



Australian Jobs Act 2013

Australian Industry Participation Plan Summary - Project Phase

Nominated project proponent: BLUESCOPE STEEL (AIS) PTY. LTD.

Project details

Name: No. 6 Blast Furnace Reline & Upgrade Project

Location: Five Islands Road, Port Kembla, NSW 2505

Type: Other productive facility

Purpose: Upgrade existing facility

Capital expenditure: \$500 million or more

Description: BlueScope has commenced development for the scope of work and estimate for a furnace reline, repair and upgrade of ancillary equipment/plant/systems allowing 6BF to re-start for a second campaign to replace the production of existing No. 5 Blast Furnace when it completes it's current production campaign. BlueScope Steel (AIS) Pty Ltd (BlueScope), a subsidiary of BlueScope Steel Limited, operates an integrated steelworks located in a coastal region of moderate climate in Port Kembla, New South Wales, Australia. BlueScope produces flat products for downstream manufacture of its range of branded coated and building products. BlueScope also supplies hot rolled coil and slabs for domestic and export clients. The plant operates with a single blast furnace, BOF, slab casters, plate and hot strip mills, and produces approximately 3.1 Mt/yr. Currently No. 5 Blast Furnace (5BF) is in operation and No. 6 Blast Furnace (6BF) is shut down. 6BF is a modern design, originally constructed in the 1990s, and is in relatively good condition. 6BF initial build and 5BF's last reline included significant commonality of equipment, systems and materials with each other. Commonality relates to the use of materially similar equipment, materials and or technology/systems. Based on the current 5BF's performance, there are significant aspects of the design and or equipment and or materials (commonality items) whose performance on No. 5 Blast Furnace BlueScope require to be utilised on No. 6. The utilisation of these commonality items will assist BlueScope to retain the production and asset life and business return benefits achieved from these elements in No. 5 Blast Furnace into the second campaign of No. 6 Blast Furnace. Current planning aims for a restart of 6BF earliest 2026, with execution of site works commencing in or about 2023. Procurement will be undertaken by a BlueScope team as further detailed in Part B Understanding Capability and Procurement Web Site Entity sections.

Completion date: 31 Aug 2026

Key goods and services

Indicative list of key goods and services to be acquired for the project:

Key goods and services	Opportunities for Australian entities *	Opportunities for non-Australian entities	Explanation for no opportunities for Australian entities
F2057 - Cast Houses Dedusting system equipment	Yes	Yes	
F2310/H2327/S2413 - Overhaul Casthouse floor//HBS & Stockhouse equipment	Yes	Yes	
F2324 - Casthouse Floor Equipment Refractory Refurbishment	Yes	Yes	

B2079MNW - Site Facilities and Services Installation (Const phase EW, 1 & 2)	Yes	No
B2620 - MCB, Sub A and Sub B Air-Con and Ventilation	Yes	No
B2621/B1082 - Buildings - Sheeting, guttering	Yes	No
B2631 - Supply and install of new fire suppression	Yes	No
B2646/G2092/H2093/K2094/S2609 - MCB c/park& rds/Gas/HBS/Ferrous Slag Gran civil	Yes	No
M1085/M1086 - Supply, install, maintain and removable temporary barriers/fencing	Yes	No
M1100 - Crawler cranes	Yes	Yes
M1103/P2052 - Construction hoist design, supply and install	Yes	No
M1111PO - Scaffolding supply	Yes	No
X1084/B2079/M2575 - DSC Project Off, Constr'n site facilities, MCB Room etc	Yes	No
X2632/M2638 - Bus and driver hire, Confined Space Personnel	Yes	No
X2643 - Processsing of large items to managable sizes (demolition scrap)	Yes	No
X2644 - Supply and install of rail lines.	Yes	Yes
C2045/B2218 - Cooling & Utility system valves	Yes	Yes
C2203 - Stave Hoses	Yes	Yes

These are extremely specialist design and castings with IP held by overseas Companies. BlueScope in mid 1990's did self perform some casting of these with limited success and since such time have always been supplied off shore via the same couple of suppliers. Not withstanding that a recent check by ICN confirmed that there are no potential or suitable onshore manufacturers, for an item so critical for the operation, reliability & production BlueScope is not considering any other suppliers, whether on or off shore.

P2022/P2051 - Copper stave, Tuyeres and Coolers - supply	No	Yes
P2023 - SGI & CI stave procurement	Yes	Yes
P2118 - Hearth installation (Carbon & white Refractory)	Yes	No
P2146/P2142/P2119/H2115/H2117/K2473 - Furnace (incl shell)/HBS/Slag SMP Const'n	Yes	No
P2207 - White refractories supply	Yes	Yes

P2208 - Tuyere zone refractories	No	Yes	<p>This area of the furnace lining is a high wear/very intense heat area and requires specialist refractories of a well proven design, composition and manufacturing process. BlueScope have had experience with several of the main worldwide suppliers and will require sourcing from these suppliers as part of achieving the furnace reliability/life objective & targets. The cost of unreliability or early life failure is immense. Further immediately below for your general information are the most recent TCO/TAN's issued for these refractory materials. While they were issued some time ago, BlueScope's custom agent advised circa CY21 that they are still current and BlueScope are not aware of any change in the Australian manufacturing capability for these refractory materials. FIRED REFRACTORY BRICKS & SHAPES Tariff Item - 6902.90.00 TCO's including - 0615399, 0615400, 0618047, 0618076, 0618078, 0618079, 0618080 TAN's including - 08430368, 0863569</p>
P2210 - Monolithics - staves, ramming supply	Yes	Yes	

P2217 - Carbon, semi graphite and graphite refractory design & supply	No	Yes	<p>These are extremely specialist design and manufacturing with IP held by small number of overseas Companies. This is another of the super critical areas of the furnace refractory lining. This area of the furnace lining is a high wear/very intense heat area and requires specialist refractories of a well proven design, composition and manufacturing process.</p> <p>BlueScope have had experience with the main worldwide supplier and will require sourcing from these suppliers as part of achieving the furnace reliability/life objective & targets. The cost of unreliability or early life failure is immense. Further immediately below for your general information are the most recent TCO/TAN's issued for these carbon block materials. While they were issued sometime ago, our agent advised circa CY21 that they are still current and BlueScope are not aware of any change in the Australian capability for these pure carbon blocks.</p> <p>GOODS DESCRIPTION TARIFF ITEM FOR TCO TAN/VAN TYPE BC-5 CARBON REFRACTORY BRICKS 6902.90.00 BSL 8430368 18442800 TAN BC-8SR CARBON REFRACTORY BRICKS 6902.90.00 BSL 8430368 18443000 TAN BC-8SM2 CARBON REFRACTORY BRICKS 6902.90.00 BSL 8430368 18443100 TAN BC-12SR CARBON REFRACTORY BRICKS 6902.90.00 BSL 8430368 18443200 TA</p> <p>These EJ's have been especially designed and associated manufacturing processes developed by a small number of overseas Companies, each of whom now have products that provide the longer life/reliability for the 20 year blast furnace campaign targets. Due to the above, BlueScope are not entertaining any local or overseas supplier outside of this proven supplier list.</p>
P2219 - Stave expansion joints	No	Yes	

P2400 - Stave Equipment Supply	Yes	Yes
P2405 - Blow Pipe Refurbishment & Lance Holder M	Yes	No

There is a requirement to match the existing top and the existing spare top, hence the only option is to sole source from the OEM of the original top & spare.

BlueScope are and will not be considering any other suppliers.

Further immediately below for your general information are the most recent TCO's issued for these specialised furnace top equipment and materials. While they were issued some time ago,

T2048/T2296 - Furnace Top Gearbox & rollers OEM by Paul Wurth	No	Yes
---	----	-----

BlueScope's custom agent advised circa CY21 that they are still current PARTS, BLAST FURNACE, BEING PARALLEL BIN MATERIAL CHARGERS (BELL LESS TOPS) Tariff Item - 8428.90.00 TCO's including - 0701476 ASSEMBLIES, MATERIAL CHARGING, BLAST FURNACE (BELL LESS TOP) Tariff Item - 8428.90.00 TCO's including - 0701870

T2226/G2419/H2030 - Fce Top Equalising, Relief etc, TRT, HBS shutoff etc valves	No	Yes	<p>These are world wide small supply volume valves of a highly specialised purpose designed/built valves for the arduous furnace temperature & particulate duties. They are also key to the furnace reliability objectives and a number of them will be of the same design/include common components with existing valves/spares, thus reducing investment. Due to the criticality & specialised nature of these valves etc, BlueScope has no plans to source outside of the known reliable and proven suppliers, all of whom are overseas based. Further immediately below for your general information are the most recent TCO's issued for these specialised furnace top equipment and materials. While they were issued some time ago, BlueScope's custom agent advised circa CY21 that they are still current. VALVES, BLAST FURNACE, MATERIAL CHARGING Tariff Item - 8481.80.90 TCO's including - 0701480 ASSEMBLIES, MATERIAL CHARGING, BLAST FURNACE (BELL LESS TOP) Tariff Item - 8428.90.00 TCO's including - 0701870</p> <p>There is a requirement to match the existing top equipment and functionality, hence the only option is to sole source from the OEM of the original top. Further immediately below for your general information are the most recent TCO's issued for these specialised furnace top equipment and materials. While they were issued some time ago, BlueScope's custom agent advised circa CY21 that they are still current. ASSEMBLIES, MATERIAL CHARGING, BLAST FURNACE (BELL LESS TOP) Tariff Item - 8428.90.00 TCO's including - 0701870</p>
T2384 - Supply new complete Lower Seal Valve Chamber	No	Yes	<p>There is a requirement to match the existing top equipment and functionality, hence the only option is to sole source from the OEM of the original top. Further immediately below for your general information are the most recent TCO's issued for these specialised furnace top equipment and materials. While they were issued some time ago, BlueScope's custom agent advised circa CY21 that they are still current. ASSEMBLIES, MATERIAL CHARGING, BLAST FURNACE (BELL LESS TOP) Tariff Item - 8428.90.00 TCO's including - 0701870</p>
T2387/P2404/G2434 - Structural Make Safe/Gas downleg/Dust catcher refurbish Work	Yes	No	
G1019/G2421/P2399/2344/H2513/H2513 - TRT, Clean Gas, Cooling, HBS Wrap Engine	Yes	Yes	

G2002 - Dust handling system design & supply	Yes	Yes	
G2003 - New demister design & supply	Yes	Yes	
G2004 - New clarifier design & supply	Yes	Yes	
G2005 - Top Recovery Turbine (TRT) design & supply	No	Yes	This is a specialist field which no Australian based design/supplier was identified. The initial check was undertaken by the BlueScope team circa CY21 during the pre-feasibility study phase. ICN have recently (February 2022) undertaken a check of potential on-shore suppliers using the ICN data base & referencing the draft technical specification generated by BlueScope for this package. They arrived at the same conclusion as BlueScope's initial findings, i.e. no suitable or potential on-shore supplier. It is a significant investment and part of the project's improved energy efficiency objectives.
G2025 - Downcomer and Dustcatcher Equipment	Yes	Yes	
G2110/G2111/G2112 - TRT, Gas cleaning & Effluent SMP sitework	Yes	No	
G2229/T2377/T2279/H2027/H2029 - Downcomer, furnace top, relief, HBS EJ supply	No	Yes	
G2421/M2102/M2102 - TRT/Cast House Floor/Utility Hydraulic Systems	Yes	Yes	These EJ's will be specially designed and associated manufacturing processes developed by a small number of overseas Companies, each of whom now have products that provide the longer life/reliability for the 20 year blast furnace campaign targets. Due to the above, BlueScope are not entertaining suppliers outside of this proven group, whether on or off shore suppliers.
G2436/C2044/E2238 - Fnce Cooling Pumps, Scrubber Diesel Pumps	Yes	Yes	
G2441 - Scrubber RS-Element Cone Assemblies & Mechanicals	Yes	Yes	
F1049/T2300 - Cast House Floor & Furnace Top Cranes	Yes	Yes	
F2533/G2534/F2543/F2537C2046/H2535/K2536-C/house, TRT, Fnc HBS-ElecEquipSupply	Yes	Yes	
G2458/H2348/H2348 - Gas Cleaning Plant/HBS/WGHR Protective Coatings	Yes	No	
G2544/K2546 - Electrical - Gas Cleaning/Slag Gran - Site Works	Yes	No	
H2184 - Cold Blast Ductwork Supply	Yes	No	
H2029 - HBS Refractory Supply	Yes	Yes	

H2031 - Hot Blast System Stove Burners	No	Yes	The burner design and associated refractories are a specialised field with relatively small world wide volume and in which only a small number of suppliers/manufacturers exist. Notwithstanding this experienced and specialised group of suppliers, the last campaign experienced significant issues with the burners. Hence BlueScope will not be entertaining any suppliers outside of the current group of suppliers, notwithstanding that this group as a whole have had some design/supply issues over the last couple of decades.
H2116 - HBS refractory installations	Yes	No	

H2006 - WGHR plant design & supply	No	Yes	<p>The Blast Furnace Hot Blast Stoves, Waste Gas Heat Recovery (WGHR) system is a specialised unit designed to operate over a wide range of operating conditions and must inherently be integral with the stove control system. Proven operations and learnings from other Blast Furnaces WGHR projects are needed for 2 key aspects: Operation and control of the hot blast stoves must be upgraded to account for the effect of WGHR, and many of the requirements for this WGHR & stove operation (including the planned replacement burners) combination will be included in the purchase specification. Materials of construction, associated allowable operating boundaries and specialised design requirements</p> <p>The main BlueScope risks if the WGHR package is unsuccessful are: * Business risk i.e. low on no return on capital * The proposed WGHR successfully operating is an enabling project for the use of coke ovens gas for high pressure coke ovens gas (COG) injection project. This use of high pressure COG is a significant contributor to BlueScope's planned CO2 reduction targets, which if not materially met will be very costly to BlueScope's business in many ways. The effects include costs, regulator notices/fines etc and reputation. The planned overseas tenderers are all hot blast stoves OEMs with proven experience delivering these integrated systems.</p>
H2349/G2024/C2373/ - TRT/Furnace Cooling/WGHR Supply & manufacture pipework	Yes	Yes	
H2350/H2359/K2472 - WGHR/Stoves/Slag Gran Steel Structure/Supports & Plfm supply	Yes	No	
E2262 - HV 6.6kV Site Refurbishment	Yes	Yes	
M2555 - Control System Vendor Engineering - Execution	Yes	No	
M2572 - Control System Proprietary Hard & Soft ware	Yes	Yes	

K2007 - Slag granulation design and supply	No	Yes	The slag granulation system is provided by a small number of specialist overseas companies. BlueScope also desire to have commonality to the maximum practical extent with the existing slag granulation system. due to the above BlueScope will not be considering any other suppliers.
K2103 - Slag granulation plant installation	Yes	No	
K2221 - Slag Handling Slag Pots	Yes	Yes	
K2278 - Kress Slag Pot Carriers	No	Yes	Specialised purpose designed & built piece of mobile equipment for the transport & tipping of the molten slag. BlueScope currently have several of these and or their slag service has them and BlueScope plan to maximise compatibility across the fleet. Due to the above reasons, BlueScope will not be considering other suppliers.
S2034 - Conveyor belt procurement	Yes	Yes	
S2038 - Vibrating screens supply	Yes	Yes	
S2040/S2188 - Stockhouse Wear Plate Ni Hard & Tile Supply	Yes	Yes	
S2063 - Conveyor pulley offsite refurbishment	Yes	No	
S2107/S2169/S2189/S2610- Stockhouse/Primary Ferrou SMP Site Works incl Bin Tiling	Yes	No	
S2172/S2538/S2530 - Stockhouse/Raw Materials Hdlg Electrical & Drive Supply	Yes	Yes	
S2548/S2540 - Electrical - Stockhouse & Raw Materials Handling - Site works	Yes	No	
S2107/S2169/S2189/S261/B2268 - Stockhouse/Primary Ferrous/Utility SMP Site Works	Yes	No	

*An Australian entity is an entity with an ABN or ACN

Project standards:

Australian
International

These are owner standards which define the direction, interpretation & or extent that owner requires the relevant Australian, IS or WHS etc regulations/code of practice applied, tenders will detail.

Supplier information and communication

Project proponent's contact person for supplier enquiries:

Contact person name Clint Mackenzie
Contact person position Construction Engineer
Phone number 0407566773
E-mail clint.mackenzie@bluescopesteel.com

Project proponent website: <https://www.bluescopeillawarra.com.au/the-future-of-steelmaking-no6-blast-furnace-reline-at-port-kembla-thursday-7-october-2021-500pm-aedt/>, noting that this link will be activated immediately after approval of the AIPP.

Project opportunities website: The Project will be published on ICN Gateway at the direct link <http://no6.icn.org.au/>, noting that this link will be activated immediately after approval of the AIPPlan.

Supplier engagement and communication actions :

- Promote project opportunities through industry associations
- Engage with vendor identification agencies on project opportunities and bid processes
- Conduct supplier information briefings on project opportunities and bid processes
- Issue media releases or ASX announcements on project developments and opportunities
- Directly contact suppliers with information on project opportunities and bid processes

Building Australian industry capability

Supplier capability development actions:

- Recommend suppliers undertake training and/or accreditation
- Transfer new product and process technology to suppliers
- Encourage joint ventures and alliances between suppliers

Global supply chain integration actions:

- Introduce suppliers to global supply chain partners
- Recommend suppliers undertake export readiness training or international accreditation
- Provide references for high performing suppliers

Feedback process for unsuccessful bidders:

The ICN Gateway process has the ability to notify unsuccessful companies who are not requested to tender. This can include reasons for lack of success which will guide the unsuccessful company to training or technology to improve their chances in the future. For companies who are register an interest with ICN and who are not invited to tender ICN will provide a written offer of feedback. In all cases, feedback will only be provided to those companies who request it. For companies who are invited to tender but are unsuccessful, BlueScope will provide a written offer of feedback. In all cases, feedback will only be provided to those companies who request it.