mitigated with current technologies.

Interim targets are presented in Table 6-1 that reflect the outcomes of the BAT / BEP Determination and current options for GHG mitigations and carbon offset measures. In addition to these fixed targets, efforts will be made to preferentially reduce GHG emissions early in the Project to minimize the total lifetime GHG emissions. The GHG reductions are relative to the baseline scenario developed using forecasts of the energy requirements of the Project and presented in the GHG Assessment.

Tracking of progress towards achieving the net-zero targets is embedded in the Net-Zero Plan, with a review and update each year with the annual GHG inventory, at minimum.

A roadmap depicting the key milestones and actions of the Net-Zero Plan is presented as Figure 6-1, with the actions and timelines described in Table 6-2. The measures considered to achieve the interim reduction targets are presented in Table 6-3, noting that conservatively low GHG reduction potentials have been applied at this time since there is inherent uncertainty in both the GHG emissions estimates and the GHG reductions achievable with each technology or practice.

6.1 SCENARIO 1 – FULL ELECTRIFICATION

The selected BAT / BEP for Scenario 1 with full electrification includes the electrification of the underground and surface fleets. Scenario 1 presented in the Net-Zero Plan forecasts a 37% reduction for the year 2030 while targeting net-zero by 2050; based on the following BAT / BEP strategies:

- Increased grid electricity availability to offset natural gas electricity generation.
- Phased-in full electrification of the underground and surface fleets. This accounts for the electrification of all haulage and material handling equipment in the underground and surface operations, as well as the production drills and shovels in the LP Central pit.
- Phased-in ventilation-on-demand in the underground mine.
- Full electrification of heating and operational diesel generators onsite.
- Carbon offsets credits will be used to address residual GHGs from acquired energy GHG emission that cannot otherwise be mitigated.

In order to reach net-zero, carbon offset credits will be required for the residual GHG emissions that cannot be otherwise reduced or mitigated.

6.2 SCENARIO 2 – ALTERNATIVE MITIGATION

The selected BAT / BEP for Scenario 2 with alternative mitigation options includes the electrification of the underground and surface fleets, optimization of all fleet operations, implementation of ventilation-on-demand systems in the underground mine, and the use of renewable drop-in fuels such as RNG and renewable diesel to displace fossil-derived fuels. Scenario 2 presented in the Net-Zero Plan forecasts a 6% reduction for the year 2030 while targeting net-zero by 2050, based on the following BAT / BEP strategies:

- Phased-in full electrification of the underground and surface fleets. This accounts for the electrification of all haulage and material handling equipment in the underground and surface operations, as well as the production drills and shovels in the LP Central pit.
- In addition to electrification, the optimization of the diesel-powered fleet (e.g., anti-idling policies, fuel tracking, and preventative maintenance).
- Phased-in ventilation-on-demand system in the underground mine will allow for an estimated 20% reduction in electricity and heating requirements of the underground mine. Residual heating will be supplied by a mix of natural gas and later will be supplied by renewable natural gas.
- Phased-in implementation of renewable fuels, including renewable natural gas for natural gas-powered electricity generation and renewable diesel for onsite diesel generators and for surface and underground fleet. Due to climate and Project constraints these fuels will be used in a fuel mixture.
- Phased-in solar and wind renewable energy onsite to displace the natural gas electricity generation.
- Carbon offsets credits will be used to address residual GHGs from acquired energy GHG emission that cannot otherwise be mitigated.

For the Project, access to sufficient electricity from the Ontario grid is a key barrier to achieving net-zero, as it requires onsite natural gas electricity generation to supplement the Projects energy demand which is the largest source of GHG emissions. The cold climate is another constraint that contributes notably to GHG emissions and must be considered when evaluating GHG mitigation options.

Great Bear Resources' positive position on climate change is demonstrated through their commitment to climate action in the planning of the Project, with energy and GHG considerations embedded in the proposed design of the mine and mill. This Net-Zero Plan demonstrates that the Project can achieve net-zero emissions by 2050, using a combination of technologies and environmental practices from all phases and all activities at the Project. Where residual GHG emissions can not be mitigated using current technologies, carbon offset credits and REC / CECs are proposed to neutralize the emissions.

Table 6-1: GHG Reduction Targets

Interim Target	Annual GHG Reduction Target	Mine Phase
2030	30% reduction in the scope 1 and scope 2 GHG emissions intensity of Kinross' global operations	Operations (open pit and underground mining)
2050	100% (net-zero emissions)	Operations (underground mining)

Table 6-2: Net-Zero Roadmap Stages

Stage	Description
Take Stock	Finalize initial GHG inventory for base year. The GHG inventory will be updated each year to support Great Bear Resources' corporate disclosures and to fulfil federal and provincial regulatory obligations.
Net-Zero Plan Review and Update	Approval of the strategy and roadmap and allocation of resources (e.g., staff, budget). The net-zero plan will be managed as an evergreen, or living, document to be reviewed annual to incorporate updated GHG inventory data and to review the status of emerging technologies that may be well suited for the Project. Net-zero plan updates will also include an evaluation of the actual GHG reductions achieved from the implementation of GHG measures to track progress towards achieving the interim reduction targets.
Net-Zero Asset Planning	Incorporate zero carbon emissions replacements in the asset management planning to account for replacing assets at the end of their useful life and minimize lifecycle carbon and costs for replacement.
Site-Wide Energy Audit	Conduct an energy audit for the Project and incorporate specific recommendations for energy conservation measures. Great Bear Resources will also have an Energy Management Program which includes monitoring and reporting of energy use by area and by equipment. The energy audit will be repeated periodically to evaluate successes and identify further opportunities; the frequency of audits will be specified in the next iteration of the net-zero plan.
Pursue Funding Opportunities	Great Bear Resources may be eligible for grants and incentives to help finance decarbonization. The availability of funding and Great Bear Resources' eligibility are subject to change depending upon government budgets and programs.
Strategy for Offsetting Residual Carbon Emissions	Identify opportunities to acquire carbon offset credits, prioritizing local partnerships or projects.
Evaluate and Implement Mitigation Measures and Carbon Removals	GHG mitigation technologies and practices are advancing rapidly, and decarbonization options will be evaluated during the design and planning phase and should be revisited at least every 5 years to include emerging technologies being brought to market, policies, and programs that address risks and constraints over renewable energy and fuels. Continue efforts to secure access to sufficient grid power which requires a regional grid upgrade. Investigate vegetative and nonvegetative carbon removal opportunities and implement where carbon removals can be verified and satisfy the requirement of additionality (i.e., the removals or reductions are not naturally occurring, legally required, are driven by financial incentives, or are a consequence of the Project).

Table 6-3: Net-Zero Emissions Reduction Plan Scenario 1

Year and Reduction Target	Technology or Environmental Practice	GHG Reduction Potential (t-CO ₂ e)	GHG Reduction Potential ¹ (% of Baseline)
2030 Operations Phase Year +1 Reduction Target: Aligned with Kinross Corporate Intensity Target	Electrification of Underground Fleet	0	0%
	Electrification of Surface Fleet	18,200	10%
	Expanded Grid Connection	59,100	33%
	Electrification of Diesel Generators	0	0%
	Ventilation-on-Demand	0	0%
	Electrification of Heating	0	0%
	Carbon Offset Credits	0	0%
2050 Operations Phase Year +21 Reduction Target: Net-Zero	Electrification of Underground Fleet	39,100	24%
	Electrification of Surface Fleet	17,900	11%
	Expanded Grid Connection	72,800	44%
	Electrification of Diesel Generators	4,400	3%
	Ventilation-on-Demand	0	0%
	Electrification of Heating	25,800	17%
	Carbon Offset Credits	11,000	7%

Note:

1 The percentage reflects the portion of the net greenhouse gas emissions (i.e., scope 1 and scope 2) for the given year of the baseline scenario. The net greenhouse gas emissions are 178,300 t-CO₂e and 165,800 t-CO₂e for 2030 and 2050, respectively.

Table 6-4: Net-Zero Emissions Reduction Plan Scenario 2

Year and Reduction Target	Technology or Environmental Practice	GHG Reduction Potential (t-CO ₂ e)	GHG Reduction Potential ¹ (% of Baseline)
2030 Operations Phase Year +1 Reduction Target: Aligned with Kinross Corporate Intensity Target	Electrification of Underground Fleet	0	0%
	Electrification of Surface Fleet	0	0%
	Fleet Optimization (Fleet Management, Anti-Idling, Fuel and Energy Tracking)	8,700	5%
	Renewable Diesel (Fleet)	2,300	1%
	Renewable Diesel (Generators)	200	0%
	Ventilation-on-Demand (Underground)	0	0%
	Renewable Energy (Wind)	0	0%
	Renewable Energy (Solar)	0	0%
	Renewable Natural Gas (Generators)	0	0%
	Renewable Natural Gas (Heating)	0	0%
	Carbon Offset Credits	42,100	24%
2050 Operations Phase Year +21 Reduction Target: Net-Zero	Electrification of Underground Fleet	39,100	22%
	Electrification of Surface Fleet	17,900	10%
	Fleet Optimization (Fleet Management, Anti-Idling, Fuel and Energy Tracking)	0	0%
	Renewable Diesel (Fleet)	0	0%
	Renewable Diesel (Generators)	2,000	1%
	Ventilation-on-Demand (Underground)	17,300	10%
	Renewable Energy (Wind)	25,700	16%
	Renewable Energy (Solar)	11,200	7%
	Renewable Natural Gas (Generators)	4,500	3%
	Renewable Natural Gas (Heating)	4,100	2%
Carbon Offset Credits	47,300	29%	

Note:

1 The percentage reflects the portion of the net greenhouse gas emissions (i.e., scope 1 and scope 2) for the given year of the baseline scenario. The net greenhouse gas emissions are 178,300 t-CO₂e and 165,800 t-CO₂e for 2030 and 2050, respectively.

NET-ZERO ROADMAP

Scenario 1

Development of Net-Zero Strategy

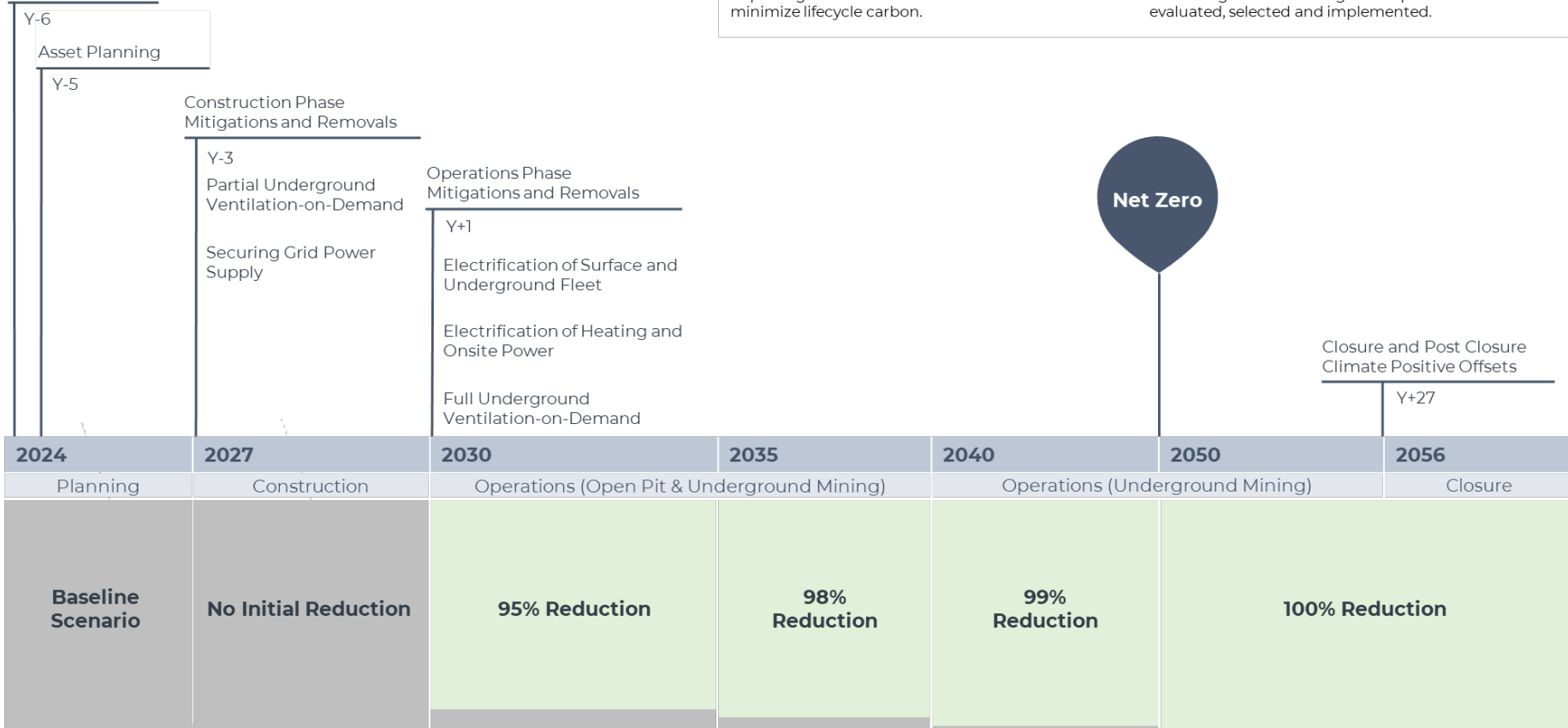


Figure 6-1: Net-Zero Roadmap – Scenario 1

NET-ZERO ROADMAP

Scenario 2

Development of Net-Zero Strategy

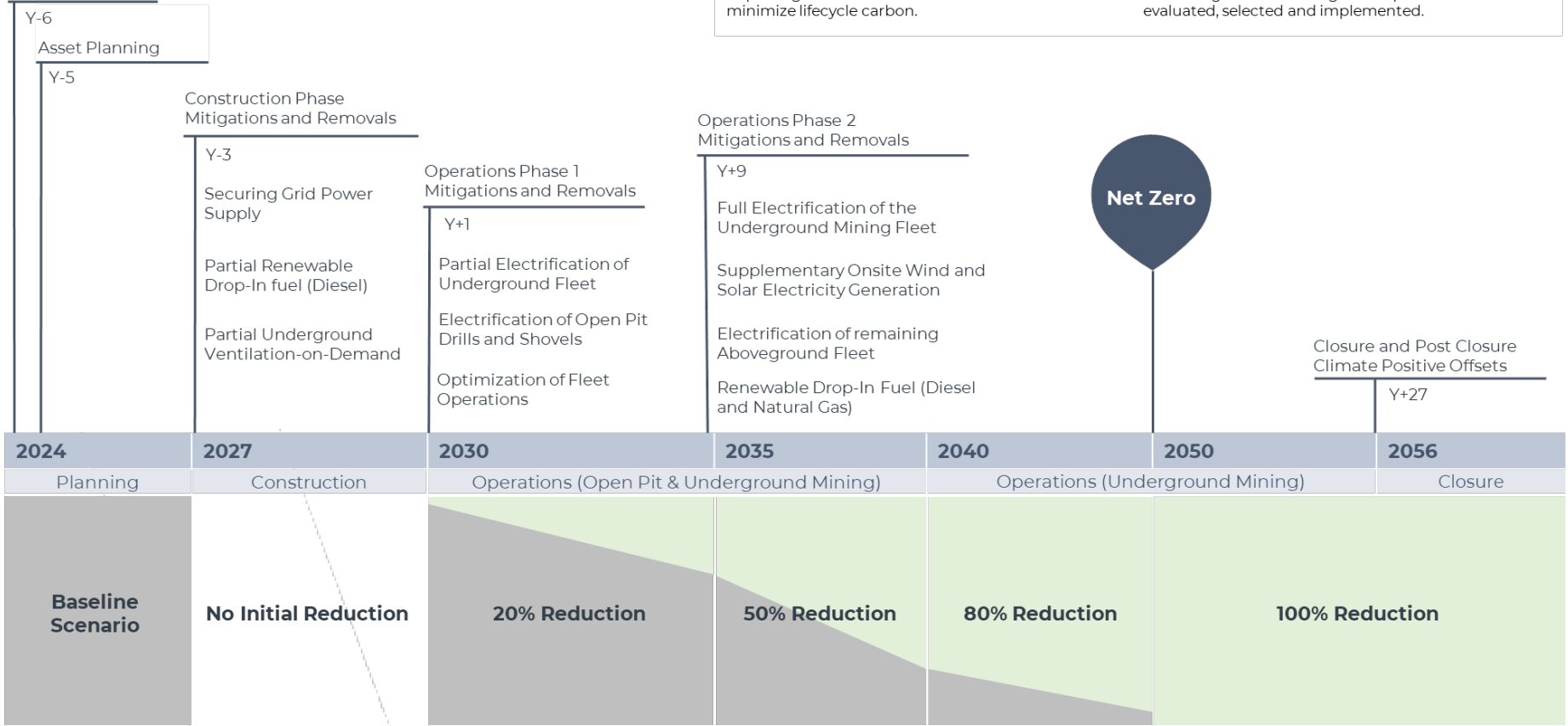


Figure 6-2: Net-Zero Roadmap – Scenario 2

Net-Zero Plan

Carbon strategy and roadmap will be maintained as a living document to support planning and resource allocation, should be reviewed annually.

Carbon Removals and Offsets

Nature based solutions and non-nature removals that sequester carbon from the atmosphere. As well as use of carbon offsets, to balance residual GHG emissions, either through purchase or partnerships.

Net-Zero Asset Planning

Replacing assets at the end of their useful life to minimize lifecycle carbon.

Mitigation Measures

GHG mitigation technologies and practices will be evaluated, selected and implemented.

7 CLOSING

This Net-Zero Plan was prepared for Great Bear Resources Ltd. by WSP Canada Inc. The quality of information, conclusions and scheduling estimates contained herein is consistent with the level of effort involved in WSP's services and based on: i) information available at the time of preparation; ii) data supplied by outside sources; and iii) the assumptions, conditions and qualifications set forth in this report.

Regular updates to the Net-Zero Plan will allow Great Bear Resources to incorporate advances in GHG mitigation technologies and alternative fuels, as well as integrate regional energy infrastructure improvements.

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Appendix A

Net Zero Plan Scenarios





A-1. Net-Zero Plan Summary - Scenario 1

Project Phase and Year	Baseline Emissions			Electrification of Underground Fleet		
	Direct Emissions (Scope 1) (tCO ₂ e)	Acquired Energy Emissions (tCO ₂ e)	Net GHG Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)
Construction	434,500	7,600	442,100	11,500	0	0
2027	140,800	0	140,800	200	0	0
2028	146,300	0	146,300	2,300	0	0
2029	147,400	7,600	155,000	9,000	0	0
Operations	4,426,600	70,700	4,496,200	956,600	50,600	743,400
2030	172,000	6,300	178,300	14,700	0	0
2031	184,400	6,100	190,500	21,000	0	0
2032	213,400	5,500	218,800	23,400	0	0
2033	222,200	4,700	226,900	28,700	0	0
2034	217,000	3,600	220,600	28,700	0	0
2035	221,500	3,300	224,800	35,800	2,100	17,900
2036	221,200	3,100	224,300	35,900	1,900	18,000
2037	207,300	2,900	210,100	35,800	2,200	17,900
2038	190,600	2,700	193,300	43,000	2,000	21,500
2039	190,000	2,500	192,500	43,000	1,900	21,500
2040	182,000	2,400	184,300	43,100	3,600	43,100
2041	182,000	2,300	184,300	43,000	3,600	43,000
2042	167,800	2,200	170,000	45,600	3,700	45,600
2043	171,400	2,200	173,600	47,700	3,600	47,700
2044	169,200	2,100	171,200	47,700	3,400	47,700
2045	171,100	1,900	173,000	47,700	3,200	47,700
2046	170,700	1,800	172,400	47,700	2,900	47,700
2047	170,600	1,700	172,200	47,700	2,700	47,700
2048	169,100	1,600	170,600	47,700	2,600	47,700
2049	170,100	1,700	171,700	47,700	2,200	47,700
2050	163,800	1,800	165,500	39,100	2,400	39,100
2051	164,000	1,800	165,800	39,200	2,400	39,200
2052	154,200	1,800	156,000	39,200	2,300	39,200
2053	79,700	1,800	81,500	37,600	1,400	37,600
2054	63,400	1,800	65,100	22,100	300	22,100
2055	37,900	1,100	38,900	3,800	200	3,800
Decommissioning and Closure	79,200	600	79,600	2,900	100	2,900
2056	35,900	300	36,100	1,900	100	1,900
2057	24,700	200	24,800	1,000	0	1,000
2058	18,600	100	18,700	0	0	0



A-1. Net-Zero Plan Summary - Scenario 1

Project Phase and Year	Electrification of Surface Fleet (Open Pit)			Electrification of Surface Fleet (Quarry, Borrow, Tailings)		
	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)
Construction	140,000	0	0	24,300	0	0
2027	39,700	0	0	8,100	0	0
2028	40,600	0	0	8,100	0	0
2029	59,700	0	0	8,100	0	0
Operations	694,400	30,700	292,100	210,600	12,300	150,600
2030	64,100	3,800	16,100	8,100	500	2,100
2031	69,000	3,900	17,300	8,100	500	2,100
2032	73,200	3,600	18,300	8,100	400	2,100
2033	74,400	2,800	18,600	8,100	400	2,100
2034	69,000	2,100	17,300	8,100	300	2,100
2035	64,500	1,600	16,200	8,100	300	2,100
2036	52,900	1,100	13,300	8,100	300	2,100
2037	39,900	400	10,000	8,100	300	2,100
2038	15,000	400	3,800	8,100	200	2,100
2039	15,000	300	3,800	8,100	200	2,100
2040	10,400	900	10,400	8,100	700	8,100
2041	9,800	800	9,800	8,100	700	8,100
2042	9,800	800	9,800	8,100	700	8,100
2043	9,800	800	9,800	8,100	600	8,100
2044	9,800	700	9,800	8,100	600	8,100
2045	9,800	700	9,800	8,100	600	8,100
2046	9,800	600	9,800	8,100	500	8,100
2047	9,800	600	9,800	8,100	500	8,100
2048	9,800	600	9,800	8,100	500	8,100
2049	9,800	600	9,800	8,100	500	8,100
2050	9,800	600	9,800	8,100	500	8,100
2051	9,800	600	9,800	8,100	500	8,100
2052	9,800	600	9,800	8,100	500	8,100
2053	9,800	600	9,800	8,100	500	8,100
2054	9,800	600	9,800	8,100	500	8,100
2055	9,800	600	9,800	8,100	500	8,100
Decommissioning and Closure	17,200	500	17,200	24,300	1,000	24,300
2056	9,800	300	9,800	8,100	500	8,100
2057	4,900	200	4,900	8,100	500	8,100
2058	2,500	0	2,500	8,100	0	8,100



A-1. Net-Zero Plan Summary - Scenario 1

Project Phase and Year	Electrification of Operational Diesel Generators			Expanded Grid Connection		
	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)
Construction	13,200	0	0	200	100	0
2027	4,400	0	0	0	0	0
2028	4,400	0	0	0	0	0
2029	4,400	0	0	200	100	0
Operations	114,400	3,300	48,400	1,796,200	95,100	1,796,200
2030	4,400	0	0	59,100	7,000	59,100
2031	4,400	0	0	59,100	6,800	59,100
2032	4,400	0	0	81,400	8,400	81,400
2033	4,400	0	0	81,400	7,100	81,400
2034	4,400	0	0	81,400	5,600	81,400
2035	4,400	0	0	81,400	5,100	81,400
2036	4,400	0	0	93,600	5,400	93,600
2037	4,400	0	0	93,600	5,000	93,600
2038	4,400	0	0	93,600	4,700	93,600
2039	4,400	0	0	93,600	4,400	93,600
2040	4,400	0	0	88,000	4,000	88,000
2041	4,400	0	0	88,000	3,800	88,000
2042	4,400	0	0	71,000	3,000	71,000
2043	4,400	0	0	72,600	2,900	72,600
2044	4,400	0	0	70,700	2,700	70,700
2045	4,400	300	4,400	72,800	2,600	72,800
2046	4,400	300	4,400	72,800	2,400	72,800
2047	4,400	300	4,400	72,800	2,200	72,800
2048	4,400	300	4,400	72,800	2,200	72,800
2049	4,400	300	4,400	72,800	2,300	72,800
2050	4,400	300	4,400	72,800	2,400	72,800
2051	4,400	300	4,400	72,800	2,400	72,800
2052	4,400	300	4,400	69,000	2,300	69,000
2053	4,400	300	4,400	2,100	100	2,100
2054	4,400	300	4,400	7,000	300	7,000
2055	4,400	300	4,400	0	0	0
Decommissioning and Closure	13,200	600	13,200	0	0	0
2056	4,400	300	4,400	0	0	0
2057	4,400	300	4,400	0	0	0
2058	4,400	0	4,400	0	0	0



A-1. Net-Zero Plan Summary - Scenario 1

Project Phase and Year	Ventilation on Demand (Underground) - Electricity		Ventilation on Demand (Underground) - Heating		Electrification of Heating		
	Baseline Emissions (tCO ₂ e)	Reduction in Scope 2 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)
Construction	6,700	0	40,400	0	40,400	0	0
2027	1,800	0	11,200	0	11,200	0	0
2028	1,500	0	12,900	0	12,900	0	0
2029	3,400	0	16,300	0	16,300	0	0
Operations	62,800	8,400	613,000	39,400	613,000	20,200	246,000
2030	2,800	0	19,600	0	19,600	0	0
2031	2,700	0	21,000	0	21,000	0	0
2032	4,700	0	20,800	0	20,800	0	0
2033	4,000	0	23,100	0	23,100	0	0
2034	3,100	0	23,200	0	23,200	0	0
2035	2,900	300	25,100	2,500	25,100	0	0
2036	3,300	400	24,500	2,400	24,500	0	0
2037	3,100	400	24,200	2,400	24,200	0	0
2038	3,000	300	25,200	2,500	25,200	0	0
2039	2,700	300	24,600	2,500	24,600	0	0
2040	2,600	600	26,600	5,300	26,600	0	0
2041	2,500	500	27,300	5,400	27,300	0	0
2042	2,400	500	27,500	5,500	27,500	0	0
2043	2,400	500	27,400	5,500	27,400	0	0
2044	2,200	500	26,900	5,400	26,900	0	0
2045	2,100	500	26,800	0	26,800	2,400	26,800
2046	1,900	400	26,300	0	26,300	2,200	26,300
2047	1,800	400	26,200	0	26,200	2,000	26,200
2048	1,700	400	24,600	0	24,600	1,800	24,600
2049	1,800	400	25,600	0	25,600	2,000	25,600
2050	1,900	400	28,100	0	28,100	2,300	28,100
2051	1,900	400	28,200	0	28,200	2,400	28,200
2052	1,900	400	22,300	0	22,300	1,900	22,300
2053	1,600	400	16,300	0	16,300	1,400	16,300
2054	1,000	200	10,800	0	10,800	900	10,800
2055	800	200	10,800	0	10,800	900	10,800
Decommissioning and Closure	0	0	18,900	0	18,900	1,700	18,900
2056	0	0	10,800	0	10,800	900	10,800
2057	0	0	5,400	0	5,400	500	5,400
2058	0	0	2,700	0	2,700	300	2,700



A-1. Net-Zero Plan Summary - Scenario 1

Project Phase and Year	Scenario 1		
	Direct Emissions (Scope 1) (tCO ₂ e)	Acquired Energy Emissions (tCO ₂ e)	Net GHG Emissions (tCO ₂ e)
Construction	434,500	7,700	442,200
2027	140,800	0	140,800
2028	146,300	0	146,300
2029	147,400	7,700	155,100
Operations	1,102,100	274,500	1,376,600
2030	94,700	17,600	112,300
2031	105,900	17,300	123,200
2032	111,600	17,900	129,500
2033	120,100	15,000	135,100
2034	116,200	11,600	127,800
2035	101,100	12,100	113,200
2036	91,400	11,400	102,800
2037	80,900	10,400	91,300
2038	66,800	9,700	76,500
2039	66,200	9,000	75,200
2040	26,500	11,000	37,500
2041	27,200	10,700	37,900
2042	27,300	9,900	37,200
2043	27,200	9,600	36,800
2044	27,000	9,000	36,000
2045	1,000	11,200	12,200
2046	1,200	10,300	11,500
2047	1,200	9,600	10,800
2048	1,300	9,200	10,500
2049	1,300	9,200	10,500
2050	1,100	9,900	11,000
2051	1,100	10,000	11,100
2052	1,000	9,300	10,300
2053	1,000	5,700	6,700
2054	1,000	4,500	5,500
2055	800	3,400	4,200
Decommissioning and Closure	2,700	4,500	7,200
2056	900	2,400	3,300
2057	900	1,700	2,600
2058	900	400	1,300



A-2. Net-Zero Plan Summary - Scenario 2

Project Phase and Year	Baseline Emissions			Electrification of Underground Fleet			Electrification of Surface Fleet (Open Pit)			Electrification of Surface Fleet (Quarry, Borrow, Tailings)		
	Direct Emissions (Scope 1) (tCO ₂ e)	Acquired Energy Emissions (tCO ₂ e)	Net GHG Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Increase in Scope 2 Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)
Construction	434,500	7,600	442,100	11,500	0	0	140,000	0	0	24,300	0	0
2027	140,800	0	140,800	200	0	0	39,700	0	0	8,100	0	0
2028	146,300	0	146,300	2,300	0	0	40,600	0	0	8,100	0	0
2029	147,400	7,600	155,000	9,000	0	0	59,700	0	0	8,100	0	0
Operations	4,426,600	70,700	4,496,200	956,600	50,600	743,400	694,400	8,200	125,500	210,600	5,600	89,100
2030	172,000	6,300	178,300	14,700	0	0	64,100	0	0	8,100	0	0
2031	184,400	6,100	190,500	21,000	0	0	69,000	0	0	8,100	0	0
2032	213,400	5,500	218,800	23,400	0	0	73,200	0	0	8,100	0	0
2033	222,200	4,700	226,900	28,700	0	0	74,400	0	0	8,100	0	0
2034	217,000	3,600	220,600	28,700	0	0	69,000	0	0	8,100	0	0
2035	221,500	3,300	224,800	35,800	2,100	17,900	64,500	0	0	8,100	0	0
2036	221,200	3,100	224,300	35,900	1,900	18,000	52,900	0	0	8,100	0	0
2037	207,300	2,900	210,100	35,800	2,200	17,900	39,900	0	0	8,100	0	0
2038	190,600	2,700	193,300	43,000	2,000	21,500	15,000	0	0	8,100	0	0
2039	190,000	2,500	192,500	43,000	1,900	21,500	15,000	0	0	8,100	0	0
2040	182,000	2,400	184,300	43,100	3,600	43,100	10,400	300	3,700	8,100	0	0
2041	182,000	2,300	184,300	43,000	3,600	43,000	9,800	300	3,500	8,100	0	0
2042	167,800	2,200	170,000	45,600	3,700	45,600	9,800	300	3,500	8,100	0	0
2043	171,400	2,200	173,600	47,700	3,600	47,700	9,800	300	3,500	8,100	0	0
2044	169,200	2,100	171,200	47,700	3,400	47,700	9,800	300	3,500	8,100	0	0
2045	171,100	1,900	173,000	47,700	3,200	47,700	9,800	700	9,800	8,100	600	8,100
2046	170,700	1,800	172,400	47,700	2,900	47,700	9,800	600	9,800	8,100	500	8,100
2047	170,600	1,700	172,200	47,700	2,700	47,700	9,800	600	9,800	8,100	500	8,100
2048	169,100	1,600	170,600	47,700	2,600	47,700	9,800	600	9,800	8,100	500	8,100
2049	170,100	1,700	171,700	47,700	2,200	47,700	9,800	600	9,800	8,100	500	8,100
2050	163,800	1,800	165,500	39,100	2,400	39,100	9,800	600	9,800	8,100	500	8,100
2051	164,000	1,800	165,800	39,200	2,400	39,200	9,800	600	9,800	8,100	500	8,100
2052	154,200	1,800	156,000	39,200	2,300	39,200	9,800	600	9,800	8,100	500	8,100
2053	79,700	1,800	81,500	37,600	1,400	37,600	9,800	600	9,800	8,100	500	8,100
2054	63,400	1,800	65,100	22,100	300	22,100	9,800	600	9,800	8,100	500	8,100
2055	37,900	1,100	38,900	3,800	200	3,800	9,800	600	9,800	8,100	500	8,100
Decommissioning and Closure	79,200	600	79,600	2,900	100	2,900	17,200	500	17,200	24,300	1,000	24,300
2056	35,900	300	36,100	1,900	100	1,900	9,800	300	9,800	8,100	500	8,100
2057	24,700	200	24,800	1,000	0	1,000	4,900	200	4,900	8,100	500	8,100
2058	18,600	100	18,700	0	0	0	2,500	0	2,500	8,100	0	8,100
Grand Total	4,940,300	78,900	5,017,900	971,000	50,700	746,300	851,600	8,700	142,700	259,200	6,600	113,400



A-2. Net-Zero Plan Summary - Scenario 2

Project Phase and Year	Fleet Optimization		Renewable Diesel (Fleet)		Renewable Diesel (Generators)		Ventilation on Demand (Underground) - Electricity		Ventilation on Demand (Underground) - Heating		Renewable Energy (Wind)		Renewable Energy (Solar)	
	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)
Construction	175,800	0	175,800	5,300	69,400	2,600	42,200	0	40,400	300	200	100	200	0
2027	48,000	0	48,000	1,500	32,500	1,200	9,400	0	11,200	100	0	0	0	0
2028	51,000	0	51,000	1,500	32,500	1,200	9,400	0	12,900	100	0	0	0	0
2029	76,800	0	76,800	2,300	4,400	200	23,400	0	16,300	100	200	100	200	0
Operations	1,861,600	91,000	1,861,600	23,700	114,400	25,000	1,311,800	198,200	613,000	91,100	1,796,200	182,600	1,796,200	78,400
2030	86,900	8,700	86,900	2,300	4,400	200	23,400	0	19,600	100	59,100	100	59,100	0
2031	98,100	9,900	98,100	2,600	4,400	200	23,400	0	21,000	100	59,100	100	59,100	0
2032	104,700	10,500	104,700	2,800	4,400	200	45,700	0	20,800	100	81,400	100	81,400	0
2033	111,200	11,200	111,200	2,900	4,400	200	45,700	0	23,100	100	81,400	100	81,400	0
2034	105,800	10,600	105,800	2,800	4,400	200	45,700	0	23,200	100	81,400	100	81,400	0
2035	108,400	9,100	108,400	2,400	4,400	200	45,700	4,600	25,100	2,600	81,400	100	81,400	0
2036	96,900	7,900	96,900	2,100	4,400	200	57,900	5,800	24,500	2,500	93,600	100	93,600	0
2037	83,800	6,600	83,800	1,800	4,400	200	57,900	5,800	24,200	2,500	93,600	100	93,600	0
2038	66,100	4,500	66,100	1,200	4,400	200	57,900	5,800	25,200	2,600	93,600	100	93,600	0
2039	66,100	4,500	66,100	1,200	4,400	200	57,900	5,800	24,600	2,600	93,600	100	93,600	0
2040	61,600	1,500	61,600	400	4,400	200	57,900	11,600	26,600	5,400	88,000	100	88,000	0
2041	60,900	1,500	60,900	300	4,400	200	57,900	11,600	27,300	5,500	88,000	100	88,000	0
2042	63,500	1,500	63,500	300	4,400	200	57,900	11,600	27,500	5,600	71,000	100	71,000	0
2043	65,600	1,500	65,600	300	4,400	200	57,900	11,600	27,400	5,600	72,600	0	72,600	0
2044	65,600	1,500	65,600	300	4,400	200	57,900	11,600	26,900	5,500	70,700	100	70,700	0
2045	65,600	0	65,600	0	4,400	2,000	57,900	11,600	26,800	5,400	72,800	100	72,800	0
2046	65,600	0	65,600	0	4,400	2,000	57,900	11,600	26,300	5,400	72,800	25,700	72,800	11,200
2047	65,600	0	65,600	0	4,400	2,000	57,900	11,600	26,200	5,400	72,800	25,700	72,800	11,200
2048	65,600	0	65,600	0	4,400	2,000	57,900	11,600	24,600	5,000	72,800	25,700	72,800	11,200
2049	65,600	0	65,600	0	4,400	2,000	57,900	11,600	25,600	5,200	72,800	25,700	72,800	11,200
2050	57,000	0	57,000	0	4,400	2,000	57,900	11,600	28,100	5,700	72,800	25,700	72,800	11,200
2051	57,100	0	57,100	0	4,400	2,000	57,900	11,600	28,200	5,700	72,800	25,700	72,800	11,200
2052	57,100	0	57,100	0	4,400	2,000	57,900	11,600	22,300	4,500	69,000	25,700	69,000	11,200
2053	55,500	0	55,500	0	4,400	2,000	45,900	9,200	16,300	3,300	2,100	0	2,100	0
2054	40,000	0	40,000	0	4,400	2,000	29,000	5,800	10,800	2,300	7,000	1,200	7,000	0
2055	21,700	0	21,700	0	4,400	2,000	23,000	4,600	10,800	2,300	0	0	0	0
Decommissioning and Closure	44,400	0	44,400	0	13,200	6,000	0	0	18,900	4,100	0	0	0	0
2056	19,800	0	19,800	0	4,400	2,000	0	0	10,800	2,300	0	0	0	0
2057	14,000	0	14,000	0	4,400	2,000	0	0	5,400	1,200	0	0	0	0
2058	10,600	0	10,600	0	4,400	2,000	0	0	2,700	600	0	0	0	0
Grand Total	2,081,800	91,000	2,081,800	29,000	197,000	33,600	1,354,000	198,200	672,300	95,500	1,796,400	182,700	1,796,400	78,400



A-2. Net-Zero Plan Summary - Scenario 2

Project Phase and Year	RNG (Generators)		RNG (Heating)		Scenario 2		
	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Baseline Emissions (tCO ₂ e)	Reduction in Scope 1 Emissions (tCO ₂ e)	Direct Emissions (Scope 1) (tCO ₂ e)	Acquired Energy Emissions (tCO ₂ e)	Net GHG Emissions (tCO ₂ e)
Construction	200	0	40,400	0	426,200	7,600	433,800
2027	0	0	11,200	0	138,000	0	138,000
2028	0	0	12,900	0	143,500	0	143,500
2029	200	0	16,300	0	144,700	7,600	152,300
Operations	1,796,200	42,000	613,000	35,000	2,701,600	135,100	2,836,700
2030	59,100	0	19,600	0	160,600	6,300	166,900
2031	59,100	0	21,000	0	171,500	6,100	177,600
2032	81,400	0	20,800	0	199,700	5,500	205,200
2033	81,400	0	23,100	0	207,700	4,700	212,400
2034	81,400	0	23,200	0	203,200	3,600	206,800
2035	81,400	0	25,100	-100	184,700	5,400	190,100
2036	93,600	0	24,500	-100	184,700	5,000	189,700
2037	93,600	0	24,200	-100	172,500	5,100	177,600
2038	93,600	0	25,200	-100	154,800	4,700	159,500
2039	93,600	0	24,600	-100	154,200	4,400	158,600
2040	88,000	0	26,600	-100	116,100	6,300	122,400
2041	88,000	0	27,300	-100	116,400	6,200	122,600
2042	71,000	0	27,500	-100	99,500	6,200	105,700
2043	72,600	0	27,400	-100	101,100	6,100	107,200
2044	70,700	0	26,900	-100	98,900	5,800	104,700
2045	72,800	11,200	26,800	4,000	71,200	6,400	77,600
2046	72,800	4,500	26,300	3,800	40,900	5,800	46,700
2047	72,800	4,500	26,200	3,800	40,800	5,500	46,300
2048	72,800	4,500	24,600	3,600	39,900	5,300	45,200
2049	72,800	4,500	25,600	3,800	40,500	5,000	45,500
2050	72,800	4,500	28,100	4,100	42,000	5,300	47,300
2051	72,800	4,500	28,200	4,200	42,000	5,300	47,300
2052	69,000	3,800	22,300	3,300	35,000	5,200	40,200
2053	2,100	0	16,300	2,400	7,300	4,300	11,600
2054	7,000	0	10,800	1,500	10,600	3,200	13,800
2055	0	0	10,800	1,500	5,800	2,400	8,200
Decommissioning and Closure	0	0	18,900	2,600	22,100	2,200	24,300
2056	0	0	10,800	1,500	10,300	1,200	11,500
2057	0	0	5,400	700	6,800	900	7,700
2058	0	0	2,700	400	5,000	100	5,100
Grand Total	1,796,400	42,000	672,300	37,600	3,149,900	144,900	3,294,800