

High Tide's Labrador West Iron Project and its role in the Decarbonization of the Iron and Steel Industry

TORONTO, October 4, 2023 – High Tide Resources Corp. ("**High Tide**" or the "**Company**") (**CSE: HTRC**) announces today that preliminary analytical test work completed on its flagship Labrador West Iron Project ("**Lab West**" or the "**Project**") indicates the potential to beneficiate (process) iron ore to allow the Company to produce Direct Reduction ("**DR**") Quality Iron Ore Pellets. DR Pellets are a critical step in supplying the raw material that will allow low-carbon, and eventually zero-carbon, emission steel to be produced.

Michael T. Zurowski, Executive Vice President of High Tide states, "The Company has identified a path forward that will see it develop an important iron ore project in Canada that will have a very meaningful impact on global CO2 emissions in regard to the iron and steel industry. We are seeing North American, and European steel production, expanding via the Electric Arc Furnaces ("EAF") that require inputs of high-quality scrap metal and DR pellets that are currently hard to source. The transition to sustainable low-carbon steel making is expanding, and much greener than traditional methods. The EAF steel making process emits ~70% less CO2 and will require the high-purity and high-value DR iron pellets that High Tide's Lab West plans to produce."

Carbon Emission Reduction

In Canada, ArcelorMittal Dofasco is progressing work on a C\$1.8 billion Direct Reduction Iron ("**DRI**") and EAF investment as part of its effort to reduce its worldwide carbon emission footprint by 30% by 2030. Algoma Steel is building a C\$703 million EAF plant to replace its Blast Oxygen Furnace ("**BOF**"). Both Projects received significant investment from the Provincial and Federal Governments.

https://corporate.arcelormittal.com/media/press-releases/arcelormittal-breaks-ground-on-first-transformational-lowcarbon-emissions-steelmaking-project

https://www.northernontariobusiness.com/industry-news/manufacturing/algoma-steels-electric-arc-furnace-projecttaking-shape-7168748

In its publication "Pedal to the Metal", September 2022, Wood Mackenzie, a leading research, insight, and consultancy service, estimated that the Iron and Steel Industry ("**ISI**") would need to spend US\$1.4 trillion to reach the 1.5-degree target by 2050. Recently, Sweden's H2 Green Steel raised €1.5 billion for its Boden Plant, designed to be a zero-carbon emission iron and steel producer. This is one of many major investments towards reducing the carbon footprint of the ISI.

ISI and the Cement Industry are two of the largest carbon emitters, each accounting for approximately 8% of the world's carbon emissions. These are also Industries critical to infrastructure development, so as growth expands, these Industries will need to reduce carbon emission to negligible levels.

https://www.woodmac.com/horizons/pedal-to-the-metal-iron-and-steels-one-point-four-trillion-usd-shot-at-decarbonisation/

 $\label{eq:https://www.h2greensteel.com/latestnews/h2-green-steel-raises-15-billion-in-equity-to-build-the-worlds-first-green-steel-plantnbsp$

The Changing Market

The past twenty years has seen the resource industry focused on supplying China to feed its incredible growth, particularly the imports of iron ore. Steel production grew from 97 million tonnes in 1998 to 1,035 million tonnes in 2021. Iron Ore imports have exceeded a billion tonnes annually since 2016. Steel production in North America, Europe and MENA grew in line with GDP but its steel production is shifting away from the carbon intensive Blast Furnace – Basic Oxygen Furnace steel process to the Direct Reduction Iron – Electric Arc Furnace ("**DRI-EAF**") steel making process. EAF steelmaking primarily uses scrap steel as its input with DRI used to dilute impurities and expand the available scrap pool. The DRI-EAF-Scrap process greatly reduces carbon emissions as it utilises natural gas and electricity in the production process. At a 30%/70% (DRI/EAF-Scrap) split, this process will cut 1.5 tonnes of CO₂ or ~70% of emissions. Hydrogen can replace the natural gas in the process creating zero-carbon emission steel, but significant cost reduction efforts are required to make the use of Hydrogen commercial.

Carbon Emissions through Each Steel Making Method

Steel Making Method	CO2 / t Steel
Direct Reduced Iron_Electric Arc Furnace	0.6 to 0.7
Blast Furnace_Basic Oxygen Furnace	2.1 to 2.2

Source: International Energy Agency



Source International Energy Agency

Production of DR Quality iron ore concentrates and pellets require iron ores that when beneficiated increase iron content to 67 to 70% but importantly reduce deleterious elements (silica, alumina, manganese, phosphorus, alkalis) to very low levels.

Direct Reduction Iron Ore Pellet Specifications				
Chemistry %		Min/Max- Acceptable	Preferred	
Fe		67.00	67.50	
SiO2				
Al2O3		3.00	2.00	
TiO2				
Mn		0.250	0.100	
Р		0.030	0.020	
S		0.010	0.008	
v		0.100	0.050	
Moisture		2.5	1.5	
Maximum Cu = 0.005% or 50 ppm (detection limit)				
		Source: Skillings		

The Lab West Deposit is exceptionally well located in the Labrador Trough, about 15 to 20 kilometres northeast of the Iron Ore Company of Canada's Carol Lake Mine and its QNS&L rail line (see location map appended to this press release). This mining camp utilises two rail lines and three Cape-size ports. Recent expansions at Carol Lake, ArcelorMittal Mines Canada's Mont Wright Mine and the Champion Bloom Lake Mine added some 20 million tonnes of iron ore but not a single tonne of iron ore pellets, despite the world's demand for the pellets. There is significant excess capacity on the QNS&L rail line and at the Point Noire Public Port facility. The shortage of direct charge iron ore (pellets, lump) has existed since 2010 but outside of China few pellet plants have been built. The time for major expansion of the Labrador Trough has arrived and it is one of the few developed areas in the World that is capable of producing and does produce DR Quality Iron Ore Pellets.

High Tide Resources Asset

High Tide Resources' wholly-owned Lab West Deposit is a new mineral resource announced in early 2023 and has characteristics specific to producing DR Quality Iron Ore Sale Products. Preliminary analytical testwork has shown the deposit has excellent potential to produce DR Quality iron ore concentrate and pellets. Some other deposits in the Trough have issues with a high silica content (>4% SiO2) or high manganese (>0.7% Mn) associated with the beneficiated iron oxide mineralisation. Processing of these ores make production of DR quality products exceptionally difficult. The Lab West Deposit does not have this problem. Although preliminary, the analytical testwork indicates that at a grind of 44 to 74 microns, the liberation of the mineralisation indicates a concentrate of 67 to 70% Fe; 1 to 2% silica plus alumina (SiO2+Al2O3) and less than 0.2% Mn may be achieved (see NI43-101 Report filed on SEDAR). Additional analytical testwork is required, particularly to establish the concentration and beneficiation circuit to achieve this DR Quality iron ore concentrate and eventual pellet.

The Lab West Deposit is well situated to the existing infrastructure (rail, power and port). Labrador is host to the Churchill Falls and newer Muskrat Falls Hydroelectric power that has zerocarbon emissions. This renewable Green Power and the close access to the QNS&L rail line (~15 km northeast of the rail) significantly reduces development costs. QNS&L is a common carrier under Federal Legislation so High Tide would be able to use this rail line. It would need to negotiate these rights with QNS&L. In addition, the development would also be able to make use of the Point Noire, the new public port facility in Sept Isles (see location map appended to this release).

The next steps are detailed analytical and metallurgical testwork, environmental baseline data collection towards the submission of a Project Description and make this Project shovel-ready. Drilling will improve confidence in the resource classification and will be driven on acquiring and continuing to de-risk the Project. Immediate work will be used to develop a Preliminary Economic Assessment working towards completion of a feasibility study to FEL3/4 status (template to build).

About High Tide

High Tide is focused on and committed to the development of mineral projects critical to infrastructure development using industry best practices combined with a strong social license from local communities. High Tide owns a 100% interest in the Labrador West Iron Project which hosts a NI 43-101 Inferred iron resource of 655 Mt @ 28.8% Fe and is located adjacent to IOCC's Carol Lake Mine in Labrador City, NL. This resource is exposed at surface and was pit constrained for an open-pit mining scenario. The Technical Report was filed on SEDAR on April 6, 2023 and was authored by Ryan Kressall M.Sc., P.Geo, Matthew Herrington, M.Sc., P.Geo, Catharine Pelletier, P.Eng. and Jeffrey Cassoff P.Eng.

The Company also owns a 100% interest in the Lac Pegma copper-nickel-cobalt deposit located 50 kilometres southeast of Fermont, Quebec. Majority shareholder Avidian Gold (TSX.V: AVG) controls approximately 30% of High Tide's outstanding shares.

Further details on the Company, including a NI 43-101 technical report on the Labrador West Iron property can be found on the Company's website at <u>www.hightideresources.com</u>.

Qualified Person

The technical information contained in this news release has been approved by Steve Roebuck, P.Geo., Director, President and Interim CEO of High Tide, who is a Qualified Person as defined in "National Instrument 43-101, Standards of Disclosure for Mineral Projects."

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Forward looking information

This news release includes certain "forward-looking statements" which are not comprised of historical facts. Forward-looking statements include estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Forward-looking statements may be identified by such terms as "believes", "anticipates", "expects", "estimates", "may", "could", "would", "will", or "plan". Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although these statements are based on information currently available to the Company, the Company provides no assurance that actual results will meet management's expectations. Risks, uncertainties and other factors involved with forward-looking information could cause actual events, results, performance, prospects and opportunities to differ materially from those expressed or implied by such forward-looking information. Forward looking information in this news release includes, but is not limited to, developing the Labrador West Iron Project into the next producer, the ability to keep exploration costs low, expected access to regional hubs, the Company's objectives, goals or future plans, statements, exploration results, potential mineralization, the estimation of mineral resources, exploration and mine development plans, timing of the commencement of operations and estimates of market conditions. Factors that could cause actual results to differ materially from such forward-looking information include, but are not limited to: the ability to anticipate and counteract the effects of COVID-19 pandemic on the business of the Company, including without limitation the effects of COVID-19 on the capital markets, commodity prices supply chain disruptions, restrictions on labour and workplace attendance and local and international travel, failure to receive requisite approvals in respect of the foregoing, failure to identify mineral resources, failure to convert estimated mineral resources to reserves, the inability to complete a feasibility study which recommends a production decision, the preliminary nature of metallurgical test results, delays in obtaining or failures to obtain required governmental, environmental or other project approvals, political risks, inability to fulfill the duty to accommodate First Nations and other indigenous peoples, uncertainties relating to the availability and costs of financing needed in the future, changes in equity markets, inflation, changes in exchange rates, fluctuations in commodity prices, delays in the development of projects, capital and operating costs varying significantly from estimates and the other risks involved in the mineral exploration and development industry, and those risks set out in the Company's public documents filed on SEDAR. Although the Company believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.

or

Labrador West Iron Ore Deposit Location Map

