

# The Prime Minister is right ...

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... coal is important for mankind, and it will be for a long while yet. But it is too valuable to be burnt, and not only because burning it pollutes the atmosphere that sustains our life.

Rather than burn it, why not really *do something with it*? Coal can be converted into higher value hydrocarbons including liquid fuels, methane and petrochemicals which in turn are baseline products for the chemical industry.

“Coal to fuels”, or “coal liquefaction” as the method is commonly referred to, was developed in Germany some decades ago by Bergius and Pier and was subsequently expanded to industrial scale processes by Fischer and Tropsch, to support Germany’s chemical and manufacturing industries.

With the exception of South Africa and China, most developed economies haven’t pursued coal liquefaction opportunities because the energy efficiency ratio has historically been too low, but we live in different times now and the economics might just be changing.

In South Africa, the Sasol plant has total production capacity of 160,000 barrels of synthetic crude oil per day. Today, the total capacity of Chinese coal liquefaction plants is 25 million tons per year.

In the Government’s recently released ‘Industry Innovation and Competitiveness Agenda’ numerous references are made to Germany’s ‘High Tech Strategy’. The Germans are notorious for seeing big industry in little – often uncompetitive – beginnings. The success of their renewable energy industry is a case in point.

What if new, more valuable ways to use coal is the next big industry? For example, in labs around Australia the potential to use new catalysts reducing water intensity and emissions, based on nanomaterials, could be explored. Instead of using “liquid coal” just for fuel and chemicals in manufacturing, it might just open up new avenues in pharmaceuticals and cosmetics.

Prof Dieter Schinzer, of Madgeburg University, one of the leading researchers on synthetic methods and their application in bioactive natural products, is convinced that new approaches in coal chemistry will make it economically viable and an important option for future industrial developments.

So when the Prime Minister and the Minister for Industry talk about new ‘Industry Growth Centres’, why not consider coal in a new light, one that sees Australian industry value-add, by developing a whole new industry out of a commodity we have hitherto used *simply to boil water*?

One wonders how the Germans might approach such an endeavour; presumably with a long term vision, a good deal of funding, locked in for a long time, but invested cleverly and with a focused eye on long term competitiveness, exports, economic growth, and jobs. Sounds visionary, doesn’t it?

Yes, the Prime Minister is right: *coal is important to mankind*.

But given that we’ve got so much of the stuff, and the Government’s plans to be truly innovative in Australia’s industrial future, perhaps now is the time to refashion coal’s place in Australia’s future.

Surely that is in the country’s and the mining industry’s interests.