

A large field of solar panels stretches across the foreground, receding into the distance. The sun is low on the horizon, creating a warm, golden glow over the scene. The sky transitions from a bright yellow near the sun to a soft orange and then a pale blue. The solar panels are arranged in neat rows, and their surface reflects the light from the sun.

> Investing for a safe climate



australian**ethical**

Report on our climate action and reporting

31 October 2016

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1 Purpose of this report

This report explains the investment action Australian Ethical is taking in response to global warming, including the way we communicate the climate impact of our investing. Communicating Australian Ethical's innovative climate change work is an integral part of our day-to-day efforts to promote climate action by investors, companies, governments and individuals. This report supplements our other climate performance reporting, providing an overview of our climate positions, action and communication.

Our climate reporting, including this report, has received a '2° Invest International Award on Investor Climate Related Disclosures'. These awards were launched in 2016 by the French Minister of Environment, Energy and the Sea. The awards aim to incentivise best practice in climate disclosure, aligned with the *Energy Transition for Green Growth Law*. This significant French law promotes transparency of climate related risk management and investor alignment with limiting warming to 2°C and supporting green growth.

2 About Australian Ethical

Australian Ethical Investment Limited was established in 1986 to manage the retirement and other savings of Australians in an environmentally and socially responsible way. All our investing activities are governed by our Ethical Charter (<https://www.australianethical.com.au/australian-ethical-charter/>) which is embedded in our constitution. This requires us to manage our clients' money in a way that is aligned with a safe climate future.

Today we manage over AUD 1.7 billion in superannuation and managed funds for over 30,000 Australians. The company is based in Sydney and is listed on the Australian Stock Exchange.

We invest for our clients and manage our business, conscious of the impact that our actions have on the world around us. We do not compromise on ethics or financial performance. We achieve both. We are the model for business of the future - doing it today.

Our forward looking approach integrates climate change considerations into our investment decisions. This long term view is aligned with the interests of our many clients who are investing for their retirement through our superannuation fund.

Australian Ethical has always been at the forefront of investing for a clean energy future. In 2014 we became the first Australian superannuation fund to join the **Portfolio Decarbonisation Coalition** launched by the United Nations Environment Program Finance Initiative. We have made a commitment to reduce the net emissions of our entire investment portfolio to zero by 2050. This is based on the level of action required to limit warming to below 2 degrees. We have also committed to the **Montreal Pledge** and **Science Based Targets Initiative**.

3 Why invest for a safe climate?

At Australian Ethical we recognise that climate change is the most challenging issue of our times. Extreme heat waves, declining global food stocks, increasingly intense storms, loss of ecosystems and species, and life-threatening sea level rise and are all known outcomes of not acting quickly enough.

Beyond the policy settings, ultimately it is capital that provides the solution – and a vast amount of capital needs to flow rapidly from financing the old economy to the new. This will not happen with a business-as-usual mentality or by waiting for “permission” from regulators. Investors need to fundamentally rethink their approach and embrace their role as stewards to promote:

- a sustainable future for people, animals and the environment
- conditions necessary for well-functioning markets (recognising the systemic threats posed by climate change).

We believe that investors can be a key driving force for action on climate change globally. Properly harnessed, global capital has enormous power to not just incrementally shift, but to transform.

We believe that all investment funds should disclose the emissions intensity of their portfolio and set emissions reduction targets. There need to be more investors decarbonising by a date consistent with an acceptable level of warming, based on the current science.

4 Why well below 2 degrees?

Australian Ethical supports the goal of the 2015 Paris Agreement countries to limit global warming to ‘well below’ two degrees and to keep open the option of a 1.5 degree limit. In line with the global scientific community, Australian Ethical sees that warming above 2 degrees poses unacceptable risks to people, animals and the environment.

Greenhouse gas concentration levels in the atmosphere are already at 400 parts per million (ppm) CO₂ equivalent (CO₂-e). This has led global temperatures to rise by 0.8°C above pre-industrial levels causing permanent and irreversible damage to the world’s ecosystems.

Even with the 2 degree goal we recognise there are significant risks. That is why Australian Ethical views 2 degrees as the **absolute upper limit** and warming should be kept **well below** this level.

This view is supported by the latest science. For example, research published in 2015 in *Science* found that the extinction rate of species rises on a more or less linear basis between 1.5 and 2°C warming.

In May 2015 the UNFCCC released a report¹ assessing the adequacy of the goal of limiting warming to 2 degrees. They found that there was a significant increase in risk between 1.5 and 2°C of warming, particularly for temperature sensitive systems like the poles, mountains and tropics. They also found that the risk of passing tipping points increases above 1.5°C.

¹ UNFCCC 2015 *Report on the structured expert dialogue on the 2013–2015 review*

5 Why zero by 2050?

Australian Ethical has committed to a target of **net zero portfolio emissions by 2050**. We made this commitment when we signed up to the UNEPFI Portfolio Decarbonisation Coalition in 2014.

The Australian Government's independent advisory body, the Climate Change Authority, determined 2050 as the date by which Australia needs to decarbonise in order to keep warming within 2°C above pre-industrial levels with a 66% probability. They assess that CO₂-e concentration should be limited to 415ppm.

We set our target in line with the Climate Change Authority because their approach:

- Sets a target specifically for Australia.
- Takes account of the diverse capacities of different countries to reduce emissions over the coming decades (with Australia having relatively strong emissions reduction capacity).
- Sets Australia's target on the basis that developed countries should have higher reduction targets than less developed countries which currently experience energy scarcity and have much lower per capita emissions levels.

Taking these factors into account, the Climate Change Authority arrives at a decarbonisation target date of 2050 which is an earlier date than both the IPCC and IEA 2° scenarios. Although Australian Ethical invests internationally, we think it is appropriate for us, as an Australian investor, to have a more stringent target in line with the factors considered by the Climate Change Authority.

Like the Climate Change Authority, we will keep this target under review in light of growing scientific knowledge, including about current and future rates of warming as well as the social and environmental implications of different levels of warming. For example, faster warming or bigger adverse impacts may lead us to identify an earlier zero target date.

6 Tracking progress to zero emissions

Australian Ethical has committed to transparently reporting progress on our decarbonisation goal. This involves:

- Selecting appropriate carbon metrics to report against (section 6.1)
- Setting milestones to track progress to zero emissions (section 6.2).

6.1 Carbon metrics

Accurate tracking of the true climate impact of investments is challenging, due to both conceptual issues (e.g. who should emissions be allocated to so that we don't under- or over- count) and data issues (what is being reported, and what is the quality of that reporting). This section will cover some of the approaches Australian Ethical has used to measure the climate impact of our portfolio. Our use of carbon metrics will be refined over time as the quality of the data improves.

We discuss carbon metrics in our Sustainability report for 2014-15 (see pages 25-27 at the [link here](#)) and our Annual & Sustainability report for 2015-16 (see pages 42-45 at the [link here](#)).

6.1.1 Portfolio carbon footprint

We have reported our carbon footprint in our Annual & Sustainability report for the past three years based on Trucost data. In 2013-14 (p. 34 [link here](#)) we assessed our Australian equity holdings only and in 2014-15 (p. 26 [link here](#)) and 2015-16 (p. 42 [link here](#)) we included international shares as well. We have not yet included fixed income investments in our footprinting.

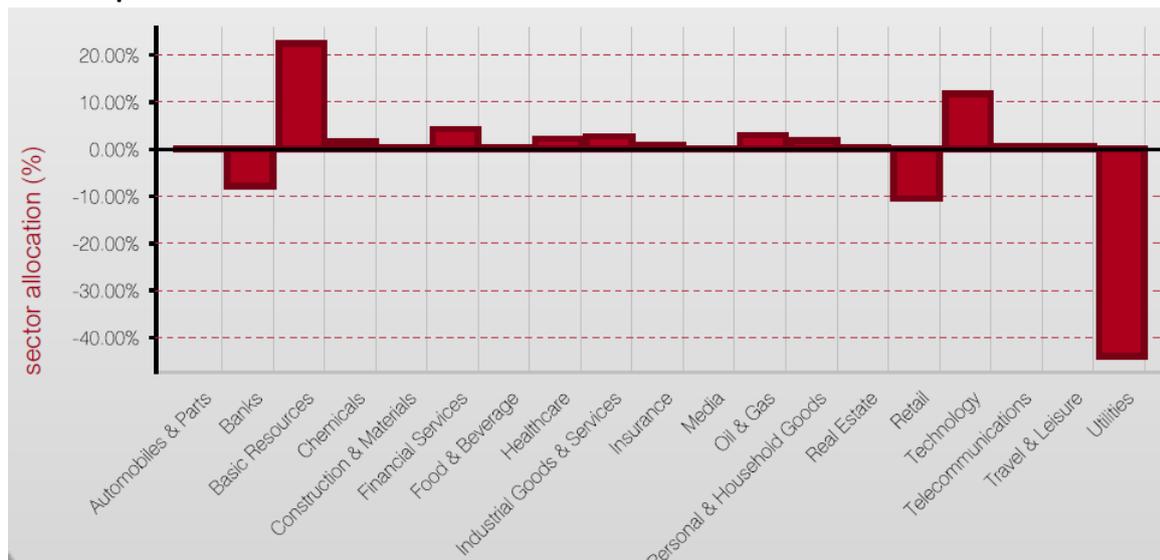
According to the carbon footprint method, Australian Ethical’s portfolio is 167.8 tonnes of CO₂-e / AUDm revenue. This is approximately 40% less carbon intensive than the index benchmark, and is a result of our screening approach (discussed in section 7).

Sectoral discussion

Australian Ethical’s portfolio is less carbon intensive than the benchmark primarily because of stock selection which results in the portfolio being 48.8% more carbon efficient than the benchmark. Funds at Australian Ethical are actively screened internally to account for ESG factors including emissions.

The positive impact of stock selection is partially offset by sector allocation which is 8.9% more carbon intensive than the benchmark. This is primarily due to Australian Ethical being underweight in Retail and Banks (see Figure 1 below), both of which are very low carbon sectors. Retail and Banks combined contribute to 18.34% of reduced carbon efficiency. While increasing our holdings in the Retail and Banks sector would reduce our carbon footprint, it would not help the world transition to a low carbon future. This is why we haven’t looked to increase holdings in these sectors in response to the findings of our carbon footprint. In contrast we have deliberately avoided the oil and gas sector because we see poor alignment of this sector with a 2 degree world.

Figure 1: Trucost analysis of sector allocation effect on carbon footprint showing Australian Ethical’s portfolio relative to the benchmark.²



Regional analysis

Our footprint from Trucost shows our international investments are significantly more carbon intensive than our Australian investments. Of the 10 largest contributors to our carbon footprint,

² Negative values indicate the fund is more heavily invested in a carbon intensive sector than the benchmark, or is underweight in a carbon ‘light’ sector. The reverse is true if the bar is positive.

only one is an Australian company (see table below). This is despite 78% of our investments at the time of footprinting being ASX listed companies. This is partly because the ASX is less carbon intensive than our global benchmark MSCI World. It is also because our international investments have historically focussed on overseas opportunities in renewable energy and energy efficiency. While these investments are 2 degree aligned, they can be more operationally carbon intensive than sectors like healthcare and I.T. where our Australian funds have significant investments.

Table 1: Top 10 largest company contributors to Australian Ethical's carbon footprint

• Company name	• Stock exchange	• Carbon footprint Contribution calculated by Trucost (% ³)
• Contact Energy Ltd	• New Zealand	• -15.16%
• Veolia Environnement SA	• France	• -12.01%
• Covanta Holding Corp	• United States	• -10.12%
• Republic Services, Inc.	• United States	• -5.22%
• Owens Corning	• United States	• -3.60%
• Falck Renewables SpA	• United Kingdom	• -2.64%
• Osaka Gas Co., Ltd.	• Japan	• -2.12%
• Cleanaway Waste Management Ltd.	• Australia	• -1.74%
• NGK Insulators, Ltd.	• Japan	• -1.47%
• REC Silicon ASA	• Norway	• -1.34%

Outside Australia our carbon footprint is positively impacted by our focus on developed countries as opposed to developing countries. The MSCI World index (developed countries index) has a footprint of 160.2 CO₂e/\$M invested compared to MSCI emerging markets index which has a footprint of 4092e/\$M invested⁴.

Limitations of carbon footprint methodology

While assessing our carbon footprint has provided useful insight, we have identified a number of issues including:

- Gaps and inconsistencies in how companies report data.
- Inconsistencies between the modelling approaches used by emissions data providers meaning that our portfolio footprint and the footprints of non-Australian Ethical funds using a different provider are not necessarily comparable.
- There is the potential for double and even triple counting of emissions because emissions reported as direct (Scope 1 emissions) by one company may also be included as direct (Scope 2 or 3 emissions) by another. Stripping out these instances of double and potentially triple accounting is problematic.

³ The Carbon Footprint Contribution is the percentage decrease in performance between what the Carbon Footprint of the portfolio would be without the holding and what the Carbon Footprint is currently. This is a measurement of how much a specific holding reduces the carbon performance of the portfolio.

⁴ https://www.msci.com/documents/1296102/1636401/MSCI_IndexCarbonFootprintMetrics_Q1+2016.pdf/84265752-83ed-4988-8462-731fa06aad2

- There is currently no accepted accounting for the positive or negative ‘externalities’. This can make it difficult to determine if a company is good or bad for the climate on the basis of their footprint alone. For example:
 - Typically a carbon footprint does not include the emissions from combusting coal (scope 3 emissions) when assessing coal mining companies. This quite obviously doesn’t give a complete picture of the emissions impact of the company.
 - A carbon footprint does not account for the economy wide emissions reductions delivered by companies in sectors like recycling, energy efficiency and renewable energy (see next section 6.1.2).

6.1.2 Carbon savings from climate solutions companies

In 2016 we worked with Ernst & Young (EY)⁵ to analyse the positive impacts of selected companies in our portfolio who are doing good things to reduce emissions like making household insulation and bicycles, generating renewable electricity and recycling waste metals. We discuss this work in our 2016 Annual & Sustainability report (pages 43-45 [link here](#)) and *2016 Emissions Crediting Project: Summary of issues and results* ([link here](#)).

The analysis demonstrated how an understanding of carbon savings can enhance and complement standard footprint analysis. For example, REC Silicon was identified by Trucost as one of the 10 biggest contributors to our emissions footprint. However, our work with EY indicates that this investment is actually reducing emissions through its production of silicon for solar panels.

The challenge with calculating these sorts of carbon savings is they are not reported by companies in a standardised way (or at all), so often many assumptions are needed to assess saved or avoided emissions. We’ll continue to develop and refine this method for estimating the emissions benefits generated by our investments, and look for ways to combine them with our carbon footprint calculations to provide a better picture of the complete climate impact of our investing.

6.1.3 2 degrees alignment check

An alternative approach to measuring climate impact and performance has been developed by 2° Investing Initiative (‘2ii’) that looks through to current company activities and commitments rather than just historical company emissions. They take a bottom up approach looking at actual assets and infrastructure to assess whether a portfolio is invested in the production capacity needed to transition to a safe climate future.

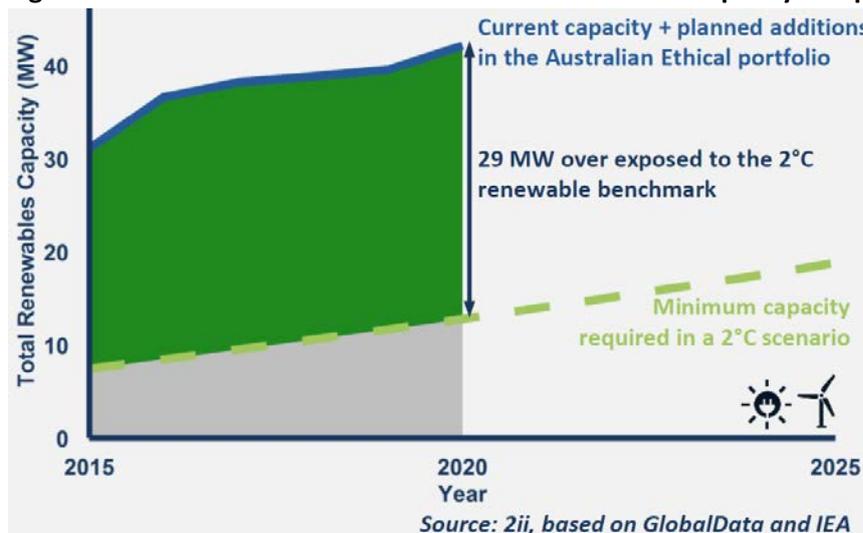
The 2ii assessment of our portfolio found that based on our utility and power investments, the energy mix of our investments are outperforming a 2 degrees trajectory. They also found our investment in renewables was outperforming the 2 degrees trajectory (see Figure 2). This approach to assessing portfolio climate impact helps us to track out progress over time towards our 2050 goal.

More information on our 2 degrees alignment check is available here:

<https://www.australianethical.com.au/news/investing-for-a-safe-climate-future/> .

⁵ Ernst & Young, a member firm of Ernst & Young Global Limited Liability limited by a scheme approved under Professional Standards Legislation.

Figure 2: 2ii assessment of Australian Ethical renewable capacity compared to IEA 2° pathway



6.2 Setting a pathway to our 2050 goal

While the goal of zero emissions by 2050 is set, developing an emissions reduction pathway with milestones has proven complex. In our 2014-15 Annual Sustainability report we discussed some of the challenges we face in setting a pathway (p. 27, [link to report here](#)).

Some of the key issues include:

- Choosing the appropriate metrics for tracking progress.
- How to incorporate the impact of climate friendly investments (see 6.1.2).
- How to avoid creating incentives to exit entire sectors (eg. energy and waste management) in favour of low carbon sectors (eg. IT and telecommunications) when this will not lead to a 2 degree world. For example, we are considering setting sector specific pathways or investment conditions.
- Cyclicity of investment markets.

We expect our work on carbon metrics will enable us to set nearer term milestones and targets in the coming year. In the interim we have used the metrics discussed to compare performance with relevant benchmark indices (6.1.1) and the IEA 2 degrees pathway (6.1.3).

7 Screening

At Australian Ethical our assessment of all our investments is guided by our Ethical Charter which is included in our constitution and provides our responsible investment framework. The Charter requires us to take into account the interests of people, non-human animals and the environment. The Australian Ethical Charter is comprised of 23 principles that guide both the positive side (investments we seek out) and the negative side (investments we avoid) of our ethical approach. A copy of the Charter, which has remained unchanged since 1986 when we were founded, is available at <https://www.australianethical.com.au/australian-ethical-charter/>

Investing for a safe climate future is required by our Ethical Charter because it directs us to consider people, animals and the environment in all our investment decisions. The next two sections describe more specifically how we apply our Charter applies to climate change.

7.1 Positive screening

At Australian Ethical we seek out investments in climate change solutions. We invest in clean energy like solar, wind, tidal, geothermal and hydro renewable energy companies around the world.

We also invest heavily in energy efficiency products and services like LED lighting, insulation, more efficient motors and smart energy management technologies.

We also consider climate change in our investment in other sectors besides energy. For example:

- We don't currently invest in any land-based animal agriculture partly because of its emissions intensity. Instead we invest in aquaculture as a low emissions meat alternative.
- We invest in recycling as a lower emissions alternative to mining virgin materials.

7.2 Negative screening

Our approach to negative screening related to climate change has evolved over time due to three main factors:

- 1 Advancing scientific research on climate causes and impacts.
- 2 Developments in clean technology.
- 3 Increased urgency of the problem due to collective inaction of governments, business and investors.

Australian Ethical never invested in the most emissions intensive fuels, coal and oil, since we started 30 years ago. In 2011, as evidence emerged of the impact of coal seam gas (CSG) on the artesian basin, we decided the risk of irreversible environmental damage was too high (in line with the precautionary principle) and so divested from companies involved in CSG. However we continued to maintain holdings in natural gas pipelines as a transitional fuel to accelerate the closure of coal electricity generation.

In 2015 rapid advancements in renewable energy technology, in particular energy storage technology and production, led us to change our position on natural gas. We are now confident that divesting from natural gas will not push demand back to coal-fired power as renewables with storage can now provide base load and back-up power. As a result in 2015 we divested from natural gas companies.

Australian Ethical is now free from all fossil fuel company investments. We exclude all companies whose main business is fossil fuels, as well as diversified companies that earn some fossil fuel revenue and aren't creating positive impact with their other activities.

We may invest in a diversified company which is having a positive impact in other ways such as producing renewable energy, provided its fossil fuel revenue is sufficiently low (a maximum of 5% to 33% depending on the fuel). For example, we invest in Contact Energy whose electricity production is approximately 80% renewables. They earn some revenue from gas, but we think they are worth supporting as they continue to invest in renewables and help us get to 100% clean energy.

Our exclusion of fossil fuels also looks at indirect involvement, for example we divested from Australian Rail Track Corporation in 2014 because of their increasing coal freight revenue.

We also exclude sectors outside the fossil fuel sectors which we assess to be major contributors to climate change. This includes airline companies or automobile companies that are fueled by carbon intensive fuels and are failing to act to limit warming e.g. by offsetting emissions and investing more in electric vehicles or renewable biofuel alternatives for aircraft. For example we do not invest in Webjet, an online flight booking company, because of their facilitation of emissions intensive air travel.

8 Engagement

We regularly engage with businesses, government and other investors to push for stronger climate action. A summary of our advocacy activity is included in our 2015-16 Annual & Sustainability Report (see page 47 [link here](#)).

We not only engage with companies who we invest in but also companies which do not meet our strict ethical screening criteria. We may acquire nominal holdings in companies which are rejected for ethical reasons so that we can exercise shareholder rights (including rights to vote, nominate directors and sponsor shareholder resolutions) to further the aims of the Charter. For example we were able to support the nomination of climate change expert Ian Dunlop to the board of BHP Billiton by purchasing nominal shares in our Advocacy Fund.

The following table summarises the topics of our company engagement on environmental and social issues over the year to 30 June 2016. Climate change was the primary issue in 36% of engagements:

Table2: Summary of Australian Ethical engagement over 2015-16 FY

Engagement topics	Primary issue	Secondary issue	Total
Climate change	27	2	29
Animal welfare	12	0	12
Human rights	3	1	4
Alleviate poverty	1	0	1
Misleading marketing	3	1	4
Financial over-commitment	1	1	2
Working conditions	2	0	2
Weapons, militarism	2	0	2
Sustainable food	0	1	1
Harm environment (general)	4	1	5
Harm people (general)	3	3	6
Governance (general)	1	0	1
Charter (general)	17	2	19
Totals	76	12	88

Of these 76 distinct engagements, 32 were collaborations with other investors and 44 were conducted independently by Australian Ethical. They included 29 engagements focussed on individual companies as well as thematic engagements which extended to more than 250 additional companies (not all of which we invest in). For example, a collaborative engagement on responsible corporate climate lobbying extended to 6 Australian companies and many more companies internationally. To put these numbers in context, during the year we invested in about 210 different companies at any point in time.

Two of our collaborative engagements during the year involved support for climate related shareholder resolutions, using nominal shareholdings in our Advocacy Fund:

- ANZ Bank: A resolution calling for better climate disclosure and climate targets. The resolution achieved 5.4% support, up from 3.1% of the vote for the 2014 climate resolution.
- Royal Dutch Shell: A resolution calling for fossil fuel profits to be invested in renewables. This resolution achieved 2.78% shareholder support.

A record of our proxy voting activities is disclosed here <https://www.australianethical.com.au/wp-content/uploads/2016/09/Proxy-Voting-Record-2016.pdf>.

As well as engaging with companies Australian Ethical also puts pressure on governments to work towards a safe climate future. For example, our Managing Director Phil Vernon attended Paris COP to share our views. Our recent submissions to the Australian Government on climate policy are available for download under 'Australian Ethical' at the links to government websites below:

- Australian Government taskforce into appropriate INDC for the UNFCCC COP21, submission number 27 from the top <https://www.dpmc.gov.au/domestic-policy/unfccc/united-nations-framework-convention-climate-change/submissions>
- Senate Committee inquiry into Carbon Risk Disclosure, submission number 20 http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Carbon_Risk_Disclosure/Submissions
- Australian Government inquiry into unconventional gas, submission number 127 http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Gasmining/Gasmining/Submissions?main_0_content_1_RadGrid1ChangePage=7_20

Engagement activities with other asset managers

Our assets are internally managed which gives us control over the application of our Ethical Charter (<https://www.australianethical.com.au/australian-ethical-charter/>) to all our investments. However we still work closely with other asset managers to encourage best practice carbon disclosure industry wide. For example we are an active member of the Australian Investor Group on Climate Change carbon disclosure working group. Our Managing Director also sits on the board of the Responsible Investment Association of Australasia. Both organisations include many of Australia's major asset managers.

We also engage directly with other asset managers. For example the more technical discussion paper *2016 Emissions Crediting Project: Summary of issues and results* ([link here](#)) was developed to share our experience with asset managers as a contribution to industry work on improved carbon disclosure and accountability.

We also engage with companies in other sectors which are significant investors, encouraging them to better manage and report on climate risks. For example, we have engaged with insurers encouraging them to place clear limits on fossil fuel investment and expand low carbon investment.

9 ESG integration and risk assessment

The application of the Ethical Charter significantly influences portfolio construction. Our positive and negative screening typically reduces our investable universe by over 60%. Our portfolios remain highly diversified and often exhibit lower volatility than their mainstream benchmarks.

The ethics research and investment teams are actively involved in the ethical investment process which assesses the social, animal and environmental impacts of the company's products and services, as well as the company's governance and management of those impacts and of its operations generally. This investigation of the sustainability of the potential investment is a source of information and insight for other aspects of the investment process, including ideas generation, fair value and risk analysis and portfolio construction.

The ethical assessment will also identify potential areas for engagement with the company to minimise social and environmental harms. Often there are direct benefits for the company through increased efficiency, improved stakeholder relationships and greater awareness of business risks and opportunities.

Climate specific risk assessment

When assessing investments, we use frameworks which apply our Charter principles (<https://www.australianethical.com.au/australian-ethical-charter/>) to specific industry sectors and ethical and thematic issues. The frameworks identify key environmental, animal and social impacts of different industry sectors. They include 'matrices' which specify revenue threshold percentages for both positive and negative activities – in all approximately 200 activities. This approach is applied across all asset classes and sectors.

Climate considerations are paramount when we develop and revise industry frameworks. They help us manage climate risks in a number of different ways:

- They screen out unsustainable carbon intensive activities such as fossil fuel extraction and electricity generation, beef farming and the manufacture of conventional automobiles.
- They set 'climate performance' thresholds for activities where greater carbon efficiency is important to limit warming. For example, our real estate framework imposes minimum property sustainability standards which must be met before we will invest. We assess compliance with these standards using property ratings like LEED, BREEAM and NABERS, as well as external sources of ESG data and research.

We use the carbon metrics described earlier to assess the effectiveness of our frameworks in managing transition risk. For example, our footprinting compares the carbon intensity of our equity investments to the intensity of market benchmarks, showing us to be approximately 40% less emissions intensive. We then review high intensity companies in our portfolio to assess the nature of their carbon exposure and carbon risk. This has led us to analyse the avoided emissions generated by specific companies in our portfolio with high operational emissions (e.g. recycling businesses and PV solar panel manufacturers), to help satisfy ourselves that these companies are playing a positive role in the transition to secure a 2 degree world. The 2 degrees alignment check is also helpful in this regard for the sectors which it covers.

The process of development and review of our ethical assessment frameworks for different industries also helps to ensure that our investment analysts have regard to the physical impacts of

different levels of global warming for the sectors we invest in, including property, transport and agriculture (see 9.1.2).

9.1 Transition / regulatory risks and stranded assets

Our carbon footprint analysis and 2-degree alignment check (section 6.1) shows that transition / regulatory risk is an area of opportunity for Australian Ethical as we are well positioned for policy which penalises carbon intensive industry and supports clean technology.

Australian Ethical does not invest in fossil fuel companies directly so our risk of stranded assets is low. However, we have some indirect exposure such as our investment in Westpac bank which lends to fossil fuel projects. We have raised the risk of stranded assets in engagements with Westpac and encouraged them to cease and reduce lending to fossil fuel projects. We have seen some positive trends in Westpac's fossil fuel and clean technology lending, but we continue to monitor carefully the action they are taking to align their business with a transition to a 2-degree future.

9.2 Physical risks and adaptation

Physical risks of climate change are unavoidable and already happening. We have identified the following as key physical risks from climate change in our portfolio:

- Energy distribution: Risk of damage to poles and wires from storms and extreme weather.
- Insurance: Risk of extreme weather events causing unforeseen levels of claims (recognising that most insurance is renewed annually and written on a claims made basis).
- Property: Damage to property from sea level rise and increased frequency and severity of storms.
- Food: Production being affected by changes in average temperature and increased extreme weather (particularly storms, droughts, and heatwaves).

To better understand these risks, we engage with companies to encourage them to prepare for climate change impacts.

For example we invest in Tassal, an Australian salmon company. Salmon is sensitive to temperature changes in the ocean and climate change has led to an increase in ocean heatwaves. Earlier in 2016 ocean heatwaves caused a drop in salmon production by Tassal. Our subsequent research showed a temperature rise of 3°C may result in severe stress to Tasmanian salmon⁶. Warmer temperatures are also likely to increase outbreaks of disease. Identifying these significant physical risks led us to request additional information from Tassal regarding what actions they are taking to adapt their business to a warmer climate. The company provided us with information on how they are preparing for warmer oceans by using selective breeding and exploring cooler site options. We are satisfied Tassal is acting to monitor and address the risk of warmer weather. We continue to monitor this issue with the company.

Another example is our investment in LendLease who are an international leader in climate resilient buildings. Their development project located on the waterfront at Barangaroo, Sydney, is exposed to risks associated with sea level rise. We looked closely at the adaptation measures LendLease have taken with the building, including their climate modelling and industry leading engineering solutions applied to assess and manage climate risks.

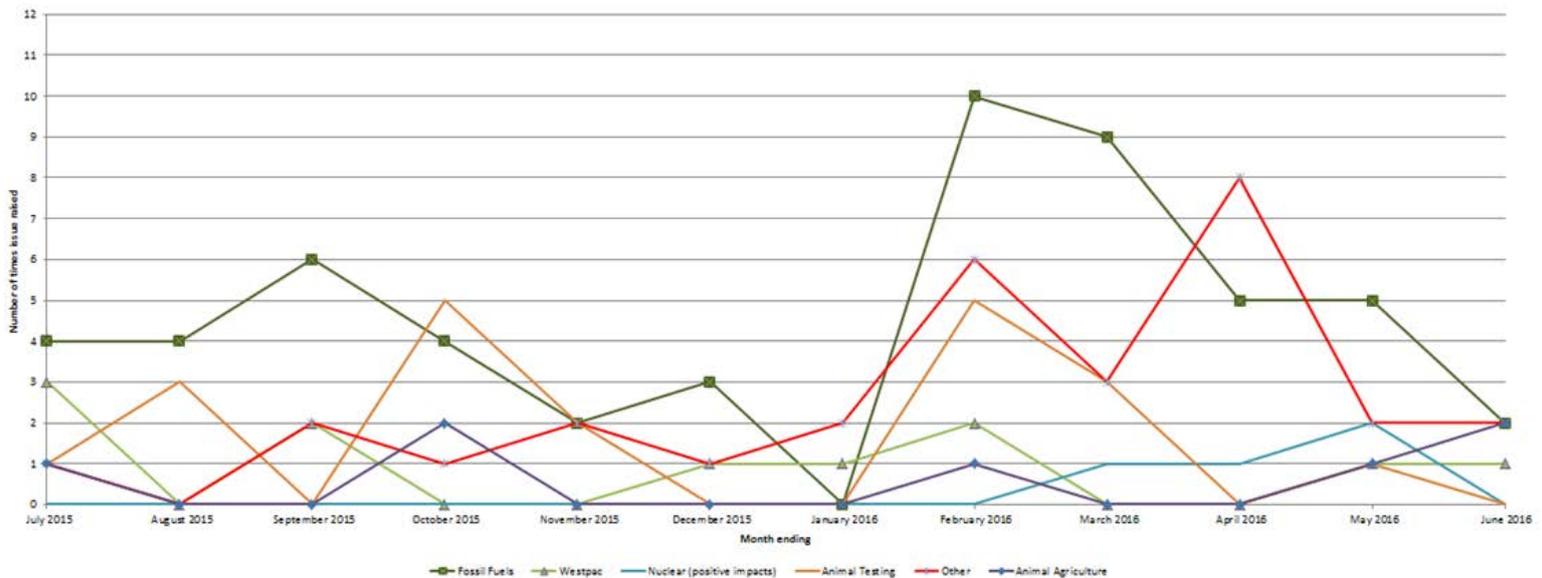
⁶<http://www.environment.gov.au/climate-change/climate-science/impacts/tas>

10 Communication on climate

We communicate regularly with our stakeholders on our action on climate, and on climate change risk in general. The article, blog, newsletter and social media examples below indicate the central importance we accord to climate amongst the broad range of environmental and social issues we take into account in our investing, engagement and advocacy. We give priority to communication on climate both because of the need to raise awareness of the tremendous harm posed by global warming to people, animals and the environment, and because of the level of interest shown by our clients and other stakeholders in this issue.

Figure 3 below shows the frequency with which different topics are raised with us by phone and email, in cases where the client or potential client is raising a concern about our ethical investment approach to the topic. Fossil fuel related concerns are the most frequent, followed by concerns about our investment in Westpac bank (most of which are also fossil-fuel related). This is consistent with client research which has shown climate change to be the most important issue for our clients. These email and phone contacts are a small portion of overall contacts on ethical issues, as a much greater number of these occur on social media. These social media interactions are harder to quantitatively analyse in a rigorous way, but we regularly review ethical trends on our Facebook page and find these to be broadly aligned with the trends shown below for other channels of comment and enquiry.

Figure 3. Summary of enquiries from clients on Fossil Fuel investments compared with other issues.



Limiting global warming to safe levels is integral to the work we do and we communicate this regularly through the following channels.

10.1 Client fund reports

We send our clients quarterly fund reports for their selected investment options. In our Advocacy Fund reports we describe our climate change (and other) engagement activities alongside our financial commentary. See for example https://www.australianethical.com.au/wp-content/uploads/2015/06/Advocacy-Fund-Dec-Quarter-2015_Final.pdf

10.2 Client magazine

Our client magazine *Good Money* is distributed to all clients twice yearly and includes information on our investments and how we invest for a safe climate future. See for example:

https://cdn2.hubspot.net/hubfs/528201/GoodMoney_Online/GoodMoney_Issue7_Online.pdf

10.3 Online blog and client emails

We email clients quarterly with links to blogs discussing our ethical approach. The following are examples of blogs we have provided to our clients on climate change:

<https://www.australianethical.com.au/news/beyond-fossil-fuel-free/>

<https://www.australianethical.com.au/news/investing-in-a-fossil-fuel-free-future/>

<https://www.australianethical.com.au/news/post-paris-we-need-a-new-conversation-around-fiduciary-duty/>

<https://www.australianethical.com.au/news/what-lies-beneath-tidal-power-next-big-wave-clean-energy-tech/>

<https://www.australianethical.com.au/news/talking-with-the-enemy/>

10.4 Social media

Our social media pages regularly post about our activities on climate change. A climate example from each of our platforms is included below.

Facebook

The example post below from Facebook gives our clients the opportunity to sign a petition from Australian Ethical to the Australian Government calling on them to ratify the Paris Agreement.

You can view more posts on climate change here: <https://www.facebook.com/australianethical/>



Australian Ethical Super

Published by Australian Ethical Investment [?] · 21 hrs · 🌐

Parliament, it's time to step up with the rest of the world and ratify the Paris Climate Agreement. Sign our petition to get Parliament to ratify the agreement ASAP: <http://ae.australianethical.com.au/ratify-paris-climate-agr...>
#COP21 #climatechange



Ratify Paris Climate Agreement

Call on Australian Government to ratify the Paris Climate Agreement today. Sign petition and join Australia Ethical to act now.

AE.AUSTRALIANETHICAL.COM.AU | BY AUSTRALIAN ETHICAL INVESTMENT

2,601 people reached

Boost post

Instagram

This example post from Instagram raises awareness with clients and the public of an investor initiative Australian Ethical is part of to increase plant based protein and reduce animal protein to transition diets towards alignment with a 2 degree world. You can view more posts on climate change here: <https://www.instagram.com/australianethical/>



The development of sustainable models of food production is essential if we are to limit climate change to less than 2 degrees. Forward-looking companies can move now to encourage more sustainable diets by reducing reliance on meat and growing the market for plant based protein alternatives.

ELLA MCKINLEY
Ethics Analyst at Australian Ethical Investment

\$1TRN Investor Coalition backed by "The future of food - the investment case for protein shake up" by the FAIRR Initiative and ShareAction



australianethical

Follow

33 likes

20h

australianethical Australian Ethical Investment joins a \$1 trillion coalition to turn up heat on 16 multinational food companies including Walmart, Tesco, Nestle, Unilever, to highlight material risks posed by industrial animal production.

Log in to like or comment.



Twitter

This example post from Twitter shared an open letter Australian Ethical signed with clients and the public. The letter appeared in the Financial Times calling on large emitting companies to align with 2 degrees in line with the Paris Agreement.

You can view more posts on climate change here: <https://twitter.com/austethical>



australianethical @austethical · 6s

An open letter to @BP_plc @total @shell @chevron @exxonmobil @StatoilASA & @eni we signed with over 78 organisations

OPEN LETTER
TO THE CHAIRS OF BP, CHEVRON, ENI, EXXONMOBIL, SHELL, STATOIL AND TOTAL

Dear Mr Swanberg, Mr Watson, Ms Marcegaglia, Mr Tillerson, Mr Holliday, Mr Loeth and Mr Poyanné,

Last Friday, nations of the world signed the agreement reached in Paris to limit climate change to well below 2°C, and achieve net zero emissions by the second half of this century.

The world is now clearly united in recognising the need to avoid the calamitous risks to our health, social order and the economy from going beyond this 2°C threshold.

Following this historic day, we invite you, as chairs of the world's biggest publicly listed fossil fuel companies, to state your support for the Paris Agreement and recognise your own vital role in this shared endeavour. As an expression of your sincere commitment, we ask you to put limiting climate change to well below 2°C, and preferably 1.5°C, at the heart of your businesses' plans for the future.

In advance of COP21, the majority of you signed a letter to delegates in which you said "For us to do more, we need governments across the world to provide us with clear, stable, long-term, ambitious policy frameworks."

The historic agreement now being ratified delivers that policy framework.

We now know that to limit climate change to below 2°C, the majority of coal, gas and oil reserves must not be used. It is clear that we must very rapidly and decisively increase the proportion of energy that comes from renewable sources.

The science is as resolute as science can be. The direction of energy policy is clear. The economic development and technological innovation afforded to us by fossil fuels is what makes it possible now to move beyond them. Speed is the critical factor that you control. **The transition to a low carbon economy is underway and must be accelerated.**

We have very little time but with united efforts across society, an increase in investment and with your company playing its part, the world can reach the Paris goal of a zero carbon economy.

Today, you have a choice: to stay on your current course and be forever on the wrong side of history, or respond to the political will of the world and ensure your company becomes part of our shared future.

Yours sincerely,

Anna Lister AP4 • Sarah Barker-Klein Aldian Trust • Phil Brown Australian Ethical Investment • Luke Fletcher Bates Wells Wealthwise • Sue Holliday Boregional • Lauren Cooper Barton Common Asset Management

Schedule: Leading by doing – Australian Ethical decarbonisation work plan

	2014-15	2015-16	Continuing
Our investments	Began carbon foot-printing Australian share investments.	Fine tune foot-printing methodology	Full portfolio footprint, including fixed income investments.
	Foot-print international share investments	Investigate additional decarbonisation metrics, including 2-degree alignment analysis	More complete carbon impact measurement, including avoided emissions
	Green/climate bonds to drive clean economy investment	Trial carbon portfolio analytic tools	Impact investment for climate mitigation and adaptation
	Target: Net zero emissions by 2050	Analysis carbon savings of key investments	Setting intermediate carbon goals and sector transition paths
	Continuing investment focus on renewables, energy efficiency, energy storage and other clean technology		
	Continuing exclusion of oil, coal and unconventional gas		
	Divestment from conventional gas		
Company engagement		Encourage constructive, science-based climate voice	
	Transparency of direct and indirect emissions (Big 4 banks; BP and Shell)	Collaboration with companies to set own emissions reduction and transition paths	
	Support Ian Dunlop for election to board of BHP Billiton	Encourage climate and other diversity in corporate decision making (across board, executives and company)	
	UNPRI engagement to limit gas fugitive emissions	Better management of supply chain emissions and other environmental impacts	
Investor leadership		Better understanding of investor and director responsibilities	
	Joined Montreal Pledge & active member Portfolio Decarbonisation Coalition (PDC).	Portfolio Carbon Initiative: ongoing UNEPFI work program for measurement and disclosure of climate performance metrics	
		Joined Science Based Targets Initiative	
	Ethical investor voice: Active contributor to Investor Group on Climate Change; Beyond Zero Emissions; Principles for Responsible Investing; Responsible Investment Association of Australasia; Varied climate action events and conferences		
Government policy		Paris ratification submission and petition	Ongoing policy submissions and voice
	Submissions for aggressive Australian post-2020 emissions reduction targets and greater carbon disclosure, with online template for members to support	Drive ambitious investor and company action to stimulate government policy action	
	Influence climate lobbying: UNPRI engagement for corporate action to encourage not obstruct action	Ethical investor voice to drive policy debate and development	