

Is Coal Dirty?

Some Facts on Coal Combustion

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*A print-ready copy of this issue of "Carbon Sense" can be downloaded from:
<http://carbon-sense.com/wp-content/uploads/2012/07/is-coal-dirty.pdf>*

Please spread this email around.

We are winning the war about Man-made Global Warming.

But about half of the population still think that the carbon tax will do some good. Why? It is all about "cleaning up dirty coal energy".

The seeds of public concern were sewn with Penny Wong's Machiavellian linking of "carbon" and "pollution". She was assisted by the gross stupidity of the coal industry leadership in promoting nonsense like carbon sequestration as a "clean coal" option. The public naturally assumed "if they need to spend billions to produce "clean coal", obviously we are now using "dirty coal". This generation of coal industry leaders is more culpable than the greens – they should have known better – they have betrayed their shareholders, their employees and the nation.

The whole "dirty coal" program was assisted by the continual portrayal by alarmist media and government propagandists of power station cooling towers belching "pollution". As carbon dioxide is an invisible gas, this is clearly a lie. What is seen are clouds of water vapour with no more pollution potential than wispy white cumulus clouds or boiling dark nimbus thunder-heads.



Bayswater Power Station.

The wispy white vapour is steam, from the cooling towers, as harmless as what comes out of a boiling kettle.

The tall stack is the Exhaust Stack, emitting mostly invisible harmless natural gases:

- nitrogen, carbon dioxide, oxygen and argon.

They all came from the atmosphere in the first place.

And of course coal is black, thus dirty and dangerous like "a black mark" which is a de-merit point, a "black act", which is nasty behaviour, "black magic" which is evil sorcery and "the black death" which kills people. What a pity coal was not rare and pretty like that other form of carbon, diamond.

A local climax of this unrelenting black-guarding of coal was a letter published in the Queensland Times of Ipswich, a town founded on coal mining, describing carbon dioxide as "one of many lethal pollutants released by coal combustion".

What are the facts on coal combustion?

When we burn any carbon fuel such as coal, oil, wood, gas, grass, candle sticks, cardboard or cow manure, it produces several gases. Burning a typical Australian thermal coal in air would produce mainly nitrogen (68%), carbon dioxide (21%), water vapour (7%), oxygen (1%), argon (1%) and ash (2%).

So 98% by weight of coal combustion products (the first five) are natural gases merely being recycled to the atmosphere from whence they came. None are toxic. All are invisible except for water vapour.

To describe carbon dioxide as a "lethal air pollutant" is an irresponsible lie – it is surprising to see such rubbish in print. Carbon dioxide is the most important and essential atmospheric plant food, without which there would be no plants, no herbivores (which live on plants), and no carnivores (which live on herbivores).

Our coal is simply another form of trees and plants that grew in Australian soils in a previous era. Ash is unburnt mineral matter that comes naturally from the soil and should go back there. Almost all of the ash is now captured in modern coal fired power stations, but is released freely in bush fires, barbeques, wood stoves, cow manure cookers and open air cremations.

Naturally the mineral content from a large quantity of coal is concentrated in a small quantity of ash. Small quantities are easier to dispose of safely, and also represent a potentially valuable source of minerals. Coal ash could be a useful mineral supplement or soil conditioner and is used as an additive in cement manufacture. The Chinese make beautiful ceramic bricks from the tailings from coal washing plants. But coal ash, like any ash, is not good to breathe.

Soot is a product of incomplete combustion and is not produced in modern, well-designed power stations. It is no more dangerous than burnt toast.

It is true that some coals when burnt can produce some SOX (oxides of sulphur) and NOX (oxides of nitrogen) but these are caught in modern filters and cleaners. Only small traces enter the air. They could be annoying, and would be dangerous if concentrated in city air, but EVERY normal component of coal is an essential plant nutrient, and far from being invariably toxic, is often in short supply in the broader environment. Anyone who raises crops or animals often needs to supplement soils, pastures or animal feeds with nitrogen, sulphur, phosphorus, calcium, magnesium, copper, zinc and selenium to name a few.

Some coals contain more impurities than others because natural ground-waters or gases circulating through the underground strata containing coal seams has left traces of their passing in tiny deposits of things like pyrite (iron sulphide) or in rare cases even arseno-pyrite (iron-arsenic sulphide). Coals containing these impurities attract price penalties in the market, and are banned in some cities. Modern scrubbers and catalytic converters are very efficient at removing them from exhaust gases.

Both sulphur and arsenic are very common natural compounds, and in correct doses, are essential trace elements for healthy life. Whether something is a vital supplement, a harmless trace element or a poisonous pollutant depends mainly on the dosage and the life form sharing that environment. Volcanoes release vast quantities of sulphur into the atmosphere, into the oceans and onto the rocks surrounding vents and geysers. Bacteria and other life forms flourish in some such environments. Arsenic is a common component of naturally occurring metallic minerals and even occurs in some benign looking sandstones. There are sandstones which outcrop over large areas of country in the Dawson River area of Queensland which contain sulphide nodules containing a high concentration of arsenic sulphides.

The few coal combustion products that are genuinely toxic in most concentrations, such as mercury or cadmium, occur rarely and in tiny quantities. If present, special filters are used to ensure they are not released from power stations. Australian coals are generally very low in mercury, indeed lower than in the average earth environment. Naturally occurring rocks containing mercury (as found at Cinnabar in Queensland), dental amalgams and the new "green" fluoro light bulbs represent a far greater mercury danger to humans.

We can expect that "coal dust" will be the new green scare. Naturally dust of any kind is not pleasant or healthy for air breathing animals like us. Dust storms, volcanoes, bush fires, rubber tyres, mine blasting and coal trains can all leave their contribution of dust in the environment. For the most cases, that dust is a valuable soil supplement. This can be seen well in the luxuriant growth of grass after a bushfire leaves its thin film of mineral dust over the ground after the fire is extinguished. Coal dust is far less hazardous than ash from any fire, even a coal fire, because the minerals in coal are very dilute and generally in just the right quantities required for healthy plant life. Coal dust can do nothing but good to soil and plant life, but is obviously an annoyance, and at times a hazard, for breathing animals.

But the main products of coal combustion, carbon dioxide and water, are not pollutants and not toxic.

In Earth's long history, today's level of atmospheric carbon dioxide is very low and the green world will benefit greatly from any additional carbon dioxide we add to the atmosphere. That is why nurserymen add carbon dioxide to their greenhouses.

Here is a detailed report on coal combustion products:
<http://carbon-sense.com/wp-content/uploads/2010/06/coal-combustion.pdf>

Carbon and Carbon Dioxide – Clearing up the Confusion:
<http://carbon-sense.com/2011/05/02/carbon-dioxide-confusion/>

Clearing the smog of Beijing with "Coal by Wire":
<http://carbon-sense.com/2008/08/04/clearing-the-smog/>

More info on scrubbers and catalytic converters to remove smog and sulphur from coal exhausts:
<http://canadafreepress.com/index.php/article/34078>

Coal is Still King:
<http://www.canadafreepress.com/index.php/article/48049>

Taxing Termites, Wetlands, Volcanoes & Sacred Cows?

Australia's tax on carbon dioxide now applies to big power stations, rubbish tips, steel works, cement plants, refineries and coal mines. But many of them have been given exemptions or compensation packages. Naturally they will pass all net costs onto consumers, but our government says that most voters will be compensated and will feel no pain. So it all looks like achieving a net nothing.

Carbon dioxide is produced whenever animal or vegetable matter is burnt, digested or rots. So when do we start taxing the big-time emitters such as termites? There are trillions of them quietly munching their way through timber, dead trees and grass. Then we have all the rice paddies, swamps and wetlands emitting that other dastardly natural gas, the Will-o-the-Wisp, methane. And who is going to chase India's 280 million sacred cows with gas collection bags?



*Termite Nests NT Australia.
Picture by Chris Gregory 1957*

Mother Earth is also a huge "carbon polluter". Will we have a "Red Adair" putting caps on Earth's 1,500 active volcanoes? Or will BP be hired to drop blow-out protectors over the 139,000 sub-marine volcanoes?



*Chilean Volcano - No filters for ash, NOX or SOX here.
And no Carbon Emission Permits.*

Volcanoes and carbon dioxide:

<http://carbon-budget.geologist-1011.net/>

It is obvious that the whole war on carbon is futile and will have no measurable effect on Earth's atmosphere or Australia's climate.

It's just a wealth redistribution and control caper.

Four Steps to Cheaper Electricity.

We are told that the carbon tax will allow the market to determine how to best reduce the use of carbon fuels.

But we still have a thicket of bureaucratic rules, subsidies and mandates driving up the cost of electricity. This is not the market reacting to a simple tax.

If politicians were honest about reducing costs for Australian households and tax payers, four steps are required:

First, abolish all rules forcing electricity retailers to buy a mandated percentage of their power from expensive and unreliable sources such as wind and solar.

Second, abolish all rules forcing electricity retailers and consumers to pay above market prices for green energy, whether they want it or not.

Third, abolish the carbon tax and all the subsidies, compensation, exemptions and compliance costs associated with it. This money merry-go-round increases costs and taxes and achieves nothing useful.

Finally, boycott those shameless electricity retailers who have actively spread the green energy myths knowing that this will increase electricity prices while simultaneously requiring more gas back-up, thus benefitting their own gas interests.

Solar Energy Dims and Wind Power Runs out of Puff

During 2012 over 5,000 German solar companies have gone broke, losing 25 billion euros and thousands of green energy jobs. As austerity hits the green subsidy industry, more will follow.

See: <http://thegwpf.org/international-news/6150-germanys-green-disaster-wave-of-solar-bankruptcies-wipes-off-almost-25-billions-euros.html>

Wind energy is also totally dependent on subsidies and market sharing mandates for survival. Here in Australia it is said that the union super funds have \$3 billion invested in Pacific Hydro, almost 10 per cent of their entire portfolio. Pacific Hydro would collapse if the MRET scheme was repealed.

Maybe that explains the strident support for wind subsidies in some quarters.

See: <http://www.quadrant.org.au/magazine/issue/2012/7-8/the-ruinous-privileges-of-renewable-energy>

And: <http://www.ft.com/cms/s/0/5867297e-9426-11e1-bb47-00144feab49a.html#axzz20xYNtlud>

The Measure of our Stupidity

"In 2011, the global carbon trading market climbed to a record US\$176 billion – about the same as global wheat production".

See: <http://www.dailymail.co.uk/debate/article-2160456/Its-wonder-worlds-cooling-climate-change.html>

This is surely an indicator of a western world gone mad. We invest more in ration cards for hot air than is invested in the world's most important staple food.

It must have felt like this in the latter days of Rome.

The Heat in Indiana:

Some call this global warming; in Indiana we call this summer.

Marty Irwin

Carbon Censorship?

Every decent war is accompanied by censorship, and the war on carbon is no different. If they had their way, Climate Commissioner Flannery, Government Guru Garnaut and their CSIRO lap-dog would determine who may, and may not, say what in the Great Climate Debate. And "Carbon Sense" may be required to provide space for alternative comments by the alarmist camp.

See: "*The forbidden history of unpopular people*". Quirky title but a great video presentation:
<http://joannenova.com.au/2012/06/the-forbidden-history-of-unpopular-people/>

The Last Word – the Consensus is Destroyed

The TV news on Carbon Tax Sunday (1 July 2012) illustrated our successful destruction of "The Consensus". The reports I saw all showed snaps of the "Axe the Tax" Rallies, and even the ABC showed a glimpse of a protest rally and described the new carbon tax legislation as "controversial".

Protest News:

http://bigpondnews.com/articles/TopStories/2012/07/01/Anti-carbon_tax_protesters_out_in_force_767010.html

A poll taken in Australia on Carbon Sunday showed 64% against the tax and only 33% for despite the flood of bribes, scare stories and propaganda spread like confetti from government spruikers.

We are now in good company. More than 1000 international scientists feel strongly enough to put their names on a list of consensus deniers:

See: <http://climatedepot.com/a/9035/special-report-More-Than-1000-International-Scientists-Dissent-Over-ManMade-Global-Warming-Claims-Challenge-un-ipcc-Gore>

Compare this to the so called IPCC Consensus:

<http://fullcomment.nationalpost.com/2010/12/30/lawrence-solomon-75-climate-scientists-think-humans-contribute-to-global-warming/>

Few people still believe the global warming story, but they will still support the carbon tax for two reasons:

First, they hope and believe they will get more compensation than they will lose in extra costs.

And second, they still feel guilty and want to do something to "save the polar bears" and "reduce pollution" (as long as it does not cost too much).

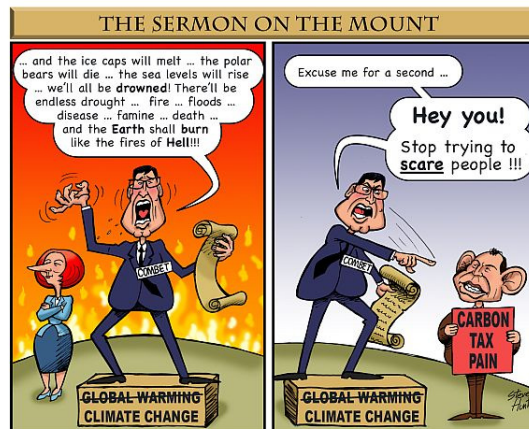
Tony Abbot has done a great job to draw attention to the "Great Big New Tax", but has a big credibility problem for two reasons – exaggeration about the effects that will be seen immediately, and a policy that in fact supports the global warming story and just wants to combat it a different way. Most Liberals are just a lighter shade of green. The Liberal policy of direct action is just another way to waste our substance on a greedy green industry.

Much of the damage of the carbon tax will not be seen – who can point to the airbus that was NOT bought, the railway line NOT built or the processing plant built in China instead of in Bendigo. The biggest long term damage will NOT be seen. Our children will be worse off but no one will ever know why.

Finally, in case "Carbon Pollution" fails to deliver us, in chains, to the UN bureaucracy, they have two new weapons being test fired – "Sustainability", and "Bio-Diversity".

Imagine governments who preside over of whole empires of sick nationalised subsidised industries trying to lecture tax payers on "Sustainability".

"Peak Oil" has proved a fizzer once again, despite all the efforts of people like Obama and his energy Czar to stop oil drilling and construction of pipelines, but "Overpopulation" is due for a new run.



The battle continues. Please help us spread the word.

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"Carbon Sense" is a newsletter produced by the Carbon Sense Coalition, an Australian based organisation which opposes waste of resources, opposes pollution, and promotes the rational and sustainable use of carbon energy and carbon food.

Please spread "Carbon Sense" around.

*For more information visit our web site at www.carbon-sense.com
Literary, financial or other contributions to help our cause are welcomed.
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