Coal

Coal is the fossilised remains of ancient forests. Many of these forests built up deep layers of peat (wet, rotten plant matter) at their base over time. As millions of years pass, this peat and the fallen trees are squashed by sediment that builds up on top of them.

This squashing slowly turns into carbon-filled coal. The prime coal-forming time on Earth was during the perfectly named Carboniferous period (300-360 million years ago).

Coal burning is the main source of electricity in Australia. A particular problem is Victorian coal, while plentiful, is of low grade (brown coal) and is wetter than black coal, which causes extra pollution when burned.

Put simply, the more coal we burn the more pollution we spew into our air, and the hotter it gets. How can we stop this pollution?

Big Coal says that it has the solution – to pump the carbon dioxide underground (geosequestration – not a new event at the Olympics involving horses!) where it will hopefully stay forever. Sounds great, let's keep burning the dirty stuff and dump the bad stuff underground. Hmmm. Why do we have to bury everything? Why can't we use all of this C02 for something good?

There are a few problems with this. The coal industry has made little effort to bury their mess. In fact, by their own admission, they will not even have the first trial on a large scale ready until 2020 and full-scale upgrades to all polluting coal power stations will not occur until 2030 at the earliest.

But many argue that we don't have that long.

Did you know that these polluters (AKA Big Coal) get $2 billion of our (taxpayers') money every year in kickbacks and subsidies? We know it sounds crazy, but it's crazy true – we pay the world's worst polluters extra, actively encouraging them to continue with their grubby ways.

Oh, these blokes also get petrol money (fuel subsidies) worth a few hundred million every year – as much funding as the entire clean energy industry could expect over the same period. Feeling a bit confused?

While we are on Big Polluters our Government pays coal, oil and gas companies subsidies to the tune of $9–10 billion (with a B) every year just to turn up.

Interestingly clean energy industries like solar and wind receive $300-500 million to support their work.

Big Coal has hailed carbon Capture and Storage (CCS) as our savior. If this CCS can be safely done, that's great, we will have a market for our coal for generations.

To pump the Carbon underground you need to have the correct type of rock below to hold the gas. This rock does not occur at many coal-fired power plants.

The cost to bury this Carbon will hugely add to the cost of making electricity from coal to make it more expensive than the clean technologies available to us now.

Our governments (both state and federal) have announced that they will pay for Big Coal's attempt to bury this carbon dioxide underground rather than invest more in existing clean renewable energy. Many Australians are concerned if CCS doesn't work, we have wasted a lot of time and money.

After attending several coal industry talks the take out is that they simply have no clue how to stop their pollution and have less idea of a time frame in which CCS can be done.

You may be wondering why wasn't Big Coal fixing this pollution problem 30 years ago? It seems they were too busy trying to turn coal into oil at that time – more profitable. We could be using this technology now.

Every day we burn the oil equivalent of 50 million barrels worth of coal.

The World Coal Association says proven coal reserves will run out in 2130 worldwide. Coal is not a renewable resource. It will run out in a little more than 100 years, if we burn it all and move it from the ground to our atmosphere.

Source
https://www.coolaustralia.org/coal-secondary/