

# Royal Nickel Pre-Feasibility Study Demonstrates \$1 Billion Value (NPV8%); Dumont Nickel Project At Forefront Of Next Generation Of High Value, Low Cost Nickel Sulphide Projects

(All amounts expressed in US dollars unless otherwise indicated)

- Outstanding Project Economics: \$1.1 billion after tax NPV<sub>8%</sub>, second quartile unit cash costs and low initial capital intensity
- Robust Project: Proven simple flowsheet, major support infrastructure in place
- Billion Tonne Reserve: 1.1 billion tonnes at 0.27% nickel
- Continuing to Advance Project: First production targeted by end of 2015

TORONTO, Nov. 1, 2011 /CNW/ - Royal Nickel Corporation ("RNC") (TSX: RNX) is advancing its Dumont Nickel Project ("Dumont") based on the results of a positive pre-feasibility study ("PFS") that demonstrates a robust project with a large, world-class resource and excellent project economics with upside potential. Once in full production, Dumont is expected to be among the top five sulphide nickel assets globally, based on annual nickel production.

# **Dumont PFS Highlights**

- \$1.1 billion after-tax NPV<sub>8%</sub>, 17% after-tax internal rate of return ("IRR")<sup>1</sup>
- C1 cash costs<sup>2</sup> of \$4.13 per pound, second quartile unit cash costs
  - Site operating costs reduced by 24% from the 100 ktpd scenario in the Preliminary Economic Assessment ("PEA")
- Staged development approach: lower cost and lower risk more than 50% reduction in initial capital outlay from the 100 ktpd scenario outlined in the PEA
  - Initial capital expenditure of \$1.1 billion for 50 ktpd operation
  - Expansion to 100 ktpd by year 5 requires \$0.7 billion of additional capital
- 1.1 billion tonnes of reserves at 0.27% nickel, life-of-mine strip ratio of 1.2:1, 31-year project life
- Average annual contained nickel production of 96 million pounds (44 kt) during the 19-year mine life and 59 million pounds (27 kt) for the subsequent 12 years from processing of the lower grade stockpile
- Single high grade concentrate containing an average of 33% nickel over life of project
- All major support infrastructure (rail line, roads and water) already in place
- Additional potential upsides: production of a final ferronickel product, production of iron ore (magnetite) concentrate by-product, additional recovery optimization and use of in-pit crushing or trolley system

"This pre-feasibility study delivered outstanding results," said Tyler Mitchelson, President and CEO of Royal Nickel Corporation. "This study clearly demonstrates the benefits of the staged development approach with a much simpler, lower cost and lower risk flowsheet. When combined with the project's outstanding location next to existing infrastructure and in Quebec — one of the top mining jurisdictions in the world — this pre-feasibility study provides a very strong foundation on which to advance this exceptional project, one which we believe is at the forefront of the next generation of nickel sulphide projects."

Project development remains on schedule and RNC intends to advance the project on multiple fronts with a view to obtaining permits by the end of 2013 and commencing production by the end of 2015. Ongoing activities include:

- Feasibility study technical support work (majority of the resource drilling for the feasibility study is already complete)
- Project Notice to begin environmental permitting process is expected to be filed before the end of November 2011
- Application to secure low industrial electricity rates for the project is expected to be filed before the end of 2011
- Project Finance Advisor is expected to be appointed before year-end 2011
- Project Director to oversee development and construction of the project is expected to be appointed by early 2012

"Royal Nickel's pre-feasibility study provides strong validation of the confidence we have maintained in the company since its founding," said Scott Hand, Executive Chairman of Royal Nickel. "We have a tremendous base metal project in Dumont, and an outstanding management team to advance it. I continue to have every confidence that Dumont is poised to become a world-class nickel producer."

## **Operating Summary**

		50ktpd	100ktpd	Stockpile	
Production	Units	Year 1-5 <sup>2</sup>	Year 6-19 <sup>2</sup>	Year 20-31	Total
Ore Mined1	Mt	148	922		1,070
Strip Ratio1	Waste : Ore	1.23	1.17		1.18
Ore Milled	Mt	75	530	465	1,070
Ore Grade	% Ni	0.33	0.29	0.24	0.27
Recovery		49%	47%	31%	41%
Nickel In Concentrate	MM lbs	263	1,564	748	2,575

1. Totals for 50 ktpd include 13 million tonnes of ore and 50 million tonnes of waste pre-stripped before production commences.

2. Year 5 is a transition year from 50 to 100 ktpd and year 19 is a transition year from run of mine ore to stockpile processing.

#### Annual Production (Contained metals in concentrate)

		50ktpd	100ktpd	Stockpile	
	Units	Year 1-5 <sup>1</sup>	Year 6-19 <sup>1</sup>	Year 20-31	Average
Nickel	MM lbs (kt)	62 (28)	108 (49)	59 (27)	82 (37)
Cobalt	MM lbs (kt)	3 (1)	6 (3)	6 (3)	6 (3)
PGM (Pt + Pd)	k oz	13	23	14	18

#### **Operating Revenue and Costs**

		50ktpd	100ktpd	Stockpile	
	Units	Year 1-5 <sup>1</sup>	Year 6-19 <sup>1</sup>	Year 20-31	Average
NSR	\$/t	\$26.68	\$22.38	\$13.42	\$18.79
Mine	\$/t	\$4.49	\$5.07	\$0.78	\$3.16
Process	\$/t	\$4.62	\$4.25	\$4.25	\$4.27
G&A	\$/t	\$0.86	\$0.44	\$0.39	\$0.45
Site Costs	\$/t	\$9.96	\$9.76	\$5.42	\$7.89
C1 Cash Costs	\$/lb	\$3.80	\$4.29	\$3.91	\$4.13

1. Year 5 is a transition year from 50 to 100 ktpd and year 19 is a transition year from run of mine ore to stockpile processing.

Additional cost and financial information can be found in the remainder of the press release A detailed production schedule can be accessed at the following link [RNC Pre-feasibility Production Profile]. Also, a site layout can be accessed at the following link [RNC Pre-feasibility Site Layout].

# **Additional Upside Opportunities**

A separate study is underway to determine the feasibility of processing the nickel concentrate anticipated to be produced from Dumont ("Dumont Concentrate") through an alternate processing option, widely used in many locations in Asia, to produce a final ferronickel product that can be consumed directly by the stainless steel industry.

In lab scale testwork, high-grade ferronickel was produced using proven and widely used downstream roasting and reduction processes, creating the potential for an alternate processing option. This alternate processing option has the potential to provide higher recoveries, lower costs and

greater flexibility than conventional smelting and refining.

Based on the testwork completed to date, ferronickel from Dumont Concentrate is expected to generate a high-grade ferronickel at 55-60% nickel content that compares favourably to typical ferronickel products containing 15-40% nickel. Significant economic benefits could be realized through its potential to be lower cost, while delivering higher recoveries (98-99% of the nickel in Dumont Concentrate compared to the 90-93% typically paid by certain smelters).

In addition, this option gives RNC greater flexibility because it is already widely used in many locations in Asia, and therefore provides far more partnership opportunities for the anticipated development of Dumont (see RNC news release "Royal Nickel Successfully Produces High-Grade Ferronickel Product Directly from Dumont Concentrate" dated October 3, 2011).

Very preliminary lab scale testwork has indicated that a high grade iron ore (magnetite) concentrate grading approximately 68% iron can be produced by taking the tails from the existing magnetic separation circuit in the mill and upgrading them by regrinding and separating them with a low intensity magnetic separation circuit. In the test sample, the final magnetite concentrate produced was 2.4% of the initial ore feed. At 100 ktpd operation, 2.4% of the mill feed could represent production of over 850,000 tonnes of magnetite concentrate annually. Additional testwork is currently underway to determine the feasibility and marketability of the product for the steel making industry and the results are expected to be incorporated into the feasibility study.

During the pre-feasibility study work, significant insights were gained into differences in the mineralogy in different parts of the orebody and how these differences had an impact on recovery. The parts of the orebody that had higher amounts of heazlewoodite and had gone through a greater degree of serpentinization tended to have higher recovery, while those parts of the orebody that had higher amounts of awaruite and had gone through less serpentinization tended to have lower recovery. Currently, higher heazlewoodite zones are under-represented in the metallurgical samples that were used to determine recoveries. Additional recovery and mineralogy tests from across the orebody will be completed in order to better understand these relationships with the potential to improve recoveries from current levels.

Pit design analysis performed during the PFS appears to provide the potential to utilize either in-pit crushing or trolley assist to improve the overall mining cost for the project by allowing electricity use, either through conveyors or trucks able to use electricity on uphill hauls, to replace a portion of the diesel fuel consumed by trucks. Approximately 50% of the life of project diesel fuel consumption (1.2 billion litres) is used in uphill hauls. Detailed work to optimize the mine plan and pit design during the feasibility study may unlock this potential.

#### **Pre-Feasibility Study**

The PFS builds on the PEA of September 2010. Since the PEA, considerable work on both the mineral resource and metallurgy has been completed. As announced previously, the flowsheet in the pre-feasibility study was simplified. This led to significant operating and capital cost benefits with a loss in recovery. The mini-plant program, additional lab scale testwork and mineralogical sample analysis (694 versus 189 samples utilized in the PEA) completed during the pre-feasibility work in 2011, as well as the addition of in-house metallurgical expertise, helped to significantly improve the understanding of the mineralogical factors that affect recovery. The larger scale mini pilot plant program allowed cleaning recoveries to be tested. The additional understanding and updated recovery formulas were then incorporated into the block model, allowing the overall impact on recovery to be assessed. The areas of the orebody that are dominated by awaruite mineralization had significantly lower recovery than what was assumed in the PEA. The areas of sulphide or mixed mineralization had lower recovery primarily driven by lower cleaner recoveries than assumed in the PEA and certain specific areas of the orebody that have higher amounts of fine grained pentlandite did not recover as well as sulphide minerals in the rest of the orebody.

The Dumont Project will be a conventional open pit mine/mill operation, using conventional drilling, blasting, loading with electric shovels and truck haulage. The process plant will have an initial average throughput of 50 ktpd using a single SAG mill and 2 ball mills for grinding, desliming using cyclones, conventional flotation and magnetic separation, to produce a nickel concentrate also containing cobalt and PGM by-products. The process plant has been designed to be expanded by the fifth year of operation to 100 ktpd by effectively duplicating most of the first mill. Additional mine equipment will also be purchased to allow the corresponding increase in mine throughput.

The Dumont PFS was completed by Ausenco Limited, a global leader in engineering and project management services for the resource and energy sectors. Ausenco was chosen for the Dumont PFS because of its expertise and experience with similar sized, large scale base metal projects, and proven experience with processing of ultramafic nickel deposits. Ausenco has successfully designed and constructed the Lumwana concentrator (55 ktpd) for Equinox Minerals, the Phu Kham concentrator (33 ktpd) for PanAust and is currently executing the GDP3

expansion (new 30 ktpd concentrator) of the Gibraltar Mine for Taseko. Significant contributions to the report were made by SRK Consulting (Canada) Inc. (resource model, geotechnical), David Penswick (mine design, financial evaluation), GENIVAR (environmental) and Golder Associates (environmental geochemistry).

## Location

The Dumont Nickel Project is located in the western portion of the province of Quebec. The property is located approximately 25 km west of the city of Amos, approximately 60 km northeast of the industrial and mining city of Rouyn-Noranda and 70 km northwest of the city of Val-d'Or.

## Mineral Resources (inclusive of mineral reserves)

Mineral Resource Statement, Dumont Nickel Project, Quebec, SRK Consulting, November 1, 2011<sup>1</sup>.

			Contained Nickel	
Resource Estimate	Resources (Mt)	Nickel Grade (%)	(000 tonnes)	(million pounds)
Measured	190	0.29	550	1,203
Indicated	1,220	0.27	3,270	7,216
Measured & Indicated	1,410	0.27	3,820	8,419
Inferred	695	0.26	1,790	3,939

 Reported at a cut-off grade of 0.2 percent nickel inside conceptual pit shells optimized using nickel price of \$9.00 per pound, average metallurgical and process recovery of forty-one percent, processing and G&A costs of \$5.40 per tonne milled, exchange rate of CDN\$1.00 = US\$0.90, overall pit slope of forty to forty-four degrees depending on the sector and a production rate of 100 ktpd. All figures rounded to reflect the relative accuracy of the estimates. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Mineral resource estimates do not account for mineability, selectivity, mining loss and dilution. These mineral resource estimates include Inferred mineral resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. Even though test mining has been undertaken in areas with Measured & Indicated class mineral resources there is no certainty that inferred mineral resources will be converted to Measured and Indicated categories through further drilling, or into mineral reserves, once economic considerations are applied.

## **Mineral Reserves**

Mineral Reserve Statement, Dumont Nickel Project, Quebec, David Penswick, November 1, 2011<sup>1</sup>

			Contained Nickel		
Reserve Estimate	Reserves (Mt)	Nickel Grade (%)	(000 tonnes)	(million pounds)	
Probable Reserves	1,070	0.27	2,876	6,341	

 Reported at a cut-off grade of 0.2 percent nickel inside an engineered pit design. This design was based on a Lerchs-Grossmann optimized pit shell using nickel price of \$6.70 per pound, average metallurgical and process recovery of forty-one percent, processing and G&A costs of \$6.30 per tonne milled, exchange rate of CDN\$1.00 = US\$0.90, overall pit slope of forty to forty-four degrees depending on the sector and a production rate of 50 ktpd. All figures rounded to reflect the relative accuracy of the estimates. Mineral reserves are based on a smallest mining unit of 6000m<sup>3</sup> and include allowances of 0.65% for dilution and 0.80% for mining losses.

# Mining

Approximately 50 million tonnes of material would be pre-stripped prior to start-up of operations. The life-of-mine plan is expected to mine 2.3 billion tonnes of material consisting of 1.2 billion tonnes of waste rock and overburden and 1.1 billion tonnes of ore over a 19-year mine life using electric rope shovels and 240 tonne haul trucks. The lower grade portion of the ore will be stockpiled in order to maximize throughput of higher value ore in the earlier years. The overall strip ratio for the project is 1.2:1.

Approximately 0.5 billion tonnes of the lower grade ore stockpile is expected to remain at the end of mine life and be processed for an additional 12 years, utilizing the open pit mine for tailings disposal.

A detailed production schedule can be accessed at the following link [NC Pre-feasibility Production Profile].

## Processing

The nickel recovery plant and associated infrastructure facilities will process run of mine ore delivered to a primary crusher feeding a conventional milling process consisting of a primary gyratory crusher, SAG and ball mill combination, desliming, nickel flotation and magnetic separation of the flotation tails. Subsequent cleaning stages on both the flotation and magnetic concentrate then occur. The nickel concentrate will be thickened and filtered on site. The concentrate is then loaded on either truck or rail for shipment to third party smelters.

In addition to nickel recovery, cobalt, platinum and palladium are also recovered to the nickel concentrate. Cobalt recovery has been estimated at 70% to follow pentlandite recovery, as the majority of the cobalt is contained in the pentlandite mineral. Platinum and palladium recovery to concentrate has been estimated based on two concentrates assays of 2 g/t Pt, and 3g/t Pd in the combined concentrate from the locked cycle tests.

The concentrate grade in the nickel concentrate is expected to exceed 34% Ni for the first 15 years before decreasing, ultimately to 30%, when stockpiled material is treated after the pit is depleted.

A detailed production schedule can be accessed at the following link RNC Pre-feasibility Production Profile.

The tailings storage system consists of a tailings storage facility ("TSF") located immediately north of the mine/mill complex. The TSF is designed to store 602 million tonnes of thickened tailings – enough for the first 19 years that the pit will be active. After that, as mining has ceased in the open pit, the mill tailings will be pumped directly into the open pit. Process water will be stored in lined ponds near the plant site. Process water will be a combination of water pumped from the mine, recycle from the TSF, surface water capture and some extraction of water from the Villemontel River.

## Infrastructure

The Dumont project is located adjacent to a rail line and highway and a power line with sufficient capacity for the construction period. A short 8 km rail spur will be built off the rail line to provide access into the mine property and a 40 km power line from an existing sub-station will be constructed to provide sufficient power once operation commences.

## **Capital Cost Estimate**

		Expansion	Sustaining	LOM
(\$ millions)	Initial Capital	Capital	Capital	Capital
Mine	\$335	\$169	\$221	\$725
Process Plant	\$354	\$313	\$337	\$1,004
Tailings	\$30	\$11	\$92	\$133
Infrastructure2	\$67	\$25	-	\$92
Indirect Costs	\$184	\$117	-	\$301
Contingency	\$142	\$98	\$83	\$323
Total	\$1,112	\$733	\$733	\$2,578

# Summary of Capital Costs (\$ millions)<sup>1</sup>

1. Accuracy of capital cost estimates are +/- 25%

2. Infrastructure costs for sustaining capital are included in process plant costs.

Contingency of 15% on direct and indirect costs for the initial capital estimate is based upon a line item review of the level of engineering definition achieved for the PFS by area.

At a CDN\$/US\$ exchange rate at par, the initial cost would be\$1.2 billion and the expansion capital would be\$0.8 billion

#### Operating Cost Estimate

Operating Costs	\$/pound
Mining	\$1.42
Processing	\$1.91

G & A	\$0.20
Total Site Cost	\$3.53
TC / RC	\$1.15
By-product Credits	(\$0.55)
Total	\$4.13

# **Economic Analysis and Sensitivities**

All metal price assumptions are the same as the figures used for the PEA with the exception of nickel price which was increased to \$9.00 per pound from \$7.50 per pound, consistent with the average long-term nickel prices used by the five analysts who currently cover RNC (average \$9.04) and the average LME cash nickel price from the beginning of 2008 untiSeptember 30, 2011 of \$9.17 per pound.

# **Economic Analysis**

Parameter	Pre-Tax	After Tax
NPV (\$ millions @ 8%)	\$1,918	\$1,083
IRR	20.2%	16.6%
Simple Payback Period (years)	-	6.5

NPV calculated from construction start date (January 2014) using October 2011 real dollar estimates.

## **Key Assumptions**

Parameter	Assumption
NPV Discount Rate (%)	8%
Nickel Price (\$ per pound)	\$9.00
Initial Capital Cost (\$ millions)	\$1,112
Expansion Capital Cost (\$ millions)	\$733
Total Site Operating Cost (\$ millions)	\$8,435
Total Sustaining Capital Cost (\$ millions)	\$733
Total TC/RC Costs (\$ millions)	\$3,052
Cobalt Price (\$ per pound)	\$12.00
Platinum Price (\$ per ounce)	\$1,500
Palladium Price (\$ per ounce)	\$750
Electricity (CDN\$ per kilowatt hour)	\$0.043

Sensitivity	NPV(8%)	IRR%
	(\$ millions)	
Nickel Price ±\$1/lb	\$445	3.2%
Nickel Price ±10% (\$8.10 - \$9.90/lb)	\$402	2.8%
Mill Recovery ±1.0%	\$104	0.8%
Payable Nickel ±1%	\$44	0.3%
Initial Capital Expenditure ±10%	\$76	1.1%
Expansion Capital Expenditure ±10%	\$35	0.4%
Total Capital Expenditure ±10%	\$132	1.6%
Site Operating Costs ±10%	\$271	1.8%
TC/RC ±10%	\$98	0.7%
US\$/CDN\$ ±\$0.05	\$147	1.5%
Cobalt Price ±\$1	\$16	0.1%
Oil Price ±\$10	\$24	0.2%

#### Permitting

GENIVAR, a leading international engineering consulting firm, has been retained to complete both the ("Project Notice"), which initiates the environmental permitting process and is expected to be filed before the end of November 2011, and the Environmental and Social Impact Assessment (ESIA) which is expected to be filed in mid-2012, all with a view to obtaining permits for the project before the end of 2013. To further assist in the permitting process, RNC initiated a stakeholder consultation process. The results of the first phase of consultations have been considered in the development of the PFS.

Geochemical testwork has shown that the waste rock and the tailings are not expected to be acid generating and the tailings will not require subaqueous deposition. Multiple baseline studies have been completed and have not indicated any major environmental constraint.

#### NI 43-101 Compliance

The technical information in this news release has been prepared in accordance with Canadian regulatory requirements by, or under the supervision of, Paul Staples, P. Eng., of Ausenco Limited, Sébastien Bernier of SRK Consulting (Canada) Inc. and David Penswick, P. Eng., all of whom are independent Qualified Persons as set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"). Technical information in this news release was reviewed by Alger St-Jean, P. Geo., Vice President, Exploration of RNC and Qualified Person and Johnna Muinonen P. Eng., Vice President, Metallurgy, of RNC and Qualified Person.

The Mineral Resource for the Dumont Deposit was classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (December 2005) by Sébastien Bernier, P. Geo (OGQ#1034, APGO#1847), an appropriate independent person for the purpose of NI 43-101. Mr. Bernier has reviewed the resource statement presented in this news release.

The Mineral Reserve for the Dumont Deposit was classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (December 2005) by David Penswick, P. Eng. (PEO#100111644), an appropriate independent person for the purpose of NI 43-101.Mr. Penswick has reviewed the technical content of this news release.

Readers are advised that Mineral Resources not included in Mineral Reserves do not demonstrate economic viability. Mineral Resource estimates do not account for mineability, selectivity, mining loss and dilution. These Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that Inferred Mineral Resources will be converted to Measured and Indicated categories through further drilling, or into Mineral Reserves, once economic considerations are applied.

Based on the resource estimate, a standard methodology for pit limit analysis, mining sequence and cut-off grade optimization, including application of mining dilution, process recovery, economic criteria and physical mine and plant operating constraints has been followed to design the open pit mine and to determine the mineral reserve estimate for the deposit as summarized in the Mineral Reserve table.

The full Dumont PFS, prepared as a NI 43-101 compliant Technical Report, will be filed under RNC's profile on SEDAR atwww.sedar.com within 45 days.

#### **Conference Call**

Royal Nickel will be hosting a conference call and webcast to discuss the PFS highlights on Tuesday, November 1, 2011 beginning at 10:00 a.m. (Eastern Time). Participants may join the call by dialing toll free 1-888-231-8191 or 1-647-427-7450 for local calls or calls from outside anada and the United States. A live webcast of the call will be available through CNW Group's website atwww.newswire.ca/en/webcast/index.cgi.

A recording of the conference call will be available for replay for a one week period beginning at approximately1:00 p.m. (Eastern Time) on November 1, 2011 by dialing toll free 1-855-859-2056 or 1-416-849-0833 for local calls or calls from outsideCanada and the United States. The pass code for the replay is 22224858. A replay of the webcast and the associated webcast presentation will be available through a link on our website at <u>www.royalnickel.com</u>.

## **About Royal Nickel Corporation**

Royal Nickel Corporation is a mineral resource company focused primarily on the exploration, development, evaluation and acquisition of base metal and platinum group metal properties. RNC's principal asset is the 100% owned Dumont Nickel Project strategically located in the established Abitibi mining camp, 25 kilometres northwest of Amos, Quebec. RNC has a strong management team and Board with over 100 years of mining experience in the nickel business at Inco and Falconbridge. The Corporation's common shares and warrants trade on the TSX under the symbols RNX and RNX.WT.

www.sedar.com

<sup>1</sup> Based on \$9.00 per pound long term nickel price and CDN\$1.00 = US\$0.90 exchange rate. NPV and IRR calculated from start of construction, January 2014 and based on October 2011 real costs.

<sup>2</sup> C1 cash costs are defined as the cash cost incurred at each processing stage, from mining through to recoverable nickel delivered to the market, net of by-product credits.

PDF with caption: "RNC Pre-feasibility Study Production Profile 1-Nov-2011". PDF available at: http://stream1.newswire.ca/media/2011/11/01/20111101\_C9233\_DOC\_EN\_5857.pdf

PDF with caption: "RNC Pre-feasibility Study Site Layout 1-Nov-2011". PDF available at: http://stream1.newswire.ca/media/2011/11/01/20111101\_C9233\_DOC\_EN\_5858.pdf

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