



Mining & Energy Services Council of Australia

Project Updates

November 2018

Report Summary

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Northern Territory



- RESOURCE - vanadium/titanium/iron ore
- RESOURCE - Oil and gas
- MINE - recommencement
- REFINERY
- RESOURCE - tungsten/molybdenum - stage 1

Queensland



- RESOURCE - coal
- OPERATING MINE - expansion
- SOLAR FARM
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- ENERGY FACILITY
- PROCESSING FACILITY

New South Wales



- SOLAR FARM
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- RESOURCE - cobalt/nickel/scandium

Victoria



- WIND FARM
- RESOURCE - high purity alumina

South Australia



- SOLAR FARM
- SOLAR THERMAL FARM
- SOLAR FARM AND BATTERY STORAGE FACILITY

Western Australia



- RESOURCE - potash
- RESOURCE - magnetite
- RESOURCE - gold
- RESOURCE - heavy minerals sands/zircon
- RESOURCE - gas offshore
- RESOURCE - fluorite/iron ore/titanium/vanadium
- RESOURCE - rare earth/metal
- RESOURCE - iron ore/titanium/vanadium
- RESOURCE - coal
- RETURN WATER PIPELINE
- SLURRY PIPELINE
- RESOURCE - gas
- RESOURCE - oil and gas
- RESOURCE - kaolin
- RESOURCE - iron ore
- SOLAR FARM

Tasmania



- WIND FARM
- RESOURCE - tin

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
843551 MOLYHIL TUNGSTEN-MOLYBDENUM PROJECT - STAGE 1		RESOURCE - tungsten/molybdenum - stage 1	Off Plenty Hwy, 220km NE of ALICE SPRINGS	\$69m	Feasibility Study
Consultant (DFS Review) PROTEUS EPCM ENGINEERS	Consultant (Geotechnical Design) GOLDER ASSOCIATES PTY LTD	Consultant (Mine Scheduling) AMC CONSULTANTS (WA)	Developer THOR MINING PLC	Project Manager THOR MINING PLC	

Project Detail

A project, located on a rehabilitated former mining site, to extend an infilled pit in 2 stages for 4 years of operations. A Resource Estimate for Stage 1 of 200,000t of ore & 890,000t for stage 2. Truck & shovel excavation using blasting with ore trucked to a 250m x 200m Run-of-Mine (ROM) pad prior to crushing & delivery to a fine ore stockpile. Processing to include a combination of magnetic separation to recover magnetite, flotation for molybdenite & gravity separation for scheelite. Tungsten recovery by a wet spiral circuit. Tailings to go via a collection tank to a tailings storage facility (TSF) handling 300,000tpa pyrite & magnetite concentrate & sharing a 12.8ha site with a magnetite storage stockpile area. Dried molybdenite concentrate filter cake to be packed in 1t bulker bags then loaded by fork lift into sea containers for trucking. Construction of office buildings, a general workshop/stores building & an explosives magazine. The main mine access road from Plenty Highway to be upgraded to an 8m wide all weather road able to take double & triple road trains & other mine roads to be upgraded as necessary. Upgrade of the existing air strip. Power to come from a Build-Own-Operate (BOO) Power Station operating on diesel fuel with diesel contained within self banded, double-skinned storage tanks. Water management to include a diversion channel around the waste dump & TSF with water directed to Molyhil Creek via Dam Creek & a sewerage treatment plant. Raw water production from 4 bores linked to storage tanks at the plant by a 6km, 160mm diameter high density polyethylene (HDPE) pipeline. Dewatering of the pit by in-pit sump pumps & to pass through a small settling basin prior to being sent to the plant process water system. Peak construction workforce of 100 & 62 ongoing personnel. Accommodation at a camp with 64 ensuited rooms, manager's office, dining room, laundry, car park & reverse osmosis potable water treatment.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
845114 MOUNT TODD GOLD OPERATIONS RECOMMENCEMENT		MINE - recommencement	Mt Todd Rd 45km northeast of KATHERINE	\$838.83m	Development Approval
Consultant (Feasibility Study) TETRA TECH	Consultant (Metallurgical Testing) ALS CHEMEX	Contact ICN - INDUSTRY CAPABILITY NETWORK (NT)	Developer VISTA GOLD AUSTRALIA PTY LTD	Project Manager VISTA GOLD AUSTRALIA PTY LTD (MOUNT TODD MINE)	

Project Detail

A project based on a resource estimate (measured, indicated, inferred) of 3.5 million tonnes (Mt) containing 9.1 million ounces (Moz) of gold expected to support 13 years of operations prior to 4 years of rehabilitation. Open-pit truck & shovel operations to extend the existing Batman Pit at a rate of up to 10.65 million tonnes per year (Mtpa) using large haul trucks, hydraulic shovels & front ended loaders to transport ore to the crusher, ore stockpiles, waste dumps & tailings facilities. At the Processing Plant ore to be crushed, pre-aerated & subjected to carbon in leach (CIL) leaching followed by adsorption, desorption & recovery (ADR) to produce gold dore. The CIL tailings to be detoxified & sent to an impoundment from which plant process water will be recycled. Raising of existing tailings dam walls (TSF1) & construction of a new dam (TSF 2) with associated Stow Creek & Horseshoe Creek diversion channels. Upgrade of the existing low grade ore stockpile (LGO1) & construction of a new one (LGO2) over 47ha. Associated infrastructure to include a waste rock storage facility with pond, various saddle dams, a light & heavy vehicles maintenance workshop, administration offices, wash down area, tyre change facility, lube storage, a water treatment plant (500cu m/hr), modular sewerage treatment plant, power station (86MW using a single gas turbine generator & 2 reciprocating engines), explosives depot (ANFO ammonium nitrate/fuel oil storage bins, powder & cap magazines), lime kiln along with sumps, decant towers, collection ditches, sludge disposal cell, equalisation pond & 10ha anaerobic treatment wetlands. A 300-500t per day drill & blast, loader & truck limestone quarry to be located nearby.

MESCA Project Updates

Northern Territory

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1157791 MOUNT PEAKE VANADIUM TITANIUM & IRON ORE PROJECT		RESOURCE - vanadium/titanium/iron ore	Via Stuart Hwy, 65km West/SW of BARROW CREEK	\$853m	Development Approval
Consultant GENESEE & WYOMING AUSTRALIA PTY LTD (GWA)	Design Engineer (Engineering/Mine Plant Design) COMO ENGINEERS PTY LTD	Developer TNG LIMITED	Engineer POSCO E & C AUSTRALIA PTY LTD	Project Manager MCMAHON SERVICES AUSTRALIA PTY LTD	

Project Detail

A project based on a Resource Estimate (Measured, Indicated, Inferred) of 160 million tonnes (Mt) containing 448,000t vanadium, 8.48 Mt titanium & 36.8 Mt of iron ore. Processing initially to produce 2.5 million tonnes per annum (Mtpa) of concentrate then stage 2 upgrading of the plant for 5Mtpa. Trucking of concentrate some 70km to a new railhead near Barrow Creek for transport by the Alice Springs to Darwin railway for shipping out of Darwin. Packages expected to include: road construction, rail construction, power station & transmission, water supply, treatment & filtration services, buildings supply or construct, mobile equipment, accommodation village, laboratory, data & communication systems, fire protection & security systems, hire (equipment & vehicle), pumps & piping, instrumentation & control systems, craneage, labour hire, site works & plant utilities & solvent extraction technology. TIVAN Refinery/processing plant (crushing & grinding circuits) now to be located at Middle Arm, Darwin. Life of mine is approximately 17 years.

MESCA Project Updates

Northern Territory

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
2147529 MOUNT PEAKE VANADIUM TITANIUM & IRON ORE PROJECT - REFINERY		REFINERY	10km from Darwin Port DARWIN	\$650m	Development Approval
Developer TNG LIMITED	Developer (Pref Finance/Equip Supply) CATERPILLAR FINANCIAL AUSTRALIA LTD	Project Manager MCMAHON SERVICES AUSTRALIA PTY LTD			

Project Detail

Proposed construction of a TIVAN refinery.

MESCA Project Updates

Northern Territory

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1687479 AMADEUS PEDIRKA BASINS JOINT VENTURE OIL & GAS PROJECT		RESOURCE - oil/gas	Stretching southwest to southeast of ALICE SPRINGS	\$150m	Early Planning
Developer CENTRAL PETROLEUM LIMITED	Developer (Up to 70%) SANTOS LIMITED	Operator SANTOS LIMITED			

Project Detail

The Pedirka Basin is a Permian depocentre prospective for oil & gas.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>848226 NEW ACLAND COAL OPERATIONS EXPANSION STAGE 3</p>		<p>OPERATING MINE - expansion - stage 3</p>	<p>Jondaryan Muldu Rd Acland Sabine Rd Oakey Cooya Rd & 10km NE of JONDARYAN</p>	<p>\$700m</p>	<p>Development Application</p>
<p>Developer NEW HOPE CORPORATION LTD (FORMERLY NEW HOPE COAL AUSTRALIA)</p>	<p>Project Manager NEW ACLAND COAL PTY LTD</p>				

Project Detail

A project to extend the life-of-mine (LoM) by mining parts of the Manning Vale & Willeroo deposits surrounding the Acland township. Continuation of conventional truck & shovel operations along with an increase in production to 7.5 million tonnes per annum (Mtpa) from 14 Mtpa run-of-mine (RoM) coal. To include an upgrade of the existing coal handling & preparation plants (CHPPs) & associated stockpiles (ROM, product). Overburden/out-of-pit spoil dumps for waste & coarse rejects as well as in-pit tailings disposal. Construction of a new 8km spur rail line as well as development of the Jondaryan rail loading facility (JRLF). Upgrading or relocation as required of existing haul & service roads as well as diversion of the northern section of Jondaryan-Muldu Road. Upgrade of the existing administration & heavy vehicle maintenance area (ML 50170). Relocation & if necessary upgrade of the existing 33kV & 11kV power lines from Oakey. Possible new groundwater bores for any water requirements in addition to that already being supplied by pipeline from the Wetalla Wastewater Reclamation Facility. Expected 220 construction & 570 operational jobs with workers expected to be housed in existing local housing.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1491674 RAVENSWOOD GOLD OPERATIONS EXPANSION - SARFIELD		OPERATING MINE - expn - open cut	via RAVENSWOOD	\$123m	Development Approval
Consultant (Definitive Feasibility Study) COFFEY SERVICES AUSTRALIA PTY LTD	Design Engineer GR ENGINEERING SERVICES (GRES)	Developer RESOLUTE MINING LTD	Project Manager CARPENTARIA GOLD PTY LTD		

Project Detail

Extending the Nolans pit floor to a depth of 105 metres from the surface, & by extending the pit wall to the south by 120 metres. Continues processing of Sarsfield & Nolans ore with the existing Mr Wright underground mine or at the existing process plant. Tails to Nolans pit & the construction of one new tailings storage facility (TSF) cell to house dredged tailings from the Sarsfield Pit, & three additional cells to accommodate mining tailings. Removal & re-establishment of a portion of the 10 metre high acoustic bund to the west & north of the existing Sarsfield pit. Recommence mining at the existing Sarsfield pit, by extending the pit wall to the north & west by 140 metres. New & upgraded mine workshop & offices. 100 ensuite room work camp expansion to accommodate an additional 160 people. Relocation of the water treatment plant & power facilities on the north face. Two new leach tanks, where additional residence time is required, if testing indicates benefits to the project. Refurbishment of Sarsfield crushing plant including improving dust emission reduction systems. Replacement of the existing waste refuse tip with a designated two to three hectare waste refuse tip. The upgrade of the oily-water separator to handle additional load. Replacement of the existing fuel storage facility with increased fuel storage. Improve the vehicle washdown facility. Sewerage treatment plant expansion to accommodate additional personnel.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>1645451 CHINA STONE COAL PROJECT</p>		RESOURCE - coal	Moray Carmichael Rd, Belyando via CLERMONT	\$6b	Development Approval
<p>Developer MACMINES AUSTASIA PTY LTD</p>	<p>MACMINES AUSTASIA PTY LTD HANSEN BAILEY ENVIRONMENTAL CONSULTANTS</p>				

Project Detail

A project to mine up to 55 million tonnes per annum (Mtpa) of run-of-mine (RoM) coal for over 50 years for export via a private rail line. Open cut methods to include truck & shovel & dragline with portals/drifts for underground access to 4 longwalls & potentially top-coal caving. Processing by a coal handling & preparation plant (CHPP) with associated conveyors & stockpiles & rejects going to a tailings storage facility. Associated infrastructure expected to include a 800MW power station with fly ash storage facility, dams (sediment, raw & mine water storage), ventilation shafts, boreholes & a rail loop with loading facilities. Mine infrastructure areas for each of the open cut & underground workings to include administration buildings, bathhouse, amenities, workshop, warehouses, vehicle facilities (wash down, servicing, refuelling). A private air strip to be located close to an accommodation camp.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1833575 BARALABA NORTH CONTINUED OPERATIONS JOINT VENTURE PROJECT		OPERATING MINE - expn	3km North of BARALABA	\$311.8m	Construction
Contractor GOLDING CONTRACTORS PTY LTD	Developer BARALABA COAL PTY LTD	Developer JFE-SHOJI TRADE AUSTRALIA PTY LTD	Operator BARALABA COAL PTY LTD		

Project Detail

A continuation project to provide an extra 15 years life-of-mine (LoM) by expanding the proposed Baralaba North pit using conventional truck & mining, excavators & haul truck methods. Increase in production capacity from 1 million tonnes per annum (Mtpa) to 3.5 Mtpa through construction of an additional coal handling & preparation plant (CHPP). Expansion of out-of-pit emplacements for waste rock along with disposal of rejects in mine voids. Associated infrastructure expected to include accommodation, public roads, mine access & mine haul roads, moura rail line upgrade, rail loop & TLO, mine industrial areas, coal processing, tailings disposal, power supply, IT & Communications, water supply, surface water management civil works, mining equipment & design & construction management. Product coal to be railed to either the existing RG Tanna or planned WICET coal terminals for export.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
4197175 SCONI SCANDIUM COBALT & NICKEL PROJECT		RESOURCE - cobalt/nickel/scandium	From South of Mt Garnet to South of GREENVALE	\$1.34b	Feasibility Study
Consultant (Definitive Feasibility Study) SRK CONSULTING	Developer AUSTRALIAN MINES LIMITED	EIS Consultant AUSTRALASIAN RESOURCE CONSULTANTS PTY LTD (AARC)			

Project Detail

A project based on nickel laterite deposits in the north (Bell Creek South/North/Northwest, Minnamooka, The Neck) & south (Greenvale, Lucknow, Kokomo) with a combined Resource Estimate of 78 million tonnes (Mt) containing 467,000t nickel, 50,500t cobalt, 3800t scandium as well as 3.46Mt iron ore & 538,00t magnesite. Initial development at Lucknow of open cut operations (drill & blast, truck & shovel) at a rate of 250,000tpa with processing using third party acid for 50-65 million tonnes per annum (Mtpa) of scandium oxide. Stage 2 to comprise up to 1 million tonnes per annum (Mtpa) open cut mining of deposits at Greenvale, Kokomo & Lucknow for 40,000tpa scandium oxide plus 7000tpa nickel-cobalt concentrate/ingots. Construction of a high pressure acid leach (HPAL) processing plant at Greenvale along with associated sulphuric acid plant, residue storage facility & 15-18MW steam turbine power station. Other infrastructure expected to include stockpiles, sediment catchment dam, evaporation ponds, waste rock dumps & waste facilities. Workshops, warehouses, stores (hydrocarbons, chemical) & office facilities. Light vehicle access roads & heavy vehicle haul roads.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
4201149 INASLEIGH JOINT VENTURE COPPER PROJECT		RESOURCE - copper	Adjacent to the Township of EINASLEIGH	\$122m	Early Planning
Consultant AUSNORTH CONSULTANTS	Contact CONSOLIDATED TIN MINES LIMITED	Developer CONSOLIDATED TIN MINES LIMITED	Developer WANGUO INTERNATIONAL MINING GROUP		

Project Detail

Based on a Mineral Resource estimate of 8Mt at 3.93% Zn (314,900t Zn), 1.52% Pb (121,700t Pb), 0.018 Cu (14,200t Cu) & 35.6g/t Ag (9.17Moz Ag). The initial phase of the operation is now expected to produce 100,000 tonnes of copper, 25,000 ounces of gold, & 3.5 million ounces of silver over a seven year period, followed by production of 42,000 tonnes of zinc, 25,000 tonnes of lead & 2.2 million ounces of silver over 2 years. Capital costs are \$108 million for the copper stage followed by \$14 million for the later zinc-lead stage. Infrastructure to include underground portal or shaft access, tailings dam, haul/access roads, ROM pad, process plant mine workshop & associated buildings, waste rock dump & water storages.

MESCA Project Updates

Queensland

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
6854137 BURDEKIN SOLAR FARM		SOLAR FARM	Ayr Balbeg Rd (Lot 22 GS1042) CLARE	\$280m	Development Approval
Consultant (Environmental) RPS (FORMERLY CONICS (TOWNSVILLE) PTY LTD)	Developer CLEANGEN				

Project Detail

Construction of a 140MW Solar PV Farm. Site office & facilities. Associated landscaping.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
6903015 PENTLAND BIO ENERGY PROJECT		ENERGY FACILITY	Pentland PENTLAND	\$564m	Tenders Called/Regs Advertised
Developer RENEWABLE DEVELOPMENTS AUSTRALIA PTY LTD					

Project Detail

The Pentland Bio Energy project involves the construction of a purpose-built, fully integrated, energy self-sufficient bio-ethanol production facility on 66,152 hectares of land at Pentland (50 km south-west of Charters Towers). To include construction of farm infrastructure. Sub-contractor packages include civil works including roadworks, concreting, pipe laying, dam construction, site grading & preparation works. Farm development. Bore drilling & construction. Potable water treatment plant. Sewerage treatment plant. Oily water treatment plant. Farm fuel tanks. Design & construct structural steel buildings. Irrigation pipe supply & installation. Electrical, communication & fire engineering services. Security fencing. It is estimated around 190 million litres of high grade bio-ethanol will be produced through first generation processing at this facility.

MESCA Project Updates

Queensland

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>6979557 NORTH ARAMARA ROAD SOLAR FARM</p>		SOLAR FARM	3341 North Aramara Rd (Lot 128 LX4449 & Lot 129 LX2172) ARAMARA	\$280m	Contract under negotiation
<p>Consulting Engineer ENGINEERS PLUS</p>	<p>Developer ECO ENERGY WORLD</p>				

Project Detail

Installation of 140MW solar pv farm across the 326ha. Construction of substations. Galvanised steel. Associated civil & construction works.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
6992300 WESTERN SURAT GAS PROJECT		RESOURCE - gas	30km Northeast of ROMA	\$100m	Site Preparation in Progress
Contractor WASCO (AUSTRALIA) PTY LTD	Developer SENEX ENERGY LTD	Operator SENEX ENERGY LTD			

Project Detail

A project that will involve the extraction of natural gas from coal seams over an area of approximately 993sq km. The proposed development will comprise development of a gas field & involves the staged drilling of up to 1000 wells & the construction & operation of supporting infrastructure over a period of approximately 30 years.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7036619 COLUMBOOLA SOLAR FARM		SOLAR FARM	290 Kerwicks Rd (Lots 70 & 71 on BWR159) COLUMBOOLA	\$300m	Development Approval
Developer LUMINOUS ENERGY PTY LTD					

Project Detail

Construction of a 300 megawatt Public Utility (Solar Farm) in 3 stages, approximately 100 megawatts each (310MW) to comprise installation & operation of ground mounted solar plant that will utilise photovoltaic modules to generate electricity, inverters & transformers. The project will generate approximately 640,000MWh of electricity per annum meeting the needs of approximately 110,000 homes annually. The solar farm will be built around Ryalls and Kerwicks Roads, approximately 10 kilometres from Miles.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7069730 MIRANI SOLAR FARM		SOLAR FARM	between Gargett & MIRANI	\$110m	Development Approval
Developer ESCO PACIFIC					

Project Detail

Construction of a solar farm with an output measuring 60 megawatts. The solar farm to cover 173 hectares & comprise 180,000 solar photovoltaic modules. The solar panels to installed on ground mounted frames that will track the daily movement of the sun. Attached power conversion units within the site will feed AC electricity into onsite power reticulation system before its dispatched to the local electrical distributor.

MESCA Project Updates

Queensland

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7069735 KOBERINGA SOLAR FARM		SOLAR FARM	between Home Hill & Bowen KOBERINGA HOME HILL	\$100m	Development Approval
Developer ESCO PACIFIC					

Project Detail

Construction of a solar farm with an output measuring 55 megawatts. The solar farm to cover an area of 144 hectares & to comprise approx 160,000 solar photovoltaic modules. the solar panels to be installed on ground mounted frames that will slowly track the sun.

MESCA Project Updates

Queensland

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7069791 ROLLINGSTONE SOLAR FARM		SOLAR FARM	north of Townsville ROLLINGSTONE	\$210m	Development Approval
Developer ESCO PACIFIC					

Project Detail

Construction of a solar farm on 190 hectares & to comprise approx 400,000 solar photovoltaic modules. The solar panels to be installed on ground mounted frames.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7078885 SCONI SCANDIUM COBALT & NICKEL PROJECT - PROCESSING PLANT		PROCESSING PLANT & INFRASTRUCTURE	South of GREENVALE	\$1.14b	Feasibility Study
Consultant (Definitive Feasibility Study) SRK CONSULTING	Developer AUSTRALIAN MINES LIMITED				

Project Detail

For the provision of a 2Mtpa processing plant.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7088919 SOLARQ LOWER WONGA SOLAR FARM STAGE 1		SOLAR FARM - stage 1	Dray Rd, Wide Bay Hwy, 5, 77 & 193 Phillips Rd LOWER WONGA	\$100m	Development Approval
Civil Engineer TMM GROUP PTY LTD	Developer BORDSTRONG DEVELOPMENTS PTY LTD				

Project Detail

Construction & operation of a 350 Megawatt, photovoltaic (PV) solar plant to include arrays of solar modules & cabling, inverter transformers, internal maintenance roads & tracks, underground & overhead high voltage conductors, high voltage substation, site based energy storage location & lay down area, operations & administration building, maintenance & storage building & road access. Associated car parking & landscaping.

MESCA Project Updates

Queensland

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>7097679 CLARE II SOLAR FARM DEVELOPMENT</p>		SOLAR FARM	Mitchell Rd (Lots 1 & 249 GS1035) CLARE	\$100m	Development Approval
<p>Developer FRV SERVICES AUSTRALIA PTY LTD</p>					

Project Detail

Construction & operation of a 45MW solar farm utilizing PV modules. Associated car parking & landscaping.

MESCA Project Updates

Queensland

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7136821 DINGO SOLAR FARM		SOLAR FARM	339 Oaklea Rd (Lot 14 HT8) DINGO	\$100m	Development Approval
Developer ESCO PACIFIC					

Project Detail

Proposed construction of renewable energy facility to include solar farm. Associated car parking & landscaping.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
290889 KEPCO BYLONG COAL PROJECT		RESOURCE - coal	Bylong Valley Way BYLONG	\$100m	Development Application
Consultant PARSONS BRINCKERHOFF AUSTRALIA PTY LTD	Consultant RUNGEPINCOCKMINARCO PTY LTD (FORMERLY MINARCO-MINECONSULT)	Developer KEPCO AUSTRALIA PTY LTD	Project Manager ADVISIAN		

Project Detail

Development of an initial open cut mine (2 pits using excavators, trucks) followed by underground operations (longwall, drifts, ventilation facilities, workshop, offices, amenities, water & gas management facilities) to recover 124 million tonnes (Mt) of ROM coal at a combined rate of 6.5 Mt per annum for 25 years. Associated haul roads, overburden emplacement areas, coal handling & preparation plant (CHPP), dewatering, rail loop & loadout, road upgrades & relocations, water management, (pipelines, pumping stations, diversion drains, dams) & accommodation facility.

MESCA Project Updates

New South Wales

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1820708 BIALA WIND FARM		WIND FARM	Gunning Rd BIALA	\$192m	Contract under negotiation
Consultant GARRAD HASSAN PACIFIC PTY LTD	Developer BEIJING JINGNENG CLEAN ENERGY (AUSTRALIA) HOLDING PTY LTD (BJCE)	EIS Consultant ERM AUSTRALIA PTY LTD			

Project Detail

Construction, operation & maintenance of up to 31 wind turbine generators (WTG's) & associated infrastructure across the project area, including a central electrical substation, electrical connections between WTGs & the on-site substation; permanent maintenance & operations facility, internal access roads, monitoring masts, temporary site offices, storage & car parking facilities; temporary concrete batching plant & other on-site structures & road upgrades as required

MESCA Project Updates

New South Wales

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>6916930 GOONUMBLA SOLAR FARM PROJECT</p>		SOLAR FARM	60 Millers Lookout Rd, 10k west of PARKES	\$223m	Development Approval
<p>Developer FRV - FOTOWATIO RENEWABLE VENTURES</p>	<p>EIS Consultant GEOLYSE PTY LTD</p>				

Project Detail

Construction, operation and reconstruction or decommissioning of a solar photovoltaic plant up to 70 MWac. The 70 MW electricity generation works will comprise solar photovoltaic modules, steel racking & piled supports, electrical transformers & inverters, electrical cabling, telecommunications equipment, an electrical control room, site substation & perimeter fencing. The farm may also include an electrical storage system which would include batteries housed in electrical enclosures. Associated infrastructure, including a grid connection.

MESCA Project Updates

New South Wales

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7021217 HAY SOLAR FARM		SOLAR FARM	Sidonia Rd HAY	\$120m	Development Approval
Developer OVERLAND SUN FARMING COMPANY PTY LTD	EIS Consultant EMM CONSULTING				

Project Detail

Development of a large-scale solar photovoltaic (PV) generation facility and associated infrastructure with an estimated capacity of 100 megawatts (MW). The project comprises a network of PV solar panel arrays, electrical collection systems, switchyard and control room, a management hub, including demountable offices and amenities and equipment sheds, internal access roads, and connection infrastructure to the Hay 132 kV Substation. Car parking.

MESCA Project Updates

New South Wales

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7100082 VALES POINT SOLAR PROJECT		SOLAR FARM	Off Vales Rd MANNERING PARK	\$117.15m	Development Approval
Developer DELTA ELECTRICITY	EIS Consultant JACOBS GROUP PTY LTD				

Project Detail

Construction of an up to 55 megawatt (MW) capacity solar facility delivering an annual output of approximately 95 gigawatt hours (GWh). Installations of approximately 220,000 solar panel modules supported by either steel piles or concrete ballasted footings. Approximately 12 Integrated inverters/transformer units comprising twin 2.75 Mega Volt Amp (MVA) 1500V technology inverters in 5.5 MW Power Conversion Station (PCS) block dispersed throughout the solar development footprint. PCS block dimensions of up to 12.2 metres long, 2.5 metres wide & 2.9 metres tall if containerised. 600 metre, mainly overhead, 33 kV transmission line to the existing 33 kV Vales Point Substation with an option for some underground cabling crossing beneath Ruttleys Road using existing pipeline culvert. Compound including construction office, crib sheds & amenities block, laydown area. car parking areas.

MESCA Project Updates

New South Wales

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7126824 GUNNEDAH SOLAR FARM		SOLAR FARM	765 Orange Grove Rd GUNNEDAH	\$201m	Development Application
Developer PHOTON ENERGY ENGINEERING AUSTRALIA PTY LTD	EIS Consultant KMH ENVIRONMENTAL				

Project Detail

Development of a 155 MW solar farm and associated infrastructure. Solar components including: up to 460,000 PV panels on mounting structures. Electrical connections & inverter stations (where the inverters are within containers at the end of solar PV rows). Underground cabling/collection circuits. Electrical infrastructure including transmission kiosk. 132kV Substation. 33kV switchgear. Ancillary works on the existing 132kV transmission line adjacent the site. An access road. Ancillary facilities & construction compounds. Perimeter security fencing. Two maintenance storage containers. Construction site offices. Car parking area.

MESCA Project Updates

New South Wales

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7144342 SAPPHIRE SOLAR FARM		SOLAR FARM	30km east of INVERELL	\$220m	Contract under negotiation
Developer CWP RENEWABLES PTY LTD	EIS Consultant ECO LOGICAL AUSTRALIA PTY LTD				

Project Detail

Development of a 200MW utility scale solar farm comprised of solar photovoltaic (PV) modules, steel racking & piled supports, electrical transformers & inverters, electrical cabling, telecommunications equipment, security fencing, a site office, maintenance building & car park facilities. Development of associated infrastructure including grid connection & battery storage.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1558666 DUNDONNELL WIND FARM		WIND FARM	Post Office Ln, Nerrin Rd DUNDONNELL	\$65m	Development Approval
Consultant NEWEN AUSTRALIA	Developer TILT RENEWABLES AUSTRALIA PTY LTD				

Project Detail

Development of Dundonnell Wind Farm. Dundonnell Wind Farm project is approximately 25km northeast of Mortlake, in the Western District of Victoria. The wind farm is to comprise up to 96 wind turbines each with a capacity of up to 300MW over a 4,200ha site. Connection to the electricity grid & ancillary structures such as control room, operations & maintenance buildings, substation & access tracks. The proposed wind turbines would have an overall height of up to 165m. An electricity grid connection is proposed between the wind farm & the 500kV transmission line at or in the general vicinity of the Mortlake Power Station, approximately 33km to the south-west of the site. A site access road is also proposed to connect the Woorndoo-Streatham Road to the site.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1857948 MURRA WARRA WIND FARM		WIND FARM	Minyip-Dimboola Rd MINYIP	\$650m	Construction
Contractor DOWNER GROUP	Developer RES AUSTRALIA PTY LTD (RES SOUTHERN CROSS)				

Project Detail

Construction of a 116 turbine wind farm, road & associated infrastructure. The wind farm will be located over a 32 square kilometre site north of Horsham encompassing Horsham Rural City & Yarriambiack Shire. It will be located west of the Henty Highway, adjacent the Minyip Dimboola Road. The wind farm may host up to 100 turbines. Energy generated from the farm would connect to the 220 kilovolt national electricity grid line between Horsham & Mildura. Components of the proposed development include: 1) Up to 116 Turbines with hardstands; 2) Height to tip of the blade at its highest point up to 220m; 3) 75km of internal track & local road improvements; 4) Temporary on site quarry to reduce heavy vehicle movement on local roads; 5) Terminal station to connect to the 220 KV grid network; 6) Operations & maintenance building with car parking; 7) Most internal cabling will be underground however there could potentially be up to 15 km of overhead line within the wind farm; 8) Up to four permanent meteorological masts; & 9) Up to three temporary site compounds & concrete batching plant facilities.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7104881 YENDON HIGH PURITY ALUMINA PROJECT		RESOURCE - high purity alumina	Near BALLARAT	\$271m	Feasibility Study
Consultant (Pre-Feasibility Study) PRIMERO GROUP PTY LTD	Consultant (Pre-Feasibility Study) SRK CONSULTING (MELBOURNE)	Developer PURE ALUMINA LTD (FORMERLY HILL END GOLD LTD)			

Project Detail

Based on a maiden resource estimate of 3.68Mt of in-situ kaolinized material. Shallow open pit mine design with low stripping ratios, which can be efficiently contract mined without blasting, crushing or grinding. 50km of internal access tracks. Two permanent anemometry masts up to 100m high; approximately 43.4km of underground cabling between the turbines & a terminal substation.

MESCA Project Updates

South Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
6957545 ADANI SOLAR FARM WHYALLA		SOLAR FARM	165 Industry Dr, Whyalla Barson via WHYALLA	\$250m	Development Approval
Consultant CDM SMITH	Developers ADANI GROUP / ADANI INFRASTRUCTURE PTY LTD	Project Director CDM SMITH			

Project Detail

Construction of a 160MW solar farm & associated infrastructure including: 1) Blocks of tracker solar photovoltaic arrays; 2) Inverter stations (one per block); 3) Substation with electricity grid connection; 4) Operational compound comprising a site office, parking spaces, ablution block with onsite sewage treatment plant, waste storage area, storage container; 5) Internal & perimeter access tracks; 6) Extension of Industry Drive including a culvert; & 7) Security fencing. The Project site is bound by the Whyalla Conservation Park to the north, Lincoln Highway to the east, Mount Laura Conservation Reserve to the west & industrial areas to the south. The Project area, which is approximately 396.5 hectares (ha) in size, is located in an area wholly zoned as industrial under the Whyalla Development Plan 2016 (the Development Plan).

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7131180 SNOWTOWN NORTH SOLAR FARM		SOLAR FARM	Wokurna Rd & Hewitt Rd, Wokurna via SNOWTOWN	\$100m	Development Approval
Civil Engineer WALLBRIDGE GILBERT AZTEC (WGA)	Developer TILT RENEWABLES AUSTRALIA PTY LTD				

Project Detail

Proposed construction of a solar farm on a 100ha site to include up to 44MW solar panels approximately 180,000 panels. Battery storage of up to approximately 26 MW. Supporting infrastructure, with associated inverters & transformers, operations & maintenance building, battery storage area, security fencing & internal access tracks & carparking. This site is alongside the existing Snowtown Stage 1 Wind Farm substation.

MESCA Project Updates

South Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7134036 AURORA SOLAR ENERGY PROJECT		SOLAR THERMAL FARM	236 Corraberra Rd, 2310 Stuart Hwy, PORT AUGUSTA	\$650m	Contract under negotiation
Developer Developer					

Project Detail

Construction of a solar thermal power plant near Port Augusta. The 150MW plant would feature about 12,000 billboard sized mirrors measuring 100 sq m arranged in a circle over an area of about 800 ha. The plant to be built about 30km north of the town on state-owned land, will be able to store between eight & ten hours of energy so it can operate when the sun is not shining. The mirrors will focus light & heat at the top of a 227m tower. The mirrors & tower will be assembled on site (although some parts may be imported). The design is based on a successful solar thermal power plant in the Nevada USA. The project site is located approximately 30km north of Port Augusta on the Stuart Highway. The site is not within a Council area but is close to the Port Augusta Council boundary & is within the SA Arid Lands Natural Resource Management area.

MESCA Project Updates

South Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7139589 RIVERLAND SOLAR & STORAGE PROJECT		SOLAR FARM & BATTERY STORAGE FACILITY	278 Nilkalapko Rd, Stuart via MORGAN	\$700m	Development Approval
Consultant ESG & CARBON SERVICES	Developer LYON GROUP				

Project Detail

Operational facilities include a site office, parking area, maintenance building, ablution block, rainwater tanks, materials laydown area, undercover storage area & waste storage area. Site access points would be established on the Morgan-Renmark Road & the Woods & Forests Road. Internal access tracks would be constructed, including around the perimeter fence line. A security fence (comprising a 2.5m high chain link fence) & security gates would be installed around the perimeter of the site.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
602488 LAKE DISAPPOINTMENT POTASH PROJECT		RESOURCE - potash	Off Talawana Track, 340km East of NEWMAN	\$302m	Development Application
Developer REWARD MINERALS LIMITED	Project Manager POTASH AUSTRALIA PTY LTD				

Project Detail

A project with an upgraded Resource Estimate of 564Mt high grade Potassium Sulfate (SOP) with an average brine grade of 13.7kg/m3 over exposed surface area of the lake. Project to include 400 000 tonne per annum Processing Plant. Access to the project from Newman is via the Marble Bar Road, Jigalong Road, Balfour Downs Road & then the Talawana Track to the project access road, Wiljabu Track which will require upgrading.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>626890 SOUTHDOWN MAGNETITE PROJECT</p>		RESOURCE - magnetite	South Coast Hwy cnr Gnowellen Rd, 10 km West of WELLSTEAD	\$2.4b	Development Application
<p>Consultant BMT JFA CONSULTANTS PTY LTD</p>	<p>Project Manager GRANGE RESOURCES LTD</p>				

Project Detail

Total upgraded Inferred & Indicated Resource is now 1,256.9 million tonnes @ 33.1% magnetite. A Measured Resource of 219.7 million tonnes grading 37.4% magnetite has been achieved with the total resource upgrade announcement. Mining is expected to be mined at 17 mtpa with a stripping ratio of 2.6:1.0. Ore will transported by a slurry pipeline to the Port of Albany for shipment overseas. The ore will be dewatered & stored in a facility at Port Albany. There will be a return pipeline in the same trench as the slurry pipeline. The infrastructure at the port is proposed to comprise a storage shed, filter plant, concentrate thickener tank & ship loader. The storage shed will stockpile 30,000 tonnes of ore per year. Dredging work at Port Albany will involve the existing channel & extending it to 8 km. The channel depth will be dredged from 12.3m to 15m. Part of the dredging work will be the construction of a new berth for iron ore exports & land reclamation of 7 hectares. The ore will be shipped to Malaysia where a pellet plant is to be constructed. Water will be sourced from ground water for the mine site. At Port Albany a proposal has been made to the Water Corporation for water requirements for the pipeline & dewatering process. It is estimated approx 2.3 GI will be needed of which waste water would provide up to 1.8 GI per year. Power supply will transported along a new 132 kv transmission line from Muja to Kojonup & then to Southdown. Power will be needed for the mine & concentrator operation.

MESCA Project Updates

Western Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>642129 CASTLE HILL GOLD PROJECT</p>		RESOURCE - gold	45km north-northwest of COOLGARDIE	\$106m	Development Approval
<p>Developer EVOLUTION MINING LTD</p>					

Project Detail

A project based on a Resource Estimate of 30.9 million tonnes (Mt) containing 1.59 million ounces (Moz) of gold. Stage 1 development to focus on the shallow Mick Adams-Kiora & Wadi deposits. Construction of a 2 Mtpa plant (2 stage crushing, SAG regrind circuit, recycle crusher, 6 x CIL tanks) followed by construction of a 2 Mtpa heap leach plant (3 stage crushing, pregnant solution pumped to milling circuit or treated in dedicated CIC column) & associated tailings storage facility to handle lower grade ore. Associated administration building, workshop, warehouse, reagents & fuel storage as well as water storage facilities. Initial development expected to utilise third party mill/s. Satellite deposits to be developed progressively on an as needs basis.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
653728 COBURN MINERAL SANDS PROJECT		RESOURCE - heavy mineral sands/zircon	West of COBURN & south of Denham Hamelin Rd Shark Bay Rd via HAMELIN POOL	\$180m	Development Approval
Consultant CHINA TRIUMPH INTERNATIONAL ENGINEERING COMPANY LTD	Developer STRANDLINE RESOURCES LTD	Managing Contractor GR ENGINEERING SERVICES (GRES)	Tendering Authority STRANDLINE RESOURCES LTD		

Project Detail

Based on an updated mineral resource estimate of 1.6Bt at 1.2% total heavy minerals. Two concentrators will be relocated as mining progresses northwards. A borefield will be constructed for water supply. Haul roads & access corridors will be constructed for ore transport. An accommodation camp, offices, workshops will be constructed. Infrastructure to be constructed include a power plant, reverse osmosis desalination plant, power lines & pipelines. Mining is proposed to be conducted open pit by bucket wheel excavators & in pit screening modules. Processing is expected to be 2200 tph for the first two years increasing to 4,400 tph in the third year. Tailings are expected to be 2180 tph for each 2,200 tph concentrator. The tailings will fill already mined open pits. Infill drilling will be conducted to upgrade some probable ore reserves. The mineral separation plant to be located at the mine.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>653806 BROWSE BASIN FLNG PROJECT</p>		<p>RESOURCE - gas - offshore</p>	<p>300km North of BROOME BROWSE BASIN</p>	<p>\$20b</p>	<p>Feasibility Study</p>
<p>Consultants AKER SOLUTIONS (WA) / FLUOR AUSTRALIA PTY LTD / MODEC INC</p>	<p>Developers BP AUSTRALIA PTY LTD / CHEVRON AUSTRALIA PTY LTD / JAPAN AUSTRALIA LNG (MIMI) PTY LTD / PETROCHINA PTY LTD / SHELL COMPANY OF AUSTRALIA LTD / WOODSIDE ENERGY LIMITED</p>	<p>Operator WOODSIDE ENERGY LIMITED</p>			
<p>Project Detail</p> <p>The project comprises Brecknock, Calliance & Torosa reservoirs. Construction of two floating production storage & offloading installations & an approximately 900km pipeline to transport gas to existing infrastructure.</p>					

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>687322 BARRAMBIE TITANIUM PROJECT</p>		<p>RESOURCE - iron ore/titanium/vanadium</p>	<p>Meekatharra Sandstone Rd cnr Colga Downs E Rd 160km SE of MEEKATHARRA</p>	<p>\$549m</p>	<p>Development Approval</p>
<p>Developer NEOMETALS LTD</p>	<p>Project Manager NEOMETALS LTD</p>				

Project Detail

A project based on an updated Resource Estimate of 280,1Mt at 9.18 TiO₂ & 0.44% V₂O₅. Life of Mine anticipated to be 19.6 years. Infrastructure to include Mine Wet Plant (MWP) treating 550,000tpa & producing 308,880 tonnes of magnetic concentrate which would be transported by road 834km to Kwinana in side tipping road trains, Chemical Processing Plant (CPP) at Kwinana treating 308,880 tonnes of magnetic concentrate, Accommodation Village, Aerodrome, Water supply borefield & pipeline, Gas supply & Power supply (dual fuel diesel/gas fired power station).

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>859866 SOUTHDOWN MAGNETITE PROJECT - SLURRY PIPELINE</p>		SLURRY PIPELINE	From Wellstead to Albany Port ALBANY	\$200m	Development Application
<p>Consultant (Project Review) AMEC MINPROC LTD (FORMERLY GRD MINPROC)</p>	<p>Developer (Port Infrastructure) PATRICK CORPORATION</p>				

Project Detail
 For the construction of a 100 km slurry pipeline.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
859917 SOUTHDOWN MAGNETITE PROJECT - RETURN WATER PIPELINE		RETURN WATER PIPELINE	From Wellstead to Albany Port ALBANY	\$200m	Development Application
Consultant (Project Review) AMEC MINPROC LTD (FORMERLY GRD MINPROC)	Developer (Port Infrastructure) PATRICK CORPORATION				

Project Detail

For the construction of a 104 km long return water pipeline.

MESCA Project Updates

Western Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>1204385 SPEEWAH DOME POLYMETALLIC PROJECT</p>		<p>RESOURCE - fluorite/iron ore/titanium/vanadium</p>	<p>Off the Great Northern Hwy, 100km South of WYNDHAM</p>	<p>\$2b</p>	<p>Early Planning</p>
<p>Developer KING RIVER COPPER LTD (FORMERLY SPEEWAH METALS)</p>					

Project Detail

Upgraded Resource Estimate of 4.7 billion tonnes at 0.30% vanadium & 2% titanium & 14.7% iron. Development of an open pit mining operation.

MESCA Project Updates

Western Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>1223121 BROCKMAN HEAVY RARE EARTH PROJECT</p>		<p>RESOURCE - rare earth/metal</p>	<p>15km SE of HALLS CREEK</p>	<p>\$700m</p>	<p>Early Planning</p>
<p>Developer HASTINGS TECHNOLOGY METALS LTD (FORMERLY HASTINGS RARE METALS LTD)</p>					

Project Detail

A project based on a Resource Estimate of 41.4 million tonnes (Mt) containing significant amounts of Dysprosium, Niobium, Yttrium & Zirconium. Open cut mining by conventional drill, blast, load, haul & dump methods for 25 years. New 1-1.5 Mtpa processing facilities producing rare earth carbonate or oxides expected to include a crushing plant, processing plant, sulphuric acid plant, power co-generation plant, solvent extraction plant, separation plants, waste recycling & tailings facilities.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>1273929 DUCHESS PARADISE COAL PROJECT</p>		RESOURCE - coal	20km S of Great Northern Hwy & 150km SE of DERBY	\$200m	Feasibility Study
<p>Developer REY RESOURCES LIMITED</p>					

Project Detail

A project with a P1-seam thermal coal Resource of 305.8 million tonnes (Mt) (in situ) & reserves of 26.3 Mt (run-of-mine, as received) which, after beneficiation, represents a 17.8 Mt marketable Reserves (ar) estimate, located on the Liveringa pastoral station focusing on the Duchess & nearby Paradise deposits. Initial slot-wall mining of shallow coal followed by underground operations at a rate of 2-2.5 million tonnes per annum (Mtpa) for 20 years. After processing through a coal handling & preparation plant (CHPP), coal from a product stockpile to go by road train to a stockpile near the Derby Export Facility. An upgraded conveyor system & shiploader to load barges for transshipment to ships anchored in King Sound. Associated infrastructure to include topsoil & temporary overburden stockpiles, light vehicle & haul roads, magazine, ammonium nitrate store, temporary surface rejects storage, offices, workshops, fuel storage & power plant, airstrip & camp. Water to come from dewatering activities supplemented by borefields.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>1316035 CYCLONE JOINT VENTURE HEAVY MINERAL SANDS PROJECT</p>		<p>RESOURCE - heavy mineral sands/zircon</p>	<p>220km north of FORREST</p>	<p>\$135.67m</p>	<p>Development Approval</p>
<p>Developer (Preferred) PERPETUAL MINING HOLDING</p>	<p>EIS Consultant SUSTAINABILITY</p>	<p>Project Manager LOST SANDS PTY LTD</p>			

Project Detail

A project based on an upgraded Resource Estimate of 211 Mt containing 2.3 % heavy minerals at 4.8 Mt & 1.2 Mt Zircon. Open cut mining to 40m deep at a rate of 10Mtpa over a 13.2 year mine life. The average annual production of HMC is projected at 147,700 tonnes. A wet processing plant fed from the workings by a slurry pipeline & surge bin to produce 65,000tpa zircon, 46,000tpa HiTi67 (67.3% TiO2) & 10,000tpa HiTi87 (86.6% TiO2). This concentrate to be pumped to a stockpile before being trucked to Forrest or Loongana for railing to a seaport where it will be stored in containers prior to bulk shipping to an overseas mineral separation plant. Associated infrastructure to include office & workshop, tailings storage facilities, water storage, accommodation camp & airstrip along with an access & haul roads. Water supply likely to come from a deep aquifer within the Murnaroo Formation of the Officer Basin involving a borefield & pipeline.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1550250 EQUUS GAS FIELDS DEVELOPMENT PROJECT		RESOURCE - gas	180km North of EXMOUTH	\$150m	Early Planning
Developer WESTERN GAS					

Project Detail

16 exploration wells prospective for natural gas.

MESCA Project Updates

Western Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1662814 WA-481-P NORTHERN PERTH BASIN JOINT VENTURE OIL & GAS PROJECT		RESOURCE - oil/gas	Offshore between JULIEN BAY & GERALDTON	\$107m	Early Planning
Developer KEY PETROLEUM LTD	Developer PILOT ENERGY LTD (FORMERLY RAMPART ENERGY LTD)	Project Manager MURPHY AUSTRALIA OIL PTY LTD			

Project Detail

Following seismic surveys, planned drilling of 3-4 exploration wells to be followed with up to 4 appraisal wells if found warranted. Drilling to be located 38km approx from the Western Australia coast in waters 50-350m deep & using a semi-submersible / jack-up mobile offshore drilling unit (MODU) with up to 3 support vessels.

MESCA Project Updates

Western Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1829335 TAMPIA HILL GOLD PROJECT		RESOURCE - gold	Via Emu Hill Rd, 12km SE of NAREMBEEN	\$119m	Feasibility Study
Consultant (Independent Report) BDO AUSTRALIA	Developer (100% & 90%) EXPLAURUM LTD (FORMERLY ERONGO ENERGY LTD)				

Project Detail

A project based on an updated Resource Estimate (Inferred) of 11.3 million tonnes (Mt) grading 1.91g/t Au (cut) containing 695,500 oz/Au. Proposed single open pit mining operation with a standalone processing plant designed for treatment of 1.5Mtpa. The project will have an initial mine life of 5.3 years.

MESCA Project Updates

Western Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
6212855 KOODAIDERI IRON ORE PROJECT		RESOURCE - iron ore	40km east of Great Northern Hwy & northwest of NEWMAN	\$2.9b	Development Approval
Consultant CALIBRE GROUP	Developer RIO TINTO LIMITED	Project Manager HAMERSLEY IRON PTY LTD			

Project Detail

Construction of a 70 million tonne a year iron ore mine & associated infrastructure. To include a rail connection with the existing freight rail network.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
<p>7065570 MERREDIN SOLAR FARM STAGE 1</p>		SOLAR FARM - stage 1	Lot 194 Robartson Rd, & Lot 19444 Bruce Rock- Merredin Rd MERREDIN	\$160m	Development Approval
<p>Civil Engineer RCR-O'DONNELL GRIFFIN</p>	<p>Developer RISEN ENERGY</p>				

Project Detail

Construction of a 120MV solar farm on land about 5 kilometres south south west of Merredin town site. The solar farm will have a generation capacity of approximately 120MW (AC) via the use of between 360,000 & 400,000 tracking solar panels & associated infrastructure including: 1) Photo Voltaic modules; 2) Piles & Framework; 3) Inverters (& associated housings); 4) Transformers (& associated housings); 5) Substations (including circuit breakers & metering); 6) Underground cabling; 7) Overhead wires; 8) Perimeter fence; 9) CCTV (at entrance & adjacent to substations); 10) Battery storage; 11) Spares storage building; & 12) Maintenance compound. Part of the initial development includes some temporary development on site that will be required during the construction phase of the project. This includes the development of a construction compound & two or three site offices. The site offices spread across the site are likely to include meeting room, lunch room, amenities & ablution facilities.

MESCA Project Updates

Western Australia

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
7091758 CADOUX KAOLIN PROJECT		RESOURCE - kaolin	220km Northeast of PERTH	\$246.8m	Feasibility Study
Consultant (Mine Design) ORELOGY PTY LTD	Developer FYI RESOURCES LIMITED (FORMERLY FREEDOM EYE)	Engineer GR ENGINEERING SERVICES (GRES)			

Project Detail

A project based on an updated Resource Estimate of 16.1Mt at 11.76% Al. Construction of a conventional open cut high purity alumina production operation with a production capacity of 8,000 tonnes per annum through the beneficiation of kaolin into concentrate & then refining the concentrate into high purity alumina. Infrastructure to include processing infrastructure, earthworks, fencing, plant buildings, offices, power generation, plant piping, water storage/supply, laboratory.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1345749 CATTLE HILL WIND FARM		WIND FARM	Near Lake Echo BOTHWELL	\$300m	Construction
Construction Manager GOLDWIND AUSTRALIA PTY LTD	Developer AURORA ENERGY				

Project Detail

Construction of 49 wind turbines each with a potential capacity of up to 144MW. The development will increase the capacity of wind generation in the state by nearly 50 per cent.

Project ID & Title		Project Type	Project Address	Estimate Value	Project Stage
1432298 HEEMSKIRK TIN PROJECT		RESOURCE - tin	24km NW of QUEENSTOWN	\$114m	Early Planning
Developer STELLAR RESOURCES LIMITED					

Project Detail

A project based on a Resource Estimate (Indicated & Inferred) of 6.3 million tonnes (Mt) for 71,500t contained tin & a mineral Resource Estimate of 2.26 Mt @ 0.61% tin, 23% iron & 0.04% tungsten at St Dizier. Open cut & underground mining at a rate of 600,00tpa for 3900t of tin concentrate for a life-of-mine of over 7 years. Open cut operations at the shallow Queens Hill deposit to potentially include recovery of silver & lead from historical mining & stope fill. Simultaneous cut & fill underground mining of the Queen Hill, Montana & Severn deposits with 3 separate declines serviced by a single portal. First stage processing plant to include crushing, pre-concentration using heavy media & grinding. Subsequent processing to include sulphide flotation, gravity separation, desliming, tin flotation & acid treatment to produce a 50% tin concentrate.