



# HAUL ROADS SET FOR BIG FUTURE IN WA'S EMERGING IRON ORE POWERHOUSE

THE YILGARN IRON PROVINCE (YIP) IS AUSTRALIA'S THIRD BIGGEST IRON ORE REGION FOLLOWING BEHIND THE PILBARA AND MID WEST OF WA. AND WITH MINDAX LTD ANNOUNCING IN MID APRIL TO THE ASX THAT THEIR MT FORREST PROJECT CONTAINS 1.48 BILLION TONNES OF IRON ORE MAKING IT THE BIGGEST JORC COMPLIANT RESOURCE IN THE YIP, TRUCKS AND HAUL ROADS LOOK LIKE SEEING PLENTY OF ACTION IN THE NOT TOO DISTANT FUTURE.

The Province extends from Wiluna to Koolyanobbing near Southern Cross and 150 km west of the Leonora-Kalgoorlie-Esperance Rail to port infrastructure.

The YIP is already an established iron producer with approaching 12

Million tonnes per annum of Direct Shipping Ore (DSO) being exported by Cliffs Natural Resources.

Cliffs Koolyanobbing Iron Ore Project consists of three mine sites, Koolyanobbing, Mt Jackson and Windarling about 425 kilometres east of Perth.

Ore is hauled from these sites about 80 km by road train to Koolyanobbing for processing. All of the processed ore is transported by rail east along the Trans line to Kalgoorlie and then to the Port of Esperance, 578 kilometres to the south.

With about over 15 Billion tonnes of iron ore identified in the YIP including Potentially Beneficial Magnetite and DSO hematite ores, the Province is seeing many companies exploring the region and turning their attention to export using the

haul road to rail model which is much cheaper than a pure rail solution.

David Utting of David Utting Communications who specialises in mining consultancy explains that all that is required in the YIP is incremental infrastructure upgrades rather than a big new Greenfields spend.

Active working with iron explorers in the YIP, Mr Utting said production and processing costs are two key issues.

Mr Utting said magnetite economics is a poorly understood issue.

"It is not as pure as DSO iron but there is plenty of it and it can be processed to bring it to a purity that is very attractive to steel mills."

"With iron ore selling at about \$180 per tonne currently, magnetite can be processed up and delivered to the port at about \$60 per tonne – more costly than Direct Shipping Ore by a big factor but none-the-less still very profitable."

One of the factors that mark the YIP as a growth area is that there is already existing infrastructure. Rail to the port of Esperance is operational and haul roads can feed that rail.

"The infrastructure is there in the form of the port at Esperance and rail connecting from the port to the trans line near existing ore and to Menzies, near where big scale mining is set to start with the likes of Mindax's Mt Forrest ahead of the pack."

"The infrastructure is imperfect but it is there and it's state owned and independently managed, leading to easier access issues than with the Pilbara," Mr Utting said.

And the State Government is showing keen interest. In March Regional development Minister Brendon Grylls announced a \$120m worth of work to upgrade road and rail access to the Port within the town site, which will remove the single biggest bottleneck restricting the expansion of the Port of Esperance.

Also, the YIP has a real advantage because the potential mine sites are close by leaving open the option of shared infrastructure including haul roads and rail."

"Having a concentration of prospective mines in such a small area would allow a new 160 km haul road and eventually a rail spur from Menzies to serve five or so mines," Mr Utting said.

"Mindax's billion and a half tonne Mt Forrest project in the northern YIP is the biggest and most advanced, they are clearly the key player."

In the north YIP, Mindax, Cliffs Natural Resources, Hawthorn Resources, Polaris Metals and Fe ltd would all benefit from a new haul road or rail line from Menzies



to Mindax's Mt Forrest. With rail costing between \$1 to \$2 million a km, a cheaper option is for a haul road to transport DSO material with rail being built later to ship magnetite.

"These companies are in the box seat – they are shaping up to have some Direct Shipping Ore of around 60% purity to kick-start their new operations and also sit on mountains of magnetite of around 30% to 35% purity.

Mindax is evaluating options for a new 160km haul road, rail spur or slurry pipeline from the Menzies rail head to Mt Forrest along its transport corridor and many other companies will be watching and wanting access as well.

"Sitting on a billion and a half tonnes of magnetite Mindax can produce and export a very desirable sinter or pellet product of about 70% purity and they have DSO to kick-start their operation," Mr Utting said.

There ore is better quality than most because it is soft and requires only a course 40 micron grind.

"This is a key element in the economics of magnetite – the more grinding, the more power and the less economic it is but with Mindax a 40 micron grind is all that is required compared to some needing 25," he said.

Some companies don't make clear what grind is required which is a questionable practice.

"Also with a 30 year plus mine life, Mindax can guarantee very long term supply of a high quality, unchanging product – very desirable for steel mills indeed."

"Magnetite is the next big thing as the amount of DSO available dwindles with the DSO being increasingly hard to source."

Mindax's Mt Forrest is set to export initially about 10 million tonnes per annum of processed magnetite.

"Mindax is a very careful minerals explorer and they use the same meticulous approach when assembling the bits of infrastructure for mining and export."

"They are the area's leader with leases for a transport corridor to the Menzies railhead and negotiations with rail, port

and other infrastructure partners are well advanced.

"Mindax is the quite achiever, well ahead of the pack in infrastructure planning and they are distinguished by a realistic timeline to mining in 2015."

Ports minister Troy Buswell announced last in March that Esperance port would go ahead with a \$300m upgrade to take it from 12mtpa to about 35mtpa within a couple of years.

"The State Government recognises the significant growth opportunities that are present for the Esperance Port," Mr Buswell said.

"I have now given approval for the Port to proceed with the development of detailed plans to support this expansion," said Mr Buswell.

A helpful state Government and player like Mindax are a combination that will bring the YIP to life as a new iron ore province. ■

**The YIP has a real advantage because the potential mine sites are close by leaving open the option of shared infrastructure including haul roads and rail**

**Mt Forrest Project contains 1.48 billion tonnes of iron ore making it the biggest JORC compliant resource in the YIP, trucks and haul roads look like seeing plenty of action in the not too distant future**

