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## Elan Project: Updated Scoping Study December 2020

## **Important notices**

#### **Forward Looking Statements**

This presentation includes various forward looking statements which are identified by the use of forward looking words such as "may", "could", "will", "expect", "believes", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. Statements other than statements of historical fact may be forward looking statements. Atrum believe that it has reasonable grounds for making all statements relating to future matters attributed to it in this presentation.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of resources or reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation. Investors should note that any reference to past performance is not intended to be, nor should it be, relied upon as a guide to any future performance.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Actual results, values, performance or achievements may differ materially from results, values, performance or achievements may differ materially from results, values, performance or achievements. None of Atrum, its officers or any of its advisors make any representation or warranty (express or implied) as to the accuracy or likelihood of fulfilment of any forward looking statement, or any results, values, performance or achievements expressed or implied in any forward looking statement except to the extent required by law.

Forward looking statements in this release are given as at the date of issue only. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

#### **Competent Person Statement**

#### **Exploration Results and Coal Resources**

The results of the Scoping Study and Coal Resources that underpin the production target are based on, and fairly represent, information and supporting documentation compiled by Mr Brad Willis, who is a Member of the Australasian Institute of Mining and Metallurgy (205328).

Brad Willis is Principal Geologist at Palaris Australia Pty Ltd (Palaris). He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person, as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Willis has 20 years' experience in exploration and mining of coal deposits. Mr Willis consents to the inclusion of the Scoping Study results disclosed by the Company in the form in which it appears.

Neither Mr Willis nor Palaris have a direct or indirect financial interest in, or association with Atrum Coal, the properties and tenements reviewed in this statement, apart from standard contractual arrangements for the preparation of this report and other previous independent consulting work. In preparing this Annual Coal Resource and Reserve Statement, Palaris has been paid a fee for time expended on this report. The present and past arrangements for services rendered to Atrum Coal do not in any way compromise the independence of Palaris with respect to this estimate.

The Company confirms that it is not aware of any new information or data that materially affects the Previous Announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the Prior Announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Prior Announcements

Mr. Willis consents to the inclusion in the report of the matters based on the information, in the form and context in which it appears.

# Atrum corporate snapshot

#### Capital structure

	ASX ticker	ATU
	Share price (1 December 2020)	A\$0.30
	Shares on issue	576.1 M
<u>(1)</u>	Options and performance rights	143.8 M
š	Market capitalisation (undiluted)	A\$173 M
	Cash (30 September 2020)	A\$14.0 M
	Debt (30 September 2020)	Zero

#### Major shareholders

Atrum Coal

COAL FOR STEEL

	Tim Roberts (Warburton Group)	19.3%
	Nero Resource Fund	5.6%
	Regal Funds	5.2%
Ŋ	Perennial Value	4.5%

#### Share price (A\$ per share, 2 year basis)



#### **Board and CEO**

Non-Executive Chairman	Charles (Chuck) Blixt
Managing Director and CEO	Andrew Caruso
Non-Executive Director	Richard Barker
Non-Executive Director	George Edwards
Non-Executive Director	Charles Fear
Non-Executive Director	William (Bill) Fleming
Non-Executive Director	Glen Koropchuk

## The team to deliver

## Deep Canadian hard coking coal development and operational experience

#### Andy Caruso (Managing Director & CEO)

- Mining engineer with 30 years of global experience across a range of operational, management and key executive roles
- Direct mine operations roles in iron ore, coal and nickel, including six years in technical and management roles at substantial coal operations in Australia
- Senior positions at both BHP and Alcoa and substantial experience with bulk commodity project evaluation, development and operations including almost nine years as the MD & CEO of several Australian iron ore and coal development companies

#### **Ross Melville (Study Director)**

- 40 years of diversified experience in multi-national engineering, procurement, feasibility, EPCM contracting and owner environments; includes 17 years of managing plant operations and maintenance at operating mines in Canada and the United States
- Project Director, Teck Resources, for all owner activities and consultant services within the Feasibility Study of the Quintette Re-Start Project (C\$858M, 3.5Mtpa met coal project)
- More recently Project Manager supporting Teck Resources in the execution and construction of the Fording River Active Water Treatment Facility

#### Tony Mauro (Senior Director, Regulatory / Stakeholder)

- Over 25 years of experience in resource project permitting, stakeholder engagement, regulatory affairs and BD
- Led the permitting of a greenfield metallurgical coal mine and several large energy and power projects in Alberta
- VP Corporate Development at Maxim Power and Inter Pipeline Ltd (both in Alberta); BSc in Geophysics and MBA

#### Daniel Campbell (Chief Geologist & Expl. Manager)

- Seasoned in geology and exploration management in Western Canada, including 7 years in metallurgical coal
- Extensive experience in field mapping, exploration planning, drilling supervision and logging, as well as coal quality testing
- Supervised exploration programs of Elan since 2014; lives in Crowsnest Pass and closely engaged with local communities

#### Jayram Hosanee (Chief Financial Officer)

- 30 years experience as a finance professional across a wide range of industries in Europe, Africa and North America
- Served as a director and Chief Financial Officer for a number of mining companies in Canada
- CPA and FCCA; Masters degree from University College, London

#### Judy Matkaluk (Stakeholder Relations Manager)

- Reg. Prof. Geoscientist (BC & Alberta) with 30 years in exploration, permitting, First Nations & government relations
- Extensive background in aboriginal engagement and negotiation for coal and other energy projects
- Previous coal exploration roles incl. permitting, environmental assessment (Provincial and Federal) and engagement

#### Ty Zehir (VP, Marketing & Business Development)

- Over 30 years of global marketing experience for especially Western Canadian hard coking coal, PCI coal and anthracites
- VP Marketing for Walter Energy and for Smoky River Coal, GM of Technical Marketing for Teck Coal
- Registered prof. mining engineer in Canada, previous senior mining design and operations roles in Canada and Europe

#### Darren Cowan (Environmental Manager)

- Over 15 years of experience in environmental management, including operating coal mines in BC, Canada
- Past Environment Manager for Walter Energy (Canadian OP met coal ops) and EHS Director for Hillsborough (UG mine)
- Consulting environmental portfolio manager for permitting and environmental studies for various clients

# ELAN PROJECT OVERVIEW



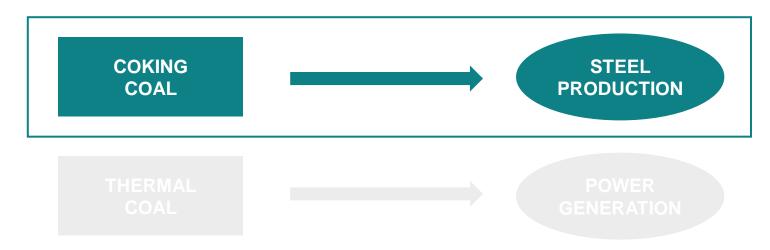
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## The value of Tier 1 hard coking coal

## HCC delivers the highest blast furnace efficiency

- Coking coal is used in the blast furnace process to produce steel it is not burned for electricity generation
- Blast furnace efficiency is directly impacted by the quality of the coking coals used to make the coke fed into it
- An increase in coke strength and/or reduction in coke impurities:
  - Increases blast furnace productivity (higher iron output per day)
  - Decreases total coke requirements and allows higher PCI usage (lower coke cost)
  - Due to its premium coking properties, hard coking coal is not substitutable in any baseload sense it is the majority foundation of any coke blend and, therefore, every blast furnace operation

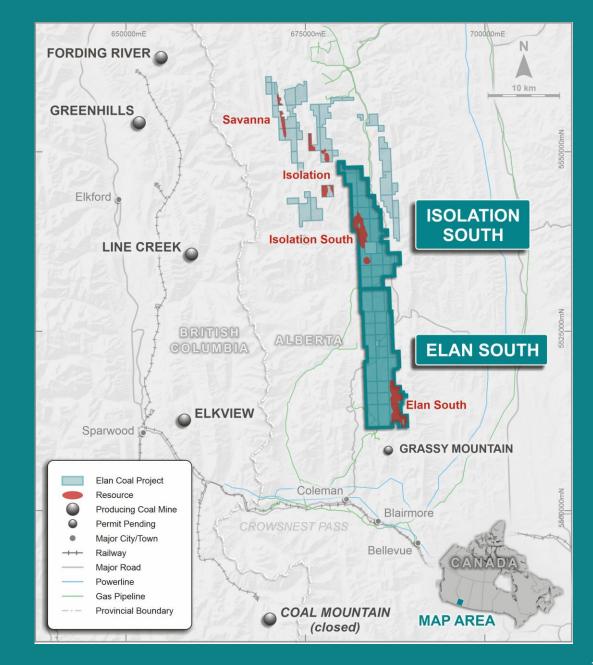


# Elan presents a rare opportunity

## **Clear scarcity value**

- Large-scale tenement holdings (230 km<sup>2</sup>) in a major HCC basin
- 486 Mt total resources<sup>1</sup> and growing
- Shallow, thick seams; low-strip open pit mining
- Tier 1 hard coking coal quality
- Located in a proven low cost mining region
- Proximate rail access to key West Coast ports with surplus capacity
- Clear potential for multiple, large Tier 1 HCC developments
- Expected PFS completion in mid-2021

<sup>&</sup>lt;sup>1</sup> For full details of the Mineral Resources estimate, please refer to ASX release dated 25 November 2020, *Isolation South Resource Update*. Atrum confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

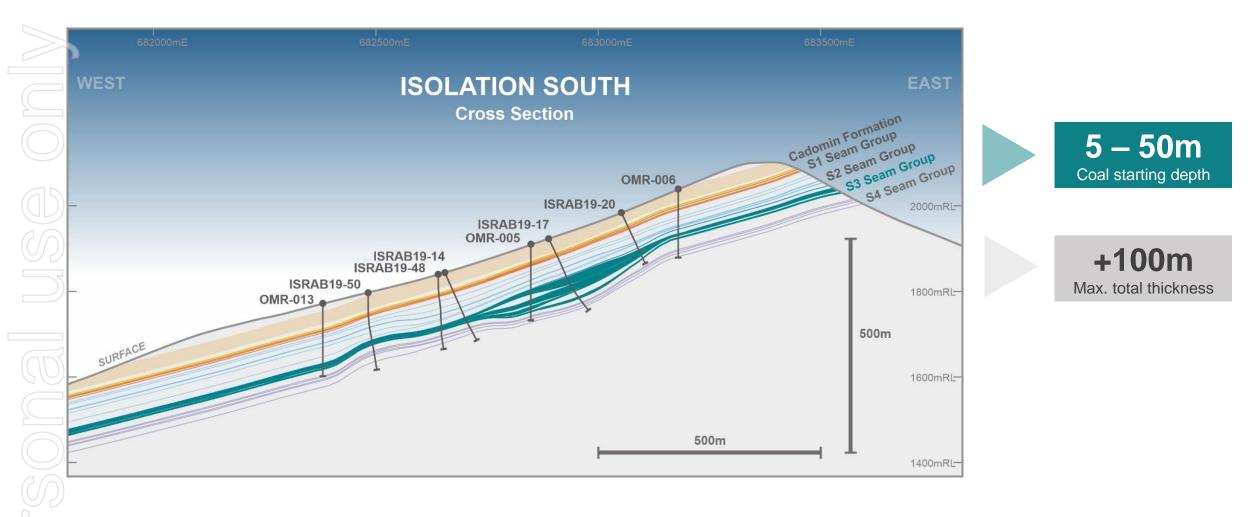


## **Attractive geology**

## Thick, shallow coal seams

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COAL FOR STEEL



## Tier 1 hard coking coal

## Bound for premium seaborne HCC markets

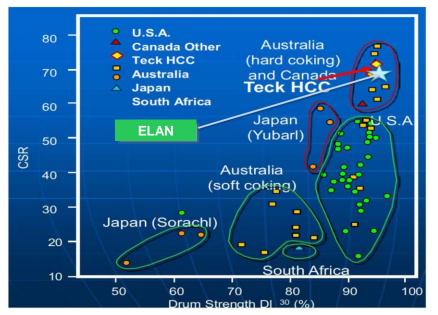
Premium mid-to-low-volatile HCC with favourable ash content, and low total S and P

Rank (RoMax) of 1.16 - 1.20% and CSR of 69 - 71%

• Comparable to Tier 1 HCC products currently exported from Teck's nearby Elk Valley mines

Value-in-use assessment indicates price levels similar to Platts Qld premium low-vol HCC index

	Elan Project (Atrum) (adb)	Elk Valley (Teck Premium) <sup>1</sup>	Grassy Mount. (Riversdale) <sup>2</sup>	Platts Premium Low Vol Index <sup>3</sup>	Platts Peak Downs Index <sup>3</sup>
CSR	69 – 71	70	65	71	74
Coal Rank R₀Max (%)	1.16 – 1.20	1.14	1.18 - 1.20	1.35	1.42
Yield (%)	60	(est 60 – 70)	55	-	-
Ash Content (%)	8 - 9	8.8	9 - 9.5	9.3	10.5
Volatile Matter (%)	22 – 26	25.5	23.5	21.5	20.7
Total Moisture (%)	10	10	10	9.7	9.5
Total Sulphur (%)	~ 0.60	0.65 – 0.70	0.50	0.50	0.60
Phosphorus (%)	< 0.050	0.075	0.040	0.045	0.03
CSN	7 - 8	7.5	-	8	8.5
Fluidity (ddpm)	100 – 300	200 – 500	150	500	400



Source: Teck Resources, January 2019

1 S&P Global Platts Coal Trader International (pg8), 3 August 2018.

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2 Riversdale Resources Targets Statement, Grassy Mountain Technical Report by RPM Global (pg21), 28 March, 2019.

S&P Global Platts. Specifications Guide, Metallurgical Coal, April 2020.

## **Ready transport logistics**

## Ample available rail and port capacity

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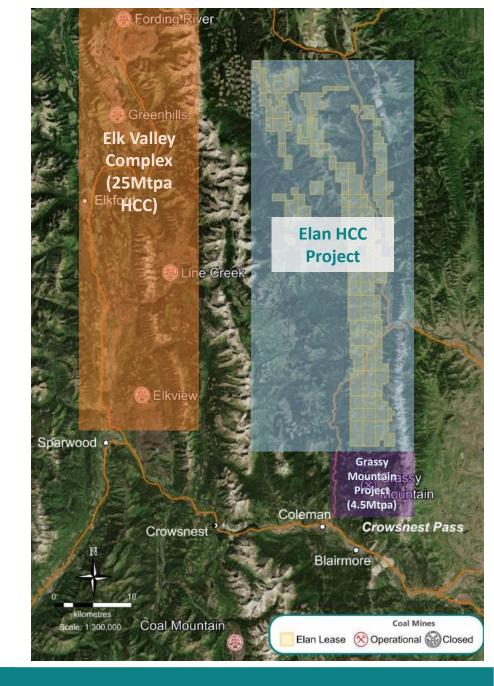
- Planned construction of new 5 km spur line to the proposed Elan train loadout area
- Product coal to be railed to Vancouver (~1,100 km)
- Discussions with CPR have indicated ample track capacity, in addition to Grassy Mountain output
- Current assessment indicates comfortable future Vancouver port capacity to handle full Elan output
- Westshore coal terminal most attractive option in terms of relative proximity and expected availability



## **Basin scale upside**

## Clear potential for multiple, large Tier 1 HCC mines

- Substantial resource upside across entire Elan tenement base
- Over 40km of delineated coal strike extent
- Significant swathes of Elan tenure undrilled or under-drilled
- Mapped coal extents stretch well beyond resource envelopes
- Teck Resources' proximate Elk Valley complex produces over 25Mtpa premium HCC from four operating mines<sup>1</sup>
- Total areal footprint and nature of coal deposition (shallow and thick) evidences clear potential to host multiple, large Tier 1 developments



# **KEY INPUT PARAMETERS**



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## **Updated Scoping Study<sup>1</sup> parameters**

## **Revised mine schedule and capital cost estimates**

- Update to the Elan Project technical and commercial review in the Scoping Study (April 2020)
- World-class 10 Mtpa ROM / 6 Mtpa HCC production scale maintained
- The revisions:
  - 1. Incorporates recent Isolation South resource upgrade<sup>2</sup> into an enlarged and enhanced mine schedule
  - 2. Defers Elan South mining to drive project simplification, permitting efficiency and development fast-tracking
  - 3. Incorporates refined capital cost estimates from current Pre-Feasibility Study (PFS) workstream
- All other key input parameters from Scoping Study (April 2020)<sup>3</sup> unchanged (including throughput, yield and price)
- Forecast estimation accuracy of +/- 35 40%
- Leading coal technical consultant, Palaris Australia, was the Study Manager for the Updated Scoping Study
- Hatch, Sedgman and WaterSmart other key contributors to unchanged inputs from Scoping Study (April 2020)

<sup>1</sup> For full details of the Elan Project Updated Scoping Study, please refer to ASX release dated 8 December 2020, *Elan Project Updated Scoping Study*. Atrum confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

<sup>2</sup> For full details of the Mineral Resources estimate, please refer to ASX release dated 25 November 2020, *Isolation South Resource Update*. Atrum confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

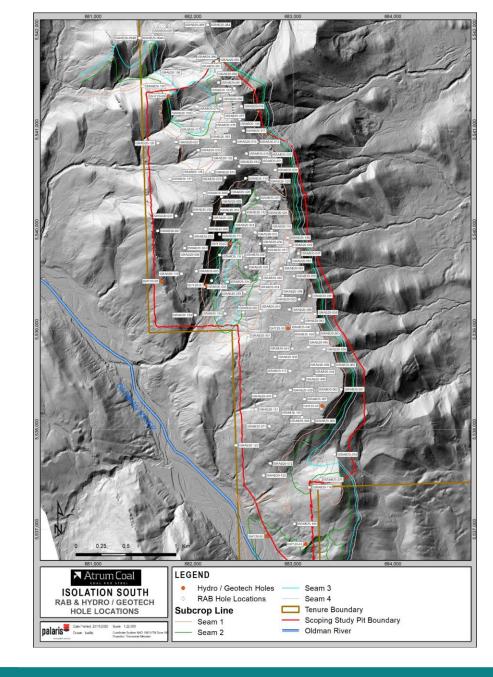
<sup>3</sup> For full details of the Elan Project Scoping Study (April 2020), please refer to ASX release dated 16 April 2020, *Elan Project Scoping Study*. Atrum confirms that, other than the revisions to the mine schedule and capital cost estimates reflected in the Updated Scoping Study, it is not aware of any new information or data that materially affects the information included in that release. All other material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.



## Major resource upgrade

## Elan 2020 exploration program delivers

- All 2020 drilling focussed on Isolation South
  - 125 rotary air blast (RAB) holes
  - 35 large diameter core (LDC holes)
  - 6 HQ geotechnical / hydrogeological holes
- Key objectives of substantial resource classification upgrade and potential further resource increase
- Interim outcomes delivered (November 2020)<sup>1</sup>
  - Isolation South M+I resource increased 93 Mt to 175 Mt (+113%)
  - 2 Total Isolation South resource increased 32 Mt to 262 Mt (+14%)
- Delivered substantial expected upside to LOM production target and forecast base case economics in the Scoping Study
- Final resource update expected 1Q 2021



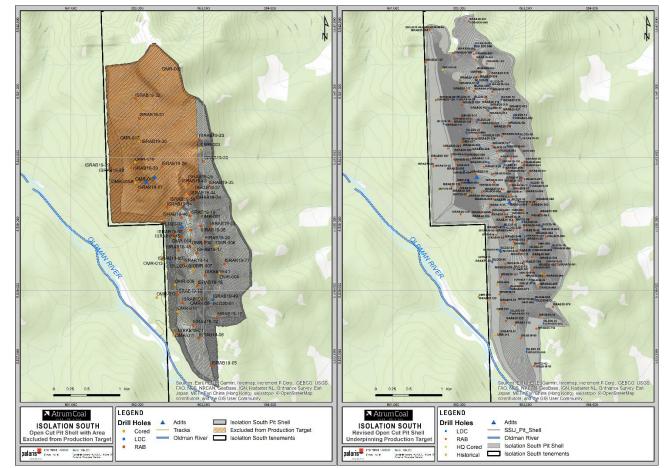
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<sup>1</sup> For full details of the Mineral Resources estimate, please refer to ASX release dated 25 November 2020, *Isolation South Resource Update*. Atrum confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

## Key updates

## Full Isolation South in-pit resource tonnage included

- Scoping Study (April 2020) practical pit shell at Isolation South contained 188 Mt ROM
- 108 Mt ROM of in-pit Inferred resources were excluded from mine schedule and LOM production target for ASX/ASIC regulatory compliance
- Recent upgrade of large portions of these previously Inferred resources to M+I status
- Allowed for inclusion in the Updated Scoping Study mine schedule
- Inclusion of these tonnes (+108 Mt ROM) drives:
  - Mine life extension
  - Lower average strip ratio and operating costs
  - Acceleration of lower-strip tonnes earlier into the mine schedule



## Isolation South optimised pit shell: Scoping Study (April 2020) on left (with material excluded from mine schedule in brown shading) and Updated Scoping Study on right

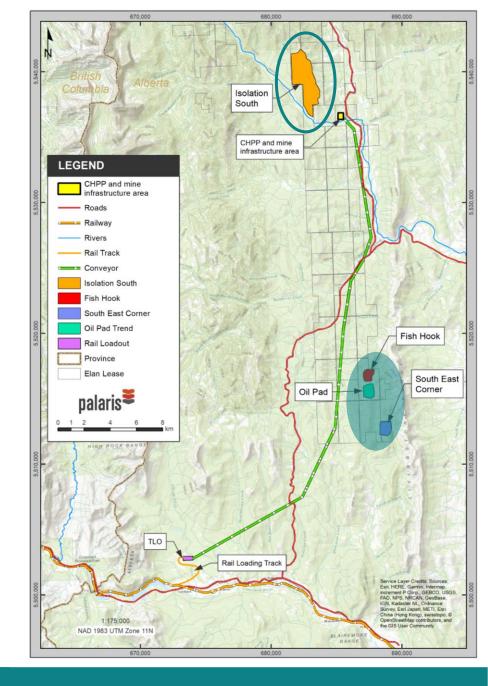
The Updated Scoping Study mine schedule and production target contain approximately 86% Measured and Indicated Resources and 14% Inferred Resources. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production target itself will be realised. Atrum confirms that the financial viability of the Elan Project is not dependent on the inclusion of Inferred Resources in the mine schedule.

## Key updates

## **Sole sourcing from Isolation South**

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- Isolation South can now independently support an initial +20-year mine life at the world-class scale of 10 Mtpa ROM (6 Mtpa HCC)
- Practical effect of deferring potential development of Elan South
- As such, Atrum has elected to remove all Elan South mining from the Updated Scoping Study mine schedule (-47 Mt ROM)
- Considerable simplification of overall Elan Project scope and footprint
- Maximising permitting efficiency and fast-tracking development
- Further reduces average strip ratio and forecast opex; Elan South, while low-strip by global standards, is higher strip than Isolation South
- Elan South remains a readily viable proposition for future mining
- Clear potential to be permitted and mined in the future as a Phase 2 expansion development and/or mine life extension for the Elan Project



## Key updates

## 3 Updated pre-production capital cost estimates

- - Further refined pre-production capital cost estimates derived from current PFS workstream
  - Updated capital expenditure estimates provided for two major items – covered overland conveyor systems (+US\$56M) and utilities supply to site (+US\$34M)
  - Total forecast pre-production capital expenditure now US\$773M (+US\$90M)
  - Main capex items:
    - Mine infrastructure
    - CHPP (1,650 tph)
    - Covered product conveyor (36 km)
    - Rail spur and loop
    - Sustaining capex remains US\$1.7/t ROM; derived using unit rates from similar operations

#### Updated pre-production capital expenditure estimates

Capital item	Inclusions	Estimate (US\$M)	Variance to Scoping Study (April 2020) (US\$M)
Utilities supply to site	Raw and potable water, site-wide electrical, controls & instrument infrastructure, internet	67	+34
On site coal handling	Overland conveyor from Product Stockpile to TLO	238	+56
Total		773	+90



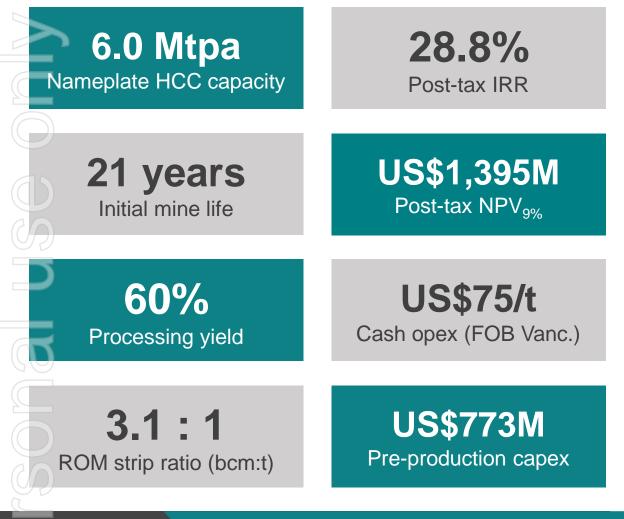
## 03 KEY OUTCOMES



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## **Updated Scoping Study outcomes**

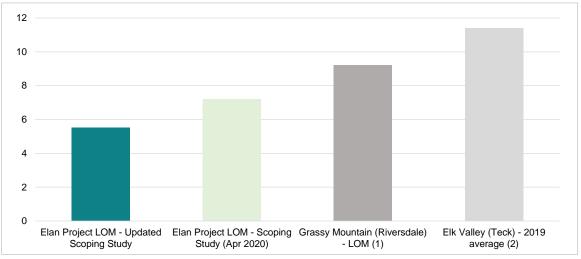
## A streamlined, world-class hard coking coal development



<u>Atrum Coa</u>

- Attractive upfront capital intensity of ~US\$130 per tonne of annual HCC capacity
- Lower 2<sup>nd</sup> quartile of export coking coal cash cost curve
- Benchmark HCC price of US\$141/t FOB Qld versus average quarterly price of ~US\$180/t over past decade
- Price discount of 2% to Qld premium low-vol HCC

#### Product (clean coal) LOM strip ratio (bcm waste / tonne HCC)

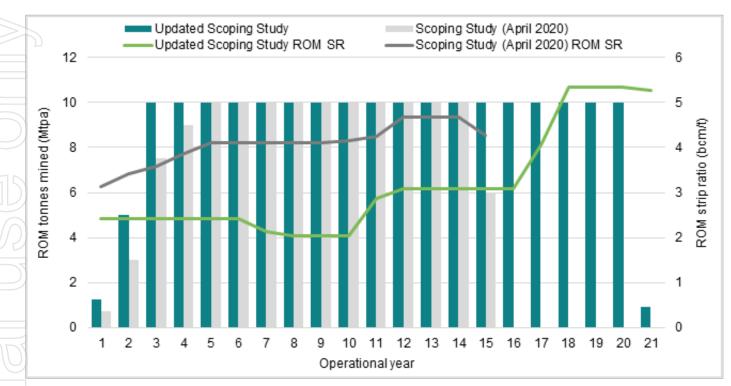


Riversdale Resources Targets Statement, Grassy Mountain Technical Report by RPM Global (pg8), 28 March, 2019 Teck Resources Q4 2019 Financial Report (pg46), 20 February 2020



## **Updated Scoping Study schedule**

## Extended and enhanced mine and process profile



Updated Scoping Study production profile versus Scoping Study (April 2020)

- Mining solely from Isolation South
- Reduced project footprint, greater simplicity
- Total ROM tonnes increase 61 Mt
  - Isolation South +108 Mt
  - Flan South -47 Mt
- Life-of-mine now 21 years (from 15 years)
- Average ROM strip ratio now 3.1
  - Reduces from 4.3 to 3.7 with inclusion of additional Isolation South tonnes
  - Decreases further to 3.1 upon removal of Flan South tonnes
- Ramp-up faster than original schedule (relative simplicity of solely Isolation South mining); but still relatively conservative



The Updated Scoping Study mine schedule and production target contain approximately 86% Measured and Indicated Resources and 14% Inferred Resources. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production target itself will be realised. Atrum confirms that the financial viability of the Elan Project is not dependent on the inclusion of Inferred Resources in the mine schedule.

## **Overall project quality and value enhancement**

Substantial upside delivered from Scoping Study (April 2020) outcomes

	Unit	Updated Study (Nov 2020)	Scoping Study (Apr 2020)	Change	
Total ROM coal mined	Mt ROM	187	126	+ 61 Mt	$\checkmark$
Annual throughput	Mtpa ROM	10	10		
Initial life-of-mine	years	21	15	+ 6 years	$\checkmark$
Average strip ratio (ROM)	bcm:t	3.1	4.2	- 28%	$\checkmark$
Average strip ratio (ROM) - first 10 years	bcm:t	2.3	4.0	- 44%	$\checkmark$
Processing yield	%	60	60		
Nameplate HCC production	Mtpa saleable	6.0	6.0		
Total product coal (HCC)	Mt saleable	112	76	+ 36 Mt	$\checkmark$
Resultant clean coal strip ratio (HCC)	bcm:t	5.2	7.2	- 28%	$\checkmark$
Pre-production capital expenditure	US\$M	773	683	+ US\$90 M	
Cash operating cost (FOB Vancouver)	US\$/t saleable	75	81	- 7%	$\checkmark$
HCC price (Elan MV HCC FOB Vancouver)	US\$/t saleable	138	138		
NPV9% (post-tax, real basis, ungeared, Y-1)	US\$M	1,395	860	+ US\$535 M	$\checkmark$
IRR (post-tax, real basis, ungeared, Y-1)	%	28.8	25.0	+ 43.8%	$\checkmark$
Project net cashflow (post-tax)	US\$M	4,580	2,610	+ US\$1,970 M	$\checkmark$

Updated Scoping Study outcomes versus Scoping Study (April 2020) results

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The Updated Scoping Study mine schedule and production target contain approximately 86% Measured and Indicated Resources and 14% Inferred Resources. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production target itself will be realised. Atrum confirms that the financial viability of the Elan Project is not dependent on the inclusion of Inferred Resources in the mine schedule.

## Further attractive opex, regionally and globally

### Forecast lower second quartile cash cost

- Forecast FOB cash cost of US\$75/t places Elan in upper first quartile / lower second quartile of global export coking coal operating cost curve
- Low FOR cost driven by low mining strip ratio
  - Rail haulage and port usage opex estimates based on actual or expected costs reported by nearby operating and proposed coal operations

#### **Operating cost forecast breakdown**

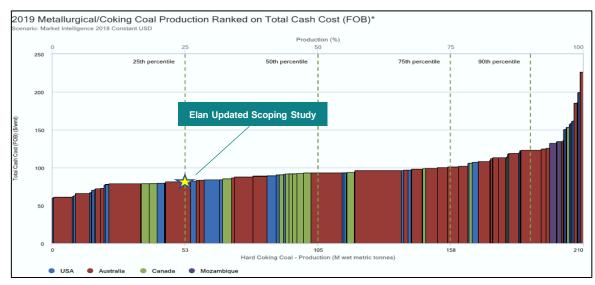
Unit cash operating costs	Unit	Updated Study (Nov 2020)	Scoping Study (Apr 2020)
Mining	US\$/t ROM	18	23
Processing	US\$/t ROM	4	4
Free an Bail (FOB) cook coot	US\$/t ROM	22	27
Free on Rail (FOR) cash cost	US\$/t saleable	37	44
Rail transport and port	US\$/t saleable	29	29
Marketing, commissions and corporate	US\$/t saleable	2	2
Royalties	US\$/t saleable	8	6
Total cash operating cost - Free on Board (FOB)	US\$/t saleable	75	81

Cost Parameters	Unit	Teck 2019 Actual	Grassy Mountain LOM Target	Elan Project Updated S.Study
Site costs	US\$/t saleable	49*	40	37
Rail and port costs	US\$/t saleable	29	29	29
Corporate / G&A / inv chg.	US\$/t saleable	1	1	1
FOB ex royalty, marketing	US\$/t saleable	79	70	67

\* Total cost of sales includes an additional C\$16/t charge for amortization of capitalized stripping costs

Source: Teck Resources Q4 2019 Financial Report (pg56), 20 February 2020.

Riversdale Resources Targets Statement, Grassy Mountain Technical Report by RPM Global (pg47), 28 March, 2019.



Source: S&P Global Market Intelligence

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# FURTHER OPPORTUNITIES



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## Key opportunity: product yield

## 1 Higher product yield

- Teck Resources' Elk Valley mines, with a similar raw coal ash content range, have process product yields typically ranging from 60 to 70%
- Compares with the 60% product yield assumption in the Updated Scoping Study
- Higher yield naturally also reduces product unit operating costs
- Yield sensitivity analysis highlights that +1% yield equates to the addition of ~US\$50M NPV in the Updated Scoping Study

Further detailed Isolation South washability testwork results expected in next few months; will inform final PFS input for product yield

#### Post-tax Elan Project NPV sensitivity to product yield (US\$M)

Average process yield	55%	56%	57%	58%	59%	60%	61%	62%	63%	64%	65%
Post-tax NPV (US\$M)	1,150	1,203	1,256	1,291	1,343	1,395	1,447	1,499	1,552	1,604	1,656



## Key opportunity: price

## 2 Conservative HCC price input

HCC benchmark price forecast of US\$141/t (FOB Queensland) based on long-term real HCC price forecast provided by Consensus Economics (Feb 2020)

- Compares with:
  - Low-vol HCC spot price of approx. US\$150 165/t during the second half of March 2020
  - Quarterly average HCC benchmark price of nearly US\$180/t over the past decade
  - Inclusive of assumed 2% discount to benchmark sees Elan realised price assumption of US\$138/t FOB
- Long-term C\$/US\$ exchange rate forecast of 0.79 also adopted from Consensus Economics
  - Drives all US\$ cost assumptions that are denominated in C\$ (much of the forecast Elan operating cost base)

#### Post-tax Elan Project NPV sensitivity analysis to HCC price and C\$/US\$

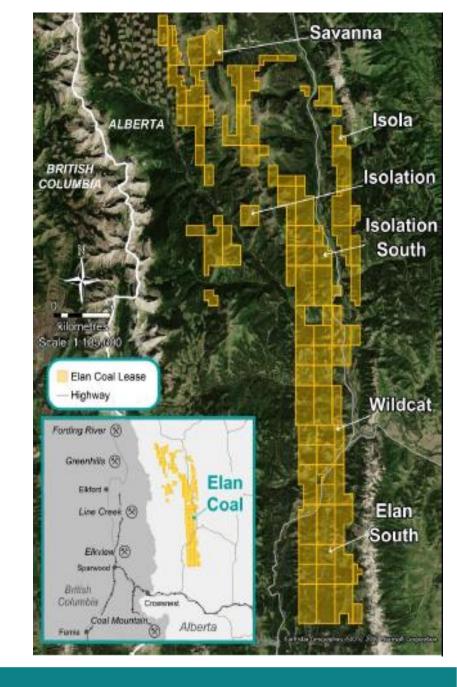
Post	Post-tax NPV			C/US\$ rate		
(ل	JS\$M)	0.95	0.87	0.79	0.71	0.63
HCC p	rice (US\$/t)	20%	10%	0%	-10%	-20%
113	-20%	152	400	638	638 873	
127	-10%	543	781	1,011	1,248	1,478
141	0%	934	1,160	1,395	1,623	1,871
155	10%	1,310	1,542	1,768	2,016	2,229
169	169         20%           183         30%		1,913	2,161	2,408	2,615
183			2,306	2,553	2,758	3,002

## Key opportunity: basin-scale

## 3 Further exploration and resource growth

- Substantial resource upside across entire Elan tenement base Over 40km of delineated coal strike extent
- Significant swathes of Elan tenure undrilled or under-drilled
- Mapped coal extents stretch well beyond resource envelopes
- Proximate Elk Valley complex mines produce +25Mtpa premium HCC
  - Clear potential to host multiple, large Tier 1 developments





## Key opportunity: Elan South

## 4 Output expansion and/or life extension option

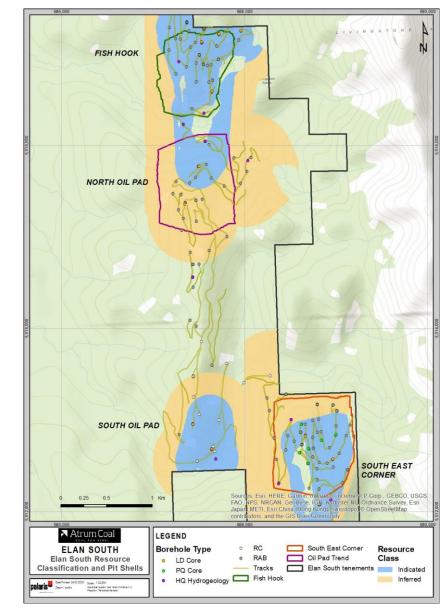


Clear potential to be permitted and mined as a Phase 2 output expansion and/or mine life extension for the Elan Project

Future drilling and resource upside potential

#### **Project Area** Indicated (Mt) Inferred (Mt) Total (Mt) Seam Group 3.2 3 7 Seam 1 South East Corner Seam 2 5.4 9 15 Seam 4 7 9 16 1.3 3 Seam 1 1 Fish Hook Seam 2 9.6 Δ 13 Seam 4 4.3 6 10 Seam 1 18.4 23 41 Oil Pad Seam 2 9.9 19 29 9 10 Seam 4 1 Elan South Total 60 83 143

Current Elan South resources<sup>1</sup>



#### Elan South resource classification areas (Seam 1) and Scoping Study (April 2020) pit shells

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<sup>1</sup> For full details of the Mineral Resources estimate, please refer to ASX release dated 25 November 2020, *Isolation South Resource Update*. Atrum confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

# DEVELOPMENT PATHWAY



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## The path to development

## **Key milestones**

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- Rapid progression through key phases
  PFS completion expected by mid-2021
  Targeted regulatory submissions:
  - Project Description (3Q 2021)
  - Impact Assessment (IA) (4Q 2021)
  - Targeted completion of DFS in mid-2022
- Estimated approvals timeframe of ~24 months from IA submission to mining permit
  - Commitment to a world best-practice development and operating philosophy
  - Environmental excellence a core value
  - Early engagement with First Nations, government, regulators and communities

Key milestone	Sep 20	Dec 20	Mar 21	Jun 21	Sep 21	Dec 21	Mar 22	Jun 22	Sep 22	Dec 22	Mar 23	Jun 23	Sep 23	Dec 23
2020 field program		★ — Updated Scoping Study completed												
Pre-Feasibility Study (PFS)														
Project Description														
Environmental Baseline Study														
Impact Assessment														
2021 field program														
Definitive Feasibility Study (DFS)														
Approvals														

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## **Social licence to operate**

## Early, proactive engagement with all stakeholders

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- Commitment to a best-in-class development and operating philosophy
- Adopted learnings from permitting of adjacent Grassy Mountain HCC Project (Riversdale Resources), which has similar or identical settings
- Early engagement with First Nations, government, communities and other relevant stakeholders
- Ownership of all regulatory applications and early, proactive engagement of federal and provincial regulators
- Repeal of Alberta Coal Policy (1976); Cat 2 status no longer relevant
- Comprehensive environmental study program commenced in 2019; forms foundation for mine planning and impact assessment
  - Development of Elan set to create several hundred full-time local jobs
  - Significant direct economic contribution to Alberta, with expected provincial royalties of over US\$850M to paid over the LOM
  - Indirect contributions to local, provincial and federal economies and taxes to be multiples of this provincial royalty total



## 05 SUMMARY

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## Atrum and the Elan Project: A rare opportunity



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Large-scale resources and landholding in a major HCC basin

- Shallow and thick coal seams = low strip ratio
- Tier 1 hard coking coal quality
- Direct rail access to key export terminals (with surplus capacity)
  - Deep Canadian HCC development and operating experience
  - Strong HCC market demand and outlook for high-quality new entrants

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## **Contact details**



## Appendix slide: Key risks

## Appropriate planning to mitigate key development and operating risks

#### **Stakeholder relations**

- Proactive engagement, meaningful consultation and future employment opportunity creation

#### Selenium

- Mine design to incorporate potential selenium sources and all mitigation strategies (e.g. saturated backfill)
- Holistic water management approach and potential water treatment solution for final discharge point

### Westslope Cutthroat Trout habitat

- Providing a robust offsetting and enhancing plan for habitat that is directly impacted by mine development

#### Approval timeframes

- Streamline the approvals process, learnings from Grassy Mountain, early engagement with AER and Federal IAA

## **Appendix slide: Coal resources**

## Elan Project total Resource estimate

>``								
	PROJECT	PROJECT AREA	MEASURED (Mt)	INDICATED (Mt)	MEASURED + INDICATED (Mt)	INFERRED (Mt)	TOTAL (Mt)	DATE REPORTED
	ELAN	ISOLATION SOUTH	7	168	175	88	262	25-Nov-20
	NORTHERN TENEMENTS	ISOLATION		-	-	51	51	22-Jan-19
	I ENEWIEN I S	SAVANNA	-	-	-	30	30	22-Jan-19
	ELAN	SOUTH EAST CORNER	-	16	16	22	38	10-Feb-20
	SOUTH	FISH HOOK	-	15	15	11	26	10-Feb-20
5		OIL PAD RIDGE	-	29	29	50	80	10-Feb-20
	TOTAL		7	228	235	252	486	

Atrum confirms that it is not aware of any new information or data that materially affects the information included in its ASX releases dated 25 November 2020 (*Isolation South Resource Update*), 10 February 2020 (*Total Elan Project Resources Exceed 450 Mt*) and 22 January 2019 (*Additional 201 Mt JORC Resources Defined for Elan Project*). All material assumptions and technical parameters underpinning the estimates in these releases continue to apply and have not materially changed.