

Replace Hazelwood with 100% renewable energy

A statement from the Climate Emergency Network and other campaigners for circulation within the climate movement

Sign on statement:

The undersigned groups and individual climate campaigners support an inclusive campaign to urgently Replace Hazelwood with 100% renewable energy, including baseload solar thermal energy (as presented in the Beyond Zero Emissions, Zero Carbon Australia 2020 report).

The undersigned:

- strongly support the Replace Hazelwood campaign;
- support using renewable energy sources and increased efficiency to replace 100% of energy currently supplied by Hazelwood;
- particularly support the use of proven baseload Solar Thermal technology; and
- reject the use of fossil gas as an alternative fossil fuel.

When CEN members and other groups who support this statement use the **Replace Hazelwood campaign** logo, we will make it clear in our statements that Hazelwood must be replaced with unequivocally clean renewable energy by inclusion of wording such as “with 100% renewable energy”. The undersigned urge others who support this position to do likewise.

Background to the statement

Safe climate technology: The melting of the Arctic sea ice and the Greenland ice sheet show that we are already out of the safe climate zone. Politicians talk about the two degrees ‘guard rail’. However, there is clear evidence that with less than one degrees of warming so far, we already in the realm of dangerous climate change. The earth is already too hot. To restore a safe climate, we need to cool the planet as quickly as possible to pre-industrial temperatures, which are the only ones known to be safe for civilization and all species. This means reducing levels of green house gases in the atmosphere to below current levels. Carbon dioxide (CO₂) lasts in the air for thousands of years (unless deliberately removed). We need to minimise our ‘overshoot’ into the danger zone and to remove the excess CO₂ that is already in the air.

There is no choice but to move quickly to zero net emissions technologies, so that we do not continue adding to the problem with more emissions. We cannot afford to wait for Carbon Capture and Storage (CCS) to save the fossil fuel industries. All the evidence to date is that safe and reliable, large-scale CCS will not be economically viable, and may not even be technologically feasible. Renewable energy works now and can be built quickly. Spain installed 3000MW of solar thermal energy in 18 months, enough to replace Hazelwood more than twice over. Solar thermal with storage provides baseload electricity day and night, with close to zero emissions. We can, and must, rapidly move to close down fossil fuel power stations, starting with the dirtiest of them -

Hazelwood. We must ensure that no more are built. The only safe place for fossil fuels is in the ground.

No time for a false start with gas: There is a growing recognition that the social licence of coal is fast being eroded. However, there is an emerging expectation among leaders in corporate and government circles that coal-fired generation will eventually be replaced by a large scale transition to *gas and wind in combination*, not to zero emissions technologies. Over the last five years, vast reserves of unconventional fossil gas have been discovered in Australia and around the world (in coal seams and shale formations). The fossil gas reserves are now thought to be large enough to allow a wholesale shift from coal-fired to fossil gas-fired power stations - 100 years of coal seam gas reserves according to Martin Ferguson

<http://minister.ret.gov.au/TheHonMartinFergusonMP/Pages/APPEA50THANNIVERSARYCONFERENCE.aspx.html> .

Unlike coal-fired power stations, gas fired power stations can vary their electricity output easily and can therefore complement the fluctuating energy supply from wind power. Fossil-gas-fired electricity plus wind power is the cheapest option for replacing coal. But if we move in this direction, we risk being stuck with gas for a long time - gas turbines can last 40 to 60 years.

Shifting to a mix of fossil-gas-fired electricity generation plus wind power may cut CO₂ emissions substantially, once-off, and per power station. But over the 40 to 60 years that this technology paradigm lasts, economic growth would most likely push up energy demand up so much that total annual emissions of CO₂ are likely to be similar to now or even higher.

We have no time for a 'false start' detour via *low emissions* technologies. We must stand firm against it right from the outset. We cannot afford to dilute our message by saying that a bit of gas here and there is OK or that fossil fuel power stations that are "carbon capture ready" can be built. If we promote fossil-gas plus wind and energy efficiency to **Replace Hazelwood** as the fastest way to cut emissions, we will also promote a fossil-gas plus wind paradigm that will divert society from restoring a safe climate as fast as possible.

Starting the zero emissions transition now: So how can we prevent this 'false-start' from happening? The best way is to promote net zero emissions renewable energy sources. We need to advocate for this solution consistently throughout all our campaigns, including the **Replace Hazelwood** campaign.

Concentrating solar thermal power with storage is an essential part of the mix, because this is the most promising commercially available, zero net emissions option for flexible dispatchable power to complement fluctuating wind power. Despite advice from Beyond Zero Emissions, Martin Ferguson has set up the tendering process for the Solar Flagships project in such a way that companies with expertise in building concentrating solar thermal plant with storage have been eliminated from the final round of tenders.

Concentrating solar thermal plants, and other zero emissions alternatives to fossil fuel baseload power, will not be built unless we campaign strongly and consistently for this.