AMBLER ACCESS PROJECT UPDATE

RESOURCE DEVELOPMENT COUNCIL

March 17, 2022







RAMZI FAWAZ

President & CEO
Ambler Metals

ALAN WEITZNER

Executive Director AIDEA

ABOUT AIDEA

To promote, develop, and advance economic growth and diversification in Alaska by providing various means of financing and investment.

Investing in Alaskans

- Revenue generated by AIDEA's investments go to two places:
 - 1. reinvested in AIDEA programs and projects and
 - 2. issued as dividends to the State of Alaska.
- AIDEA works with Alaska's communities and businesses to advance your economic development priorities.
- Projects must meet two important criteria:
 - 1. be a sustainable financial investment; and
 - 2. create tangible benefits for Alaska and its communities.

AIDEA OVERVIEW

- ✓ Investing in Alaskans since 1967
- ✓ Alaska's Development Finance Authority
- ✓ Financially Self-Sustaining Public
 Corporation (no GF by statute AS
 44.88.190(b))
- √ \$446 million in Dividends declared
 to Alaska since 1997
- ✓ Directed over \$3.5 billion into economic development in Alaska

AIDEA PROGRAMS + PROJECTS

- Conduit Revenue Bond Program
- Loan Participation Program
- Development Project Finance
- Sustainable Energy Transmission and Supply (SETS)
- Arctic Infrastructure Development Fund (AIDF)
- Small Business Economic Development Loan
 Fund
- Rural Development Initiative Loan Fund
- Business Export Assistance Program

Development Project Finance:

- ✓ Delong Mountain Transportation System
- ✓ Skagway Ore Terminal
- ✓ FedEx Aircraft MRO Hangar
- √ Snettisham Hydroelectric Facility
- ✓ Alaska Ship & Drydock, Ketchikan
- √ Camp Denali Readiness Center (JBER)
- ✓ Mustang Holding LLC
- ✓ Interior Energy Project
- ✓ BlueCrest Energy Drilling Rig Loan
- ✓ AK SHIP Vessel Repair Finance Program
- ✓ Duck Point Development II (Icy Strait Point)
- ✓ HEX Cook Inlet, LLC
- ✓ SSQ Line
- ✓ Ambler Access Project
- ✓ West Susitna Access Road Project
- ✓ Section 1002 Area Leases
- ✓ FNSB Military Facility Zone Land

PUBLIC-PRIVATE PARTNERSHIPS (P3)

WHAT IS IT?

A public-private partnership is a cooperative agreement between government and private sector investors that work together to create, build, or provide services to communities.

- A P3 arrangement can mobilize additional sources of funding and financing for infrastructure – it doesn't replace public sector financing entirely.
- Mechanism for greater private-sector participation in all phases of the development, operation, and financing of infrastructure projects vs. traditional procurement.
- Infrastructure to access resources is a prime example of the value of a P3.
- Provides certainty to infrastructure investors public sector is critical in driving certainty and reducing risk.



COMPLEX PROJECTS

Projects are typically large and complex involving numerous partners and stakeholders, often with conflicting opinions.



REGULATORY CHANGES

Modifications or stays to regulations, laws, ordinances, or other policies can significantly disrupt progress.



MULTIPLE APPROVALS

Additional layers of review and approval help mitigate risk, but can also cause schedule delays.



NEGOTIATIONS

Balancing each party's priorities and concerns to reach a consensus.

PUBLIC-PRIVATE PARTNERSHIP BENEFITS

Improves Value

Leverages private sector best practices with public sector cost transparency.

Engages Communities

Stakeholders are involved early and often, compared to private alone.

Ensure Responsible Development Stakeholders are involved early and

Stakeholders are involved early and often, compared to private alone.



Mitigates Risk

Financial and project management risk is shared across all parties.

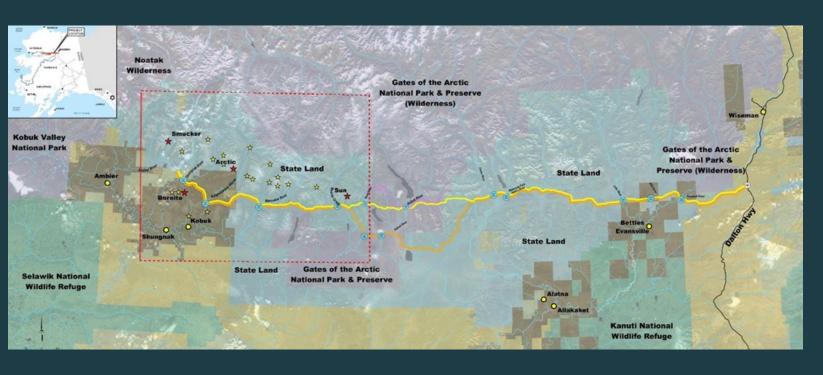
Encourages Innovation

Ability to incentivize cost-effective solutions and other efficiencies.

Reduces Taxpayer Costs

Lowers the overall cost of funding. Private investment leverages funding by the public sector, which can include taxpayer funds.

AMBLER ACCESS PROJECT OVERVIEW



Proposed 211-mile private controlled industrial access road to the Ambler Mining District in northwestern Alaska.

Access to Ambler Mining District defined within the Alaska National Interest Lands Conservation Act (ANILCA).

ECONOMIC DEVELOPMENT + JOB OPPORTUNITIES

Economic benefits from road access facilitating development of four major deposits in the district:

ROAD CONSTRUCTION + OPERATIONS	CONSTRUCTION OF MINES
 360 direct jobs for road construction on an annual average Up to 81 direct annual jobs for road operations and maintenance over the life of the road 	 2,777 direct jobs for mine construction; \$286M in wages annually 2,034 additional indirect and induced jobs; \$108M in wages annually
MINING OPERATIONS	GOVERNMENT REVENUES (LIFE OF ALL FOUR MINES)
 495 direct jobs; \$72M in wages annually 3,436 additional indirect and induced jobs; \$228M in wages annually 	 \$393M in mining license tax revenues to the State \$524M in corporate income taxes to the State \$214M in production royalties to the State \$13M in claim rents to the State \$193M in payments to local governments

SOURCE: University of Alaska, Center for Economic Development. (2019). Economic Impacts of Ambler Mining District Industrial Access Project and Mine Development.







2021 STAKEHOLDER OUTREACH



Subsistence Advisory Committee

Working group and formal committee established. October 19, 2021 and December 9, 2021



Workforce Development Working Group

Working group established.
October 19, 2021 and December 9, 2021



Visits To Allakaket + Alatna



New Website for PC, Mobile Devices



Email Correspondence System



SOAR Communication Database

Subsistence Advisory Committee (SAC)

Members from: Huslia, Kiana, Alatna, Allakaket, Ambler, Hughes, Kobuk, Noorvik, Shungnak, Evansville, and Gates of the Arctic Regional SAC

- Each member practices subsistence and is knowledgeable about the land, animals and culture around their respective communities.
- Integral part of the project's development as permitting and design work continues.



EXPANDING ENGAGEMENT WITH ALASKA BUSINESSES

- Amidst the pandemic, 2021 ushered in the first field season for the Ambler Access Project (AAP) with a specific focus on broadening opportunity for Alaskan contractors across 12 tasks.
- 30+ Alaska prime and subcontractor companies that will continue with cultural, archaeological, logistics, geotechnical, design, and other field season tasks.
- Professional Services Procurement Policy adopted to encourage minority Alaskan-owned companies to bid through an MBE program. Currently, MBE entities represent 30 percent of AAP contracts.







2021 HIGHLIGHTS BY THE NUMBERS

Conducted surveys and Fish habitat study data **10** performed hydraulic and collected at 22 sites hydrology reconnaissance at 10 bridge locations Tribal liaisons consisting Surveyed 691 acres for 691 of Doyon and NANA cultural resources shareholders 10 shovel test pits were New Alaska Heritage positive and 112 were Resource Survey sites negative for cultural were identified material. 1 known Alaska Heritage Installed over 15 stream Resource Survey site boundary gauges and collected key was documented within the direct area of potential effect.

2022 FIELD ACTIVITIES

Cultural Resources

Continue field surveys in prioritized areas.

Geotechnical Investigations

Characterize subsurface conditions of the riverine environment, general soil characteristics along alignment, and assess viability of material sites. Borings at 45 river crossings, 11 material sites and 10 roadway sites along alignment. Summer and winter activities planned.

♦ H+H Investigations

Assess conditions for area drainage, culvert placement, and bridge design; spring breakup monitoring at 26 rivers; establish stream gauges at bridge sites.

Land Survey Activities

Establish land ownership boundaries, bodies of water, and major design features; survey Northwest Arctic Borough boundary; survey alignment over 4 months for land ownership and project features.

Roadway Design

Establish project design criteria, advance preliminary engineering to 35% design.

Fish Habitat Studies

ADF&G will continue 2021 field efforts to collect fish habitat, water quality, species presence, or critical spawning area data, focusing on mid-alignment (MP 58-130) at 57 locations.

Wetland Investigations

Field evaluation of eastern 50 miles of alignment; survey for wetlands and waters of the U.S.; invasive species, if found; sensitive plant species, if found.

Stakeholder Outreach

Website update, calendar of events, mail newsletter, distribute press releases (letters of support, etc.), continue subsistence advisory committee & workforce development working group, launch social media.



Note: Update does not include Independent Cost

ABOUT AMBLER METALS

- Ambler Metals LLC (AMC) formally established February 11, 2020
- 50%-50% Joint Venture between South32 and Trilogy Metals
- Alaskan Company with offices in Anchorage and Fairbanks
- Partnership with NANA Regional Corporation for the exploration and development of the Upper Kobuk Mineral Projects (UKMP)
- Focused on the development of the UKMP with a mandate to advance projects in the Ambler Mining District.
- Development Agreement with AIDEA to co-fund the Feasibility & Permitting Stage of the Ambler Access Project
- AMC Board approved 2022 budget of \$28.5M for AMC and \$15M for AAP



AMBLER METALS 2022 OBJECTIVES

2022 Field Season

- Plan and execute a safe and effective 2022 summer field program
- ~ 10,000m of drilling planned in 2022

Studies & Permitting

Arctic Project:

- Complete prep work leading to a 404 permit NOI submission and start the EIS process
- Progress prefeasibility study through stage gate approval

Ambler Access Project

- Support Ambler Access Project's 2022 Annual Work Plan
- Continued intervention on the two lawsuits

Environmental, Social & Governance

- In partnership with NANA, engage with communities and stakeholders to ensure regional interests are respected and protected
- Maintain an effective organization, underpinned by strong fiscal systems and internal controls

ARCTIC PROJECT PERMITTING

PERMITTING PROCESS

Federal, State, and Borough Permitting Processes

US ARMY CORPS OF ENGINEERS

Lead Agency for the NEPA 404 EIS Process

STATE & OTHER

- Northwest Arctic Borough
- Alaska Department of Environmental Conservation
- Alaska Department of Natural Resources
- Alaska Department of Fish & Game

AMC FIELD SEASON

2021 Season

- ~120 Seasonal Employees
- ≥50% NANA & Doyon Shareholders

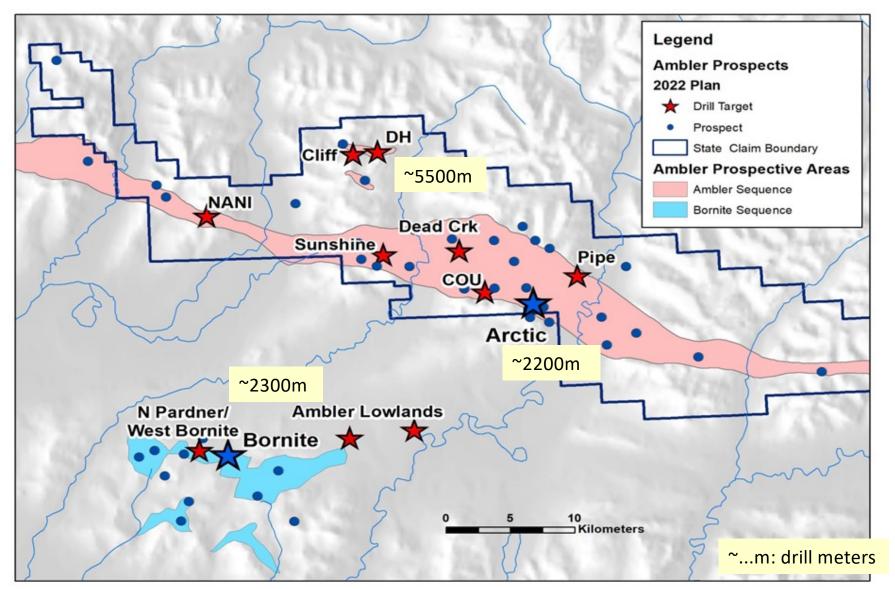


- May-Sept 2022
- ~110 Seasonal Employees
- Direct hire: geologists, geo-technicians, operators, mechanics, camp management
- Contractor hire: drillers, drill pad builders





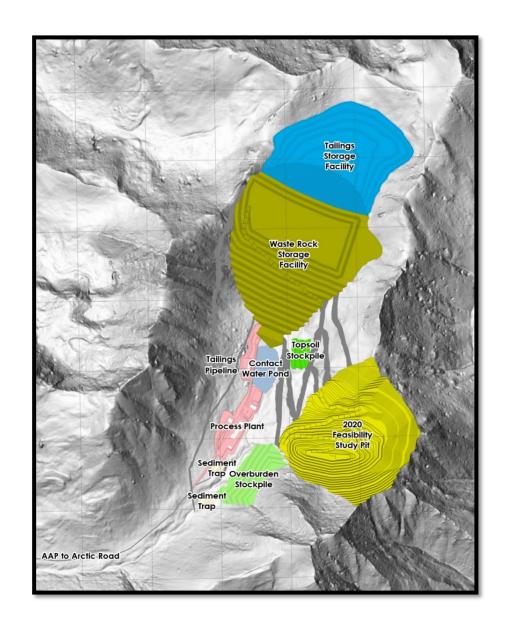
2022 FIELD SEASON EXPLORATION PLANS



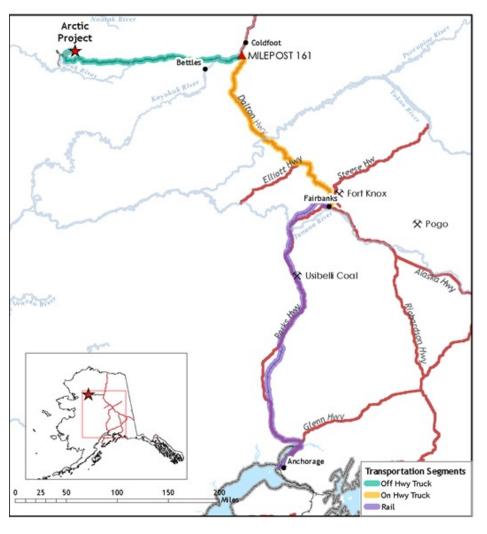
THE ARCTIC PROJECT

PROPOSED MAJOR FACILITIES

- Open Pit
- Tailings Storage Facility
- Waste Rock Storage Facility
- Contact Water Pond
- Overburden & Topsoil Stockpiles
- Process Plant



CONCENTRATE TRANSPORTATION



ARCTIC MINE TO DALTON HIGHWAY

- 214 Miles
- Off-highway trucks
- 2 containers per truck

DALTON HIGHWAY JUNCTION TO FAIRBANKS

- 240 Miles
- On-highway trucks
- 1 container per truck due to Dalton Hwy weight restrictions

FAIRBANKS TO ANCHORAGE BY RAILWAY

- 360 miles
- 2 dedicated trains per week with extras on mixed load trains

CONCENTRATE CONTAINERS

- All three concentrate products (Cu, Zn, Pb) shipped in purpose built 28-tonne capacity containers with integrated locking lids.
- Container "revolver" suspended from port cranes
 - Lift containers into ship's hold
 - Separates the lid
 - Dumps the load
 - Replaces and locks lid
- System eliminates dust and spillage at mine site, along transportation route, and at the port.



Revolversuspended under port crane



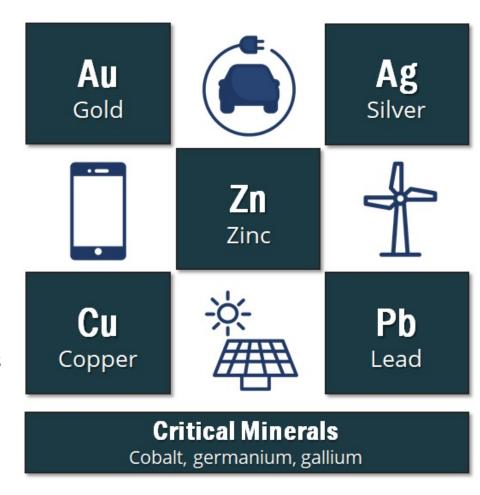
Integrated lid style container



Revolver tipping container in ship's hold

DOMESTIC SUPPLIES OF CRITICAL MINERALS

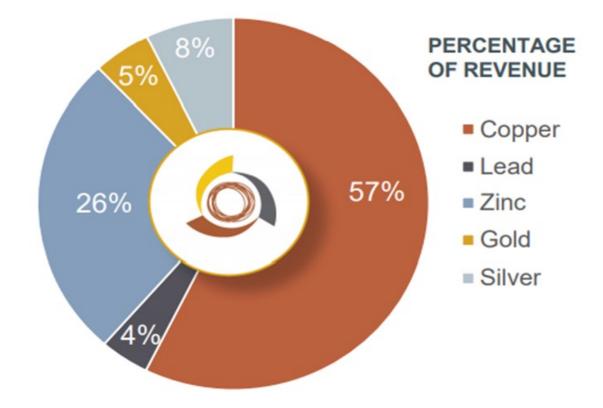
- Mining plays a critical role in supporting clean energy and technology for the emerging and future economies.
- The Ambler Mining District is a large prospective copper-zinc mineral belt with deposits of cobalt, germanium, gallium, arsenic, palladium, lead, gold, silver, and platinum.
- Aligns with federal policy to identify new sources of critical minerals, increase activity at all levels for a reliable, domestic supply chain.



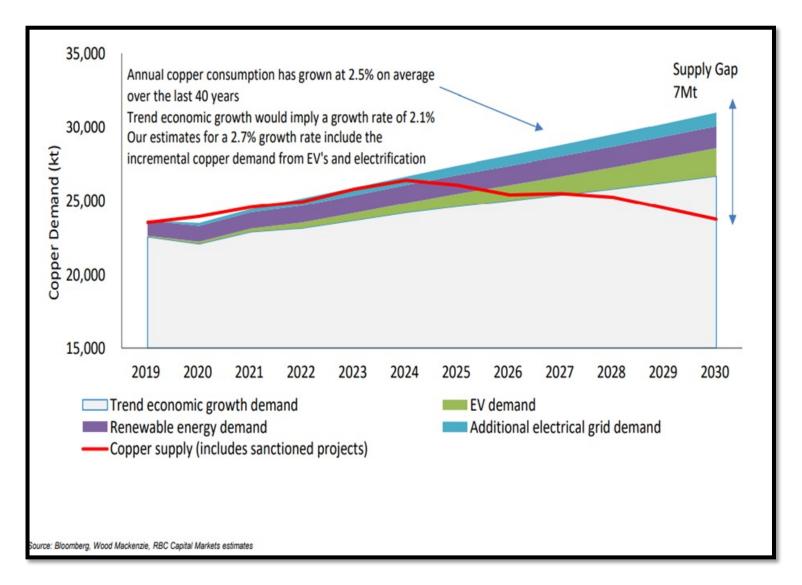
ARCTIC PROJECT - METAL PRODUCTION

FORECAST ANNUAL METAL PRODUCTION

- 155M lbs Cu
- 192M lbs Zn
- 32M lbs Pb
- 3.4M oz Ag
- 32K oz Au



COPPER SUPPLY vs DEMAND



TIME TO MINE PRODUCTION

DISCOVERY TO PRODUCTION

It takes nearly 17 years to bring a resource to production



Source: IEA report (https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions)

AAP REGULATORY APPROVALS & AGREEMENTS

- November 24, 2015 formal application for permitting submitted to BLM & Army Corps of Engineers
- July 23, 2020 Joint Record of Decision was issued by the BLM & Army Corps of Engineers
- August 25, 2020 Army Corps of Engineers issued the 404 B permit
- January 5, 2021 National Park Service (NPS) and BLM ROWs were approved
- February 11, 2021 Ambler Access Development Agreement between AIDEA and Ambler Metals was approved
- April 14, 2021 Land Access Agreement was executed with Doyon Regional Corporation
- September 14, 2021 Land Access Agreement was executed with NANA Regional Corporation
- January 11, 2022 AAP Subsistence Advisory Committee held their first meeting.
- February 2022 AIDEA & Ambler Metals Boards approved a \$30M budget for AAP's 2022 Annual Plan

COMPREHENSIVE PROJECT ENGAGEMENT

As documented in the Final Environmental Impact Statement (FEIS), the BLM engaged in extensive outreach nearly quadrupling the required scoping period to allow additional time for public input.

- An initial scoping period extended from 90 days to 330+ days along with 15 BLM-hosted public hearings in 13 communities receiving more than 7,200 written comments.
- A draft EIS released in August 2019 that resulted in an additional 18 hearings in rural communities and hearings in Anchorage, Fairbanks, and Washington, D.C. resulting in receipt of an additional 29,000 written comments.
- BLM sent letters to more than 50 federally recognized tribal groups, including those along the proposed road corridor.
 - Following up on these communications, the BLM held:
 - 15 government-to-government consultation meetings,
 - 11 Section 106 consultation meetings, and
 - 8 other stakeholder consultation meetings.

AAP LITIGATION

- Two lawsuits against AAP's FIES/JROD filed in Q4 2020.
- NANA, State of Alaska, AIDEA, and Ambler Metals are Intervenor Defendants.
- October 2021 DOI/DOJ requested a 60-day stay that expired in November. Litigation resumed.
- January 21, 2022 DOI/DOJ requested another 30-day stay.
- February 22, 2022 DOI/DOJ requested the court remand the ROD in order to correct what it calls "deficiencies" identified in the NEPA analysis (NHPA Section 106 & ANILCA 810).
- March 11, 2022 BLM suspended ROW for AAP.
- March 15, 2022 NPS suspended ROW for AAP.

HOW CAN RDC MEMBERS HELP?

- Advocate for the Ambler Road & Ambler Mining projects
- Participate in calls to action
- Calls & Letters to Department of Interior, Alaska Legislators
- Support Resolutions





