

Rank Hypocrisy

Where Australia ranks on 'renewables per capita'

At the UN General Assembly the Prime Minister claimed Australia has the highest renewable energy investment in the world in per capita terms. This claim is contradicted by multiple data sources including those the government cites, and is misleading. The recent boom followed a collapse caused by the government cutting the Renewable Energy Target. Investment is again slowing and without new policy and planning the industry's future is uncertain.

Discussion paper

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Summary

Australia's greenhouse gas emissions are rising because Australia has no credible climate policy. Australia's emission reduction targets are dangerously low and Australia is not on track to meet even these targets.

Speaking at the UN General Assembly, the Australian Prime Minister rejected criticism of his government's climate inaction and urged critics to note Australia's "achievements". In particular he claimed "Australia now has the highest per capita investment in clean energy technologies of anywhere in the world". Later at the dispatch box in Parliament the PM said "Australian per capita investment in renewable energy is the highest in the world today". The Minister for Energy and Emission reduction has made similar claims many times.

The recent boom in renewable energy installation in Australia is indeed remarkable, worthy of public attention and an achievement for Australia. It is, however, highly misleading for the government to claim it 'achieved' this result. Focusing on the recent boom, the government ignores the renewable bust from 2013-16 caused by its own policy uncertainty.

The government's claims are not only misleading, but also false. The claims are contradicted by multiple data sets, including those cited by the Minister's own Department.

In support of their Minister's claim, the Department for Environment and Energy cited data from Bloomberg New Energy Finance (BNEF) and others, claiming Australia had "the highest per capita investment in clean energy in 2018 out of 14 countries [and] second highest per capita investment in renewable energy in 2018 out of 30 countries".

Both of these claims contradict the PM's claims about being *first* among *all* countries.

The first reference includes not 14 countries, but 23 countries and Taiwan. On this data The Australai Institute finds Australia is not first but *third*, behind Sweden and Denmark. Together Sweden, Denmark and Norway have a similar population to Australia and higher per capita investment in clean energy in 2018.

The second reference also gives investment over the decade. Over the decade, Australia ranks *fifth* for renewable energy investment per capita.

The data sets do not include much smaller countries. Renewable energy investment in Tuvalu is higher than in Australia on the BNEF figures. The same may well be true of other smaller countries. If the PM intended to exclude the achievements of such countries, he did not say so.

A fairer basis for comparing renewable investment achievements would be investment per GDP. The Prime Minister himself talks about emissions intensity per GDP. On the second

reference, Australia ranked *twelfth* for renewable investment over the decade per GDP, just behind India, while China was first.

Another set of recent claims relate not to investment, in dollar terms, but additional capacity, in megawatts. These claims can be traced back to studies by a group of researchers at ANU. These researchers who claim Australia ranks above Japan, being “second”. However their study does not show Australia is first of all countries, rather first of a specific group. It is not clear how that group was chosen; it is not the biggest countries by GDP or per capita.

The ANU researchers use data from the International Renewable Energy Agency (IRENA). These data show in 2018 Australia’s total installed renewable capacity puts it *seventeenth* among all other countries and *nineteenth* per capita.

Looking at *additional* capacity just in 2018, on the IRENA data Australia was ranked *third* per capita, behind Iceland and Norway. Over the last five years, Australia is ranked *twelfth* for per capita installation.

Australia ranks first in per capita renewable installation only in 2018 and only if hydro power is excluded. The Australian government touts Snowy 2.0 and other pumped hydro projects as renewable energy and key parts of the government’s climate policy. Other countries have installed more per capita in other years.

While it is justified to highlight the recent surge in installation and investment in Australia, it is entirely unjustified to cite these events in defense of broader inaction on climate change. Australian was first in the world to repeal a national carbon price and its emissions increased every year since. Australia has greater per capita emissions than nearly all other countries and is the third biggest exporter of fossil fuel CO₂.

The Australian government’s main role in the recent renewable energy boom has been trying to slow it down. Debate about cutting the Renewable Energy Target led to a collapse in renewable energy to 2016. Once the RET was cut, and certainty was returned, projects came forward to meet the target. If the government did not cut the RET, renewable energy would be 24% higher by 2020. The government is now claiming Australia has overinvested in renewables, leaving planning to state governments and regulators.

Australian energy debate is poorly served by misleading and unjustified claims about the rate of renewable investment or installation. Australia would be better served by energy policy aligned with the goal of solving the climate crisis, to which Australia is committed.

Introduction

Australia's greenhouse gas emissions are rising because Australia has no credible climate policy. Australia's emission reduction targets are dangerously low and Australia is not on track to meet even these targets.

Speaking at the UN General Assembly, the Australian Prime Minister rejected criticism of his government's climate inaction:

Australia's internal and global critics on climate change willingly overlook or ignore our achievements, as the facts simply don't fit the narrative they wish to project about our contribution.

Australia is responsible for just 1.3% of global emissions. Australia is doing our bit on climate change and we reject any suggestion to the contrary.¹

The Prime Minister ignored the extensive evidence showing the oversized impact Australia has on the global climate, instead downplaying Australia's domestic emissions as a share of global emissions, ignoring per capita emissions or exported emissions. At the same time, and somewhat inconsistently, the PM talked up Australia's "contribution" and "achievements".

In particular the PM emphasised Australia's recent boom in renewable energy:

Australia now has the highest per capita investment in clean energy technologies of anywhere in the world²

At a press conference at the UN, the PM reiterated his claim:

It often comes as news to people when I share with them that Australia has the highest per capita investment in renewable energy of any country in the world. So I think there is a bit of lack of awareness on the action Australia has been taking.

The PM again made the same point at the dispatch box in the House of Representatives. Answering a question regarding Australia's rising emissions, the PM pointed to:

the speech I gave to the UN, recently, in the national statement for Australia, which set out clearly the actions Australia was taken, and our record, in particular in relation to renewable energy investments, which per capita is the highest of any

¹ Morrison (2019) *National Statement to the United Nations General Assembly*

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

² Ibid.

country in the world today. I note the Member for Melbourne shaking his head. I simply said, that Australian per capita investment in renewable energy is the highest in the world today! He shook his head. If he is in denial of those facts I will leave that to him.³

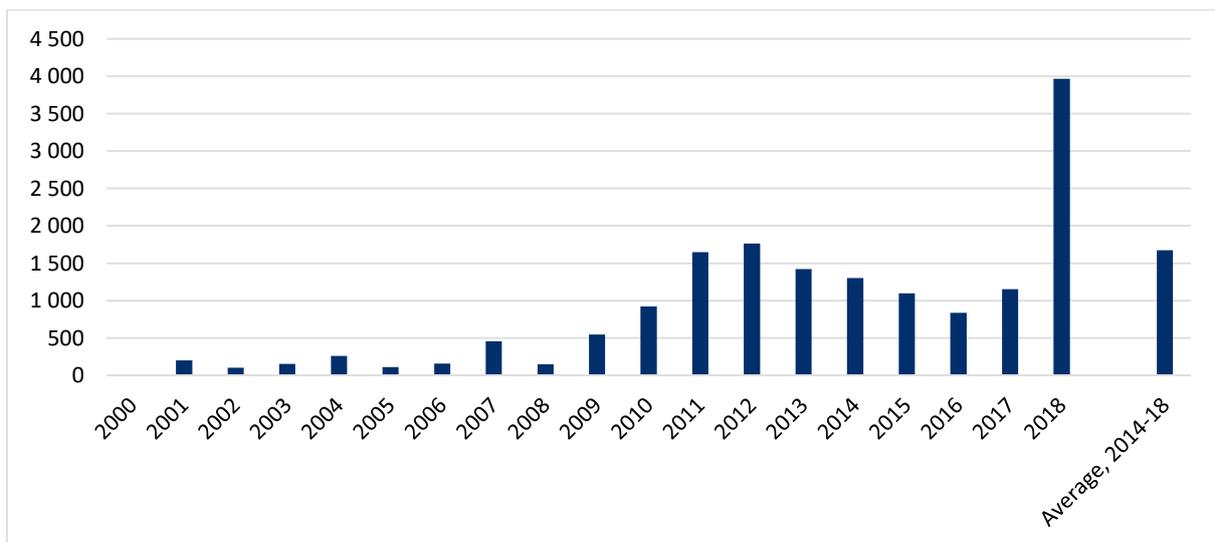
The Minister for Energy and Emission Reductions Angus Taylor has also made similar claims:

Australia leads the world in per-capita investment in renewable energy – at almost double the level of second placed Japan, and triple that of France and Germany.⁴

In fact we invested more per person than any other major country in the world – almost double most, nearly all, other countries.⁵

The recent boom in renewable energy installation in Australia is indeed remarkable, worthy of public attention and an achievement for Australia. It is, however, highly misleading for the government to claim that it has ‘achieved’ world leading renewable energy investment. The government has cherry-picked the recent boom but ignored the earlier multi-year bust caused by its own policy uncertainty – shown in Figure 1 and discussed in detail below.

Figure 1: Australian renewable energy capacity additions - IRENA



Source: The Australia Institute calculations from IRENA (2019) *Query Tool, Total Renewable Capacity*;

³ Morrison (2019) *Question Time, 16 October 2019*

⁴ Angus Taylor, (2019) *2019 Australian Energy Update*,
<https://minister.environment.gov.au/taylor/news/2019/2019-australian-energy-update>

⁵ Karp (2019) *Angus Taylor taken to task over sudden drop in renewable energy investment*,
<https://www.theguardian.com/australia-news/2019/sep/12/angus-taylor-taken-to-task-over-sudden-drop-in-renewable-energy-investment>

The government's claims about being first on renewable per capita investment are not only misleading, but also false. The claim is contradicted by multiple data sets, including those cited by Minister Taylor's own Department of Environment and Energy.

Per capita renewables investment

EVIDENCE FROM THE DEPARTMENT

Government Ministers have generally made claims about Australia's renewables investment per capita without citing any sources.

The Australia Institute asked the office of the Minister for Energy and Emissions Reduction for the source of the government's claims. Such information could be assumed to be readily available, given its prominence in the government's talking points.

The Minister's office directed the Institute to the Department for Energy and Environment, which took four working days to provide these comments:

The Department of the Environment and Energy calculated per capita investment in clean energy using Bloomberg New Energy Finance (BNEF) investment data and World Bank population data.

An analysis of BNEF's Clean Energy Investment Trends data (accessed June 2019) showed Australia had the highest per capita investment in **clean energy** in 2018 out of 14 countries at \$514/person.

An analysis of Frankfurt School-UNEP Centre/BNEF's *Global Trends in Renewable Energy Investment 2019* (published September 2019) showed Australia had the second highest per capita investment in **renewable energy** in 2018 out of 30 countries at \$470/person).⁶

Surprisingly, the Department directly contradicts the Prime Minister's claim to the UN.

The Prime Minister told the UN General Assembly that "Australia now has the highest per capita investment in clean energy technologies of anywhere in the world".⁷

The Department claimed Australia was first among *14 countries* and second for per capita renewable energy investment amongst *30 countries*.

The Australia Institute attempted to replicate and verify the Department's analysis.

⁶ Email from Department on 8 October 2019.

Note the bolded terms, which the Department defined and are defined in text below.

⁷ Morrison (2019) *National Statement to the United Nations General Assembly*

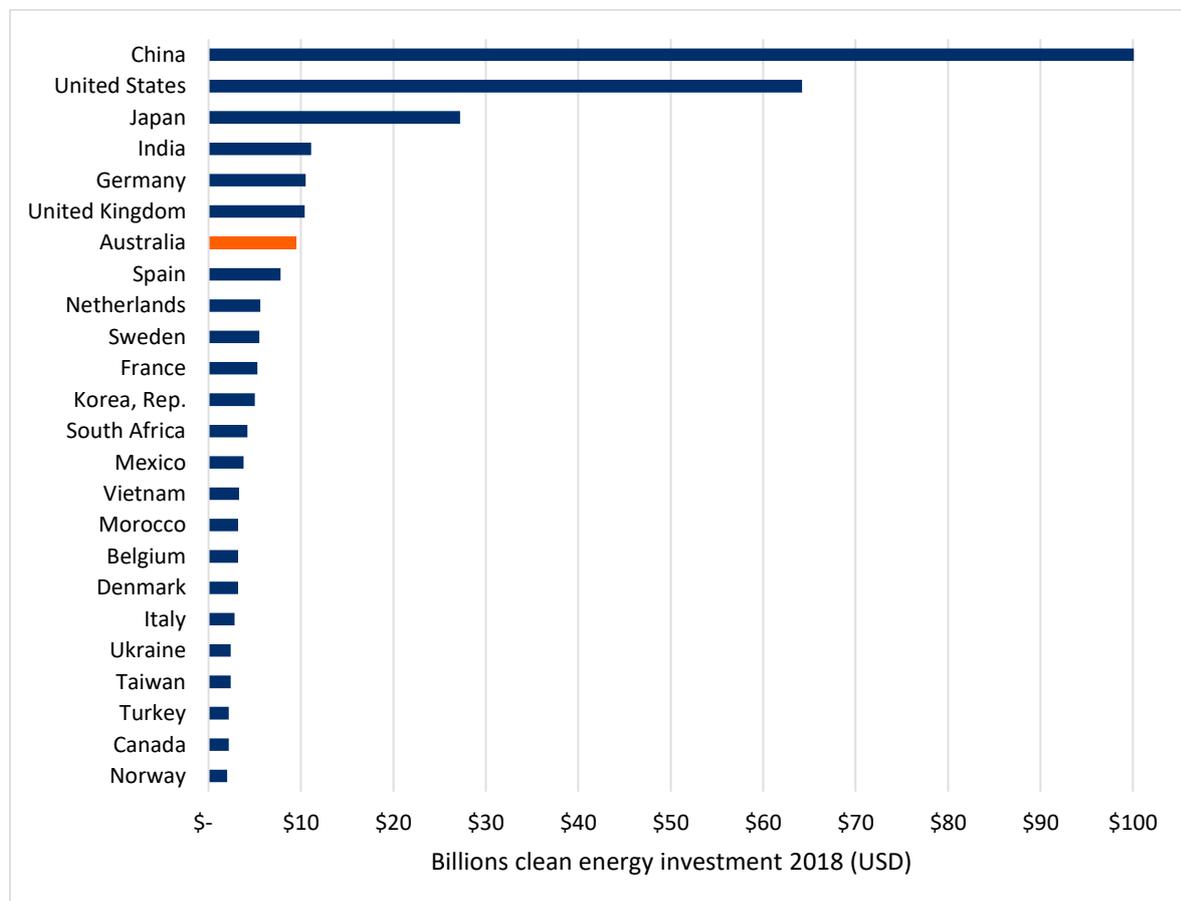
<https://www.pm.gov.au/media/national-statement-united-nations-general-assembly>

REFERENCE 1 - CLEAN ENERGY INVESTMENT

The Department accessed the BNEF Clean Energy Investment Trends data in June 2019 and refers to the 2018 data, which BNEF released in January 2019.⁸ Note clean energy is here renewable energy as well as smart grid and flexibility technology, and related services.

While the Department claims Australia is first of 14 countries, BNEF's public publications do not summarise data from a list of 14 countries. One presentation of BNEF's data displays investment in nine countries, and range of regions.⁹ An accompanying blog post lists clean energy investment in 23 countries and Taiwan, markets each with more than \$2.0bn investment in 2018; investment amounts are shown in Figure 2.¹⁰

Figure 2: BNEF: Clean Energy Investment in 2018, USD



Source: BNEF (2019) *Clean Energy Investment Trends 2018*

⁸ BNEF (2019) *State of Clean Energy Investment* <https://about.bnef.com/clean-energy-investment/>

⁹ BNEF (2019) *Clean Energy Investment Trends, 2018*

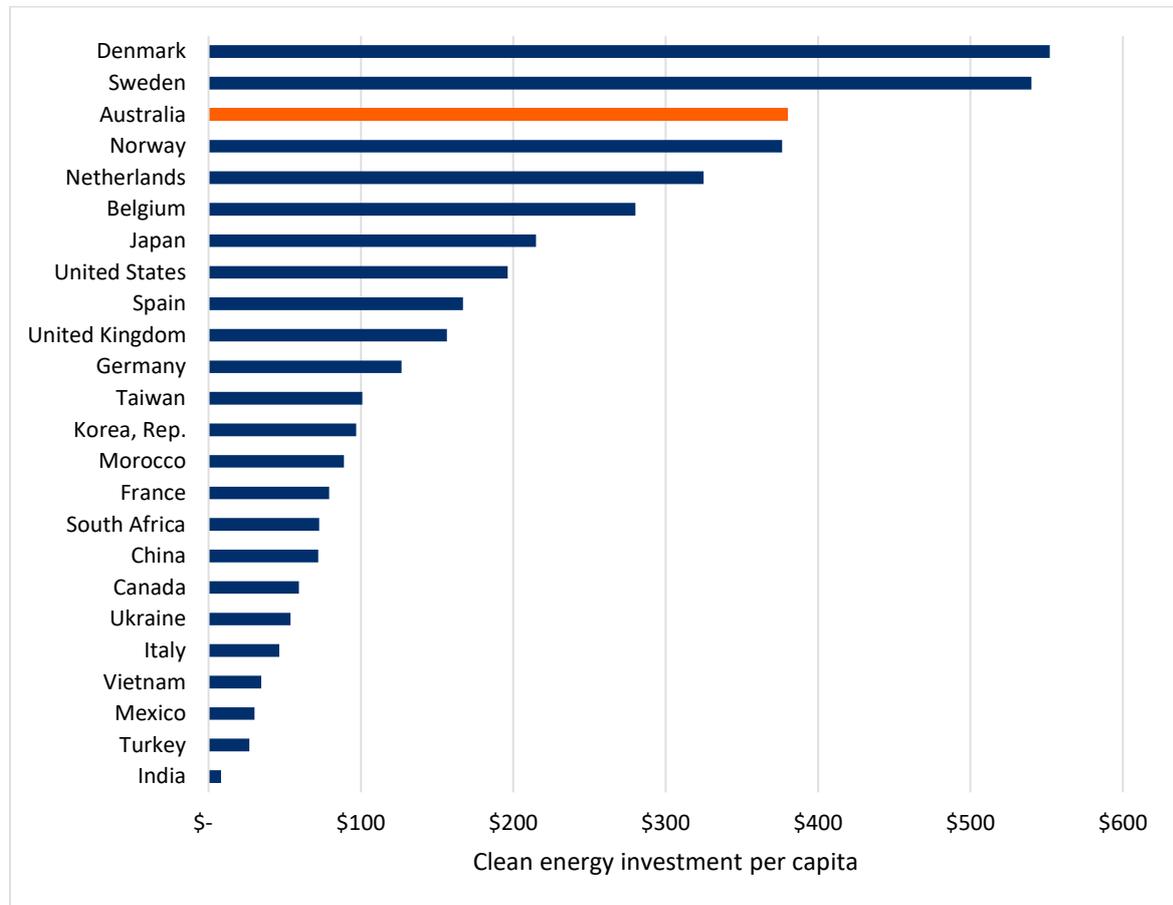
<https://data.bloomberglp.com/professional/sites/24/BNEF-Clean-Energy-Investment-Trends-2018.pdf>

¹⁰ BNEF (2019) *Clean Energy Investment Exceeded \$300 Billion Once Again in 2018*

<https://about.bnef.com/blog/clean-energy-investment-exceeded-300-billion-2018/>

Figure 3 shows the BNEF data in per capita terms, using World Bank population data.¹¹

Figure 3: BNEF: clean energy investment in 2018, USD per capita



Source: BNEF (2019) *Clean Energy Investment Trends 2018*, World Bank (2019) *Population*

On this data, Australia is not first, but *third* per capita.

Australia ranked behind Denmark and Sweden. It is about level with Norway.

Together these three Nordic countries together have a population similar to Australia's, but a higher per capita investment in clean energy in 2018.

Note further that Japan is not second, as the Minister claimed.

Note further the result for Australia (\$380 per person in 2018) was lower than the result produced by the Department (\$514 per person). The reason for this difference is unclear.

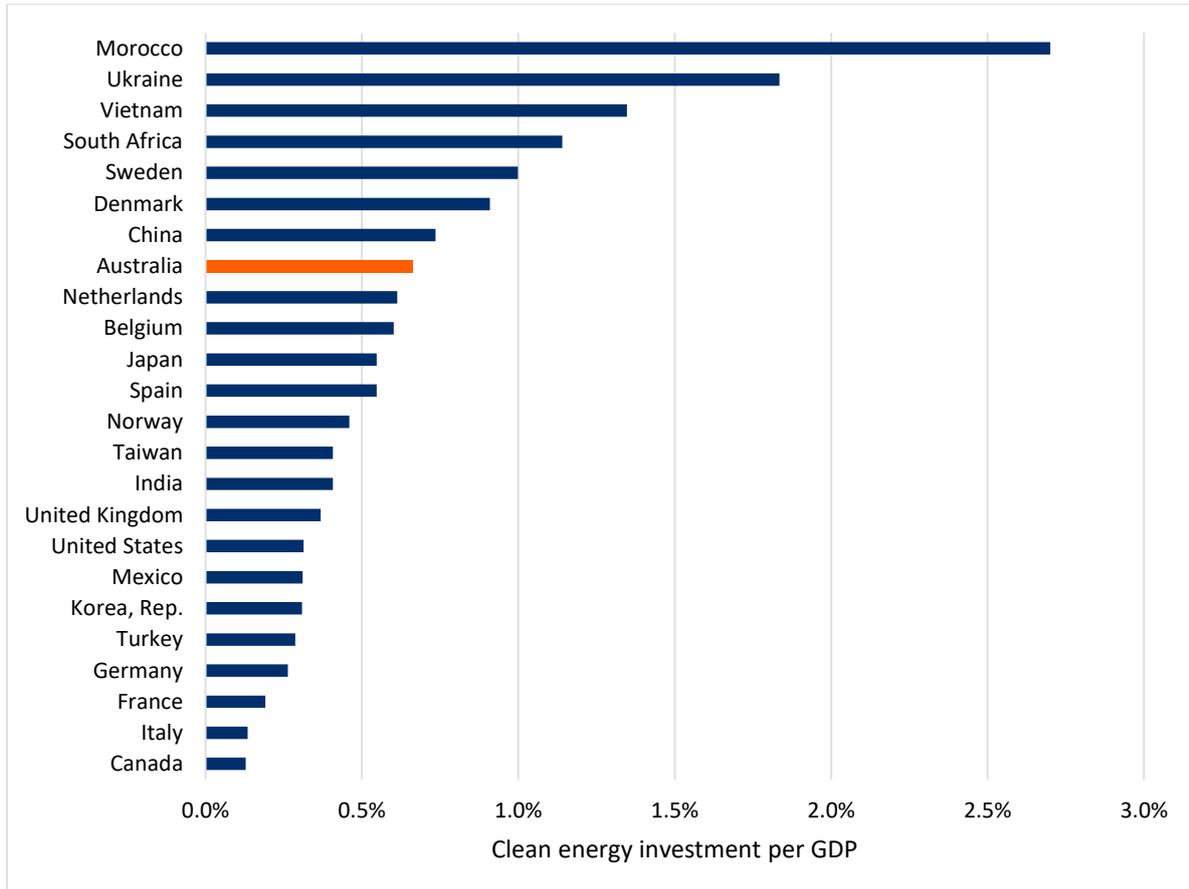
Arguably a more appropriate basis for comparison would be renewable energy investment *per GDP*. A higher income country can more readily invest in more clean energy than a lower income country, all other things being equal.

¹¹ World Bank (2019) *Population*, <https://data.worldbank.org/indicator/SP.POP.TOTL>

The Prime Minister himself has used the the metric of emissions intensity of the economy (based on GDP), alongside emissions per capita, when promoting his government’s policies, as he did in his speech to the UN General Assembly.¹²

The same data, presented as a share of GDP, is shown below.

Figure 4: BNEF: clean energy investment in 2018, per GDP



Source: BNEF (2019) *Clean Energy Investment Trends 2018*, World Bank (2019) *GDP*

Ranked by clean energy investment per GDP in 2018, Australia was *eighth* of these 24 markets.

Highest was Morocco, Ukraine, South Africa, Sweden, Denmark and China.

Australia came just after China.

REFERENCE 2 - RENEWABLE INVESTMENT

The most recent source provided by the Department was a report by the Frankfurt School of Finance and Management, the United Nations Environment Program (UNEP) and BNEF. Data

in this report includes renewables but not other clean energy technology investment included in Reference 1; it also excludes large hydro.

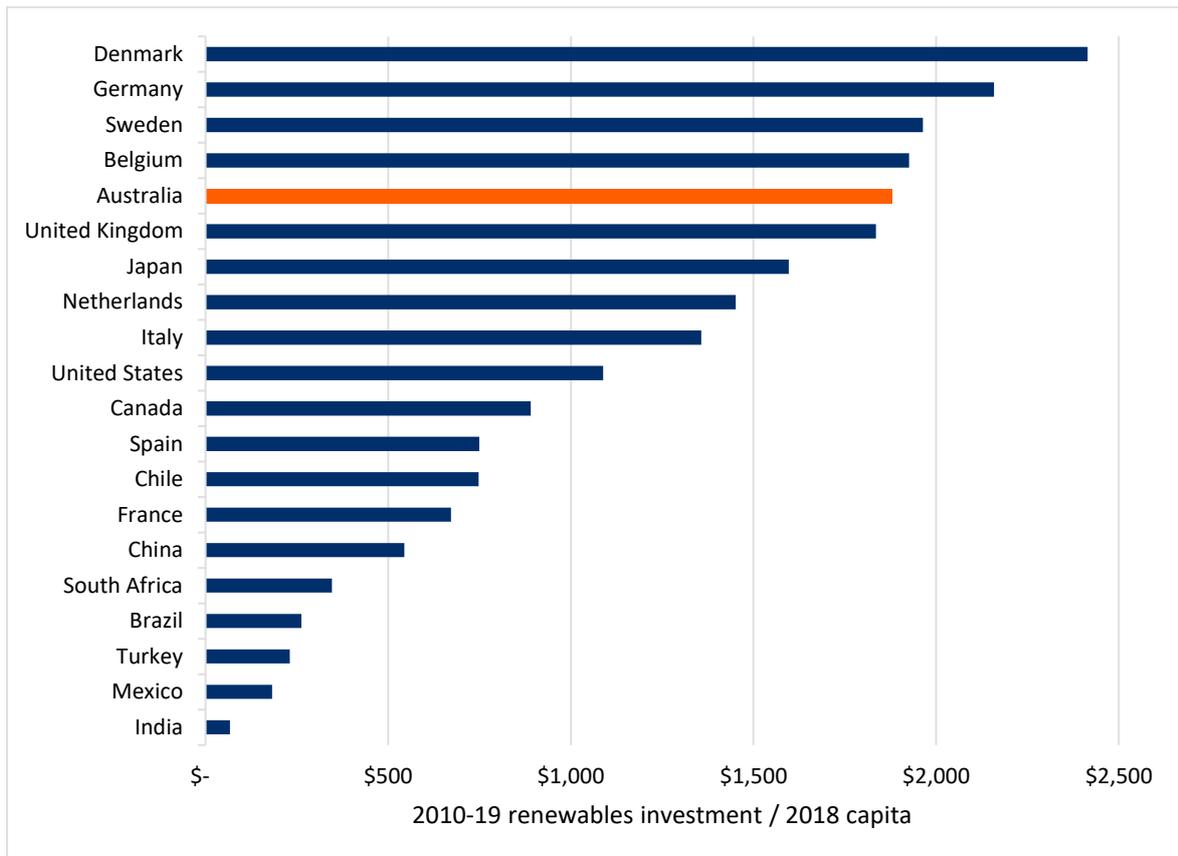
This report gives investment in renewables by the top 30 countries/markets in the calendar year of 2018.¹³

With this data set, The Australia Institute finds Australia is ranked second per capita, as claimed by the Department. However, The Australia Institute finds per capita investment of \$368 per person, compared with the Department claim of \$470 per person. Again the reason for this is unclear.

Earlier in the report, figures are presented for renewables investment over the decade (2010 to mid 2019). Data is shown for 20 countries with the largest renewables investment. As noted above and discussed below, the government's focus on the recent boom ignores the earlier bust. Investment over a longer period is more reflective of national 'achievement' than a boom and bust. Results are shown in Figure 5, using the most recent population figures from the World Bank (2018).

¹³ *Global Trends in Renewable Energy Investment 2019*. Figure 11 <https://fs-unep-centre.org/research/report>

Figure 5: Renewables investment over decade from 2010, per capita, USD



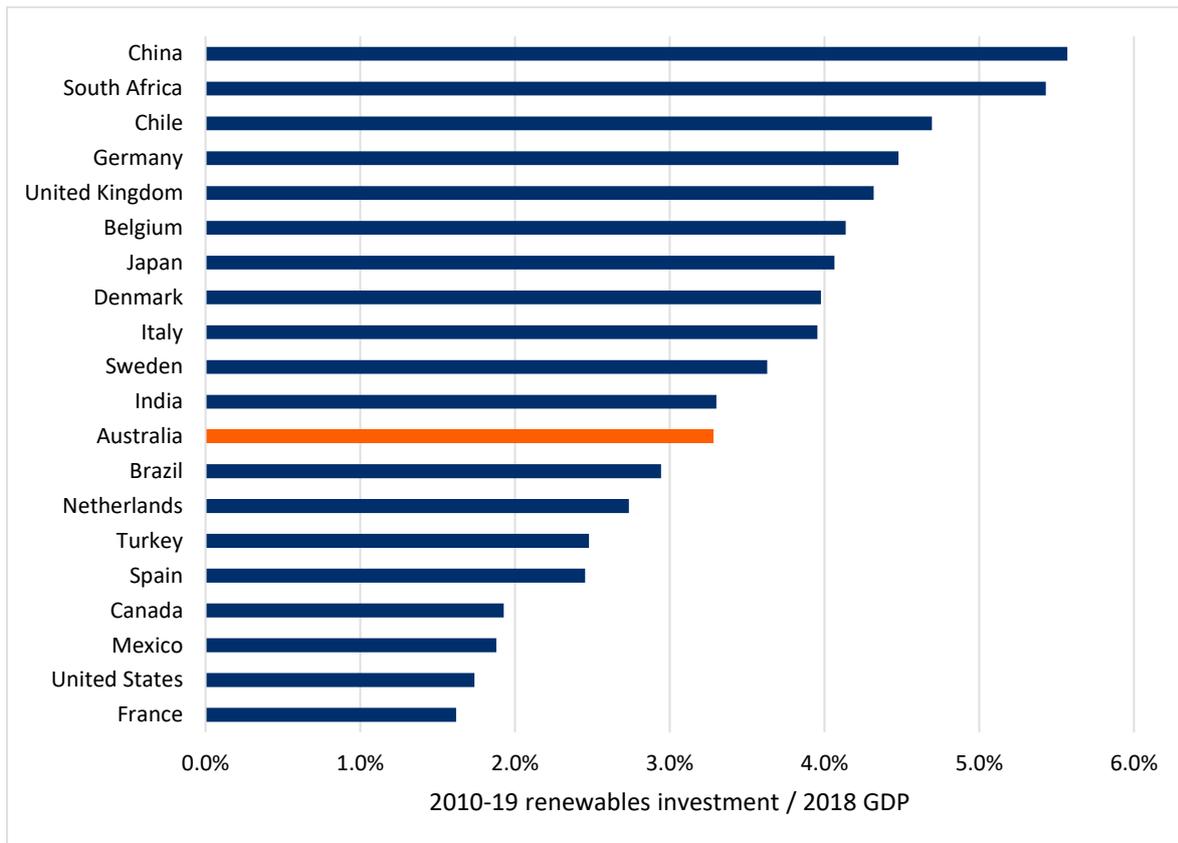
Source: Frankfurt School et al (2019) *Global Trends in Renewable Energy Investment 2019*, World Bank (2019) *Population*

Amongst the largest 20 markets for renewable energy investment over the past decade, Australia ranks *fifth* per capita behind Denmark, Germany, Sweden and Belgium.

For 2018 renewables investment per GDP, Australia places *eighth* out of 30 over 2018, behind Morocco, Vietnam, Ukraine, Kenya, South Africa, Sweden and China.

Over the last decade, Australia is 12th for renewable investment per GDP, about level with India. China is first.

Figure 6: Renewables investment over the 2010s, per GDP



Source: Frankfurt School et al (2019) *Global Trends in Renewable Energy*, World Bank (2019) *GDP*

Figure 5 above compares the Frankfurt School et al. estimates of renewable energy investment from 2010 to 2019, with the World Bank’s estimates of each country’s GDP in 2018.

SIZE MATTERS

The Prime Minister’s claim that Australia does better on per capita renewables than “any country in the world” should be checked against countries with small populations. In countries such as Tuvalu, with a population of around 11,000,¹⁴ relatively modest investments in renewable energy translate into high per capita investment.

A basic internet search finds that Tuvalu is aiming for 100% renewable energy by 2020. Its plan for a 6 megawatts of generation capacity and battery storage is supported by the

¹⁴ World Bank (2019) *Tuvalu*, <https://data.worldbank.org/country/tuvalu?view=chart>

World Bank,¹⁵ and has an annual average construction budget of \$AUD6.5 million.¹⁶ Divided by its 11,000 residents, this comes to \$AUD591 per person, or \$US401 per person at current AUD/USD exchange rates. Based on this estimate, Tuvalu's annual average investment ranks third in Figure 2 above, above Australia's \$USD380, derived from a record high year in 2018.

Other countries with small populations are likely to have similarly high levels of per capita investment, particularly if favourable years are selected. This further undermines the Prime Minister's claim.

¹⁵ World Bank (2015) *Tuvalu Set for More Efficient and Renewable Energy*,

<https://www.worldbank.org/en/news/press-release/2015/01/26/tuvalu-efficient-renewable-energy>

¹⁶ Government of Tuvalu (2012) *Tuvalu Master Plan for Renewable Electricity and Energy Efficiency in Tuvalu, 2012 – 2020*, <http://prdrse4all.spc.int/node/4/content/tuvalu-master-plan-renewable-electricity-and-energy-efficiency-tuvalu-2012-2020>

Per capita renewable capacity

Ministers are not the only ones to have claimed Australia ranks first on renewables per capita. The Clean Energy Regulator (CER) has also made a similar claim:

Australia is installing solar and wind so fast that it is now leading the world in the per capita deployment rate for renewables, overtaking Germany and the United Kingdom.¹⁷

Note this claim relates to capacity installed, measured in megawatts (MW), not investment, measured in dollars, as discussed in the section above.

CER made the claim in an administrative report for the RET (which the CER administers). The Australian Renewable Energy Agency (ARENA) later described the CER report as “finding that Australia is installing more renewable generation per capita than any other country.”¹⁸

In fact the CER did not itself make these findings, but cites an early 2019 report from researchers at the Australian National University (ANU).

ANU REPORTS

The ANU report does not say Australia is first among all countries. The first sentence of the four page report is:

Australia is installing renewable energy (solar photovoltaics and wind) far faster per capita than other countries.¹⁹

Strictly this requires only that Australia ranks higher than *two* other countries not every other country. Later in the report the authors compare Australia against seven other countries :Germany, China, the USA, Uruguay, Japan, China and India. It also includes other regions.

¹⁷ Clean Energy Regulator (2018) *The Renewable Energy Target, Administrative Report - Year in Review*, <http://www.cleanenergyregulator.gov.au/About/Pages/Accountability%20and%20reporting/Administrative%20Reports/The%20Renewable%20Energy%20Target%202018%20Administrative%20Report/Year-in-review.aspx>

¹⁸ ARENA (2019) *Australian renewables growing at record rates*, <https://arena.gov.au/blog/australian-renewables-growing-at-record-rates/>

¹⁹ Blakers et al (2019) *Australia: the renewable energy superstar* <http://re100.eng.anu.edu.au/publications/assets/100renewables.pdf>

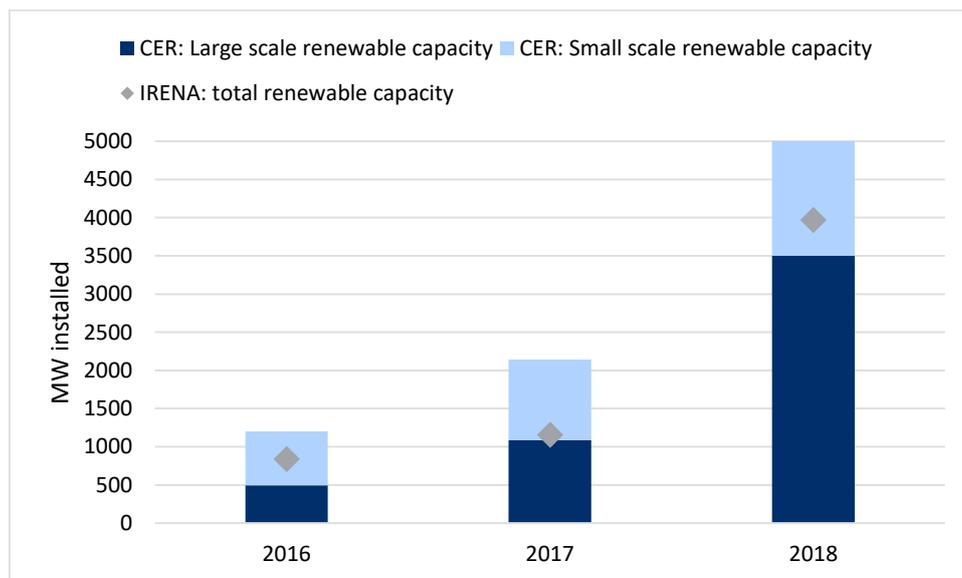
They are not the largest by population or GDP. Uruguay is a small developing country with high renewable energy investment in 2017 and the list does not include France. It is unclear what if any criteria were used.

A follow up report from the ANU, including two of the same authors, uses the same data sources and method as the first report. Uruguay and the UK are missing from this later report. The later report concludes

Australia is leading the world in the installation of renewable electricity capacity... This is more than two and a half times faster than the next fastest country, Germany, and is about ten times faster than the world average.²⁰

For Australian capacity the ANU researchers use data from the CER.²¹ For all other countries they use data from the International Renewable Energy Agency (IRENA). These data sources are similar and show the same increase from 2016 to 2018, although the CER data is somewhat higher than IRENA's numbers for Australia, as shown in Figure 7.

Figure 7: Australian renewable energy capacity additions



Source: The Australia Institute calculations from IRENA (2019) *Query Tool, Total Renewable Capacity*; CER (2016,2017,2018) *The Renewable Energy Target Administrative Reports*

CER presents *project accreditation* in that year, while IRENA figures are calculated from total capacity figures and so are net additions including reductions. This could be one reason for the difference between the data sources. It is also important to note data is generally

²⁰ Stocks et al. (2019) *Powering ahead: Australia leading the world in renewable energy build rates*, page 3 <http://re100.eng.anu.edu.au/news/2019-09-04.php>

²¹ CER (2019) *The Renewable Energy Target 2018 Administrative Report*, Appendix A <http://www.cleanenergyregulator.gov.au/DocumentAssets/Documents/The%20Renewable%20Energy%20Target%202018%20Administrative%20Report.pdf>

provided to IRENA by governments themselves. It is potentially problematic to use Australian CER data but international IRENA data.

Another issue with the reports is that they compare CER data with IRENA data from the year before. The authors say the IRENA data should not change much from year to year. The Australia data alone shows this is not correct. Looking at the IRENA data shows it also fails to hold for Uruguay and indeed many other countries.

This again shows the problems with cherrypicking single years. It also demonstrates why the Prime Minister's claims about renewable investment "today" cannot be verified with this approach, if today means 2019.

IRENA

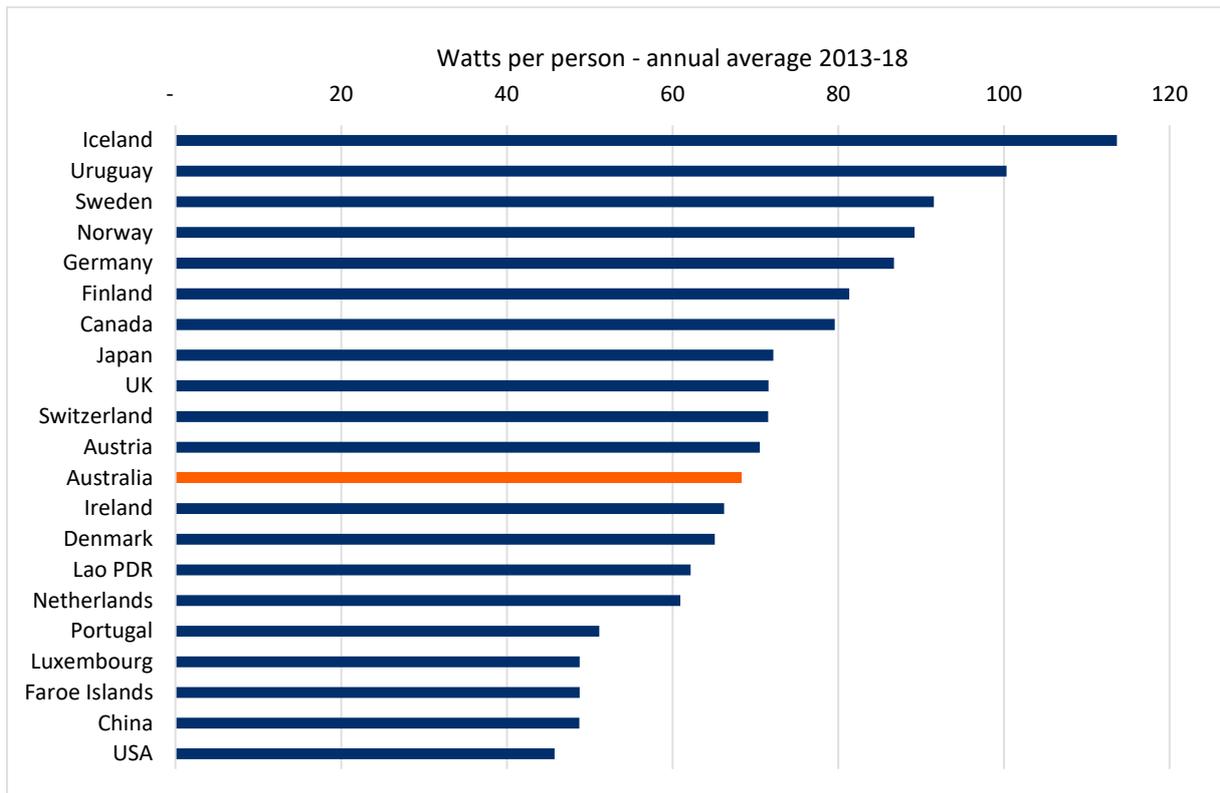
The data from IRENA shows:

- Australia has the seventeenth largest renewable capacity globally.
- Excluding hydro, Australia ranked twelfth.
- Per capita in 2018, Australia was *nineteenth* for total installed renewable capacity.
- Excluding hydro, Australia was *seventh* per capita.

Recent claims about renewable per capita have focused on annual rates of investment or installation, rather than total installation. On the IRENA data, Australia's 2018 capacity addition per capita placed it *third* globally, behind Norway (204W per person) and Iceland (410W per person).

The IRENA data show Australia's renewable energy boom is a very recent phenomenon. A longer term view over the last five years puts Australia ranks twelfth for average renewable capacity additions per capita (see Figure 8)

Figure 8: IRENA: per capita renewable capacity addition, five year average



The Australia Institute calculations from IRENA (2019) *Query Tool, Total Renewable Capacity*; World Bank (2019) *Population*

Australia ranks first per capita capacity addition for 2018 only if hydro electricity is excluded from IRENA's data. Excluding hydro power would mean excluding the Snowy Hydro scheme, including Snowy 2.0, and other pumped hydro schemes the government considers central to its renewable energy policies. Looking over five years Australia is *seventh* globally on non-hydro renewable capacity addition.

Putting the claims in context

Claims about the recent renewables boom turn out to be more problematic than they appear. But it is nonetheless justified to highlight the recent surge in installation and investment in Australia. It is entirely unjustified for the government to cite these events in defense of its inaction on climate change.

Australia has an oversized role in causing climate change, far greater per capita than nearly every other country.²² The renewables boom has not prevented Australia's emissions from rising.

The Australian government became first in the world to repeal a national carbon price. Australia's emissions have increased every year since.

Moreover, the Commonwealth government has repeatedly sought to stop or slow down the installation of renewable energy.

AUSTRALIA'S OVERSIZED CLIMATE IMPACT

The government focuses on Australia's share of world emissions, yet it ignores Australia's very high emissions per capita.

At the same time, the government focuses on renewable energy installation per capita, while ignoring Australia's share of world renewables.

Australia's emissions are the highest per capita in the OECD and come behind only handful of smaller petro-states. Australia's emissions per capita are twice those of China and more than triple the world average. Australia's emissions are greater than emissions than 40 countries each with bigger populations than Australia.

Australia has a smaller share of world renewable energy capacity (1.0%) than it has of world emissions (1.2%), and is ranked lower (16th vs 14th).²³ By comparison, China has 29.5% of world renewable energy capacity. Excluding hydro power, Australia's share of renewables increases slightly to 1.5%, placing Australia twelfth.

²² Emissions figures in this section from Swann (2019) *High Carbon from a Land Down Under* https://www.tai.org.au/sites/default/files/P667%20High%20Carbon%20from%20a%20Land%20Down%20Under%20%5BWEB%5D_0.pdf

²³ Swann (2019) *High Carbon from a Land Down Under*, IRENA (2019) *Query Tool, Total Renewable Capacity* <https://www.irena.org/Statistics/View-Data-by-Topic/Capacity-and-Generation/Query-Tool>

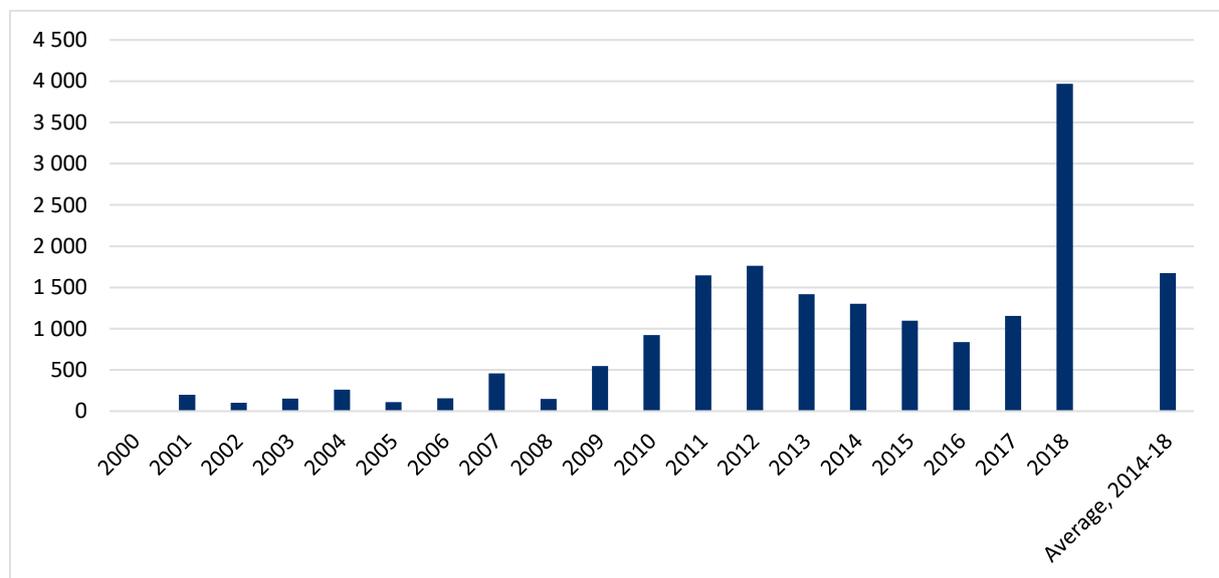
Moreover, these figures ignore Australia’s fossil fuel exports which result in CO2 emissions more than double Australia’s domestic emissions. Australia is the fifth biggest extractor of fossil fuel CO2 and the third biggest exporter of fossil fuel CO2.²⁴

The focus on recent renewable uptake is all the most misleading for the fact that the Coalition Federal Government has repeatedly tried to slow it down.

GOVERNMENT SLOWING RENEWABLES

The International Renewable Energy Agency (IRENA) provides data on renewable energy capacity in different countries. IRENA data for net capacity additions in Australia is shown in Figure 9.

Figure 9: Australian renewable energy capacity additions - IRENA



Source: The Australia Institute calculations from IRENA (2019) *Query Tool, Total Renewable Capacity*;

Annual capacity additions increased in Australia from 2009 to 2012, after the Rudd Commonwealth government increased the Renewable Energy Target. After the election of the Coalition Government, annual installations fell each year to 2016.

From 2013 onwards the Coalition Government created policy uncertainty, including publicly advocating for cutting or removing the Renewable Energy Target. A lead critic of the RET was Angus Taylor, who is the current Energy and Emissions Reduction Minister.

²⁴ Swann (2019) *High Carbon from a Land Down Under* [https://www.tai.org.au/sites/default/files/P667_High_Carbon_from_a_Land_Down_Under_\[WEB\]_0.pdf](https://www.tai.org.au/sites/default/files/P667_High_Carbon_from_a_Land_Down_Under_[WEB]_0.pdf)

In 2015 the federal government cut the 2020 RET from 41,000GWh to 33,000GWh. Resolving the uncertainty saw renewables installations increase in 2017 followed by a tripling in 2018.

Once the RET was cut, projects that were put on hold came forward to meet the RET requirements. This is one reason for the subsequent boom. In other words, the government created a renewable bust through policy uncertainty then resolution then resolved it.

Higher wholesale electricity prices have also incentivised new renewable energy; the increase in prices was in part caused by policy uncertainty.

Another driver behind the boom has been falling renewable costs, for which the government is not responsible.

The federal government's main role in the recent renewables boom has been providing policy uncertainty.

Note the average annual installation over the last five years, and in four out of the five years, was lower than in 2012.

If the government had not cut it, the Renewable Energy Target would be 24% higher in 2020. This is the renewable energy the government did not want installed.

ONGOING UNCERTAINTY

While recent experience shows a renewable boom is possible, its future is far from certain.

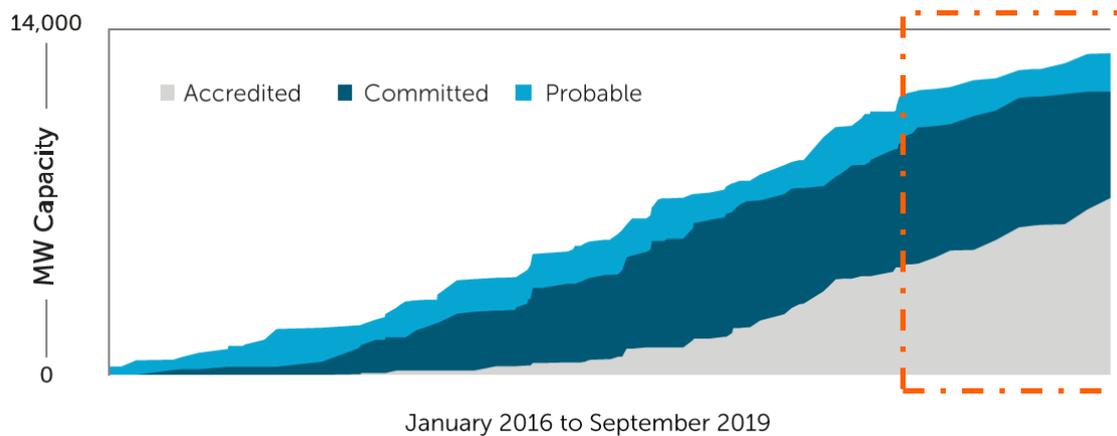
The federal RET for 2020 is now effectively met and the Federal Government has no specific ambition or policy goal for new renewables. There are also impending grid bottlenecks requiring more transmission and other integration services. Without policy support from the Federal Government, these issues will be left to state governments, regulators and the market operator.

Already clean energy investment has fallen in Australia. According to BNEF, the data source on which the government relies, investment in the first half of 2019 dropping by half on levels a year before, and approaching levels not seen since 2016.²⁵

This is also clear from the CER data for the large scale renewable capacity "pipeline". The most recent data shows there has been significant installation so far in 2019 and significant capacity in the pipeline. However the pipeline growth is slowing and levelling off..

²⁵ McConnell (2019) *Australia has met its renewable energy target. But don't pop the champagne*
<https://theconversation.com/australia-has-met-its-renewable-energy-target-but-dont-pop-the-champagne-122939>

Figure 10: CER: Renewable energy project pipeline progress



Source: orange added, CER (2019) *Large-scale Renewable Energy Target Market Data – Sept 2019*
<http://www.cleanenergyregulator.gov.au/RET/About-the-Renewable-Energy-Target/Large-scale-Renewable-Energy-Target-market-data> .

The government is expressing little to no enthusiasm for sustaining recent the levels of renewable investment. Minister Taylor himself argued that Australia has over invested in renewables: “The challenge we have now is that we have crossed the threshold” of what the grid can “absorb”.²⁶ The claim is dubious, with many states still having relatively low levels of renewable generation, and significant opportunities for integration of higher levels, as the example of South Australia shows, provided there is planning and credible policy. The Australian government’s response has been to to develop a new program to underwrite generation, including, gas and coal,with taxpayer money and to criticise companies seeking to close down aging coal power stations.

²⁶ Mazengarb (2019) ‘We have crossed the threshold’ – Taylor repeats claim of too much wind and solar
<https://reneweconomy.com.au/we-have-crossed-the-threshold-taylor-repeats-claim-of-too-much-wind-and-solar-23850/>

Conclusion

In 2017 Scott Morrison stood in Parliament at the dispatch box brandishing a lump of coal. Two and a half years later, the now Prime Minister stood at the UN podium brandishing claims about Australia's renewable achievements.

The recent renewable energy boom has indeed been remarkable achievement. However government claims about the boom are misleading without context, which the government does not provide, and are also unsupported by data sources the government itself points to.

The Australian government's main role in this achievement has been through trying to slow it down. If the RET was not cut, there would be significantly more renewable energy installed in Australia. Already there are concerning signs that the boom is slowing down and the government is expressing little willingness to do this.

Meanwhile Australia's emissions continue to climb and Australia's fossil fuel industry is increasing its already very large impact on the climate.

Addressing the climate crisis in line with the Paris Agreement requires moving to 100% clean energy, renewable storage, energy efficiency and demand management.

Australia is poorly served by misleading and unjustified claims about the rate of renewable investment or installation. The national interest would be better served by energy policy based on facts and aligned with the goal of solving the climate crisis, to which Australia is committed.