### **RESPONSIBLE US NICKEL\***

PRODUCTION •

FOR ELECTRIC VEHICLES MANUFACTURED IN THE UNITED STATES

To be produced from America's only known, high-grade, undeveloped Ni-Cu-Co asset on infrastructure

MADE IN THE UNITED STATES

<sup>\*</sup>Presented May 2, 2019 at the Benchmark Minerals Summit 2019, Washington D.C.: "Securing 21st Century U.S. Supply Chains for EVs and Energy Storage"

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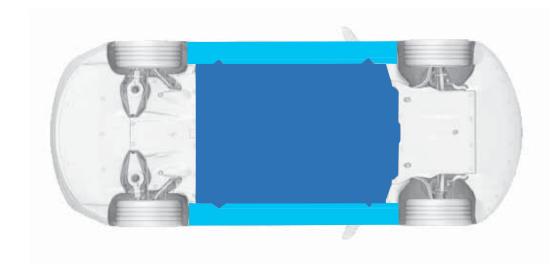
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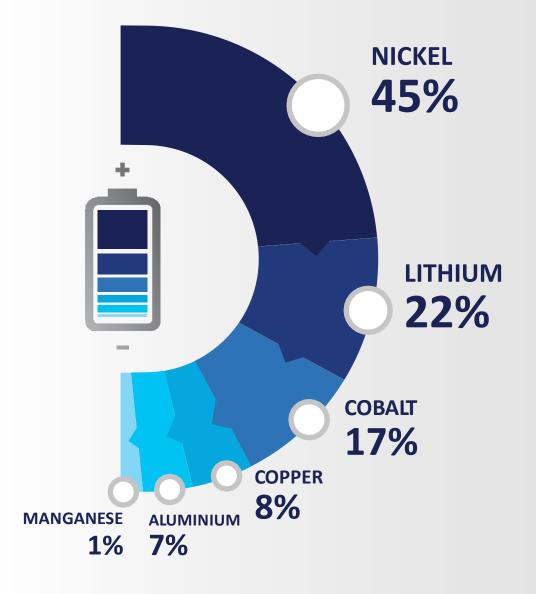
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- Forward-looking statements are subject to significant risks and uncertainties and other factors that could cause the actual results to differ materially from those discussed in the forward-looking statements, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on Talon. Factors that could cause actual results or events to differ materially from current expectations include, but are not limited to: changes in commodity prices, including nickel; the Company's inability to raise capital for the Tamarack Project; the Company's ability to obtain permits in a timely fashion; the lack of electric vehicle adoption or in the event of such adoption, such not resulting in an increased demand for nickel or there being a nickel deficit; negative metallurgical results; changes in interest rates; risks inherent in exploration results, timing and success, including the failure to identify mineral resources or mineral reserves; the uncertainties involved in interpreting DHEM surveys, drilling results and other geological data; inaccurate geological and metallurgical assumptions (including with respect to the size, grade and recoverability of mineral reserves and resources); uncertainties relating to the financing needed to further explore and develop the properties or to put a mine into production; the costs of commencing production varying significantly from estimates; unexpected geological conditions; changes in power prices; unanticipated operational difficulties (including failure of plant, equipment or processes to operate in accordance with specifications, cost escalation, unavailability of materials, equipment and third-party contractors, inability to obtain or delays in receiving government or regulatory approvals, industrial disturbances or other job action, and unanticipated events related to health, safety and environmental matters); political risk, social unrest, and changes in general economic conditions or
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# OUR MISSION

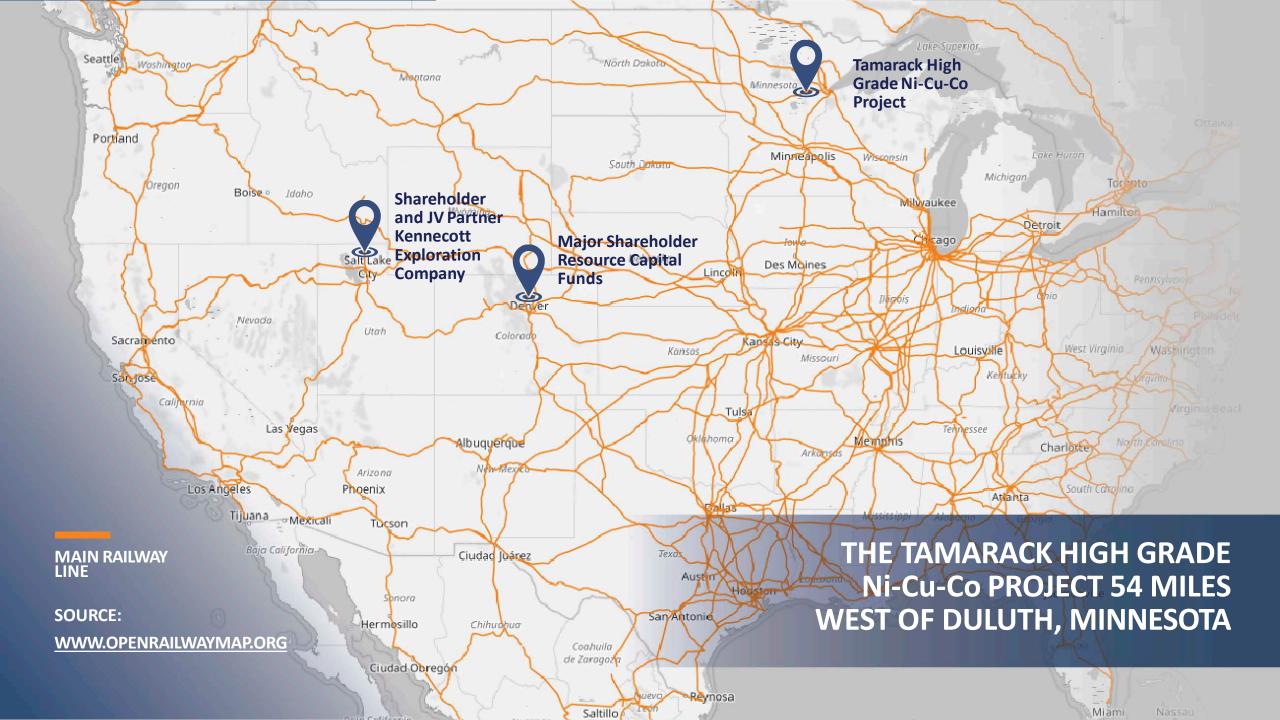
Produce nickel responsibly for electric vehicles manufactured in the US



#### **ESTIMATED METAL RATIO, BY VALUE\***



<sup>\*</sup>Talon estimate from publicly available data



# **LESS TONNAGE**

**LESS ENERGY** 

# **MORE METAL**

**LESS WASTE** 



LOW GRADE SULFIDE DEPOSITS\*:

- PRODUCES 1 TON OF NICKEL FOR EVERY ~900 TONS MINED

60%

OF NICKEL IN THE ROCK CAN BE



THE TAMARACK HIGH GRADE Ni-Cu-Co DEPOSIT\*\*:

- PRODUCES 1 TON OF NICKEL FOR EVERY 38 TONS MINED

85%

OF NICKEL IN THE ROCK CAN BE EXTRACTED THE TAMARACK PROJECT THEREFORE REQUIRES SIGNIFICANTLY LESS:

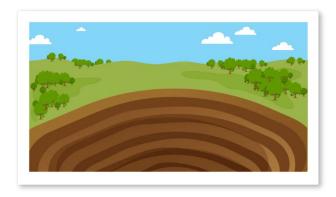


- to produce 1 ton of nickel

<sup>\*</sup> Talon calculation from publicly available information

<sup>\*\*</sup> Estimated with reference to the NI 43-101 Technical Report, Preliminary Economic Assessment (PEA) of the Tamarack North Project – Tamarack, Minnesota, Effective Date: December 14, 2018

# GOLDILOCKS DEPTH NOT TOO SHALLOW, NOT TOO DEEP



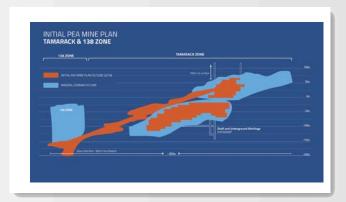
## OPEN PIT REQUIRES LARGE LAND AREAS TO:

- MINE
- PROCESS MATERIAL
- STORE WASTE



# DEEP UNDERGROUND MINES REQUIRE:

- HIGH CAPITAL
- HIGH ENERGY



THE TAMARACK PROJECT, STARTING AT 1,250 FEET FROM SURFACE IS AT AN IDEAL DEPTH TO:

- EXPLORE EFFECTIVELY
- OPTIMIZE CAPITAL AND ENERGY USAGE

# POWERED BY RENEWABLE ENERGY

#### **ESTABLISHED SOLAR GARDEN 39 MILES FROM TAMARACK**\*



Minnesota Power Celebrates Solar Garden Program

• 111 SOLAR FARMS IN THE DULUTH REGION\*\*

• FARMLAND AVAILABLE FOR SOLAR GARDENS AT THE TAMARACK HIGH GRADE Ni-Cu-Co PROJECT

<sup>\*</sup>https://www.solarendowment.org/2017/11/03/minnesota-power-celebrates-solar-garden-program/

<sup>\*\*</sup>https://www.cleanenergyprojectbuilder.org/installed-projects

# ELECTRIFICATION OF MINING

#### **ELECTRIC MINE FLEET**

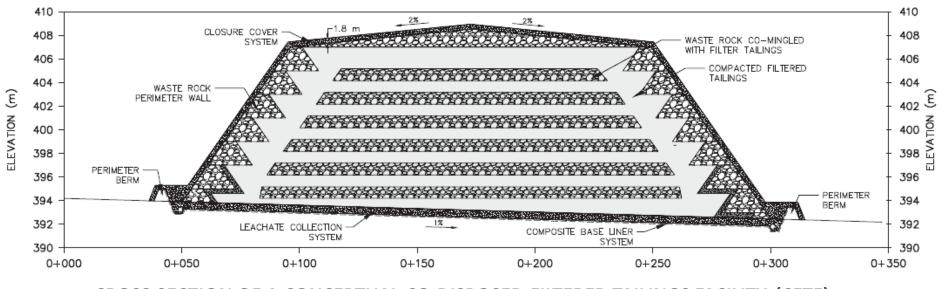








# **DESIGN TO PROTECT**



CROSS SECTION OF A CONCEPTUAL CO-DISPOSED FILTERED TAILINGS FACILITY (CFTF)

# POST MOUNT POLLEY BREACH, BEST AVAILABLE TECHNOLOGY (BAT) RECOMMENDATIONS\* ARE:

- FILTERED, UNSATURATED
- COMPACTED TAILINGS NO
- WATER COVER

# CO-DISPOSED FILTERED TAILINGS FACILITY (CFTF)

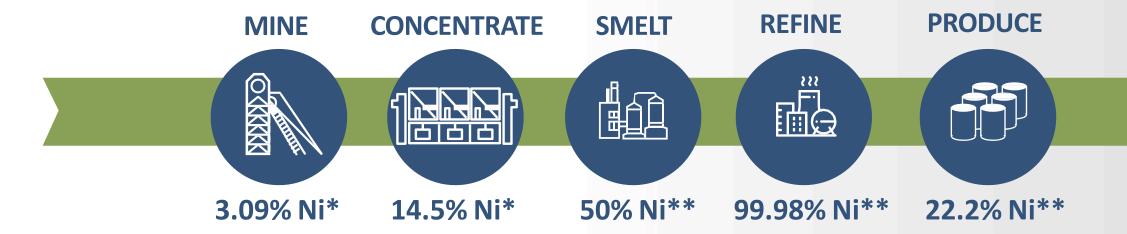
#### **POTENTIAL IMPACTS ARE:**

- REDUCED SURFACE FOOTPRINT
- NO DAM
- IMPROVED RECYCLING OF WATER

<sup>\*</sup> Report on Mount Polley Tailings Storage Facility Breach, January 15, 2015

# OPTIMIZE THE EXTRACTION OF NICKEL

INSTEAD OF LENGTHENING THE EMBEDDED STAINLESS STEEL VALUE CHAIN...



<sup>\*</sup>NI 43-101 Technical Report, Preliminary Economic Assessment (PEA) of the Tamarack North Project – Tamarack, Minnesota, Effective Date: December 14, 2018

\* \* Estimates – numbers may vary for different processes and facilities

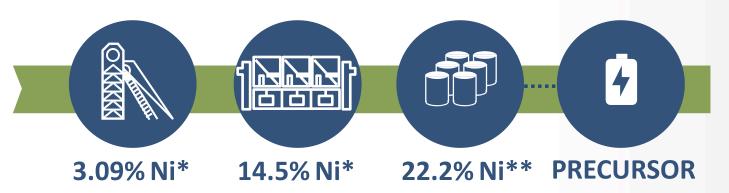
# ...CREATE A VALUE CHAIN - FOR BATTERIES



REDUCE DEPENDENCE ON IMPORTS



MINE CONCENTRATE PRODUCE MANUFACTURE





REDUCE ENERGY CONSUMPTION



MAXIMIZE RECOVERY
OF METALS



REDUCE OPERATING COSTS



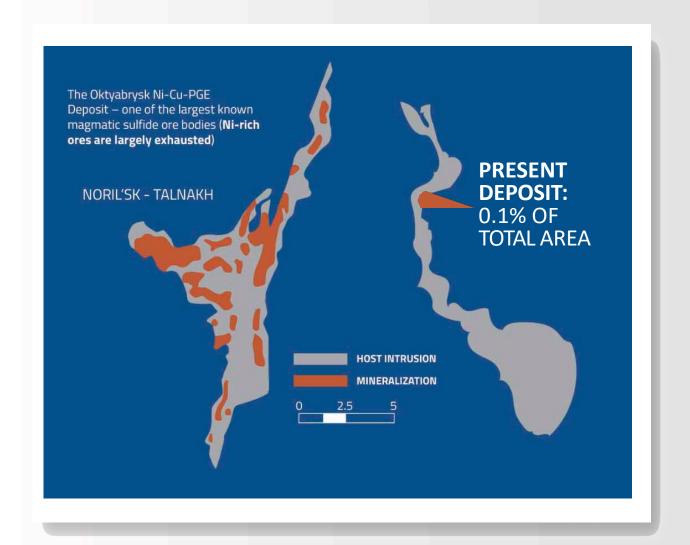
REDUCE TRANSPORTATION COSTS

\*NI 43-101 Technical Report, Preliminary Economic Assessment (PEA) of the Tamarack North Project – Tamarack, Minnesota, Effective Date: December 14, 2018

\* \* Estimates – numbers may vary for different processes and facilities

# **ROOM TO GROW**

- ALREADY 1.1 MILLION\* ELECTRIC VEHICLES COULD BE PRODUCED FROM TAMARACK NICKEL
- POTENTIAL TO GROW
- PRESENT DEPOSIT COMPRISES
   ~0.1% OF THE TAMARACK
   INTRUSIVE COMPLEX BY AREA

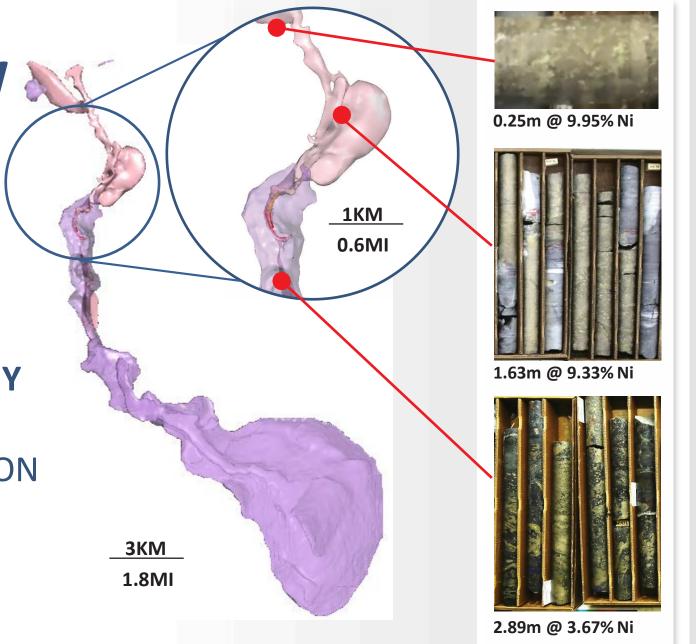


**ROOM TO GROW** 

- TWO WAYS TO GROW:
  - DEPOSIT EXTENSIONS
  - SATELLITE DEPOSITS

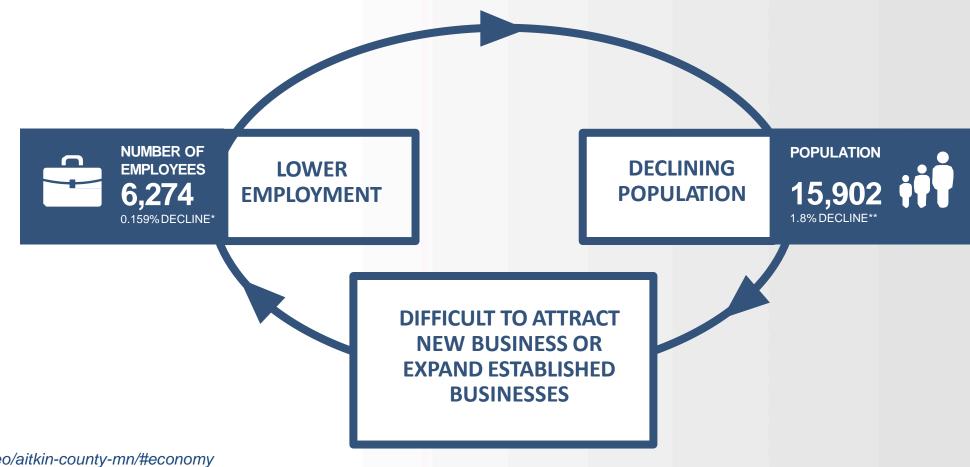
• DEPLOY TECHNOLOGICAL ADVANCES TO REDUCE ENERGY AND COST OF DISCOVERY:

- -ENHANCED REMOTE DETECTION
- -MORE EFFECTIVE DRILLING



# MINING – A CATALYST FOR ESTABLISHING FUTURE INDUSTRY

PRESENT CHALLENGES



<sup>\*</sup>https://datausa.io/profile/geo/aitkin-county-mn/#economy \*\*https://www.census.gov/quickfacts/aitkincountyminnesota

# MINING – A CATALYST FOR ESTABLISHING FUTURE INDUSTRY

THE OPPORTUNITY

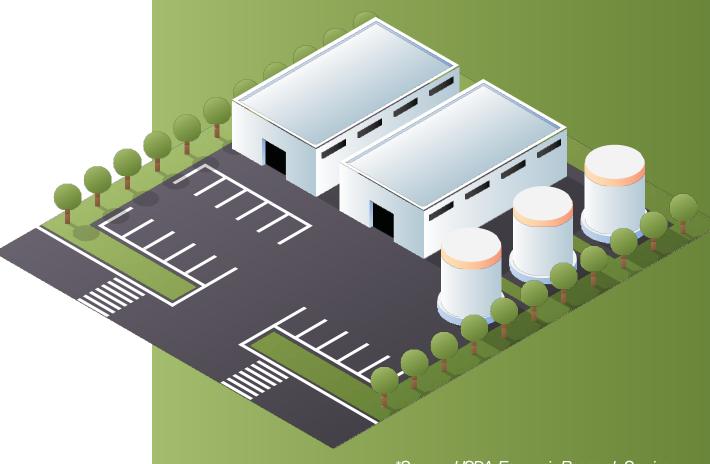
**BROAD COMMUNITY SUPPORT** 

POST MINING, THE REGION WILL HAVE ESTABLISHED:

- SOLAR FARMS
- BUILDINGS AND INFRASTRUCTURE SUITABLE FOR MANUFACTURING
- AN EXPANDED, HIGHLY SKILLED WORKFORCE

IDEALLY LOCATED TO ESTABLISH AN INDUSTRIAL MANUFACTURING COMPLEX POST MINING

MANUFACTURING IS RELATIVELY MORE IMPORTANT TO THE RURAL ECONOMY THAN THE URBAN ECONOMY\*



\*Source: USDA, Economic Research Service analysis of Bureau of Economic Analysis, Regional Economic Information System data

### TIME IS RUNNING OUT

TO THE PREDICTED CLASS 1 NICKEL DEFICIT



2019

2023

#### **CREATE AN OPTIMIZED:**

- DATA COLLECTION
- DESIGN
- ENGINEERING and
- PERMITTING SCHEDULE

WITH AGREED MILESTONES AND DEADLINES

WITH BUY-IN FROM ALL STAKEHOLDERS