Information Sheet 47

Energy

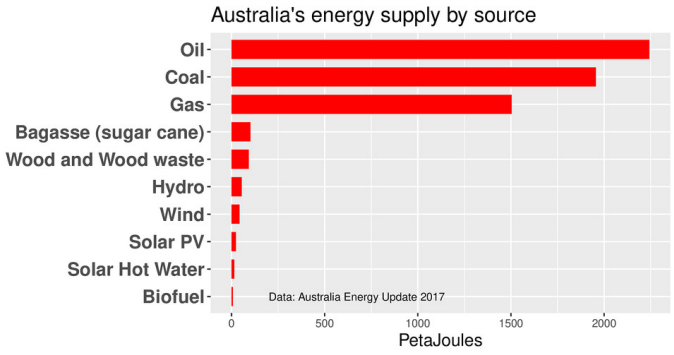
Household electricity is 1/16 of our energy usage. We need more than panels on roofs to decarbonise our energy infrastructure.

Background

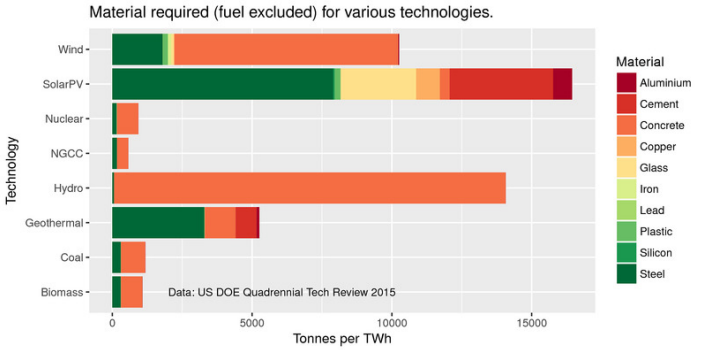
Animal Justice Party (AJP) is concerned about the reliance on fossil fuel energy sources in Australia. These have been scientifically proven to contribute to climate change. While we recognise that humans rely on energy in their daily lives, we seek a solution that is not only sustainable but also considers the lives of other animals.

Energy production is a major source of greenhouse gases. Alarmingly, Australia has the highest per capita emissions in the Organisation for Economic Co-operation and Development (OECD), with 25 tonnes of greenhouse gases being emitted per person every year. Australia has committed to reducing emissions by 5 percent from 2000 levels by 2020 in line with The Paris Agreement (2015).

Electrical energy generates a disproportionate amount of greenhouse gases but all fossil fuels have to be eliminated. The following chart puts our energy sources into context.



In 2017, despite our commitment to the Paris Agreement, emissions increased[1] by 0.8 per cent, the third consecutive year with an increase in emissions. It is clear that our current energy systems and strategies are failing. While "clean energy" and "renewables" are often put forward as the solution, these terms are somewhat misleading as all energy harvesting technologies generate pollutants during their life-cycles. Renewables, for example, require considerably[2] more mining than nuclear.



The mining requirements of renewables increase still further if mining for battery or other storage technologies is included.

Understanding the full consequences of energy production systems is necessary for meeting demand while also safeguarding the ecological systems on which we depend[3]. Significant losses of global biodiversity and ecosystem services are already occurring as a direct result of increasing climate change. We need systems which simultaneously minimise impacts on animals at a species and individual level, while reducing greenhouse gas emissions rapidly. It's a tough problem.

Fossil Fuels

AJP recognises that fossil fuels, including coal and natural gas, cannot and will not be part of any final clean energy solution to climate change. Roughly speaking, if a technology isn't 95 percent cleaner than coal, then it can't be part of a long term solution. Natural gas is neither sustainable nor clean enough. It makes no sense to transition to natural gas only to have to replace it with something better in the near future.

Biofuels

Compared with oil based fuels, biofuels reduce transport emissions or carbon dioxide by approximately 74 percent[4]. This is not clean enough as a long term solution. Furthermore, biofuels require large amounts of what should be wildlife habitat. As it is a core AJP goal to maximise land available

[1] https://www.climatecouncil.org.au/emissions-data-released-2017
[2] https://acola.org.au/wp/esp/
[3] https://academic.oup.com/bioscience/article/65/3/290/236920
[4] https://www.afdc.energy.gov/vehicles/diesels_emissions.html

ANIMAL JUSTICE PARTY

Want a voice for animals in Parliament? Join, donate, or find out more about the Animal Justice Party at **animaljusticeparty.org**. You can also read our policies, here: **animaljusticeparty.org/policieslist**.

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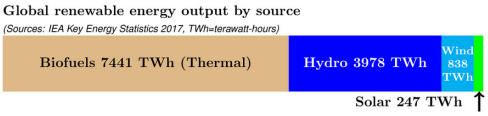
for wildlife by minimising our own land use, biofuels do not present as a viable option.

Renewables and objectivity

While it is enticing to think that natural elements may be the way of the future, this is not a straightforward solution. While sun and wind are renewable, the resources used to harvest them are not. These include land, battery chemicals, steel, concrete and a range of rare-earth metals. All have an impact on animals and need serious consideration.

The AJP's focus on animals means we cannot ignore any adverse impacts on them. Most renewable energy comes from either flooding river valleys or the burning of forests or crops, as illustrated in the figure.



Wind power is also not benign, with US wind farms killing between 600,000 and 880,000 bats a year in addition to half a million birds. Solar has the least adverse consequences of the renewable options currently available.

Globally, hydroelectric reservoirs have flooded 34 million hectares of land to date. Despite this devastation, over 3,700 large (>1MW) dams are planned or under construction, many in the Amazon basin, South East Asia and Africa. If we are to protect the environment and its inhabitants, hydroelectricity cannot be expanded further in Australia.

Forests are now labelled as "renewable" energy, stripping them of protection. The largest coal fired power plant in the UK, for example, has been converted to run on wood pellets. That single power station burns through almost 6.5 million tonnes per year. At best this requires[5] the continuous logging of some 6,800 square kilometers of forest. At present this wood is coming mainly from forests in the US and Canada via very large tankers burning very dirty oil. The transportation fuel emission costs aren't even close to being clean enough to make this renewable energy part of a clean energy future.

It is clear that solving our energy problem without increasing impacts on wildlife and habitat will take careful planning and clear thinking.

Animal agriculture.

We also have to solve *all* the problems associated with energy consumption, including clean food. AJP has concerns that current comparisons of energy sources focus solely on carbon emissions alone and do not take into account the impact different energy sources have on animals such as land clearing. For instance, carbon data typically excludes emissions from the Kyoto Protocol category Land Use, Land use Change and Forestry. The largest single source of land use emissions is land clearing for the expansion of grazing, which not only contributes to emissions, but also impacts biodiversity, water quality and climate change. Animal agriculture is one of the largest uses of energy in Australia. The simplest and most cost effective method of addressing all of these issues, including the reduction of energy is to transition away from animal agriculture towards a plant-based economy and food solution (see our *Farming* policy).

Consumer demand

Education is required around the importance of everyday consumers reducing energy consumption. This will not only be achieved through direct conscious household energy consumption, but will require targeting the largest consumers of energy - non-ferrous metals (mostly aluminium), food processing, chemical production and mining. Solutions here connect with other AJP policies, such as limiting urban sprawl (see our *Population* policy).

Policy

The AJP Climate Change policy supports any clean energy source because the consequences to all animals of further climate destabilisation will be dire (see climate change fact sheet). But not all clean energy sources are equal in their animal impacts. Further research is required into viable and sustainable options.

Key Objectives

1. Including the impact on animals and the environment in the selection criteria for all energy sources.
2. Rapidly transition to a carbon free energy infrastructure, using known clean technologies in the most ecologically and animal friendly mix. Rapidly in this case means 15 to 20 years.
3. Investing in development of new clean animal friendly energy technologies.
4. Implementing a climate tax on both the fossil fuels and animal agriculture industries, using the principle that the polluter pays.

For more information refer to our Climate Change policy.

[5] https://mitpress.mit.edu/books/power-density

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