Adani’s proposed Carmichael mine in the undeveloped Qld’s Galilee Basin has been a controversial issue over recent years, prompting protests and impacting on the recent federal election campaigns, so Peter James provided a summary of the project and associated issues.

Adani’s market target is to gain some of the growth of steam coal imports into India (130 Million Tons (Mt) higher in 2030 than 2017), plus into Philippines Vietnam Thailand Bangladesh and some other developing Asian markets (230 Mt higher over the same period). Australia shipped only 11 Mt to these markets in 2017 out of its total steam coal exports of 195 Mt, (source Commodity Insights).

As the world’s largest exporter of thermal coal with approximately exports of 360-400 Mt per year, Indonesia dominates supply to these markets currently, but has limited export growth prospects. It may face large domestic coal demands, perhaps an extra 160 Mt by 2030, reducing its exports if proposed new power stations are built and on time.

There are currently no mines in the Galilee Basin, which is a large region about 150-200 km west of the massive Bowen Basin where most of Queensland’s current major coal mines are located.

Four major Galilee projects in the range 30-60 Mt per year were planned, including 3 separate approximately 400 km rail lines to be built to the port at Abbot Point, where Adani bought the lease and management of the existing terminal, which has been expanded to capacity 50 Mt per year, currently shipping half that.

Whilst other Galilee Basin projects have been delayed, Adani’s Carmichael project has been redesigned as a 10 Mt per year open cut mine, with a 200 km rail connection to be built to link in with the existing Aurizon track to Abbot Point, where there is existing spare capacity. This reduced future capital cost to $A 2 billion (on top of Adani’s $A 3 billion expenditure to date on purchasing Abbot Point, constructing a 65 MW solar farm in Qld, plus planning and preliminary costs associated with the Carmichael project).

Most of Adani’s environmental approvals have been granted, including last week’s approval of a plan to save an endangered bird, the black throated finch, by creating extensive conservation areas nearby with suitable habitat.

A Ground Ecosystem Management Plan remains under consideration by the Department, with particular focus on Doongmabulla Springs, a key wetland 11 km west of the proposed mine. Adani’s studies have shown the spring is sourced from a sandstone layer, which is separated and protected by 250-300m thick claystone, which in turn is above the layer linked to the coal. After lengthy delays (which were attributed to the ALP loss of Qld seats in the federal election last month), the Qld Government has undertaken to expedite re-evaluation, possibly leading to an approval decision shortly.

Meanwhile the local indigenous communities have agreed to the mine, and a water agreement will provide water from the Suttor/Belyando river systems to dams only during flood times, whilst protecting water needs of farmers downstream.

The mine/rail is said to involve 1,500 direct jobs in the construction phase, for which 14,000 applications have been made, reflecting the high unemployment in North Queensland.

Coal quality involves energy content less than the premium thermal coal from Hunter Valley, but higher than most Indonesian coal.
Mining cost will be low, with stripping ratio of only 4 (the ratio of the volume of overburden required to be handled in order to extract some tonnage of coal). Adani has stated that its cash cost will be in the lowest quartile on basis of delivered cost to China, and that the financials stack up. However, some analysts have calculated that addition of capital costs puts the mine into a loss. Adani will face freight disadvantage from Indonesia in India and Southern Asia, where many ports are rather shallow.

Adani says they are ready to proceed, as soon as the final approval is granted, using internal finance. No doubt protests in capital cities will persist, not only on mine issues but also on climate change, so the project will remain in the news.