



# **stanmore**coal

23 October 2020

#### BFS COMPLETED FOR ISAAC DOWNS PROJECT

# **Highlights**

- The Bankable Feasibility Study (BFS) has confirmed that attractive metallurgical coal for steel making will be produced from Isaac Downs
- Production levels of ROM<sup>1</sup> coal matched to the 3.5Mtpa<sup>2</sup> nameplate capacity at the Isaac Plains CHPP<sup>3</sup>
- FOB costs (including state royalties) are projected at \$108/saleable tonne for the first five years after which increasing strip ratio will drive an increase in costs with an overall life of mine average of \$129/saleable tonne forecast
- All Resources are declared as Measured and Indicated as defined under the JORC Code (24.7 Mt Measured and 11.5 Mt Indicated) a total of 36 Mt<sup>4</sup>
- Recoverable Coal Reserves of 25.9 Mt ROM of which 22.3 Mt is classified as Proved Reserves and 3.6 Mt is classified as Probable Reserves<sup>4</sup>
- Marketable Coal Reserves at Isaac Downs now totals 17.9 Mt (17.3 Mt is coking coal at 9.1-9.5% ash and 0.6 Mt is thermal coal)<sup>4</sup>
- Attractive investment proposition established with an all-in capital cost of A\$85.2M generating an NPV<sup>5</sup> of A\$215M and IRR<sup>6</sup> of 139%

Stanmore Coal Limited (**Stanmore** or the **Company**) is pleased to announce that the Bankable Feasibility Study (BFS) is now completed for the Isaac Downs Project on behalf of Stanmore IP South Pty Ltd, a 100% owned subsidiary of Stanmore.

Isaac Downs is the development of a satellite operation for the Isaac Plains Complex, with low capital costs, producing 2.5Mtpa (saleable), of primarily coking coal, resulting in a favourable economic outcome of \$215M NPV (IRR 139%). This development supports the continuation of operations at the Isaac Plains Complex by providing a new source of ROM coal to feed the Isaac Plains CHPP.

The recommended outcome of the BFS study, led by Palaris Australia Pty Ltd, is to proceed to the development stage for the Isaac Downs Project utilising the existing Isaac Plains infrastructure (including the CHPP and train loadout) and the long-term port and rail logistic agreements already in place with Stanmore.

<sup>&</sup>lt;sup>1</sup> Run of Mine

 $<sup>^{\</sup>rm 2}$  Mt – Million Tonnes; Mtpa - Million tonnes per annum

<sup>&</sup>lt;sup>3</sup> Coal Handling and Preparation Plant

<sup>&</sup>lt;sup>4</sup> Refer ASX announcement "Isaac Downs Resource and Reserve Update" dated 21 August 2020

<sup>&</sup>lt;sup>5</sup> Net Present Value @ 9%

<sup>&</sup>lt;sup>6</sup> Internal Rate of Return

#### **Market**

Products to be produced from Isaac Downs are primarily 9.1-9.5% ash¹ high quality semi-soft coking coal with a secondary product of 16% ash thermal coal. In addition, the same coal seams can produce a semi-hard coking coal specification at 8.5% ash which may result in improved realisations and margins depending on the coal price relativities for different products.

The Isaac Plains Mine has been in operation for 14 years building a strong customer base of Asian, Indian and European customers and has developed a reputation as a consistent and reliable supplier from a volume and coal quality perspective. Stanmore now generates 95% of its product coal for key steel making customers.

The longer-term coking coal demand forecast is expected to be robust with India and South-East Asia forecasted to generate strong demand for finished steel. This drives the requirement for coking/steelmaking coal supply, with Australia being the dominant supplier to the worldwide seaborne trading market.

# **Geology and Mining**

A detailed programme of exploration activities supported the development of the BFS and Stanmore recently published the updated Mineral Resources<sup>2</sup> that total 36 Mt from two coal seams, the Leichhardt and the Vermont Upper. Of this, 24.7 Mt was at a Measured category, and 11.5 Mt was at Indicated category under the 2012 JORC Code.

Pursuant to ASX Listing Rule 5.19.2, Stanmore confirms that all material assumptions underpinning the production target and the forecast financial information derived from the production report, namely the Isaac Downs Resources & Reserves Update<sup>2</sup>, continue to apply and have not materially changed.

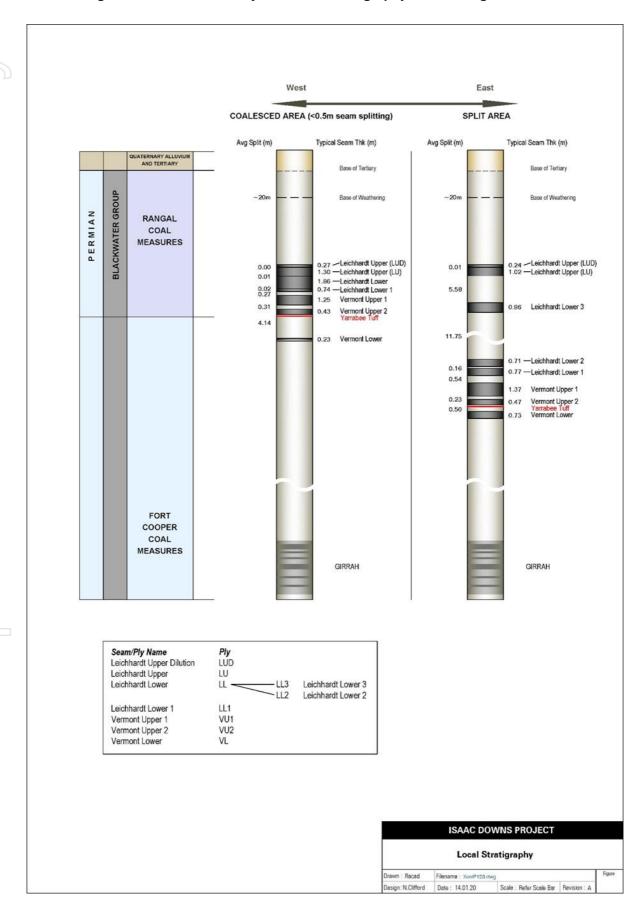
The Leichhardt seam at Isaac Downs is very similar in characteristics to the seam mined at Isaac Plains and Isaac Plains East. The Vermont Upper seam is a particularly high quality seam suitable for coke making and the characteristics are well defined by laboratory analysis. The Vermont Upper seam is also mined at the Millennium and Poitrel mines, located to the east, adjacent to Isaac Downs.

<sup>&</sup>lt;sup>1</sup> Ash: all ashes expressed are to a % air dried basis (%adb)

<sup>&</sup>lt;sup>2</sup>Refer ASX announcement "Isaac Downs Resource and Reserve Update" dated 21 August 2020

The coal seam stratigraphy and the seam/ply naming convention are illustrated below at Figure 1.

Figure 1: Isaac Downs Project - Seam Stratigraphy and Naming Convention



The BFS study programme provided the relevant information and mine planning to define Coal Reserves¹ under the 2012 JORC Code which defined 25.9 Mt of recoverable coal (ROM), of which 22.3 Mt was categorised as Proved Reserves and 3.6 Mt was defined as Probable Reserves. The technical assessment included detailed examination of all modifying factors listed under the JORC Code involved with developing this resource, with no material flaws or impediments to development noted.

Under the BFS mine planning scenario, the initial Isaac Downs box-cut will be established where the coal seam is close to the surface topography using an excavator and truck operation at low strip ratios. Subsequently, the dragline will be 'walked' from Isaac Plains to Isaac Downs and a standard Bowen Basin dragline operation will be established from north to south, supported by excavator and truck pre-strip operations. This will provide a cost-effective solution for the mining operation. The estimate of operating cost forecasts is based on current contractual arrangements at the Isaac Plains mine.

# **Key Mining Metrics**

Metrics	Units	Outcome
ROM Tonnes (scheduled)	Mt	27.7
Production Output (steady state average)	Mtpa ROM	3.2
Production Output (peak)	Mtpa ROM	3.6
Saleable Tonnes	Mt	18.7
Saleable production (steady state average)	Mtpa	2.15
Saleable production (peak)	Mtpa	2.7
Strip Ratio (average)	bcm/ROM t	9.4

The 27.7Mt of 'ROM tonnes (scheduled)', shown above, includes 22.3 Mt of Proved Coal Reserves, 3.6 Mt of Probable Coal Reserves (as defined under the JORC Code) and 1.8 Mt of 'unclassified' coal that is represented in the geological model but does not as yet meet the standard required under JORC to be classified as a Measured or Indicated Mineral Resource. The 'unclassified' coal scheduled in the modelling is located in the same pit shell developed to generate the JORC Proved and Probable Reserve estimate, and this coal is associated with a geological thrust fault where the existing data is not sufficient to justify inclusion in the Measured and Indicated Mineral Resource category. The proportional contribution of unclassified scheduled tonnes to the ROM tonnes profile is illustrated below and the unclassified "IDN tonnes" are not materially significant.

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement "Isaac Downs Resource and Reserve Update" dated 21 August 2020

**ROM Coal Production** palaris 4.0 3.5 12 3.0 10 € 2.5 8 Z.0 STRIP 6 § 1.5 1.0 2 0.5 0.0 FY22 FY28 FY23 FY24 FY25 FY26 FY27 FY29 FY30 FY31 IDM - ROM Coal IDN - ROM Coal ID - Strip Ratio (BCM/t)

Figure 2: Isaac Downs Project - Production Profile

The Coal Reserves and Mineral Resources underpinning the production target identified in the BFS were prepared by competent persons in accordance with the requirements of the JORC Code and have been previously released to the market.<sup>1</sup>

The relevant proportions of ROM Coal underpinning the overall production target for the project are identified below according to the categories described in the JORC Code:

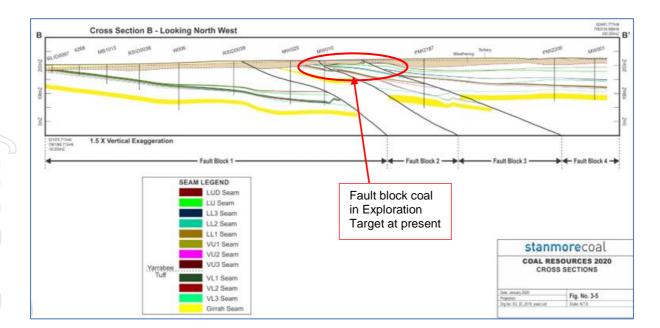
Proved Reserves	80.5%
Probable Reserves	13.0%
Exploration Target (unclassified)	6.5%

#### **Cautionary Statement**

The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that future exploration work will result in the determination of mineral resources or that the production target itself will be realised in regard to the 1.8 Mt included in the schedule.

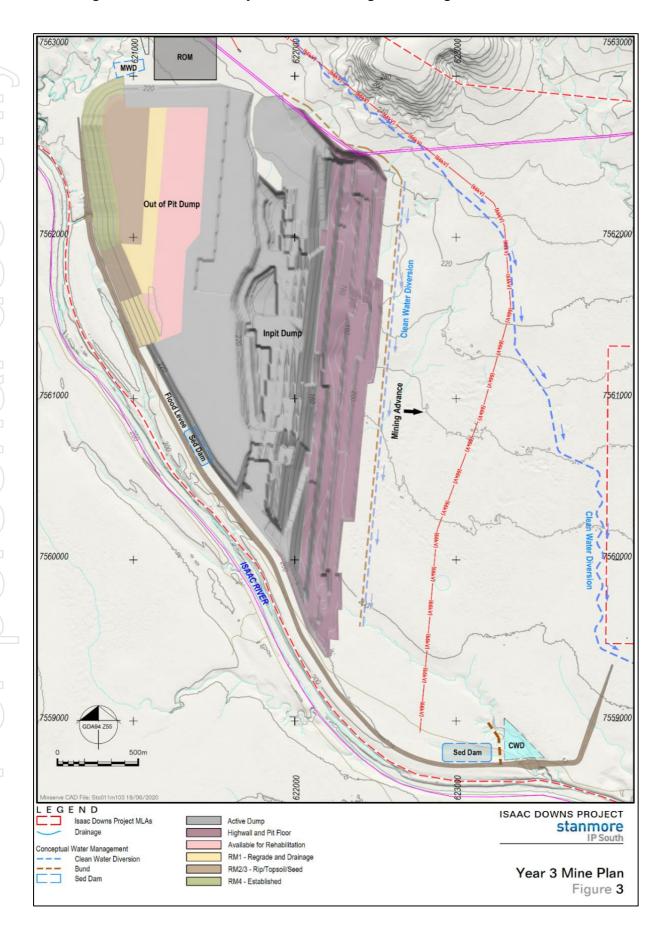
A total of 16 exploration boreholes have intersected the coal seams in the location of the 'unclassified' (Exploration Target) tonnes, including 1 coal quality hole, providing the ability to construct a geological model that included this area. Given the nature and extent of the possible faulted area, the mining team believed there is sufficient likelihood that this quantity of coal can be recovered from the planned mining operation to warrant inclusion in the feasibility study production target.

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement "Isaac Downs Resource and Reserve Update" dated 21 August 2020



Stanmore plans to undertake a seismic programme in 2021, and subsequent further drilling, to provide additional information such that the level of confidence in this limited area can be improved.

Figure 2: Isaac Downs Project - Mine Planning Year 3 Stage Plan



# **Infrastructure and Capital Costs**

Isaac Downs will be developed as a satellite operation for the Isaac Plains Complex, therefore the new mine does not require capital for a coal handling and preparation plant (CHPP), nor rail loading facilities. The major infrastructure required for Isaac Downs is:

- New haul road connecting Isaac Downs to the CHPP at Isaac Plains (~12km);
- A bridge to allow the haul road to pass under the Peak Downs Highway;
- · A new access road to Isaac Downs from the Peak Down Highway;
- Water management infrastructure;
- Site drainage infrastructure;
- A flood protection levee to protect the mine from Isaac River flood waters (designed for up to a 1 in 1,000 year event);
- A mine infrastructure area (MIA) including crib facilities, car and bus parking, dome type workshops, storage, heavy and light vehicle wash downs, fuel and lubricant storage, waste storage etc;
- Secure explosives magazine and reload areas; and
- Power supply connecting Isaac Downs to Isaac Plains (including MIA, lighting, pumps and dragline supply).

Stanmore has developed a capital cost estimate with substantial contractor involvement. Civil cost estimates have been developed by an experienced civil contractor under an ECI¹ agreement. The mine requires a \$63M capital investment for the construction activities to establish the site infrastructure. These costs are based on tendered rates from construction contractors with quantities generated using engineered designs based on the requirements of the site. An additional \$22M is allocated to project management costs, payments related to environmental approvals and third party agreements, and equipment transfer costs to move the dragline to the new location.

Importantly, no new coal preparation plant facilities will be required, and the facilities at Isaac Plains have a tailings management plan that is more than sufficient capacity to accommodate the reject disposal requirements from the Isaac Downs project over the life of the operation as well as rejects from the existing and planned Isaac Plains operations.

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<sup>&</sup>lt;sup>1</sup> ECI – Early Contractor Involvement including design

Isaac Plains Mine 7507500 m 300mm dia pipe at IPE Pit 2 565000 mV ROM New Isaac 562500 mV Downs area In-pit Dump LEGEND Mining Leases Isaac Downs Project MLAs MDL 137 Drainage Roads - Major, Minor 2m Topography Contours Cadastral Boundary Q1000 hundation Limits (without levee) Project Infrastructure Pit Shell Crest Possible Basalt disturbance Limit Raw Water Pipeline Mine Water Pipeline stanmore IS AAC DOWNS PROJECT Minserve

1500m

Figure 3: Isaac Downs Project - Infrastructure and location relative to Isaac Plains

BFS Infrastructure Layout

# **Investment Rationale**

The development of Isaac Downs is a significant step improvement for Stanmore to:

- increase the annual production level
- improve the coal quality attributes of Stanmore products
- increase the average saleable coal price
- decrease the operating costs
- provide an attractive return on investment

# **Key Financial Metrics**

Metrics	Units	Outcome
FOR Cash Costs (LOM)	A\$/t Product	95
FOB Cash Costs, ex. State Royalties (LOM)	A\$/t Product	115
FOB Cash Cost (LOM)	A\$/t Product	129
FOB Cash Cost (First 5 years)	A\$/t Product	108
Average Sales Price (LOM)	A\$/t Product	164
Development Capital (1st 2 years)	A\$M	85
Sustaining Capital	A\$ / ROM t	4
NPV (real) at 9% hurdle rate	A\$M	215
Internal Rate of Return (post tax)	%	139
Payback period (from construction commencement)	months	18

The cash costs have been developed based on the existing operating cost regime at the Isaac Plains mine with input from the existing mining contractor assessing the specific site requirements at Isaac Downs. The information presented above represents material assumptions on which the overall production target is based.

Sensitivity analysis shows that if the sales price improvements attributed to improved coal quality are not fully realised, and historical relativities for Isaac Plains semi-soft coking are achieved, the NPV for the project remains high at \$140M with an IRR of 105% and payback period of 24 months.

#### **Tenure, Approvals and Environment**

The primary approvals required for the Project are:

- Mining leases under the Mineral Resources Act 1989 (MR Act).
- Environmental authority (EA) under the Environmental Protection Act 1994 (EP Act).
- Approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

Stanmore IP South Pty Ltd submitted mining lease applications for the project in May 2019, and an application for an environmental authority in June 2019. Stanmore IP South Pty Ltd submitted a voluntary environmental impact statement (EIS) to the Department of Environment and Science in January 2020. Public submissions in response to the EIS have been received and Stanmore IP South Pty Ltd is in the process of responding to the submissions to address concerns.

Very few non-government submissions have been received and the overall approval schedule remains on track with mining lease grants expected in the first half of 2021.

Stanmore is confident that Isaac Downs will be able to acquire the environmental approvals and mining leases for the project and has a positive track record in this regard, based on the recent experience of gaining approvals for Isaac Plains East in 2018. Compensation agreements with the landowner and native title holders have also been executed.

This announcement has been approved for release by the Board of Directors of Stanmore Coal Limited

#### For further information, please contact:

Marcelo Matos Interim Chief Executive Officer 07 3238 1000 Frederick Kotzee Chief Financial Officer 07 3238 1000

#### **Competent Person Statement**

The information in this report relating to Coal Resources for the Isaac Downs Project is based on information prepared by a team of consultants under the guidance of Mr Toby Prior who is a Principal Geologist with Measured Group Pty Ltd. Mr Prior is a qualified Geologist (BAppSc (Geology), University of Southern Queensland), a member of the Australasian Institute of Mining and Metallurgy with over 20 years' experience, and has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Prior consents to the inclusion in the report of the matters based on the information, in the form and context in which it appears.

The Coal Reserve estimate is based on information compiled by Mr Michael Barker, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) (112634). Mr Michael Barker is General Manager, Feasibility Studies for 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 Barker has over 23 years' experience in the estimation, assessment, evaluation and economic extraction of Coal Reserves. He consents to the inclusion of this Reserve Estimate in reports disclosed by the Company in the form in which it appears.

## **About Stanmore Coal Limited (ASX: SMR)**

Stanmore Coal Limited operates the Isaac Plains coking coal mine in Queensland's prime Bowen Basin region. Stanmore owns 100% of the Isaac Plains Complex which includes the original Isaac Plains Mine, the adjoining Isaac Plains East (operational), Isaac Downs (open cut mine project) and the Isaac Plains Underground Project. The Company is focused on the creation of shareholder value via the efficient operation of the Isaac Plains Complex and the identification of further development opportunities within the region. In addition, Stanmore holds a number of high-quality development assets (both coking and thermal coal resources) located in Queensland's Bowen and Surat Basins.

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## **Forward Looking Statements**

Some of the statements contained in this ASX announcement are forward-looking statements. Forward looking statements include but are not limited to, statements relating to, among other things, the operations of Stanmore and the environment in which it operates.

Generally, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved.

Forward-looking statements include, without limitation: estimates of future earnings, the sensitivity of earnings to commodity prices and foreign exchange rate movements; estimates of future production and sales; estimates of future cash flows, the sensitivity of cash flows to commodity prices and foreign exchange rate movements; statements regarding future debt repayments; estimates of future capital expenditures; estimates of resources and statements regarding future exploration results; and where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis.

However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to commodity price volatility, currency fluctuations, the exploration, development and mining of mineral properties; the inability to obtain mine licenses, permits and other regulatory approvals required in connection with mining and processing operations; increased production costs and variances in resource or reserve rates from those assumed in the Company's plans, as well as political and operational risks in the countries and states in which we operate or sell product to, and governmental regulation and judicial outcomes.

For a more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other ASX announcements. Although the Company believes that its expectations reflected in the forward-looking statements are reasonable, such statements involve risk and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Various factors could cause actual results to differ from these forward-looking statements and include the potential that the Isaac Downs Project may experience technical, geological, metallurgical and mechanical problems, changes in product prices and other risks not anticipated by the Company or disclosed in the Company's published material. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this release, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. The reader is cautioned not to place undue reliance on forward-looking statements or information. Readers are also cautioned to review the risk factors identified by the Company in its regulatory filings made from time to time with the ASX.