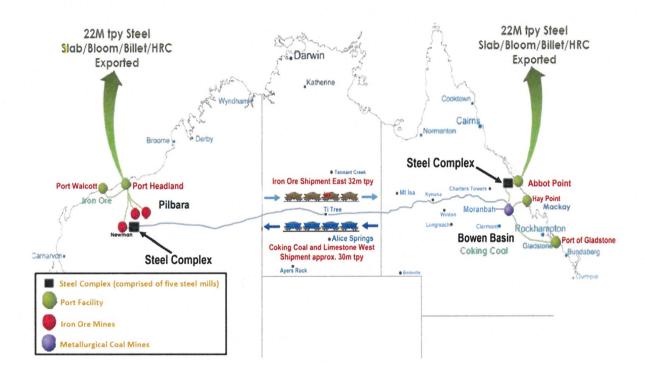


What is Project Iron Boomerang?

Project Iron Boomerang is an integrated steel, rail, intermodal and port project, with a multipurpose corridor beside the railway providing water, power & internet to regional communities.

The project other than the multi-purpose corridor function upgrade, is fully-funded and just needs Government approval. This will be Australia's largest infrastructure investment, consisting of:

- 1. A 3,300km trans-continental railroad with heavy-duty axle capacity, connecting existing rail networks in the iron ore region of Western Australia to existing rail networks in QLD;
- 2. Iron ore will be transported from west to east, and those carriages then back-loaded with coal to transport to Western Australia hence the 'boomerang' in the name;
- 3. Steel parks at either end will turn the iron ore and coal into steel slabs, which are then exported from Abbot Point in Queensland and the Port Hedland in WA;
- 4. Fibre-optic, water and electricity cables along the alignment will deliver modern services to remote communities across the top end;



An unbeatable competitive advantage

PIB will produce steel 10% - 15% cheaper than China, making Australian steel the cheapest and highest quality steel in the world.

This is why: currently iron ore is extracted in Western Australia and loaded on to trains, which deliver the ore to port. Those trains return empty. Ore is loaded onto ships which take the ore to their overseas destination, which then return empty.

Coal is exported from the east coast in the same way. This style of shipping burns around 6000 litres of heavy fuel oil an hour, which generates pollution no matter your belief or otherwise in the CO2 issue.

On arrival at the destination port, ore and coal is loaded onto trains for the trip to the smelter, and once again return empty.

This whole process is economically wasteful and environmentally damaging.

PIB would change that workflow. PIB trains would carry ore one way and coal the other, with smelting located at either end. This means there is no empty transport movement, no heavy shipping and a faster time from mining to smelting.

While a ship could achieve the same trip, the additional loading/unloading and transit times would defeat the economic benefit of the project.

Steel parks at either end are funded. EWLP are holding firm expressions of interest from some of the world's leading steel manufacturers, all of whom see the obvious benefit in Iron Boomerang. This in turn means realising the additional \$100bn+ p.a. of steel sales is implicit in their investment.

The railway is funded. This is using a combination of equity investment and loan facilities.

The only Government money required is for the final planning stage. This is only necessary because nobody trusts the Government anymore. Once the Government puts their \$240m share 'where their mouth is' then stakeholders will have the confidence to make their investments. That is sad, then again we only have ourselves to blame. This \$240m can be taken as a loan or equity. Taxpayers will not pay a cent.

Iron Boomerang rail line will be profitable from day one. There is substantial interest in using the line and more potential customers are coming forward every day.

Australia stands to gain \$100bn in additional steel sales in the first stage of the project – 5% increase in our GDP. With the world steel market valued at \$1.8tn (trillion) and Iron Boomerang steel becoming the cheapest and highest quality steel, produced at a lower environmental cost than any other country, the capacity for growth in the Australian economy is much more than just 5%.

Iron Boomerang will drive Australian economic development for a century.

This project is not unique, the 1,440km Tarcoola-Darwin railway was completed in 5 years at a cost of \$1.2bn across similar terrain.

What about net zero?

Every slab of steel produced in Australia produces lower emissions than steel made elsewhere. Transport represents 37% of greenhouse gas emissions, PIB will reduce that figure by taking thousands of ship movements off the water, and by taking diesel train movements off rail.

In particular:

- The elimination of one-way freight (also expressed as a reduction in transport cost)
 provides Iron Boomerang steel with a much lower carbon footprint than steel made
 overseas from imported ore and/or coal;
- 2. Iron Boomerang will use the latest electric/gas locomotives and very cool, low-drag rolling stock to reduce the energy used in the trip dramatically against any transport method foreign steel could be using;
- 3. Steel slabs can be exported in a regular shipping container. This will help back-fill container ships that leave Australia empty or part-filled. This is a further emission saving;
- 4. The use of the latest, efficient smelting technology reduces Iron Boomerang steel's carbon footprint even further. EWLP estimates put PIB steel at around 20% of the carbon footprint of foreign steel.
- 5. Railways take trucks off the road. Tens of thousands of truck movements will be moved to rail if Iron Boomerang is connected to the inland rail at Port of Gladstone to create a rail circuit from Port Hedland around the country and back to Perth.

Literally every steel slab we make reduces the world's emissions.

Please note: This office is receiving submissions from companies involved in zero-emission smelting. This is not capture & storage. This is capture and convert into commercial products like fertilizer, ethanol fuel and ammonia. It is probable that PIB could be 100% carbon neutral as against foreign steel from the get-go.

The route does not pass through any national parks or areas of preservation areas.

Anyone who believes in the concept of net zero cannot but support Project Iron Boomerang.

Steel Industry background

In 2020 the world's largest steel manufacturer China produced 1066 million tonnes of steel. By contrast Australia's two largest manufacturers, Liberty and Blue Scope produced 6 million tonnes between them.

The world steel market is currently valued at \$1.8tn. Despite accounting for less than 1% of world production, the Australian steel industry employs 100,000 Australians and adds \$29 billion to our GDP.

Australia should be a leading manufacturer of steel, we hold the world's third largest reserves of metallurgical (black) coal and the largest reserves of iron ore.

Yet most of the industry output is simply exported - \$145bn of Iron ore and \$100bn of coal.

Royalties to the States from minerals exports were \$15bn and Commonwealth company tax revenue \$24bn.

Underlying world steel demand is expected to remain at 2% growth over the medium term, with the new developing region of India, Bangladesh and Pakistan taking up the slack from maturing Chinese, USA and EU markets. Steel demand from this developing region's 1.8 billion people is expected to exceed China's steel demand by 2030.

This should provide good continuity of employment for coal workers who have every cause to be concerned about their future.

Steel is critical to the new economy, being an essential component of wind turbines and EVs, amongst many other uses. Green steel – using hydrogen rather than coal as the energy source in steel smelting is not feasible in the short or medium term. This is a topic for separate discussion.

Ancillary Industries

Using coal in steel smelting produces by-products of commercial significance:

- Fly ash forms 20% 30% of a concrete mix. Concrete mills are expected to locate next to the steel mills. The other main ingredient – limestone is in plentiful supply along the Iron Boomerang route;
- Ceramics a large ceramics company has expressed interest in locating near the smelter to
 use the waste heat for ceramics production. I am not sure how that works, it is an area for
 further inquiry;
- Tertiary processing of emissions technology now exists to split the steam stacks of the smelter, with steam being recycled for ceramics (tbc), particulates captured for commercial use and CO2 being combined with sea water to produce a hydrocarbon base. This can then be used for fertilizer, fuel and many other uses. This process won an Australian environmental award in 2014, but it appears nobody wants a process that can make coal great again by reducing it's emissions to zero.

Economic benefit – steel and related industries

- PIB will contribute \$100bn in economic activity annually, and around \$25bn in additional government revenue through the production of 44 million tonnes of steel p/a, plus related industries.
- With the international steel market of \$1.8tn, the figure EWLP are using of \$100bn in addition GDP growth is substantially undercooked. We are constrained by population issues and water availability, but three or four times that must be a realistic figure.
- Around 40,000 new breadwinner jobs will be created directly and double that indirectly.
- New communities will be formed around the steel parks and at major intermodals along the route.

 One large development will be at Ti Tree where the Iron Boomerang crosses the Adelaide-Darwin line. Estimates of new, breadwinner jobs are above 1000, this is how Alice Springs gets a fair go – jobs!

Economic Benefit - Grazing

After talks with Meat and Livestock Australia, it became clear that the benefit of this railroad is more significant than just steel. Northern Australia has a significant grazing industry. Many of those are remote. Many employ Aboriginal workers or are owned by Aboriginal enterprises.

Currently sending cattle to market requires a long and arduous (on the cattle) road train. This trip causes the cattle to lose 15% of their body weight, which must be re-added in east coast feed lots before the cattle go to market.

This contributes, in effect, "double" the carbon emissions as a result of growing that weight on the cattle twice.

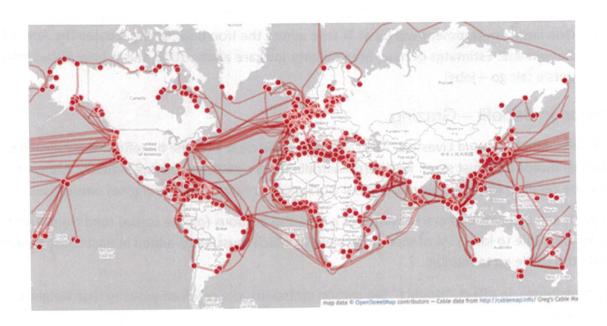
Being able to add a cattle train to the track will bring cattle to market earlier, in better condition, cutting weight loss by 10%, reducing the grazing industry contribution to net zero and helping Meat and Livestock Australia with their net zero by 2030 target.

More importantly it helps graziers run profitable businesses with a reliable 'to-market' performance. That should grow employment in the industry, especially of Aboriginal staff, who may be employed by Aboriginal enterprises.

Economic benefit - the Internet 'backbone"

Upgrading the fibre-optic cable that would ordinarily be built alongside a railway line like this to T1 status has attracted interest from major technology companies. I can see why. Australia always has been a weak point in the world's internet backbone. Internet traffic from Australia's east coast goes through China and comes back down through Indonesia to get to Western Australia.

Putting a direct link between Perth and Sydney by using the alignment of inland rail from Sydney to the Port of Gladstone and then along the iron boomerang alignment to connect with the cable going into Port Hedland just makes sense. It will generate "rental" returns and add a much-needed "missing link" in the world's internet backbone.



Economic Benefit – Ord River Irrigation area

Ord River is constrained by the cost of transport of produce to market. In discussions with the Grain Growers Council, it was offered that, speaking generally, freight of produce to market from the Ord can cost 5 times as much as from other regions that can load direct to train, such as the Victorian food bowl.

Iron Boomerang will provide an alternative to road and assist in the existing Ord River Irrigation area becoming more cost effective.

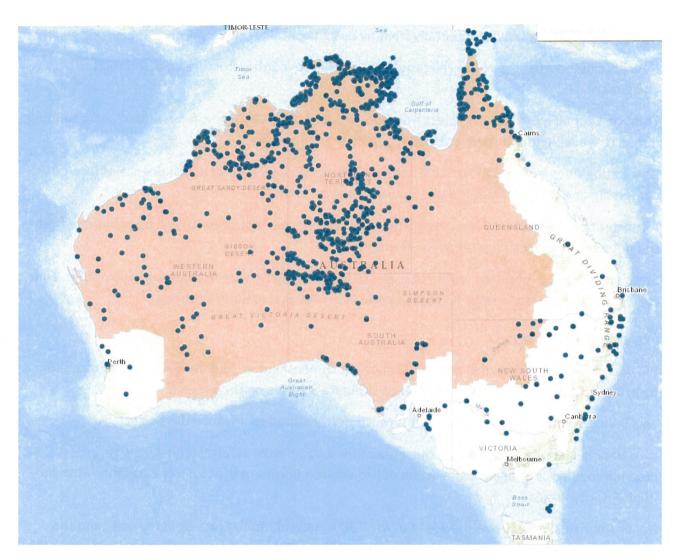
Leaving the best to last – the multi-function corridor

Running alongside the railway will be an underground multi-purpose corridor (MPC), consisting of a power cable, water pipeline and internet cable.

The internet cable and power line are necessary for the railroad, so that costing is already included in the \$25bn. Upgrading the capacity of those lines is not included so the additional cost must be considered.

The purpose of this corridor is to take "town" services and deliver these to remote communities across the top end. These are largely Aboriginal Communities with ties to their land on which they live. The idea that we should move these Australians out to where the employment, housing and services are flies in the face of Aboriginal culture.

The Australian Government must bring those services to those communities and the MPC is how we do that. By treating the MPC as a trunk line and running services up to 200km away from the line to reach remote communities, we can service one hundred+ aboriginal communities that currently have no services or tenable housing:



What an opportunity for this project to transform regional Aboriginal Communities is the most exciting aspect of this project.

While the cost is likely to be \$2m a km for power, water and internet, how much are we spending on Aboriginal affairs that does nothing, in fact make things worse.

Water can be taken from Lake Argyle for stock and station and town water only, not irrigation. That dam is an underutilised asset. Water can get from Lake Argyle to QLD and down to Tarcoola mostly on gravity feed, with some limited pumping.

Power can be sourced for the HVPL, that will no doubt be a political decision not a sensible one.

PIB is fully funded by the private sector

The railroad is costed at \$25bn based on a recent 150km railway constructed in the Pilbara. That funding has been secured from blue chip financiers.

The steel parks total \$45bn and East West Line Parks is holding expressions of interest from the world's leading steel manufacturers including Nippon Steel, Tata Steel and Hyundai Steel to build those.

New, high-efficiency, environmentally friendly design container ships will cost \$6bn.

New precincts across the route will require about \$15bn in infrastructure cost and related investment.

Total cost for all elements of Project Iron Boomerang is \$100bn. This is fully funded and a funding model is available for confidential inspection by the Committee.

One Nation does have a concern that the funding model will result in a high degree of foreign ownership and this is something the Committee can discuss.

A substantial business case has already been conducted and indicates PIB will be profitable from the outset, providing a high return on funds invested.

State and Local Government will incur expense in providing services to the new metropolis'. That cost will be recovered in rates and State taxes in the normal manner of things.

Moving PIB forward

PIB was granted "Project of State Significance" in Queensland in 2006 however this appears to have lapsed, partly through the need to co-ordinate 3 states on the project.

This is where the Federal Government is much better suited to advance the project.

One Nation successfully proposed this project for a committee referral with a view to recommending for or against the listing of Project Iron Boomerang as an Infrastructure Australia 'High Priority Project'.

Never since this project was proposed in the 1980s have all three State Governments and the Federal Government been the same party. It's time to work together and build this nation for the benefit of all.



Disclaimer

Briefing document prepared by the Office of Senator Roberts (ON QLD) on the Iron Boomerang Project. There is no financial relationship between project managers East West Line Parks and One Nation or any elected officer or official. This briefing paper goes to the benefit in PIB to Australia as a whole and covers a wider benefit than East West Line Parks cover in their proposal. Particular mention is made of the benefits to remote Aboriginal Communities and the grazing industry. All dollars are in AUD.

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