

## Research Note – Atrum Coal NL

Atrum Coal (ASX: ATU) is a focused metallurgical coal explorer and developer with a substantial coal position in British Columbia, Canada. ATU listed in July 2012 following a successful A\$9.1 million initial public offering at 20 cents per share. The Company owns 100% of its four metallurgical coal projects, with the more advanced flagship Groundhog Anthracite Project boasting a maiden JORC 159Mt Resource. ATU aims to develop a number of coal mines to supply export markets of China, Korea and Japan. ATU is in the process of assessing coal quality and upgrading its JORC resource at Groundhog in the view of finalising a scoping study. In addition, the Company also intend to estimate the first JORC resource at their recently acquired Panstone project.

### Capital Structure

<b>Share Price</b>	<b>A\$0.195</b>
Fully Paid Ordinary Shares	102.5M
Partly paid shares	38.5M
In-The-Money Options	-
<b>Fully-Paid Market Cap</b>	<b>A\$19.99M</b>
Less: Cash	A\$5.4M
Add: Debt	-
<b>Enterprise Value</b>	<b>A\$14.59M</b>

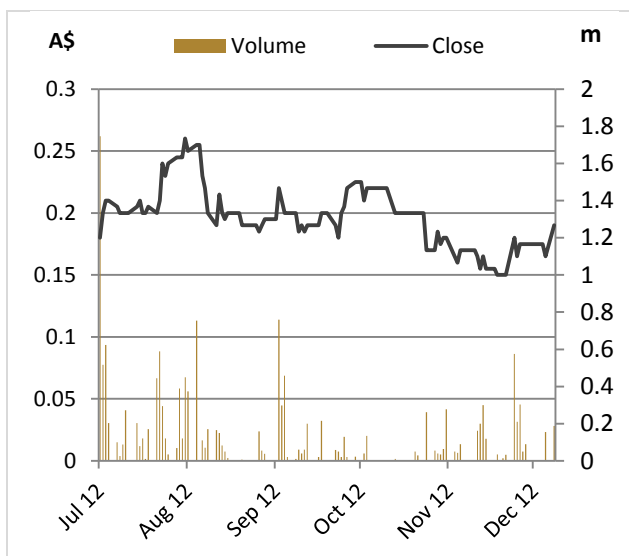
### Board & Management

Chairman	James Chisholm
Executive Director	Russell Moran
Executive Director	Gino D'Anna
Non-Executive Director	Eric Lilford
CEO	Lyle Hobbs
Chief Technical	Brad Van Den Bussche

### Top Shareholders

Lenark Pty Ltd	17.45%
Russell Moran	16.45%
Gino D'Anna	4.99%
JP Morgan Nominees	3.30%
Lujeta Pty Ltd	3.01%
<b>Total</b>	<b>45.20%</b>

### ATU Price Chart



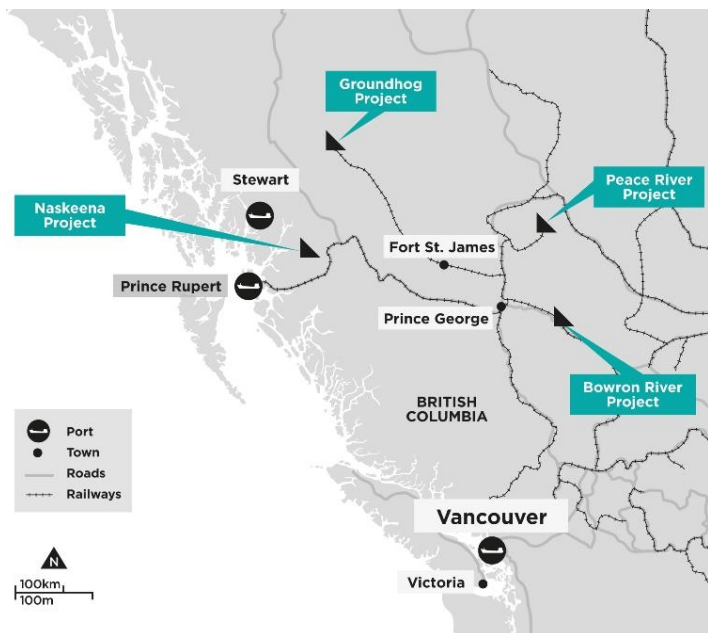
### Investment Highlights

<b>Good location</b>	<ul style="list-style-type: none"> <li>British Columbia is a mining friendly jurisdiction with no carbon tax and attractive labour costs</li> <li>The projects have been selected with infrastructure in mind</li> <li>Located in close proximity to key mining infrastructure including rail, port, power and water</li> </ul>
<b>Ambitious Strategy</b>	<ul style="list-style-type: none"> <li>Management has a strong track record in the coal sector in both Australia and Canada</li> <li>Strong directors confidence who personally own shares and have recently made significant on market purchases</li> <li>ATU aims to produce a suite of high value metallurgical coal products for use in the steel and ferro-alloy industries</li> <li>Targeting production in the lowest quartile of the cost curve</li> </ul>
<b>Leverage to exploration</b>	<ul style="list-style-type: none"> <li>Highly prospective projects covering a total land area of over 44,000 hectares</li> <li>Existing JORC-compliant 159Mt Resource with a current exploration target of 590-785Mt</li> <li>An EV valued at A\$0.09/t compared to A\$0.71/t for ASX peers</li> <li>Well funded for 2013 with approximately \$5.4M in cash</li> </ul>
<b>Price Catalyst</b>	<ul style="list-style-type: none"> <li>JORC Resource for recent Panstone acquisition</li> <li>Coal quality result at Groundhog</li> <li>JORC resource upgrade for Groundhog</li> <li>Scoping study completion at Groundhog</li> <li>Commence exploration on other three projects</li> </ul>

### Resource and Exploration Target

<b>Groundhog</b>	<ul style="list-style-type: none"> <li>159Mt JORC Indicated and Inferred resource</li> <li>390Mt – 510Mt exploration target</li> </ul>
<b>Naskeena</b>	<ul style="list-style-type: none"> <li>200Mt - 250Mt exploration target</li> </ul>
<b>Peace River</b>	<ul style="list-style-type: none"> <li>0Mt – 25Mt exploration target</li> </ul>

Projects Location Map



Source: Atrum Coal

Groundhog JORC Resource

JORC Category	Resource (Mt)
Indicated	57.1
Inferred	101.9
<b>Total</b>	<b>159</b>

JORC Resource Breakdown By Depth			
0 – 50m	0 – 100m	0 – 150m	0 – 200m
29.7%	67%	91.5%	99.9%
<b>47.2Mt</b>	<b>106.5Mt</b>	<b>145.5Mt</b>	<b>158.8Mt</b>

Historical Coal Quality Analysis (air dried basis)	
Coal Type	• Anthracite to semi-anthracite rank
Volatile Matter	• 9.0%
Calorific Value	• 8,400Kcal/kg
Sulphur	• ~0.4%
Washability Test	• Potential to produce a <10% ash clean coal product with a calorific value of 7,500Kcal/kg

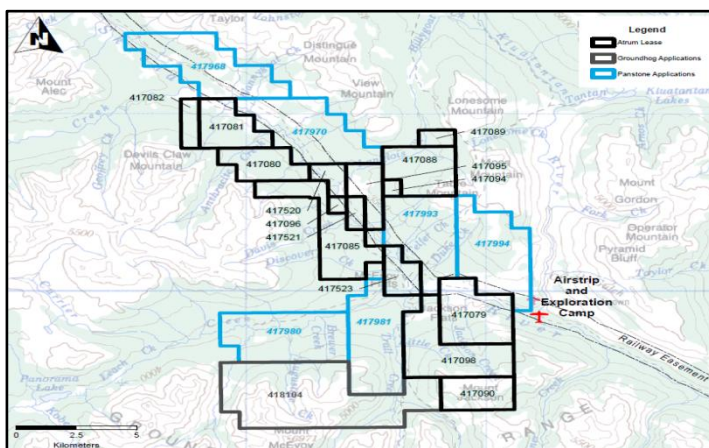
Flagship Project Highlights – Groundhog

<b>Location &amp; Infrastructure</b>	<ul style="list-style-type: none"> <li>• Located in the Groundhog Coal Basin</li> <li>• 30km north of a heavy gauge rail</li> <li>• ~1,250km by rail from Port of Prince Rupert or Vancouver Metro</li> <li>• Water and electricity close by</li> </ul>
<b>Exploration Potential</b>	<ul style="list-style-type: none"> <li>• 18 ELs covering a large land area of 8,322 hectares (83.2km<sup>2</sup>) and an additional of 8 LA's covering 14,493 hectares</li> <li>• Large Exploration Target of 390-510Mt coal defined to up to 250m</li> <li>• Product ranging from PCI to coking to anthracitic coals</li> </ul>
<b>Recent Exploration</b>	<ul style="list-style-type: none"> <li>• 15 diamond core drill completed since September quarter</li> <li>• Discovery of up to 36.0m of cumulative coal seams to a depth of up to 400m and starting near surface</li> <li>• The average depth of the holes drilled was 330m with many holes remaining open at depth</li> <li>• Recent drilling suggests potential for a significantly greater cumulative coal across the property, therefore a larger exploration targets and resource</li> </ul>
<b>Significant Coal Seam Intercept</b>	<ul style="list-style-type: none"> <li>• 2.3m from 19.65m (DDH-GH-12-07)</li> <li>• 3.5m from 58.55m (DDH-GH-12-07)</li> <li>• 3.7m from 48.42m (DDH-GH-12-08)</li> <li>• 3.5m from 90.15m (DDH-GH-12-08)</li> <li>• 4.4m from 200.2m (DDH-GH-12-05)</li> <li>• 6.5m from 270.5m (DDH-GH-12-05)</li> <li>• 4.2m from 142.0m (DDH-GH-12-10)</li> <li>• 4.4m from 270.1m (DDH-GH-12-10)</li> <li>• 8.2m from 369.6m (DDH-GH-12-11)</li> </ul>

Panstone Licence Application

<b>Location</b>	<ul style="list-style-type: none"> <li>• The Applications are located contiguous with the Groundhog project</li> </ul>
<b>Exploration Potential</b>	<ul style="list-style-type: none"> <li>• Six coal licence applications covering a total of 8,343 hectares</li> <li>• ATU will immediately commence the transition of the Panstone applications to granted licences as part of preparation for the 2013 drilling season</li> <li>• ATU expects to expand significantly on Groundhog's current resource and exploration targets</li> <li>• Recent diamond drilling at Groundhog indicated the extension of the coal bearing geology into the newly acquired area</li> </ul>
<b>Past Exploration</b>	<ul style="list-style-type: none"> <li>• The Applications have been historically drilled, mapped, surface trenched and channel sampled</li> <li>• This data will be included in the modelling of drilling data from Groundhog</li> </ul>

Panstone & Groundhog Location



Source: Atrum Coal

Naskeena Anthracite Project

<p><b>Location &amp; Infrastructure</b></p>	<ul style="list-style-type: none"> <li>• Located approximately 50km north of Terrace in British Columbia</li> <li>• 250km away from deep sea port of Prince Rupert and Ridley Coal Terminal, accessible via rail lines and highway</li> </ul>
<p><b>Exploration Potential</b></p>	<ul style="list-style-type: none"> <li>• Nine contiguous coal licence applications covering an area of 11,400 hectares within the Kitsumkalum valley</li> <li>• The broad Kitsumkalum valley basin is interpreted to have had minimal structural disruption</li> <li>• ATU has defined a 200Mt - 250Mt exploration target with significant exploration upside in untested areas</li> <li>• Limited coal quality testing by previous explorers suggest a potential to host metallurgical ranking anthracite coal</li> </ul>
<p><b>Past Exploration</b></p>	<ul style="list-style-type: none"> <li>• Historic coal showing was first discovered in 1913</li> <li>• Five trenches were hand dug in 2007 and exposed the weathered coal seam for a 30m strike length</li> <li>• Six diamond drill hole drilled in 2007 for a total of 1,215m</li> <li>• Followed by a second 1,310m drill program in 2008</li> </ul>

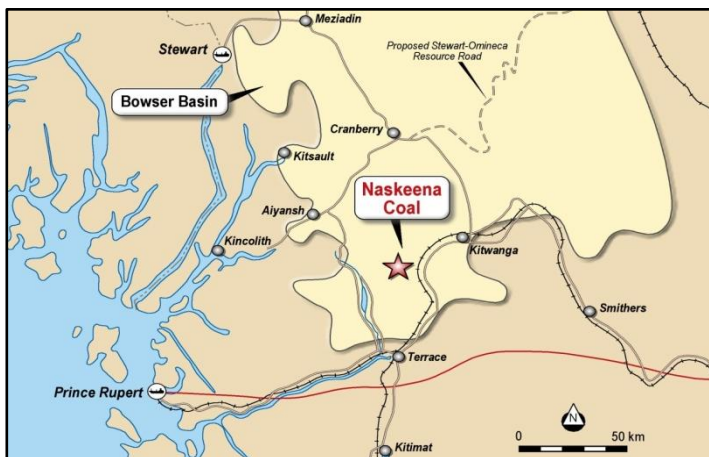
Peace River Coal Project

<p><b>Location &amp; Infrastructure</b></p>	<ul style="list-style-type: none"> <li>• Located ~300km north east of Prince George</li> <li>• The project is close to highways and excellent mining infrastructure with key mining services</li> </ul>
<p><b>Exploration Potential</b></p>	<ul style="list-style-type: none"> <li>• Project surrounded by two operating mines and the Wapiti Coal Project, owned by Hillsborough Resources</li> <li>• Peace River Provide ATU with an early stage exploration project in a well know area with occurrence of hard coking coal and metallurgical coal deposits</li> <li>• The project is surrounded by operating hard coking and metallurgical coal mines</li> <li>• Current exploration target of 0Mt – 25Mt with significant exploration upside</li> </ul>

Bowron River Coal Project

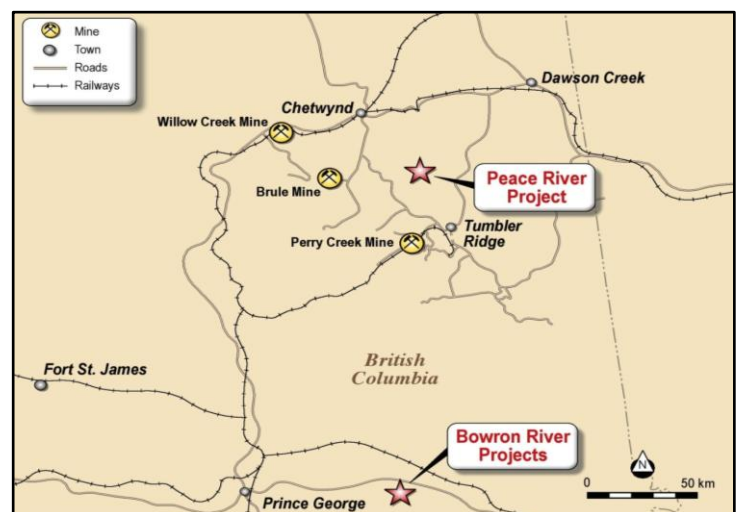
<p><b>Location &amp; Infrastructure</b></p>	<ul style="list-style-type: none"> <li>• Located ~60km south east of Prince George, British Columbia. Highway and rail access are in a &lt;35km radius</li> <li>• Also located close to mining related infrastructure</li> </ul>
<p><b>Exploration Potential</b></p>	<ul style="list-style-type: none"> <li>• Adjacent to a historically explored area with well-known geology and export quality metallurgical coal</li> <li>• Three main coal seams have been identified; the Upper, Middle and Lower</li> <li>• Lower coal seam occurs approximately 100m above the Antler Formation</li> <li>• 3.4m average thickness of the seam</li> <li>• Exploration in 1981 demonstrated the continuity of the seam in the south and east of the project area</li> </ul>

Naskeena Project Location



Source: Atrum Coal

Peace River & Bowron River Projects Location



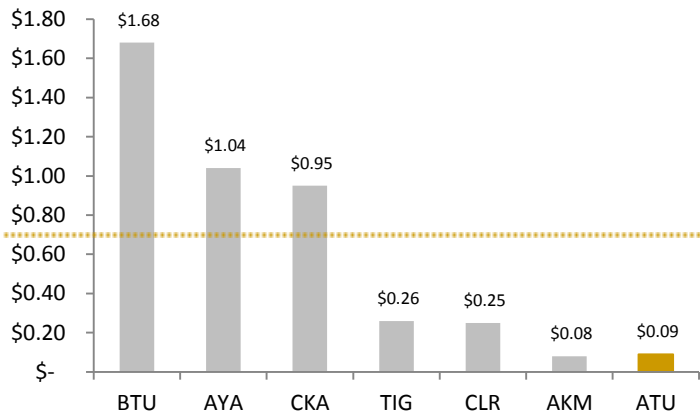
Source: Atrum Coal

## Peer Comparison

ASX codes	Loc.	Price	Coal Type <sup>1</sup>	Resource	EV	EV/t
BTU	NZ	\$0.36	C	126Mt	\$211M	\$1.68
CKA	Indo.	\$0.155	C&P	46Mt	\$44M	\$0.95
AYA	USA	\$0.80	C	57Mt	\$59M	\$1.04
CLR	QLD	\$0.36	C&T	141Mt	\$35M	\$0.25
TIG	Russia	\$0.135	C	164Mt	\$43M	\$0.26
JAL	Cana.	\$0.235	C&A	-	\$29M	-
AKM	Mong.	\$0.068	C	353Mt	\$28M	\$0.08
ATU	Cana.	\$0.195	A,C&P	159Mt	\$15M	\$0.09

<sup>1</sup>Coal Type: A: anthracite, C: coking, T: thermal & P: PCI

Source: Dayton Way Financial



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## British Columbia, Canada

Canada is one of the world's leading coking coal suppliers to the seaborne market. Canada also has a pro-mining government with low sovereign risk, favourable regulatory environment, extensive and regulated infrastructure and is comparable shipping distance to Asia when compared to that of the east coast of Australia

Atrum has targeted British Columbia due to its relative:

- abundance of high quality metallurgical coals;
- well-developed rail and port infrastructure with excess capacity;
- access to deep sea ports;
- competitive shipping distance to Asia; and
- positive government stance on mining

## Directors and Key Management

**Chairman –**  
James Chisholm

- Work in the engineering and mining sector for the past 28 years, including management and M&A
- Seed shareholder of Doyles Creek Mining and Co-founded a number of companies

**Executive Director –**  
Russell Moran

- Experienced in mining transaction management, capital raisings, public reconstructions and recapitalisations, and strategic business development
- Non-Executive Director of Ebony Coal Limited

**Executive Director –** Gino D'Anna

- Significant offshore coal experience having been involved in a South African anthracite explorer and developer
- He has run a number of junior ASX listed public exploration companies

**Non-Executive Director –**  
Dr Eric Lilford

- He has over 27 years of operational and investment experience across the global resources sector
- Including mine production experience at gold, platinum, copper and coal mines

**CEO –** Lyle Hobbs

- He has 24 years' experience in engineering, operations and project management
- He has fulfilled a number of senior management roles including the management of a 13.5Mtpa coal mine

**Chief Technical –** Brad Van Den Bussche

- Professional geologist with over 27 years' experience predominantly in the coal industry
- He has spent over 10 years in senior management positions for public junior companies
- Strong technical background and knowledge of the coal bearing geology of the Groundhog Coalfield

**Chief Permitting –** Glenn Collick

- ~25 years' experience in dealing in the regulatory environment for the resource sector
- Strong network of local contact within the mining industry

## Contact Details

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