Class 1 Nickel Updates Resource Estimate on Dundonald North Nickel Sulphide Deposit – New Insights Into Significant Tonnage and Grade

27.03.2025 | GlobeNewswire

TORONTO, March 27, 2025 - Class 1 Nickel and Technologies Ltd. (CSE: NICO | OTCQB: NICLF) ("Class 1 Nickel" or the "Company") is pleased to announce an updated mineral resource estimate (the "MRE") for the Dundonald North Nickel Sulphide Deposit (the "D-N Deposit") (Table 1 and Table 2). The D-N Deposit is one of 4 nickel sulphide deposits within the sizeable Alexo-Dundonald Nickel Sulphide Project (the "Project" or "A-D Project") (Figure 1), covering about 3,093 hectares (30.93 km^2) and located about 45 km northeast of the mining centre and City of Timmins, Ontario. Over the past two years, the Company has focused on a comprehensive effort to refine the Project's mineral resource base, underscoring Class 1 Nickel's commitment to build a robust portfolio of nickel sulphide resources in one of Canada's premier mining districts (Class 1 news release 4 December 2024).

Highlights from the Dundonald North Nickel Sulphide Deposit:

- Fully interpreted and robust 3D geological model forms the basis of the updated mineral resource estimate.
- Out-of-Pit* Inferred Resources of 2.5 Mt at 0.75% Ni, 0.03% Cu, 0.02% Co (Table 1 and Table 2).
- Represents a 31.4% increase in total tonnes with 3.5% increase in contained nickel (42 M lbs Ni), 74% increase in contained copper (2.6 M lbs Cu), and 40% increase in contained cobalt (1.2 M lbs Co).
- Total 1.0% Ni Mineral Resources within the 4 A-D nickel deposits, using various %Ni cut-offs: 500 kt at 1.07% Ni Indicated and 1.0 Mt at 1.01% Ni Inferred (Table 3).
- Total Mineral Resources within the 4 A-D nickel deposits using C$52.5/t and C$96.0/t NSR cut-offs: 3.4 Mt at 0.54% Ni Indicated and 6.6 Mt at 0.56% Ni Inferred (Table 4).
- With 100% of the Dundonald North Deposit tonnes in the Inferred category there is excellent exploration upside to expand and upgrade resources through additional drilling.
- Like the other 3 nickel deposits within the Project, the Dundonald North Deposit is open along strike and at depth, with new geological modelling and interpretation providing ample targets for next-stage drilling.
- The Dundonald North and Dundonald South deposits have never been exploited and represent new exploration and development targets within the Alexo-Dundonald Nickel Sulphide Project.

*Pit optimization was not possible due to a lack of drill hole coverage over the mineralized area; Underground (Out-of-Pit) C$96.00/t NSR cut-off was applied to current mineral resource estimate whereas an underground C$90.00/t NSR was applied in the 2020 mineral resource estimate (Stone *et al.*, 2020).

David Fitch, CEO of Class 1 Nickel, commented: "These results from the mineral resource estimate for Dundonald North deposit are extremely positive in confirming the potential of this deposit, which along with the Dundonald South Deposit, give us two new re-interpreted nickel targets for future drilling. In addition to these 4 deposit areas, there are numerous untested airborne EM-Magnetic anomalies and historical nickel sulphide occurrences within the Alexo-Dundonald Project that provide us with abundant targets for future drilling programs."

The updated MRE for the D-N Deposit was completed by Atticus Geoscience Consulting Ltd. ("Atticus") and their strategic partner Caracle Creek Chile SpA ("Caracle") (together the "Consultants"). This MRE replaces the 2020 mineral resource estimate completed by P&E Mining Consultants Inc. (Stone et al., 2020) which is filed on SEDAR+ (www.sedarplus.ca).

The current MRE for the Dundonald North Nickel Sulphide Deposit was completed in accordance with National Instrument 43-101 ("NI-43-101"), and a technical report in support of the MRE will be filed on

SEDAR+ within 45 days from the date of this news release.

Table 1. Mineral Resource Statement (I) for the Dundonald North Nickel Sulphide Deposit, C$96/t NSR cut-off.

Dundonald North Resources	Tonnage (t)	Grade					Contained Metal		
		Ni (%)	Cu (%)	Co (%)	NiEq (%)	NSR (C$/t)	Ni (k lbs)	Cu (k lbs)	Co (k lbs)
Underground (C$96/t NSR COG)									
Inferred	2,500,000	0.75	0.05	0.02	0.80	153	42,000	2,600	1,200

Notes to Table 1:

(1) The independent Qualified Person for the MRE, as defined by NI 43-101, is Mr. Simon Mortimer (FAIG #7795) of Atticus Geoscience Consulting Ltd., working with Caracle Creek Chile SpA. The effective date of the MRE is 27 March 2025.
(2) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
(3) The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
(4) The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated and/or Measured mineral resources with continued exploration.
(5) The Mineral Resources were estimated following the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines prepared by the CIM Mineral Resource & Mineral Reserve Committee and the 2014 CIM Definition Standards for Mineral Resources & Mineral Reserves prepared by the CIM Standing Committee on Reserve Definitions.
(6) Geological and block models for the MRE used core assays (3,960 samples from historical drilling). The drill hole database was validated prior to resource estimation and QA/QC checks were made using industry-standard control charts for blanks, core duplicates and commercial certified reference material inserted into assay batches.
(7) The block model was prepared using Micromine 2020. A 12 m x 12 m x 12 m block model was created, with sub blocks to 1.0 m x 1.0 m x 1.0 m and rotate 60 degrees. Drill composites of 1.0 m intervals were generated within the estimation domains, and subsequent grade estimation was carried out for Ni, Cu and Co using Inverse of Distance Weighting interpolation method.
(8) Grade estimation was validated by comparison of input and output statistics (Nearest Neighbour), swath plot analysis, and by visual inspection of the assay data, block model, and grade shells in cross-sections.
(9) As a reference, the average estimated density value (specific gravity) within the mineralised domain is 2.85 g/cm^3 (t/m^3).
(10) Estimates have been rounded to 3 significant figures for Indicated resources and 2 significant figures for Inferred sources.
(11) The MRE considers a geological dilution of 5% and a mining recovery of 95%.
(12) US$ metal prices of $8.00/lb Ni, $3.25/lb Cu, $13.00/lb Co were used in the NSR calculation with respective process recoveries of 85%, 70%, and 80%; gold, platinum and palladium are not considered in the current NSR calculation.
(13) Pit-constrained Mineral Resource NSR cut-off considers processing, and G&A costs, applying a factor of 5% for mining dilution, that respectively combine for a total of (($45.00 + $5.00) * (1 + 5%)) = C$52.5/tonne processed.
(14) Underground Mineral Resource NSR cut-off considers ore mining, processing, and G&A costs that respectively combine for a total of ($46.00 + $45.00 + $5.00) = C$96.0/tonne processed.
(15) The Underground grade blocks were quantified above the $96.0/t cut-off, within the constraining mineralized wireframes. Additionally, only groups of blocks that exhibited continuity and reasonable potential stope geometry were included. All orphaned blocks and narrow strings of blocks were excluded. The long-hole stoping with backfill mining method was assumed for the Underground MRE calculation.
(16) The NSR calculation is as follows: NSR C$/t = ((Ni% x 199.89) + (Cu% x 66.87) +(Co% x 305.71)) x 95%.
(17) The NiEq% calculation is as follows: NiEq% = (Ni% x 1) + (Cu% x 0.33) + (Co% x 1.53).

Table 2. Mineral Resource Statement (II) for the Dundonald North Nickel Sulphide Deposit, 0.46% Ni cut-off grade (COG).

Dundonald North Resources	Tonnage (t)	Grade					Contained Metal		
		Ni (%)	Cu (%)	Co (%)	NiEq (%)	NSR (C$/t)	Ni (k lbs)	Cu (k lbs)	Co (k lbs)
Underground (0.46% Ni COG)									
Inferred	2,600,000	0.75	0.05	0.02	0.80	150	43,000	2,100	1,200

*see Notes to Table 1 above

Figure 1. Alexo-Dundonald Nickel Sulphide Project showing the location of the 4 nickel deposits and the optimized pit shell outlines for Alexo North, Alexo South and Dundonald North, overlain on the generalized geology of the Project.

The updated Dundonald North MRE was calculated entirely from historical drilling (22,041.97 m in 64 holes) completed on the D-N Deposit by previous operators.

Plan view and cross-section views of the current MRE are provided in Figure 2, and an isometric view of categorized mineral resources is shown in Figure 3.

Grade-Tonnage curves for mineral resources are provided in Figure 4 (C$/t NSR) and Figure 5 (%Ni) and various views of the Dundonald North Deposit are shown in Figures 6 and 7.

Updates to the mineral resources of the Alexo South, Alexo North, Dundonald South deposits were announced 24 April 2024, 22 May 2024, and 3 October 2024, respectively.

Table 3. Mineral Resources for the 4 Alexo-Dundonald Nickel Sulphide Deposits at 1.0% Ni, using various %Ni cut-offs.

Deposit	Type	Resource Category	Ni (%) Cut-Off	Ni Grade (%)	Tonnage (t)	Contained Ni Metal (klbs)
Alexo South	Pit-Constrained	Indicated	0.52	1.00	77,700	1,720
Alexo North	Pit-Constrained	Indicated	0.28	1.01	33,900	791
Dundonald South	Pit-Constrained	Indicated	0.67	1.09	388,000	9,350
Dundonald North	Underground (no pit)	Inferred	0.71	1.01	1,000,000	23,000
		Total:	Indicated	1.07	499,600	11,861
		Total:	Inferred	1.01	1,000,000	23,000

Table 4. Summary of Mineral Resources for the 4 Alexo-Dundonald Nickel Sulphide Deposits.

Deposit	Resource Category	NSR Cut-Off	Tonnage (t)	Grade					Contained Metal		
				Ni (%)	Cu (%)	Co (%)	NiEq (%)	NSR (C$/t)	Ni (klbs)	Cu (klbs)	Co
Within-Pit											
Alexo North	Indicated	C$52.5/t	35,100	0.98	0.11	0.04	1.08	206	759	83	33
	Inferred	C$52.5/t	470	0.32	0.04	0.02	0.36	68	3	0	0
Alexo South	Indicated	C$52.5/t	275,000	0.58	0.02	0.02	0.62	123	3,490	133	133
Dundonald South	Indicated	C$52.5/t	2,540,000	0.49	0.02	0.01	0.52	103	27,400	911	755
	Inferred	C$52.5/t	3,600,000	0.42	0.01	0.01	0.11	88	33,000	1,100	1,1
Total:	Indicated		2,850,000	0.50	0.02	0.01	0.53	106	31,700	1,130	921
Total:	Inferred		3,600,000	0.42	0.01	0.01	0.44	88	33,000	1,100	1,1
Out-of Pit (Underground)											
Alexo North	Indicated	C$96.0/t	7,540	0.63	0.08	0.03	0.70	134	105	12	5
Alexo South	Indicated	C$96.0/t	297,000	0.65	0.03	0.02	0.69	139	4,240	190	157

	Inferred	C$96.0/t	130,000	0.54	0.03	0.02	0.58	116	1,500	75	52
Dundonald North	Inferred	C$96.0/t	2,500,000	0.75	0.05	0.02	0.80	152	42,000	2,600	1,2
Dundonald South	Indicated	C$96.0/t	201,000	0.95	0.03	0.02	0.99	198	4,210	145	80
	Inferred	C$96.0/t	390,000	0.57	0.02	0.01	0.60	120	4,900	160	120
Total:	Indicated		505,000	0.77	0.03	0.02	0.81	162	8,560	347	242
Total:	Inferred		3,000,000	0.72	0.04	0.02	0.60	120	48,000	2,900	1,4
Combined Within-Pit and Out-of Pit (Underground) Resources											
Total:	Indicated		3,350,000	0.54	0.02	0.01	0.58	115	40,200	1,470	1,1
Total:	Inferred		6,600,000	0.56	0.02	0.01	0.51	100	81,000	4,000	2,5

Figure 2. Plan view (left) and cross-sectional views looking east (right) through the Dundonald North Deposit showing the categorized Inferred (green) mineral resources.

Figure 3. Isometric view (looking northeast) of the Dundonald North Nickel Sulphide Deposit showing Inferred (green) resources.

Figure 4. Grade-tonnage curve for the Underground (Out-of-Pit) resources (C$96/t NSR cut-off) in the Dundonald North Nickel Deposit. The C$96/t NSR is highlighted.

Figure 5. Grade-tonnage curve for the Underground (Out-of-Pit) resources (%Ni cut-offs) in the Dundonald North Nickel Deposit. The 0.46% Ni cut-off grade is highlighted.

Table 5. Selected drill core assay results (>3.0 m length/>1.0% Ni) from historical diamond drilling at Dundonald North (medium- and high-grade nickel domains).

Drill Hole	From (m)	To (m)	Interval (m)	Ni (%)
DUN25-02	540.34	548.20	7.86	1.69
DUN25-03	311.18	315.92	4.74	1.01
DUN25-04	470.00	473.80	3.80	1.12
DUN25-04	476.75	481.00	4.25	2.41
DUN25-05	283.45	286.76	3.31	2.01
DUN25-10	388.25	391.70	3.45	1.49
DUN25-12	596.79	602.26	5.47	2.32
FNT05-12	302.00	306.50	4.50	1.47
FNT05-13	301.00	306.00	5.00	1.23
FNT05-13	306.50	311.50	5.00	1.69

Figure 6. Generalized geological plan map of the Dundonald North Deposit and the location of the historical drill hole collars.

Figure 7. The updated and interpreted 3D geological model (looking north) showing the Inferred mineral resources that define the Dundonald North Deposit which is open along strike and at depth.

As stated in the Company's recent news release of 4 December 2024, the primary objectives of the Company are to expand known mineralization and resources at its 4 existing magmatic nickel sulphide deposits within the Alexo-Dundonald Nickel Sulphide Project.

Furthermore, the Company will be launching an exploration program to examine the numerous underexplored areas of the Project including the numerous nickel sulphide occurrences that exist outside of the known deposit areas. Much of this exploration will be guided by recently completed airborne geophysics and historical drilling, with new ground geophysics and remote sensing surveys being planned.

Deposit Types and Project Potential

In addition to the high-grade nickel sulphide (>1.0% Ni) potential we see at Alexo-Dundonald, immense potential exists to target and develop large tonnage, low-grade komatiite-hosted deposits such as those being developed in the Timmins area by Canada Nickel Company (Crawford Project), EV Nickel Inc. (CarLang A Deposit) and Aston Minerals Ltd. (Boomerang Project). The Company is currently planning a targeted diamond drilling program to outline this deposit type within the Alexo-Dundonald Project.

This two-pronged approach - develop "traditional" high-grade nickel sulphide resources and in parallel large-tonnage, low grade nickel deposits - brings together the best of both nickel deposit types which are actively and aggressively being explored for and developed within the Timmins Mining Camp.

Core Handling, Assay and QA/QC Procedures

The historical analytical methods used in the years 1955-1993 and 2001 from the Falconbridge Ltd. and Hucamp Mines Ltd., respectively, are not precisely specified. However, the core samples from the 2004-2005 First Nickel Inc. were transported to Laboratoire Expert in Rouyn-Noranda. The samples, along with certified standards and blanks included by the Company for quality assurance and control, were prepared and analyzed at Laboratoire Expert.

The samples were prepared using industry-standard procedures and analyzed for gold, palladium, platinum, nickel, copper, cobalt, and zinc. The analytical methods employed consisted of Atomic Absorption Spectrometry for multi-element analysis (including Ni, Cu, Co, and Zn), Atomic Absorption Spectrometry (over-range) for the same elements (Ni, Cu, Co, Zn), and fire assay collection with ICP-OES finish for palladium, platinum, and gold.

Alexo-Dundonald Nickel Sulphide Project

The A-D Project is located about 45 km northeast of the City of Timmins, Ontario, covers an area of approximately 3,093 hectares (30.93 km^2), and was originally acquired by the Company in September 2018. The A-D Project includes four foundation nickel deposits (Alexo North and South and Dundonald North and South) of which the Alexo North and Alexo South (aka Kelex) were small-scale past producers of relatively high-grade nickel (*i.e.*, 1957; 2004-2005). The 4 deposits are located on a near-continuous folded komatiite-ultramafic rock sequence that extends for at least 14 km within the Property and which has never been systematically explored. The 4 mineral resources are open at depth and along strike and could increase in size with additional drilling (Class 1 news releases 18 April 2024, 22 May 2024, 23 September 2024).

Qualified Persons

The Qualified Person, as defined by NI 43-101, for the Dundonald North Mineral Resource Estimate reported herein, Mr. Simon Mortimer (FAIG #7795), Principal Geoscientist at Atticus Geoscience Consulting Ltd.

(Cornwall, UK and Lima, Peru). All other technical information and data in this news release has been reviewed and approved by Dr. Scott Jobin-Bevans (P.Geo., PGO #0183), Principal Geoscientist at Caracle Creek Chile SpA and a Qualified Person under the definitions established by NI 43-101.

About Class 1 Nickel

Class 1 Nickel and Technologies Limited (CSE: NICO | OTCQB: NICLF) is a Mineral Resources Company focused on the exploration and development of its 100% owned komatiite-hosted nickel sulphide projects: the Alexo-Dundonald Project, neat Timmins, Ontario (4 nickel sulphide deposits) and the Somanike Project, near Val-d'Or, Quebec (includes the historical Marbridge Ni-Cu Mine). Both projects comprise extensive property packages covering past-producing nickel mines, offering near-term production opportunity and excellent exploration upside.

Class 1 Nickel's current focus is to continue brownfield and greenfield exploration on its large property packages to aggregate additional nickel resources and in parallel look to advance the A-D Project back into production. The A-D Project sits on a 14+ km strike-length, folded komatiite unit containing several nickel-copper-cobalt and PGE mineral resources plus numerous underexplored sulphide occurrences. Decades of successful capital expenditure and investment into the Project has resulted in the discovery and delineation of four main nickel Mineral Resources that occur along the folded komatiite unit. The A-D Project was previously mined via a direct-shipping model, and the Company will soon commence a Preliminary Economic Assessment (PEA) study to determine the best path forward.

In addition, the Company also holds a 100% interest in its River Valley PGE Project located about 65 km northeast of the City of Sudbury, Ontario, the world's largest and longest operating nickel-copper-cobalt-PGE mining camp (Company news release dated 13 December 2023).

For more information, please contact:

Mr. David Fitch, President & CEO
T: +61.400.631.608
E: info@class1nickel.com

For additional information please visit our website www.class1nickel.com and our Twitter feed @Class1Nickel.

Neither the Canadian Securities Exchange nor its regulation services provider has reviewed or accepted responsibility for the adequacy or accuracy of this press release.

This news release contains forward-looking information which is not comprised of historical facts. Forward-looking information is characterized by words such as "plan", "expect", "project", "intend", "believe", "anticipate", "estimate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking information involves risks, uncertainties and other factors that could cause actual events, results, and opportunities to differ materially from those expressed or implied by such forward-looking information. Factors that could cause actual results to differ materially from such forward-looking information include, but are not limited to, changes in the state of equity and debt markets, fluctuations in commodity prices, delays in obtaining required regulatory or governmental approvals, and other risks involved in the mineral exploration and development industry, including those risks set out in the Company's management's discussion and analysis as filed under the Company's profile at SEDAR+ (www.sedarplus.ca.). Forward-looking information in this news release is based on the opinions and assumptions of management considered reasonable as of the date hereof, including that all necessary governmental and regulatory approvals will be received as and when expected. 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. The Company disclaims any intention or obligation to update or revise any forward-looking information, other than as required by applicable securities laws.

Photos accompanying this announcement are available at:

https://www.globenewswire.com/NewsRoom/AttachmentNg/9dce0ab3-fdaa-4e99-aabd-4ba63abdc03d

https://www.globenewswire.com/NewsRoom/AttachmentNg/43a377a4-6c61-4cbc-8fbc-09c2ffcc82aa

https://www.globenewswire.com/NewsRoom/AttachmentNg/bffea567-be7e-4836-a54d-79767f858e1c

https://www.globenewswire.com/NewsRoom/AttachmentNg/4a1446b6-8031-4434-9a8d-a6be1b0ede57

https://www.globenewswire.com/NewsRoom/AttachmentNg/1052b86e-ee60-4a46-b451-b3334f3e428d

https://www.globenewswire.com/NewsRoom/AttachmentNg/b987bc20-1ada-4fe0-adf3-3340c7e79f6e

https://www.globenewswire.com/NewsRoom/AttachmentNg/090758c8-e1cd-4c70-97f2-da5d3d740316