

Comparing Local Energy Conflicts in NSW Australia: Moving to climate generosity

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Abstract

Australia does not have ‘carbon democracy’, but a form of ‘carbon oligarchy,’ in which the State defends the established and self-destructive relations of order, wealth and power built around fossil fuel energy. The article sketches interaction with carbon oligarchy in the three NSW country towns of Lismore, Narrabri and Bega, in relation to climate change, and renewable energy. The aim is to uncover some problems of energy transition, and to suggest possible courses of action elsewhere. In one town, a Local Council program to become self-supporting on renewables ran into problems of regulation and the maintenance of neoliberal economic values. In the second, transition has been constrained by plentiful local fossil fuel supplies. In the third, some local people embraced a form of ‘climate generosity’ which enables support for transition against neoliberal economic ‘common sense’ and the requirements of carbon oligarchy. The paper suggests that climate generosity could usefully supplement Climate Justice, by circumventing demands for other people to make fair responses, and by providing an exemplar of action which may help build community, support and meaning.

Keywords

[Energy Transition; Community Energy; Climate Justice; Australian Energy]

Introduction

Recent history implies the improbability of current modes of State or business organisation having the capacity to prevent increasing climate and ecological crises. Obstacles abound. Burning fossil fuels is a major source of the greenhouse gases causing climate change, yet major struggles occur over the transition from fossil fuel based energy to renewables. To elucidate this problem, this fieldwork-based study focuses on attempts at energy transition in three country shires in New South Wales (NSW), Australia – Lismore, Narrabri and Bega – suggesting that some of these problems reside in ‘carbon oligarchy’ and its neoliberalism. It examines difficulties in the different pathways attempted, and suggests that localised groups of people may gain greater freedom to act through ‘climate generosity’.

These country towns were chosen by accident, but contrast in their approaches to energy transition, facing different challenges in their responses to climate change and the implementing of renewable energy projects. In Lismore, a program for the Local Council to become self-supporting in renewables ran into problems of delay, cost, regulation, confused state policy, and maintenance of economic values. Established modes of functioning undermined transition. In Narrabri, transition seemed hindered by abundant, Federal Government supported, fossil fuels, together with a mining company’s exploitation of historical fractures between town and country. Deferral resulted from the oligarchy maintaining power and profitability. In Bega, *some* local people embraced a generosity which presses against neoliberal economic ‘common sense’ and helped facilitate action. This latter response suggests that ‘climate generosity’ can supplement climate justice, help bypass the oligarchy, and promote a successful energy transition. Research in Lismore was done by myself and a PhD student Alana West, in Bega by myself, and work in Narrabri involved undergraduate students and other academics.

The World Crisis

The Delay in Acting

Climate change has been recognised for many years. The role of fossil fuels in generating climate change, has been established even longer (Bell 2021). Margaret Thatcher announced its significance in the late 80s (Thatcher 1989). The UN Framework Convention on Climate

Change was signed by 154 states in June 1993 and the Kyoto Protocol approved in December 1997.

Despite this recognition, the consumption of fossil fuels has increased. Using figures from the IEA, burning rose from 7,115,986 'kilotonnes of oil equivalent' (ktoe), in 1990, to 11,596,919 ktoe in 2018. During the same period, wind and solar increased from 36,571 ktoe to 286,377 ktoe in 2018. In total, fossil fuel consumption has increased by over 50% on 1990 figures and the world currently uses 46 times more fossil fuels than solar and wind together (IEA 2020). A small decline occurred during 2020, due to Covid, but a large rebound was expected (IEA 2021). Despite 25 years of global meetings and targets, the problems of emissions and ecological destruction have increased.

To avoid runaway climate change humanity needs to replace fossil fuels. This, in turn suggests the necessity (and problems) of a joint massive build of renewables *and* a massive phase out of fossil fuels. A recent news release from the UN states:

current levels of climate ambition are very far from putting us on a pathway that will meet our Paris Agreement goals (UN Climate 2021a).

A report by Climate Action Tracker from September 2021 estimates emission levels will remain constant until 2030, rather than declining by half, which is necessary to remain under a 1.5 degrees increase:

Australia, Brazil, Indonesia Mexico, New Zealand, Russia, Singapore, Switzerland and Viet Nam... have submitted the same or even less ambitious 2030 targets than they had put forward in 2015 (CAT 2021).

Current international programs are not succeeding.

Australian Paradox

The Australian Federal Government will not increase 2030 targets as recommended by COP26, and largely relies on imagined developments in technology to reach net-zero by 2050 (Australian Government 2021). This lack of government action, in accordance with world failure, contrasts with apparent popular enthusiasm. Australian polls are consistently pro-renewables and pro-climate action, but do not always translate into electoral success. Polls may not predict what people will do, but they can show aspirations, and preferred trends. *The Guardian's* 'Essential' poll in September 2020 found two-thirds of voters wanted the

government to support renewables rather than gas plants. This popularity crossed “all gender, age and voting demographics.” Even voters for the governing parties were 60% in favour (Murphy 2020). A Lowy Institute Poll (2021) claimed 60% of Australians view climate change as a pressing problem while 91% supported government “providing subsidies for the development of renewable energy technology”. A poll in the rural Bega region found 59% of the sample would “be more likely to vote for a candidate who supported publicly-funded renewable energy projects to create secure, full-time jobs in the local area” (Hurst 2020). This is common elsewhere. A Pew poll of people in 17 countries, found 72% of people fear that climate change will hurt them personally and 80% would make changes in their lives to beat climate change (Bell et al. 2021).

The popularity of renewables in Australia is also shown by rooftop solar installs, being 18% higher in 2020 despite Covid. By “the end of 2020, an estimated 2.66 million [of about 10 million] Australian homes and businesses had a rooftop PV system” (AEC 2021: 3). Action also seems popular with many local Councils. ClimateWorks and Monash University’s Sustainability Unit, surveyed 57 local Councils and found 58% of the local governments assessed had a target to reach net zero operational emissions by 2050 and the cities of “Sydney, Melbourne and Brisbane are already carbon neutral for their operational emissions” (ClimateWorks 2020).

Clearly State action in Australia and elsewhere has been inadequate and has not matched local enthusiasm or apparent desire. When organisational forms repeatedly fail to deliver their intended results, then that failure is part of their inherent dynamics, and an analysis of those dynamics is needed to move forward. Understanding of solutions will fail if theories about how humans organise, or become motivated, are inadequate. The study of failure is as important as success. This paper suggests that Carbon Oligarchy and neoliberalism, set up situations of failure, which can undo even spirited attempts at transition, and that climate generosity might form a way out from this restriction.

Carbon Oligarchy

Timothy Mitchell in his book *Carbon Democracy* (2013) argued that the organisation of coal fired energy changed class relationships, because workers could relatively easily disrupt the mining, distribution, and burning of coal. This disruptive presence forced dominant social groups to negotiate with workers *in general*, leading to extended democracy and the

beginnings of a relatively protective and helpful State. When the dominant groups turned to oil, then by design or accident, they organised oil in ways which suppressed the workers' power found in the coal industry, while keeping control over energy supply and use: "politicians saw the control of oil overseas as a means of weakening democratic forces at home" (Mitchell 2013: 36). Pipelines removed potential blocking points, and massed worker participation in oil distribution was reduced, so workers had less power (Mitchell 2013). States depended on fossil fuels to promote the growth of the modern economy and military. This magnified the power of those providing the fuels.

It can be suggested that representative democracy has now been replaced by a Carbon Oligarchy (Mitchell 2013: 8-9, 122, 143), which seems to have transferred power back to the owners of coal, and forward to gas. In Australia, it is widely believed fossil fuel and mining companies sponsored the overthrow of at least one prime minister, gives post-politics jobs to politicians and takes positions in government (Wilkinson 2020; Baer 2022: 59-60). The current Prime Minister's Chief Of Staff (John Kunkel) was 'Chief Adviser, Government Relations' for Rio Tinto and 'Deputy Chief Executive Officer of the Minerals Council of Australia'. The head of the National COVID-19 Commission Advisory Board (Neville Power), which recommended a 'gas led recovery', was the CEO of Fortescue Metals and Deputy Chair at Strike Energy, a gas company.

There is no guarantee renewables will change power relations (Baer 2022: xi). Tronti (1965) points to the "history of the successive attempts of the capitalist class to emancipate itself from the working class," while some supplementary technologies to fossil fuels, such as carbon capture and storage, could function as attempts to emancipate capitalists from the 'limits of nature'. Mitchell also elaborates how carbon oligarchy, commercial power and neoliberal theory reinforce each other, creating modes of common sense and procedural rationality (2013: 141ff. 197ff. 224). Walker (2020) further shows how neoliberal ideologies were used to prevent environmental action from impinging on both corporate 'liberty' and the hegemony of fossil fuels, by forcibly decrying governmental intervention in markets, attacking environmental regulation as 'green tape' and promoting 'market based' environmentalism. Dario Kenner (2019) argues that political and economic elites, are a 'polluter elite'. Wealth, power and 'freedom' are tied to pollution through: consumption, travel, luxury imports and energy wastage; investing in polluting and destructive industries; and protection of the freedom to pollute through 'State capture.' He says:

Given the dominant political power of the oil and gas polluter elite the low-carbon transition will only happen on the large scale and at the rapid speed that is needed if they are weakened (2019: 10).

It seems the ‘Modern World’ has been built on destructive but cheap fossil fuel based energy, and has generated a social ecology of technology, regulation and procedures to support that technology, which hinders attempts to escape it.

The presence of a carbon oligarchy and its networks seems obvious in Australia (Wilkinson 2020; Baer 2022: 53, 56). The Coalition-led Australian Federal Government has generally supported fossil fuels. BloombergNEF (2021: 14), states that Australia increased financial support for fossil fuels by 48% between 2015 and 2019. John Hewson, ex-leader of the Australian Liberal Party (the main part of the current Federal Government) said, while visiting Bega, one of the towns in this study:

In the thirty years that I have been involved in this issue, we still don’t have a national energy policy, a climate action strategy, or an emissions reduction strategy (q. Campbell 2019).

In Australia, the major parties have supported renewables, fossil fuel power stations and fossil fuel exports which do not count in Australia’s official emissions (Baer 2022). The current Government supports a taxpayer funded ‘gas led recovery’, with new gas fields, pipelines and power (Morrison 2020). Australia had a carbon price, under the previous Labor government, which was removed in 2014 after the Coalition took power, and replaced by a series of unclear and even hidden policies, which made planning difficult (Wilkinson 2020: 189-202, 227). Participants in this fieldwork commonly complained about the difficulty of steering through regulations or discovering what aids to progress were available. Uncertainty and confusion seemed normal. This may be lessening at the NSW state level, with the government promoting Renewable Energy Zones, but new coal and gas for export seem more openly encouraged than community energy.

Three NSW country Towns

Comparing towns of a similar size under a similar regime allows the possibility of observing what strategies seem the most and least successful; with the potential of having implications

elsewhere. Town choices were reinforced by their differences. In Lismore the Council was an early mover, with a renewable energy target for Council operations which looked achievable. Narrabri was chosen because of the heavy presence of fossil fuels, and Bega arose because of my attending a climate event organised by Clean Energy for Eternity in Tathra, a small beach town in the area, and finding their ‘climate generosity’ inspiring and apparently effective. Data collection has been conducted primarily by interview, reading local papers and official reports, hanging out with participants, and attending events in the areas, to get some sense of how the social dynamics and conversations work. These are not stories of finished triumph, they are stories of struggle and possible failure, occurring within the political ecology of the Carbon Oligarchy. This political ecology manifests primarily as a technology of regulations and rules built up around an understanding of correct procedure, economy, values and common sense, which hinders popular action and success in changing that system. This establishment is challenged by climate generosity. How this will work in the long-term is unclear, but it seems to have considerable benefits.

Lismore

Lismore, is a town and a shire in the Northern Rivers area of New South Wales. It has a history of activist campaigns, most famously preventing logging in the Terania Creek rainforest (Bible 2018), together with the Bentley Blockade, and Gas Free northern Rivers Campaigns (Kia & Ricketts 2018). Success in energy transition would be expected and began early at both household and council levels. In 2014, Lismore was reported to have “a higher percentage of households... using rooftop solar and/or hot water systems than anywhere else in Australia” (Mortimer & Parks 2014). Currently 42.4% of households have solar panels (APVI 2021). However, the program for Council to move to 100% renewables has, at the moment, lost momentum through problems of cost, regulation, hidden state policy and the maintenance of economic values. Lismore shows the problems of innovating by rule following.

In 2005 the Council embraced a goal of 20% emissions reduction in 10 years, starting with energy efficiency and attempts to reduce expenditure on Council electricity bills despite large increases in electricity costs. In 2009 the first solar panels were installed on Council buildings. In 2012 they began ‘Imagine Lismore’ which involved consultations with randomly selected citizens, finding massive local support for renewables, and they announced a “challenge of becoming 100% self-sufficient on electricity from renewable resources by

2023” (Lismore Council nd: 30), becoming “the first regional Council to commit to a renewable energy goal” (Interview 2, 21 March 2018).

This led to the 2014 Renewable Energy Master Plan (Lismore Council 2014) which formalised the self-sufficiency target.

[Council] wanted to identify two sites that ran 7 days a week, so they had 7 day use and... wanted to develop a community funding partnership model (Interview 2, 21 March 2018).

They worked on the funding model with Farming the Sun, a “registered charity organisation [which had]... already done a number of [community projects]” (ibid), and decided to borrow from the community, paying back with interest.

Borrowing money from the community for Council funds had never been done in NSW, and was difficult to organise. The solution involved Farming the Sun raising the money through a share offer and then issuing a loan to Council for seven years. When the loan is paid off, Council owns the farm.

Council pays... 5.5 per cent interest and the investors get a franked dividend every 6-12 months... an attractive investment due to low bank interest rates (Interview 2, 21 March 2018).

Reportedly some Councillors argued for a cheaper loan from a bank. Council workers explained the Council wanted community involvement and that “it’s more than just the bottom line, it’s meeting our partnering strategy, taking us towards our goal to be self-sufficient and our community’s vision” (Interview 2, 21 March 2018). The Council’s own guidelines reinforced the policy and helped get the initiative passed. However, focusing on ensuring local investors got a good rate of return restricted what they could do.

Another problem was lack of trust in the stability of government policy:

there was this political uncertainty around the Renewable Energy Target. If your system is under 100 kilowatts you could claim the Renewable Energy Certificates... rebates up-front. [Above] 100[kw], you had to claim them on an annual basis (Interview 2, 21 March 2018).

Council were uncertain how long the government would maintain the certification system. If it ended before the seven years was up then they could not guarantee a fixed rate of return.

This uncertainty limited available options so they decided on a system under 100kw to guarantee Certification. Consequently the project was smaller than desired. Regulatory problems continued. Due to Australian Securities and Investment Commission requirements, shareholdings had to be “limited to only 20 shareholders per site because it was a private share offer.” As \$180,000 was needed for each site, this meant the shares cost \$9,000 each.

Lismore is not a wealthy area, and “we were pretty nervous about whether people would invest” (Interview 2, 21 March 2018). However, the community pledge was filled in “a matter of weeks” (Hunnisett and Powell 2017) and in October 2015 Lismore City Council approved borrowing \$360,000 in total. Council could have raised money for an extra solar farm given citizen interest in the loan (Vorath 2016), but chose not to. The farms were placed on the roof of the swimming centre and in ponds at the sewage farm.

Regulations also caused difficulties with using solar on one site to power another site, and hence siting of the projects:

we had a perfectly sized roof at the waste facility and it’s only 400 metres away,... But because they’re on two different meters, it just wasn’t possible... the electricity would have cost us more because they would have charged us for the network fees twice (Interview 2, 21 March 2018).

Sites were limited to those able to use all the energy produced. Later plans to electrify the central shopping centre with solar panels, while upset by flooding in 2017, were scrapped due to similar cable and regulatory problems. One member of Council management complained the regulations made it:

too hard... all I can see is we will be embroiled in some oxygen energy sucking machine that will take us away from every other strategic and operational thing we have to do (Interview 3, 24 June 2019).

Attempting to fulfil regulations sapped initiative and limited results.

The sewage farm plant was also delayed by unfamiliarity and regulation. Most companies contacted did not use floating panels, and some wanted millions of dollars “because they were... having to manufacture something they had never made before” (Interview 2, 21 March 2018). Council found a company in South Australia which had become a distributor for a French floating product not yet installed in Australia. However, “when we got the designs... [they] didn’t comply with Australian Standards”. Consequently the product had to

be redesigned, with new safety walkways: “it ended up taking 6 to 12 months because... they had to make new moulds and stuff” (Interview 2, 21 March 2018).

Construction began in October 2017, with the expectation of expanding the farm to power the whole sewage site (Harper 2017), and begin an ongoing expansion of renewables. The Mayor announced they were “looking at a mid-size solar plant somewhere else around the LGA” (Anon. 2017).

A local newspaper reported the expected benefits; financial and communal, through becoming an exemplar, and through expected future progress:

Sharyn Hunnisett [says]... “the money we spend remains within the Lismore community, [and] “There’s been national interest in the floating solar farm and we have been invited to share our success story.... this is the first step and... will definitely be expanded” (Paterson 2017).

Lismore Council won awards for their farms and process.

Those involved in the project suggested it took 4-5 years of background work because of the regulatory and political complications and uncertainties, and the need to guarantee investment returns. This took energy away from other projects. Another obstacle emerged when the General Manager who instigated the renewable program resigned. The new GM discovered a budget deficit (which appears unconnected to energy), and changed priorities. Some people allege this change led to a crisis of communication, where uncertainty dominated and delayed the renewable program for over a year:

it’s mad not to do it, it saves money.... but I don’t know that we will be doing anything outside the square in the next 12 months (Interview 4, 26 February 2019 conducted by Alana West).

However, budgeting rules were changed with the outcome that “they were either going to defer projects or cancel them altogether” (Interview 5, 18 June 2019).

In 2020 the environmental officer’s job, which included planning the renewable energy transition, was scrapped. This was apparently not formally discussed in Council, nor reported locally in advance, indicating the Council’s work was not embedded in the community.

While Council did plenty of consulting, they did not help the community organise

themselves, nor am I aware of close working relations between Council and pro-renewables groups.

At the time of writing it appears that progress has halted with the Council coming against neoliberal framings of debt, and what is defined as economically essential. Council could not escape the neoliberal common sense of managing finances by cutting spending, assets and services, and so avoided looking at future climate problems. While there is a possible further change of direction, after Council elections in 2021, it seems that Lismore tried to conduct transition by the rules in an orderly manner, but were caught by the Carbon Oligopolies' regulations, confusion and crisis.

Narrabri

Narrabri is an inland town and shire in NSW which, since colonisation, has grown through farming. With little rain and one main river, most farms survive via bore water. One of its major agricultural industries is cotton farming, which requires considerable water. Narrabri can be said to suffer from the resources curse, as it sits upon plentiful supplies of coal and coal-seam gas beneath the water table. This situates it as a region of interest for the Carbon Oligarchy, which seems determined to gain access to local fossil fuel resources before they are stopped by slowing demand or legislation. This rush to exploit helps to maintain the fossil fuel lock-in in possible times of change, creating the so called 'green paradox' of increased pollution due to the possibility of green policies (Sinn 2012). Narrabri has had a history of popular action against gas fields, largely because of feared damage to water supplies. These features strongly affect discourses about renewable energy.

People in the town often seemed to claim Narrabri was in crisis: social, economic and ecological. However, 'sustainability' seemed framed in terms of maintaining, or even increasing, population, rather than maintaining ecology. Young people leaving the area was a major concern (cf Coffey et al 2017). One influential person described this as "our most precious, valued export" (Interview 6, September 2018, research students). High school students we talked to, wanted to leave, displaying little knowledge that 'adults' and Council were concerned about them leaving (Forum 1, September 2018, research students).

Solutions to 'sustainability' problems focused on increasing employment and monetary prosperity. For many, it did not matter where the jobs came from, with the obvious solution being more mining for fossil fuels, although this provoked large scale community dispute. We were told of long-term friendships which had broken due to the conflict. People reported splits in sports clubs between those who would accept the 'community funds' provided by the companies and those who would not. Others reported repeated abuse. One group alleged "the industry have... come in [and] divided the community" (Coonabarabran Discussion Group 2018). This fracture seemed to be experienced as deeply painful by many community members, although some said the stress was diminishing.

In the region there was little to no contest between large-scale renewable energy and fossil fuels. Renewables were rarely held to promise long-term employment despite an Institute for Sustainable Futures report supporting an ambitious renewables scenario taking up significantly less land than gas exploration while creating "3,600 jobs and produc[ing] 3,900MW of power" (ISF 2018). Fossil fuel companies had a presence in, and a history with, the town, and had donated plenty of money to town activities. In comparison, renewables companies seemed to have little regular presence in town at least until 2019, just before COVID, when a local organisation developed plans to build a community owned virtual power plant. During the fieldwork period people interviewed seemed only vaguely aware of, or uninterested in, plans for large scale solar farms in the region (Narrabri Council 2020a: 41). It was unclear what would proceed and some people suggested these plans were just ambit claims to drive off competition. Solar farms seemed a distant, almost alienated, form of energy, and conservationists opposed to coal and gas could also oppose wind farms. Unlike Lismore or Bega, Council seemed largely uninterested in building any renewables themselves, although the *Local Strategic Planning Statement* identified community "support for solar or wind renewable energy developments" while pointing to "the need for immediate upgrade to interconnecting grids" for commercial renewable farms. It also noted the common problem of "lack of certainty around State and Federal government energy policy" (ibid: 41). Council's Annual report claimed that "plans for installing energy efficient technologies and innovations... i.e. solar panels, LED lighting, air-conditioning" were put on hold "due to budget restraints" (Narrabri 2020b: 25), again showing neoliberal regulation in action.

Those interviewed were aware of the possible dangers from gas, and the devastating experience of other communities, but local Councillors (for example) thought they were more

prepared than others had been. Business people we talked to seemed to accept the gas company's promises of no contamination, even though there had already been some local accidents, and it was impossible to guarantee seals on drilling sites, and no risk to the water table, forever. The Carbon Oligarchy's promises seemed largely unquestioned outside of activist groups. Opponents of the drilling frequently mentioned that it was unclear whether gas jobs would go to locals rather than fly-in-fly-out workers, or temporary workers (who would get counted as locals). As another report argued:

the recent expansion of coal mining and CSG exploration in the Shire have engendered considerable conflict between those who see the extractive industries facilitating economic growth and diversity and those who see these activities as a threat to the core agricultural functions upon which Narrabri Shire is founded (Askew and Askland 2016: 17).

These contending positions seem fuelled by an historical rivalry between town and country. Many people claimed the status of farmers had declined, and they were no longer the most prosperous section of the community, a situation magnified by prolonged drought. Farmers' relative decline in income, plus new technology, meant they employed fewer townspeople as casual labourers and spent less in the town. This weakened ties, dependencies and mutual concern, helping the gas company promote their plans. Farmers were closer to the areas being affected by mining and thus more reluctant to support it. Those nearer the coal mines were affected by dust, and worried about river pollution. Those near the gas seemed more opposed than the townsfolk because of bore water issues. However, declining income provoked fears that some farmers would rent out their land for exploratory gas wells, potentially risking their, and others, bore water (cf Hunjan 2018).

However, the issue seemed out of local hands, as the Federal Environment Minister approved the gas fields (Santos 2020b), encouraged by a deal between the Federal and NSW governments under the Federal Government's 'gas led recovery' and National Gas Infrastructure Plans (Santos 2020a). Narrabri's fate seems largely dominated by those seeking security through the Carbon Oligopoly, resource extraction, anticipated 'jobs' and neoliberal common sense, although there is continuing opposition to the path being taken. Whatever the result, climate change, water risk, drought and Government policy have all made decisions extraordinarily difficult for local people. It is not an enviable position to be in. Neither of the other two areas currently face such severe problems.

Bega

Bega is a town and Shire in Southern NSW, primarily renowned for its dairy farms, lush fields and bush. Like Lismore it has a mixture of established agricultural families and people who moved in for the quiet life. However, the area faces long-term drought, and has suffered ferocious bushfires almost certainly intensified by climate change. The fires severely affected some small towns and burnt down many houses. Bega is the source of some interesting conflicts and developments over the energy transition.

I came to Bega excited by something I had not seen before. Local people, particularly in the local town of Tathra, were embracing a form of generosity undercutting the neoliberal economic common sense of Carbon Oligarchy. The community organisation, Clean Energy for Eternity (CEFE), proceeds by gifting solar panels for the rooftops of community buildings. They ask local people to donate money or panels, and have “installed renewable energy on every community building in Tathra” (CEFE 2019). They use payback from the gifts (from saved electricity costs) to purchase more gifts for the community. For example, they:

developed the 30 KW “Imagine” Solar Farm, in partnership with the Bega Valley Shire Council [by gifting panels to Council], saving Council dollars.... We invest these savings into renewable energy installations on community buildings, in partnership with local organisations (CEFE 2019).

The farm was expected to supply “50 per cent of the power needs of the sewage treatment plant, which currently costs about \$30,000 a year to run” (Bega Anon 2015), and potently demonstrated the feasibility of solar to Councillors. CEFE further organises bulk buys of solar panels with low interest finance for purchasers, again ploughing any profit back into more panels gifted to public buildings.

This approach bypassed the rules which hurt Lismore and the supposed economic realities restraining Narrabri, setting in place ‘climate generosity.’ As well as deploying generosity, CEFE focused on building community and engagement through ‘happenings’, meetings, events, prominent speakers, entertainments, human signs and so on. This helped build good feeling, usually with a positive objective, such as putting panels on a surf club roof, or asking “the Bega Valley community to commit to a 100% renewable energy target by the year 2030”

and issuing a declaration when the motion was passed (CEFE 2019). These practices both reinforce and demonstrate community involvement, which then leads to Council involvement. Public gifting builds relationships, creates exemplars, builds obligation, and can instigate public action. In theory everyone who wants to can participate. CEFE is hard to object to as they are giving to the community, or to local Council as a symbol of community, and perhaps for the sake of future generations, to show that people want something done about climate change. Furthermore, the gift can occur because the cheapness and modularity of solar energy makes it easy for people to participate as money becomes available.

Bega Council is caught in severe conflict over climate change and renewables. One Councillor said:

in terms of Council, I can go on until the cows come home about the argy-bargy there (interview 7, 20 March 2019)

Several Councillors seemed to be dedicated opponents to renewables, however, CEFE's procedure demonstrates committed community support and involvement; people turn up to their events and talks and put in money with visible results. Those Councillors favouring energy transformation know they have significant community support, which helps them stand against 'neoliberal' opposition. They have been able to declare a climate emergency (which directs Council to check how Council proposals interact with climate change in the region) and Bega's climate resilience action plan was passed relatively easily; neither seemed possible at Narrabri. Bega Council still has to act according to the regulations, but it keeps encountering community input and support for action. Rather than a few isolated people joining in a loan, many local people are putting money and effort into visible projects. CEFE and the generosity framework's importance was emphasised when several people informed me that attempts to establish a new Bega Council-community solar farm, as in Lismore, foundered after similar problems with regulations and attempts to guarantee investment returns. This severely constrained possibilities and the venture failed.

CEFE's actions attracted attention from outside. The, then, Leader of the Federal Opposition, Bill Shorten, announced a major renewable policy initiative in the region during the 2019 election campaign:

What we're going to do is allocate \$10 million, to provide Tathra and surrounding communities with the opportunity to embrace the clean energy revolution (Shorten 2019).

If the election results had differed, these projects could have made a country wide difference, which could have been attributed to small actions by CEFE.

While CEFE and its allies move from a position of strength, certainty and generosity, there are potential problems. Massive fires over the 2019-20 summer, followed by the Covid-19 outbreak, took energy away from the process. CEFE could not organise public events due to lockdown, although they did gift panels to some rural fire sheds, and attempted to get the Rural Fire Service to collaborate on putting panels on all rural fire sheds, but failed (Interview 8, 26 November 2020). CEFE has only a few dedicated older committee members. While their processes magnify the impact of these members, CEFE is vulnerable to generational change. Winning government support is still vital to transition, but CEFE's method helps generate visible local movement and support, while establishing community energy. The question is whether this can apply on a larger scale, beyond face-to-face encounters at the local level.

‘Climate Justice’ and ‘Climate Generosity’

Apart from simple survival, one of the main sources of opposition to the Carbon Oligarchy has come from Climate Justice. The points made are important. For example, the main victims of climate change are:

the poorest and most marginalised in both the Global North and the Global South, who frequently lack access to the economic, social and political structures necessary to ensure that their views are recognised, their interests represented and their needs addressed (Jafry et al 2019).

The Mary Robinson Foundation (nd) says climate justice is about “sharing the burdens and benefits of climate change and its impacts equitably and fairly” while the UN Environmental Program (nd) points out “Climate justice is a term used for framing global warming as an ethical and political issue.” However, this framing *may* hinder action and is relatively easily incorporated into the neoliberal profit framework.

Not only is justice *not* a universally resolved concept granting clarity of action, but many refusals to act on the ecological crises use ‘justice’ or ‘fairness’ arguments. For example, people claim Australia is responsible for just over 1% of global emissions and therefore has

negligible effect on the world, suggesting it is neither 'just' nor fair to ask Australians to 'risk the economy' or neoliberal power (McDonald 2019). The Prime Minister (Morrison 2019) made such an argument at the UN. The reality is Australia has much less than 1% of the world's population, has a very high emissions rate per head of population, and exports massive amounts of fossil fuels which are not counted as part of Australia's emissions, but the argument can still stand: it's not fair or 'just' to act alone.

'Developing' countries can argue that while their increasing emissions and development are likely to magnify the crises, it is 'just' for them to continue. The West had years of unconstrained growth and developing nations should be able to catch up. From this perspective, attempts to stop these countries from polluting are attempts to stop poverty reduction, or attempts by the West to maintain domination. Allowing pollution is a matter of justice. Australia politicians use this argument to justify selling coal to India and China: "we actually are quite passionate about the economic success of countries in our region" (Morrison 2021). Claims that the West should cut back to zero *first*, can be met with the response that developed nations should not cut back either, because where is the justice or fairness in crippling their economy and hurting their people, to allow others to pollute massively? In both cases the Carbon Oligarchy's move of putting 'the economy' over ecology, and implying development requires fossil fuels is naturalised as 'just'. It may take forever for a purely 'equitable' and 'just' situation to arise. Consequently, climate justice can provide a rhetoric for keeping things as they are, and unintentionally protecting the Carbon Oligarchy.

Climate Justice was not a commonly discussed mode of activating people in these towns, as they could wait for others to cut emissions first. In Narrabri, it could be argued the town could only survive through mining. Some people interviewed in Bega and Lismore were worried about poorer people not being able to afford renewables, and having to use expensive, polluting, energy, but there is little evidence locals were doing much to remedy this, now.

"Climate Generosity," on the other hand, proposes that we give to others without waiting for fairness. 'We' act to get things done and because we can act now. No one needs to be punished or forced. Generosity does not seek blame, nor worry the economy will be destroyed, but asserts the right to action (and agency) by people and governments, at this

imperfect moment. Even the relatively poor and powerless can act and gain respect and agency (Rudiak-Gould 2014).

Gifting is a common human behaviour, which ignores neoliberal economics. In many societies people give generously to others to gain respect, or persuade others to give in return, and to build alliances, active trust or reduce the noise of communication (Klapwijk & Van Lang 2009; Przepiorka & Liebe 2016). Even small acts of generosity can build networks and alliances (Whitham 2021). 'Gifting' lies both outside and within capitalism, and although classically a gift may expect return, equal reciprocity is not a requirement, and relationships do not end when the gift is given (Cheal 126). As Blau suggested exchange is caught between pure calculation and pure generosity; neither of which may exist unmixed (1964: 112). Gifting can motivate other people to act, shaming inactivity. Through seeing others acting, people can come to think they can act themselves, without waiting for others. Generosity is usually defined as 'good', hence people may emulate those being generous in a positive feedback loop, adding to the climate gifts becoming available, and helping solve the problem. It demonstrates that the givers are motivated to act. As such they can become an electoral force needing to be acknowledged. Further, they can display support for change, and can be relied upon by those active in pursuing the same ideals. Generosity also seems to make givers feel good, builds meaning and connection, while undermining the acceptance of neoliberal transactionalism and claims profit is fundamental to human psychology (Smith & Davidson 2014).

With justice you have to wait for a framework for justice to occur, but with generosity people can act immediately. They don't need State action to begin with. Generosity can be a daily behaviour. If a person gives solar panels or contributes to wind turbines, nobody loses, everybody benefits including themselves; eventually it could seem odd not to support giving. Generosity slashes through indecision, or the restrictions of profit seeking behaviour; you are doing this because you want to and it's rewarding. It could cross political barriers, as humans tend to recognise generosity in action. Generosity does not pretend we are only competitive, but people can compete in their generosity, should they choose to. The many ways of being generous allows a multiplicity of ways to approach multiple eco-crises. While co-operation and alliance can be built through generosity, whether this can apply at the international level is uncertain, but the current framework is not functional, and processes of generosity could break the deadlock.

Generosity is harder at the international level because of interactional histories between States, but it is possible if States give with care, and without demands (Barnett & Land 2007). However it is easily possible for people to take this motive up in their own communities, build community energy without profit requirements, and through taking advice from those organisations already engaged in Climate Generosity.

Conclusion

Looking at these three country areas as exemplary forms of action common in the world, the following issues and blockages become clear.

Lismore

The Council attempted to follow the rules and build in profit for investors, while finding obstruction in those rules and normal priorities, losing momentum. The rules grew up under Carbon Oligarchy neoliberalism and take that oligarchy's ways of action as fundamental. Regulations support the old order and old economy and led to reassertions of the old ways when Council faced the unrelated problem of debt. Despite wanting community involvement, Council began a top-down process with little active community participation. Council values may have been in the right place but being primarily rule-based and investor-oriented they slowed and hindered progress significantly.

Narrabri

Many locals ignored the crisis promoted by fossil fuels, both direct threats of damage to water supplies and the indirect threats of compounding consequences of climate change. At least one powerful faction favoured attempts to solve the severe problems of employment by taking advantage of plentiful fossil fuels and the 'generosity' of the Carbon Oligarchy, reinforced by State and Federal Government support for fossil fuel companies and gas production. The proposed 'solution' to the employment problem created social splits, probably undermining the ability of the town to pull together to address problems with water supplies and ecological damage. Future damage can arise from present security. The strategy takes the neoliberal economy and the Carbon Oligarchy as a given, rather than something to change. The values being professed, and the actions encouraged by the presence of fossil fuel

resources are in conflict with plausible predictions of future conditions. A new community energy movement could alter this, as they are focused on sharing rather than profit, but it is too early to say.

Bega

This region has middle class radicals who largely ignore the rules, and bend established practices, exercising influence out of all proportion to their numbers. They take an existing interest and motivate people further. The movement is largely bottom-up and free of demands for monetary profit, but depends on good local leaders who appeal to people to act beyond themselves in service to a cause, while benefitting the community and gaining local status for showing they care. The strategy builds a sense of community and engagement through meetings and events, thus making social meaning. It provides an obvious base for activist Councillors and Council workers, and circumvents or avoids neoliberal economic conventions in a practical way. It gifts the future and states clearly “If our politicians refuse to show leadership, then we will do it ourselves” (Interview 9). Momentum is generally kept up, and provides support for sympathetic action despite the hostility of some Councillors.

Perhaps large states and businesses cannot save the world precisely because they are so big and so ingrained with the Carbon Oligarchy’s established habits, power relations and rules. To the contrary, generosity not only promotes action, but undoes the common-sense of neoliberal economics which values corporate profit over survival and makes profit-taking fundamental to human life. It also undoes the Climate Justice bind of simply making a normative appeal. The model of generosity on principle can be scaled-up, beyond the local. There is no reason, other than support for the Carbon Oligarchy, that nations likewise cannot simultaneously cut back their own emissions and give renewables to other nations, rather than encourage them to buy coal or gas. Generosity may be seen as a mode of refusal of capitalism which gives direction, and shows how co-operation can be built.

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Bio

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References

AEC 2021. Solar Report January 2021. Australian Energy Council
https://www.energycouncil.com.au/media/jv4blk2l/final-pdf-australian-energy-council-solar-report_-jan-2021.pdf

Anon 2017. Energy poured into opening solar farm. *The Northern Star* 17 Nov 2017: 3. [Via Proquest]

APVI 2021 Mapping Australian Photovoltaic installations.
<https://pv-map.apvi.org.au/historical#10/-28.7564/153.2066>

Askew, M. & Askland, H. *Local Attitudes to Changing Land Use – Narrabri Shire: Full Report*. NSW Department of Primary Industries and the University of Newcastle.
<https://www.newcastle.edu.au/research/centre/csrrf/publications/local-attitudes-to-changing-land-use-narrabri-shire>

Australian Government. 2021 *Australia's whole-of-economy Long-Term Emissions Reduction Plan*. Australian Government Department of Industry, Science, Energy and Resources.

Baer, H. 2022. *Climate change and capitalism in Australia: an eco-socialist vision for the future*. Oxon: Routledge.

Barnett, C & Land, D. 2007. Geographies of generosity: Beyond the 'moral turn. *Geoforum* 38: 1065–1075.

Bega Anon 2015. Community solar farm in Tathra spells IMAGINE. *Bega District News*, 19 March 2015.

<https://www.begadistrictnews.com.au/story/2955674/tathra-community-solar-farm-an-australian-first/>

Bell, A. 2021. *Our Biggest Experiment: A History of the Climate Crisis*. London: Bloomsbury.

Bell, J., Poushter, J., Fagan, M., & Huang, C. 2021. In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work, 14 September.

<https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work/>

Bible, V. 2018. *Terania Creek and the Forging of Modern Environmental Activism*. Palgrave Macmillan.

Blau, P.M. 1964 *Exchange and Power in Social Life*. NY: John Wiley & Sons.

BloombergNEF 2021. *Climate Policy Factbook: Three priority areas for climate action*. https://www.un.org/sites/un2.un.org/files/bp_bnef_climate_policy_factbook_071921_final35.pdf

Campbell, I. 2019. Tathra starts push for 100% renewable energy in Bega Valley. *About Regional*. 20 February 2019.

<https://aboutregional.com.au/tathra-starts-push-for-100-renewable-energy-in-bega-valley/>

CEFE 2019. Subject: Position Statement to request Government support to help meet community targets for renewable energy for Tathra and Bega Valley. Clean Energy for Eternity 24 January 2019.

<https://cleanenergyforeternity.net.au/files/2019/03/PosStat20190124.pdf>

Cheal, D. 1988. *The Gift Economy*. London: Routledge.

CAT 2021. Global Update: Climate target updates slow as science demands action. Climate Action tracker.

<https://climateactiontracker.org/publications/global-update-september-2021>

ClimateWorks 2020. Net Zero Momentum Tracker: Local Government Sector.

ClimateWorks 2 March 2020.

[https://www.climateworksaustralia.org/wp-](https://www.climateworksaustralia.org/wp-content/uploads/2020/01/ClimateWorks_NZMT_Local-Government-Report_Jan20.pdf)

[content/uploads/2020/01/ClimateWorks_NZMT_Local-Government-Report_Jan20.pdf](https://www.climateworksaustralia.org/wp-content/uploads/2020/01/ClimateWorks_NZMT_Local-Government-Report_Jan20.pdf)

Coffey, J., Threadgold, S., Farrugia, D., Sherval, M., Hanley, J., Askew, M. and Askland, H. 2018. 'If You Lose Your Youth, You Lose Your Heart and Your Future': Affective Figures of Youth in Community Tensions Surrounding a Proposed Coal Seam Gas Project.

Sociologia Ruralis, 58(3): 665-83.

Cullenward & Victor 2020 *Making Climate Policy Work*. Cambridge: Polity Press.

Harper, D. 2017 Australia's first floating solar farm soon to be buoyant in Lismore. *ABC News*, 16 November 2017.

<https://www.abc.net.au/news/2017-11-16/australias-first-floating-solar-farm-will-be-buoyant-in-lismore/9157878>

Hunjan, R. 2018. When coal seam gas comes knocking. *Insight*, 28 May 2018. SBS

<https://www.sbs.com.au/news/feature/when-coal-seam-gas-comes-knocking>

Hunniset, S., and Powell, G. "Stories of Success" Lismore Community Solar. *C4CE* 27-28 February 2017

<http://c4ce.net.au/congress/wp-content/uploads/2017/02/Stories-of-success-Lismore-Community-Solar.pdf>

Hurst, D. 2020. Climate change critical issue in Eden-Monaro by-election as six in 10 voters say more action needed by government. *The Guardian* 25 May 2020

<https://www.theguardian.com/australia-news/2020/may/25/climate-change-critical-issue-in-eden-monaro-byelection-as-6-in-10-voters-say-more-action-needed-by-government>

IEA 2020. World Energy Balances

<https://www.iea.org/data-and-statistics/data-tables>

IEA 2021. Despite some increases in clean energy investment, world is in midst of ‘uneven and unsustainable economic recovery’ – with emissions set for 2nd largest rebound in history. IEA Website, 28 October 2021.

<https://www.iea.org/news/despite-some-increases-in-clean-energy-investment-world-is-in-midst-of-uneven-and-unsustainable-economic-recovery-with-emissions-set-for-2nd-largest-rebound-in-history>

ISF 2018. Renewable energy could power the future of Narrabri. *Institute of Sustainable Futures, University of Technology Sydney* 16 May 2018.

<https://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/news/renewable-energy-could-power-future-narrabri>

Jafry, T., Mikulewicz, M., & Helwig, K. 2019. *Introduction: Justice in the era of climate change*. In T Jafry ed *Routledge Handbook of Climate Justice*. Oxford Routledge.

Kenner, D. 2019. *Carbon Inequality*; Oxford: Routledge.

Kia, A., & Ricketts, A. 2018. Enabling Emergence: The Bentley Blockage and the struggle for a gasfield free Northern Rivers. *Southern Cross University Law Review* 19: 51-75.

Klapwijk, A., & Van Lange, P.A.M. 2009. Promoting Cooperation and Trust in “Noisy” Situations: The Power of Generosity. *Journal of Personality and Social Psychology* 96(1): 83-103

Lismore Council nd. *Ten Years of Greenhouse Gas Emissions: Monitoring and Reporting 2002 to 2012*.

<https://www.lismore.nsw.gov.au/page.asp?f=RES-HUQ-71-55-36>

Lismore Council 2014. *2014 Renewable Energy Master Plan*, Sustainable Business Consulting Pty Ltd |

<https://www.lismore.nsw.gov.au/page.asp?f=RES-PCH-64-58-30>

Lismore Council 2017. Work begins on Lismore community floating solar farm. (Originally on council website) *Get Industry* 16 November 2017

<http://getindustry.com.au/2017/11/16/work-begins-lismore-community-floating-solar-farm/>

Lowy Institute 2021. Climate poll 2021.

<https://www.lowyinstitute.org/publications/climatepoll-2021/>

Mary Robinson Foundation nd. Principles of Climate Justice.

<https://www.mrfcj.org/principles-of-climate-justice/>

McDonald, M. 2019. How to answer the argument that Australia’s emissions are too small to make a difference. *The Conversation*, 18 June.

<https://theconversation.com/how-to-answer-the-argument-that-australias-emissions-are-too-small-to-make-a-difference-118825>

Mitchell, T. 2013. *Carbon Democracy: Political Power in the Age of Oil*. London, Verso.

Morrison, S. 2019. National Statement to the UN General Assembly 25 Sep 2019. Prime Minister of Australia’s Office.

<https://www.pm.gov.au/media/national-statement-united-nations-general-assembly>

Morrison, S. 2020. National Energy Address - Tomago, NSW 15 Sep 2020. Prime Minister of Australia's Office.

<https://www.pm.gov.au/media/national-energy-address-tomago-nsw>

Morrison, S. 2021. Press Conference - Canberra, ACT, 9 Sept, 2021. Prime Minister of Australia's Office.

<https://www.pm.gov.au/media/press-conference-canberra-act-23>

Mortimer, L. and Park, A. 2014 Lismore leads nation in adopting solar energy, report finds. *Northern Star*, 5 May 2014.

<https://www.northernstar.com.au/news/lismore-leads-nation-adopting-solar-energy-report-/2247827/>

Murphy, K. 2020. Essential poll: two-thirds of voters would prefer Coalition support renewables rather than new gas plants. *The Guardian* 22 September 2020

<https://www.theguardian.com/australia-news/2020/sep/22/essential-poll-two-thirds-of-voters-would-prefer-coalition-support-renewables-rather-than-new-gas-plants>

NSW Government 2018. Bega Valley Shire Council case study: 100% renewable energy target. NSW Government Clean Energy Strategies for Business Program

<https://energy.nsw.gov.au/sites/default/files/2018-12/Bega%20Valley%20Shire%20clean%20energy%20strategy%20case%20study.pdf>

Paterson, A, 2017. "Power to the people" *The Northern Star*; 18 Jan 2017: 3

<https://www.northernstar.com.au/news/lismores-sustainable-solar-success-story/3132900/>

Przepiorka, W. & Liebe, U. 2016. Generosity is a sign of trustworthiness - the punishment of selfishness is not. *Evolution and Human Behavior* 37: 255–262.

Rudiak-Gould, P. 2014. Climate Change and Accusation: Global Warming and Local Blame in a Small Island State. *Current Anthropology* 55(4): 365-386.

Santos 2020a Santos welcomes Government's focus on unlocking new gas supply 15 September 2020

<https://narrabrigasproject.com.au/2020/09/santos-welcomes-governments-focus-on-unlocking-new-gas-supply/>

Santos 2020b. Santos welcomes federal signoff on Narrabri Gas Project. 24 November 2020. <https://narrabrigasproject.com.au/2020/11/santos-welcomes-federal-signoff-on-narrabri-gas-project/>

Shorten, B. 2019. Transcript doorstep Tathra Tuesday 29 January 2019. https://www.billshorten.com.au/transcript_doorstop_tathra_tuesday_29_january_2019

Sinn, H.-W. 2012. *The Green Paradox: A Supply-Side Approach to Global Warming*. Cambridge, MA: MIT Press.

Smith, C., & Davidson, H. 2014. *The Paradox of Generosity: Giving we receive, grasping we lose*. NY: Oxford University Press.

Thatcher, M. 1989. Speech to United Nations General Assembly. Margaret Thatcher Foundation. <https://www.margaretthatcher.org/document/107817>

Tronti, M. 1965, 'The strategy of refusal.' Available at: <https://la.utexas.edu/users/hcleaver/TrontiRefusal.html>

UN Climate 2021a. Greater Climate Ambition Urged as Initial NDC Synthesis Report Is Published. Press Release 26 February 2021. United Nations Climate Change. <https://unfccc.int/news/greater-climate-ambition-urged-as-initial-ndc-synthesis-report-is-published>

UN Environmental Program (nd) "Climate Justice." LEO Thesaurus <https://leap.unep.org/knowledge/glossary/climate-justice>

Vorath, S, 2016. Lismore community solar farms set for construction as investors pile in. *One step off the Grid*, 15 August 2016

<https://onestepoffthegrid.com.au/lismore-community-solar-farms-set-construction-investors-pile/>

Walker, J. 2020. *More Heat than Life: The origins of our future in the tangled roots of economics, ecology and energy*. Palgrave Macmillan.

Whitham, M.M. 2021. Generalized Generosity: How the Norm of Generalized Reciprocity Bridges Collective Forms of Social Exchange. *American Sociological Review* 86(3): 503–531.

Wilkinson, M. 2020. *The Carbon Club*. Crows Nest: Allen & Unwin.