

TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES REPORT 2019



In this report we address the key topics recommended by the Task Force on Climate-related Financial Disclosures (TCFD), which are: strategy (climate impacts and our investment response and zero emissions target); management and governance of climate risk; and the metrics we use to measure and manage our climate performance.

The impact of climate change

The principal direct impact of global warming on Australian Ethical's business is its effect on our investment portfolios. The prospects and value of the businesses we invest in are exposed to risks and opportunities flowing from the many effects of climate change.

Physical impacts like sea level rise and extreme weather are already changing where and how buildings and infrastructure can be safely built. Changes in temperature and rainfall are affecting the productivity and viability of different types of agriculture.

Government climate policy action and inaction can radically alter the prospects of companies' products and technologies. A price on carbon and higher clean air standards will favour renewables over fossil fuels. Tougher emissions restrictions on new vehicles will help hybrid and electric over conventional vehicles.

Consumer climate action also affects business values when consumption choices favour businesses helping to reduce greenhouse gas emissions and shun big contributors to global warming.

We've summarised the timing of key climate impacts in the table below. Although some more severe consequences of climate change may arise only in the longer term, the regulatory and consumer action taken in the short term can accelerate both positive and negative impacts on the value of investments.

Beyond more immediate impacts on climate sensitive industries like energy and transport, climate change has flow-on effects across the economy. With commitment to strong climate action, the growing availability of cheap and decentralised clean energy will invigorate many existing industries and enable new ones. But if we are slow to act, growing inequality and the displacement of people from areas hardest hit by climate change will cause widespread social and economic disruption.

Timing of climate impacts

Sho	rt-term
0-3	years

Nearer term physical impacts of temperature increase such as more extreme weather and fires, and flow-on effects on climate sensitive sectors such as agriculture.

Changes in customer demand due to evolving expectations for climate action by business.

Changing government energy and climate policies and regulation such as tougher emissions standards and carbon pricing.

Medium-

In addition:

term
3-10 years

Progressive physical impacts of temperature increase such as increases in sea level, and consequential technological, supply chain and other business and social disruption, including

impacts on human health and well-being. Growing pressure on threatened species.

Disruption of global trade from international disagreements about climate action and inaction.

And from changing patterns of production and demand and growth.

Long-term

In addition:

10-100+ years

Social, political and economic disorder from climate harm suffered by people (including their displacement) and from increased inequality because different groups and countries suffer more

harm than others.

Disrupting effect of potential and actual conflict between countries.

The importance of a 1.5 degrees limit on warming

The 2018 report of the Intergovernmental Panel on Climate Change (IPCC) made it clear that every bit of warming matters as we move beyond the current level of temperature increase (1°C above pre-industrial levels). Up to 90% of coral reefs will disappear by 1.5 degrees, and over 99% will be gone at 2 degrees. Warming beyond 1.5°C increases the risk of irreversible changes, whereas the changes which keep warming under 1.5°C will deliver a more sustainable and equitable society.

Our strategic investment response to climate

Our Ethical Charter applies to all our investment strategies and products. It requires us to assess short, medium- and long-term impacts on people, animals and the environment. This guides us to invest in a way which minimises dangerous climate change. We aim to drive change in three main ways:

- 1. our investment choices
- 2. our advocacy and engagement on climate action and policy, and
- 3. reducing and offsetting our own operational emissions

Key features of our approach related to climate risk and opportunity are:

Investment screening

Investors can help limit global warming if they only choose companies with strategies aligned with limiting warming to below 1.5 degrees. By shifting capital from fossil fuels to renewables, investors help to bring down the price of renewable energy, they encourage investment in more flexible electricity grids and energy storage, and they contribute constructively to a sensible public discussion about energy policy. These investors, particularly universal investors like super funds, are also acting in the financial interests of their customers, because we believe that sustainable, risk-adjusted returns will be better in a low-warming world than a high-warming one.

In our day-to-day investing, climate change is the top factor we consider when applying our Ethical Charter to companies because of its wide-ranging implications for people, animals and the planet. We don't invest in companies assessed to be obstructing the objectives of the Paris climate agreement to limit global warming to well below 2°C and to pursue a limit of 1.5°C. The way this test is applied depends on the company and its sector. For example:

Energy: We seek out investment in clean energy solutions like energy efficiency, renewable energy and energy storage. Current investment include wind, solar, hydro and geothermal energy, battery storage, LED lighting, insulation, and clean energy technology start-ups (though the Artesian Clean Energy Seed Fund). We don't invest in oil, gas or coal companies, but we will invest in a transition company like Contact Energy which generates 80% of its electricity from hydro and geothermal (but falls back to gas when low rainfall reduces hydro-power generation).

Banking sector: We expect large banks to align their business lending activities with the objectives of the Paris Climate Agreement. We use a climate scorecard to assess this alignment which assesses:

- bank lending to the fossil fuel and energy sector, including emissions-related lending restrictions
- bank lending to renewable energy, energy storage and activities which reduce energy usage or store carbon (e.g. green buildings, low-emissions transport and reforestation)
- bank support for green financing by others, for example by arranging the issue of green bonds
- bank support for (or obstruction of) government climate policy aligned with the Paris Agreement.

Food sector: We avoid investment in current systems of commercial animal agriculture including meat, dairy, eggs and seafood. We focus on investment in lower emissions plant-based protein and nutrition. A key consideration is the higher emissions of animal protein compared to plant-based protein. The World Resources Institute assesses that "beef requires 20 times more land and emits 20 times more greenhouse gas emissions per gram of edible protein than common plant proteins, such as beans". This year we invested in a ground-breaking greenhouse business which grows 17,000 tonnes of truss tomatoes a year in arid conditions in South Australia. The facility uses sea water which is desalinated with power from a concentrated solar power tower system. We invested through the unlisted Morrison & Co Growth Infrastructure Fund, along with other investors including the Clean Energy Finance Corporation (CEFC).

Transport sector: We avoid investment in conventional cars and trucks and in air travel because of their high emissions intensity compared to rail, ships and buses and other forms of public transport.

Real estate sector: We will not invest in general purpose residential, office or commercial property portfolios where they demonstrate below average environmental sustainability, with energy efficiency being a key factor.

Retailing sector: We avoid investment in retailers which fail to demonstrate credible action to manage negative impacts on people, animals and the environment in (1) the products they make available (2) their sales and marketing, and (3) their supply chain.

Mining sector: Minerals will only be assessed as positive under our Ethical Charter if they are '1.5 degrees aligned' i.e. the continued extraction and use of the mineral is aligned with the transition to a world which limits warming to 1.5 degrees. We currently invest in lithium mining.

Across sectors: Companies in any sector may be excluded for obstructing the Paris agreement objectives where they are assessed to be obstructing informed climate policy debate or showing general disregard for energy efficiency in their operations where they are involved in production of emissions intensive products and services.

Revenue thresholds apply to the above exclusions. For example, we may invest in an agricultural company which produces both plant and animal-based food, provided the animal food revenue is below our exclusion threshold.

Influencing companies

We engage with companies to influence better management of the climate impacts of the way the company's products and services are produced, supplied, consumed and disposed of. We encourage better measurement and reporting of direct and indirect greenhouse gas emissions; emissions reduction target setting; and analysis of the resilience of the company's business strategy to different climate scenarios. We aim to reduce companies' contribution to global warming as well as reducing climate-related harm to their business prospects. Through engagement we also build our own understanding of climate-related risk.

We exercise our influence through private engagement, voting at company meetings, public praise or criticism, shareholder resolutions and divestment.

The most effective climate response requires strong action by all of government, business and citizens. We therefore scrutinise lobbying or other action by companies which undermines sensible public climate policy. Sadly, many companies and their industry associations have encouraged climate disinformation and made political donations which have helped to derail constructive climate debate and policy. To combat this, we supported several shareholder resolutions over the last year calling for greater transparency about companies' climate change positions and challenging their support for industry associations which promote contradictory positions on climate policy.

This year we also co-filed a shareholder resolution arranged by Market Forces that called on insurer QBE to disclose its targets to reduce investment and underwriting exposure to coal, oil and gas in line with 1.5°C. Although QBE responded positively with a commitment to phase out insurance for thermal coal, it continued to signal support for oil and gas. We attended the QBE annual general

meeting in May 2019 to encourage QBE directors to adopt restrictions on oil and gas as well as coal. Under sustained questioning at the meeting from Australian Ethical and others, the company said its climate restrictions will continue to evolve; that QBE "hear and listen to folks like yourself".

Further details of our company engagement and Influencing are here.

Investment industry influence

By sharing experience of investment climate opportunities and challenges we learn from other investors and encourage broader investor support for strong climate action. We are active participants in the climate focussed work of the Investor Group on Climate Change and Responsible Investment Association of Australasia.

Public climate voice and policy advocacy

Investment decisions affect cost of capital, but often the most powerful impact of ethical and responsible investing is the public praise and disapproval associated with decisions to invest in sustainable businesses and to divest from or criticise unsustainable ones. The balanced voice of long-term investors is needed alongside voices of business and civil society (which are often more narrowly focussed). It can inform and influence government and business directly, and it can inform and influence citizens and consumers who hold government and business to account.

Through policy submissions, consultation with government and our public voice we aim to encourage more effective climate policy, including better energy policy, carbon pricing and corporate climate disclosure. Australian Ethical communicates continuously with a variety of audiences about climate, including calls for climate action in mainstream and social media, as well as more technical perspectives in finance industry media and public policy submissions to government. Our message is consistent though tailored. For non-specialists we develop clear and engaging content with a call to action. Our Good Money magazine and blog includes a strong climate focus. Coverage in FY19 included the climate impact of diet (also here), which followed our FY19 updating of our climate screening of the food sector and grants by the Australian Ethical Foundation to *Food Frontier*, an industry advocate and accelerator for alternative meat. Our carbon footprint calculator encouraged people to think about the carbon footprint of their lifestyle, consumption and investment choices. Our coal investment video and blog encouraged people to find out about the climate impact of their savings and promoted better fund transparency.

Further details of our government policy submissions and engagement are here.

Investment portfolio management

Our assessment of investment opportunity and risk is informed by our ethical assessment of the climate impacts of companies and industry sectors and the way their products and services are produced, supplied, consumed and disposed of. This feeds into our buy, sell and portfolio management decisions. For example, company prospects and valuations in the energy sector are affected by our assessment of the future regulatory environment for the sector.

Targets

In 2014 we set a target for our investments of net zero emissions by 2050, which is aligned with reduction needed to achieve a 1.5°C warming limit. In 2015 we committed to define a trajectory for emissions reduction aligned with the Paris Agreement, to be verified by the Science Based Targets initiative (SBTi), and this year we contributed to the SBTi work on a science-based methodology for investor portfolios. Once finalised we will apply that methodology to assess nearer term 1.5°C aligned targets for our investments, including an earlier net zero target.

Measurement, transparency, accountability

We measure and report our climate performance, including the emissions intensity of our share investments (carbon footprinting) and the alignment of share investments in the power sector with the changes needed to limit warming in accordance with the Paris Climate Agreement. This helps us test the effectiveness of our management of climate risk and our progress towards our net zero emissions target. The latest results are included in this report.

We do not currently model the impact of different emissions and temperature increase scenarios on the value of our investment portfolios. Our ethical investment approach recognises the power which investors have to help positively shape the future. By shifting capital from fossil fuels to renewables, investors help to bring down the price of renewable energy and encourage investment in more flexible electricity grids and energy storage. They are also acting in the financial interests of their clients because we believe that risk-adjusted returns will be better in a low-warming world than a high-warming one.

Governing climate-related decision making

Our approach to ethical investment is governed by our Ethical Charter. The Charter principles are applied using our ethical frameworks, policies and measurement systems. These require detailed assessment of the impacts of climate change on people, animals and the environment, which in turn affects the way we invest including through negative and positive screening, engagement and advocacy, and climate performance measurement and reporting.

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Implementation of our Ethical Charter across our investment activities is overseen by the Ethical Advisory Group (EAG), comprising our CEO, Chief Investment Officer (CIO) and Head of Ethics Research. The climate-related work of the EAG includes the ongoing review of our ethical screening criteria for emissions intensive sectors and setting climate advocacy and engagement priorities. The Board of directors has oversight of the EAG through scrutiny of reporting of quarterly EAG activity and of critical ethical issues. Working with the investment team, our ethics research team applies our Ethical Charter on a day to day basis in our investment activities. The ethics team monitors existing and emerging ethical risks (including climate-related risks) using diverse company, industry, government, responsible investment, scientific, civil society and news sources. The work of the ethics research team is overseen by the EAG and in turn the Board.



Climate risk management

We identify, assess and manage material climate-related investment risks through our ethical investment process. For example, our investment screening and company engagement guides us to sectors and companies which are aligning their businesses with the transition needed to limit global warming to 1.5 degrees. These companies are better positioned to manage many climate-related risks, such as the risk of introduction or increase in carbon pricing. However, the effects of climate change will be felt across the economy and society. Higher global warming threatens to disrupt trade and financial markets and carries significant risk of loss to all investment portfolios.

Our ethics research team monitors existing and emerging climate-related risks using diverse information sources. The team monitors developments in:

- · scientific understanding of the rate and impacts of global warming
- domestic and international climate policy and regulation
- technological innovation in climate mitigation and adaptation.

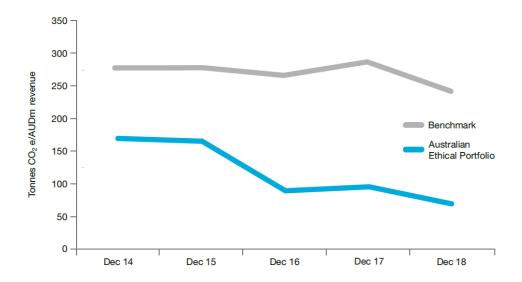
The ethics team assesses whether these developments require review of our existing ethical assessments of companies and industry sectors, including our company engagement priorities. As an example of this process, our periodic ethical review of a carbon intensive sector like the energy sector takes into account changes in renewable energy and energy efficiency and storage technologies and their social and environmental impacts; changes in levels of atmospheric carbon; changes in scientific understanding of the pace, extent and impacts of global warming; changes in energy infrastructure such as the grid; and changes in energy market supply and demand. Consequential changes to our ethical framework for the energy sector and engagement and advocacy objectives are prepared by the ethics research team and reviewed and approved by the EAG. These changes may include additional investment exclusions or inclusions (e.g. a change in our screening of biofuels), or a change in our engagement and advocacy objectives and priorities for companies in the sector. The changes to our energy sector framework may then have flow on effects to other frameworks (e.g. to the way we assess the alignment of banks' lending with the Paris Agreement under our banking framework).

Our ethical screening and engagement currently focusses on the need to reduce emissions to limit dangerous climate change (*mitigation* of climate change). It is also crucial that companies have business models and strategies which are *adaptable* to the physical impacts of current and future climate change. In the property sector, our positive assessment of Investa property group takes account not only of their zero emissions and building efficiency targets, but also their adaptation initiatives including their support for initiatives of the Australian Business Roundtable for Disaster Resilience and Safer Communities. (The Roundtable is focused on reducing the social and financial impact of natural disasters including through more resilient infrastructure.) Looking ahead we plan to develop additional screening criteria, engagement initiatives, metrics and reporting related to climate adaptation.

Our carbon footprinting and climate alignment checks (on the following pages) help us test the effectiveness of our management of climate risk.

The carbon footprint of our investments

The carbon footprint of our investments is one way to check the effectiveness of our ethical investment approach to manage climate risk and to support the transition to a net zero-emissions economy and society. The carbon footprint of our share investments at the end of 2018 was 70% less than the market benchmark, with historical levels shown in the following chart.



This chart shows the carbon footprint of our share investments, calculated as their carbon intensity measured in tonnes CO2 e/AUDm revenue, compared to the Benchmark. The Benchmark is a blended benchmark of the S&P ASX 200 Index (for Australian and New Zealand share holdings) and MSCI World ex Australia Index (for international fund share holdings).

We assess our share investment footprint based on the carbon intensity of the companies we invest in. The carbon intensity is calculated from direct and some indirect emissions (Scope 1 and 2 emissions) of the companies relative to their revenue. The carbon footprint for prior years (2014 to 2017) was assessed by S&P Trucost. This year we used tools and data provided by MSCI ESG Research LLC. The December 2018 carbon footprint data is based only on the companies for which MSCI ESG Research provide carbon data (83% of our share investments and 99% of the Benchmark, by market value). We consider the comparison between the 2018 footprint and previous years to be meaningful because there is general alignment between the methodologies and data sources used by MSCI ESG Research and S&P Trucost. However, there are differences in data, estimates and company coverage which affect direct comparability.

More information on carbon footprinting methodology and metrics is available here.

Although we have used company research data and tools provided by MSCI ESG Research, MSCI ESG Research is not responsible for the way we have used their data and tools to calculate the carbon footprints. MSCI ESG Research (1) retains copyright in all its data; (2) does not warrant or guarantee the originality, accuracy and/or completeness of their data; (3) makes no express or implied warranties of any kind, and disclaims all warranties of merchantability and fitness for a particular purpose; (4) has no liability for any errors or omissions in connection with their data or for our reporting and use of their data; and (5) without limiting any of the foregoing, has no liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Why is our carbon footprint low?

A range of factors contribute to our lower carbon footprint. We have lower investment in high emissions industry sectors such as mining and traditional energy, and higher investment in lower emission sectors such as information technology (IT) and communications.

We do also have higher investment in the high emissions 'Utilities' sector. But because our utilities investments include lower carbon renewables companies like Infigen Energy and Meridian Energy, our overall investment in this sector lowers our footprint compared to the benchmark.

Who are the largest emitters?

Even for low carbon portfolios like ours, analysing our investment carbon footprint is important to check the ethical rationale for our investment in any higher emissions companies. The table below lists our ten most carbon intensive companies and why we still invest in them under our Ethical Charter, even though they are engaged in energy intensive activities such as waste management and glass manufacturing.

Company	Sector	Country	Carbon Intensity ¹	Positive under Ethical Charter	
Covanta Holding Corp	Industrials	USA	1,799	Waste treatment, recycling and disposal, including energy generation from waste incineration	
Orocobre Limited	Materials	Australia	1,497	Lithium for lithium ion batteries for electric vehicles and storage	
NextDC Limited	Info Tech	Australia	1,313	IT servers and data centre infrastructure. They are energy hungry but overall help efficient use of resources.	
Ausnet Services Limited	Utilities	Australia	989	Electricity network infrastructure needed for the transition to 100% renewables. They are emissions intensive because of the energy lost	
Spark Infrastructure	Utilities	Australia	961	(as heat) when electricity passes through the networks	
Veolia Environment SA	Utilities	France	918	Water and waste management and treatment	
Contact Energy Limited	Utilities	NZ	636	Renewable electricity (hydro and geothermal)	
AGC Inc.	Industrials	Japan	632	Glass for solar and noise control, security and insulation	
Nippon Sheet Glass Co	Industrials	Japan	592	Glass for solar energy production, and for solar and noise control, security and insulation	
Sealink Travel Group	Consumer	Australia	538	Lower emissions transportation: Ferries and other shared transport	

^{1.} t CO2e / AUDm revenue

Limitations of carbon footprinting

Company carbon data often includes estimates and errors, and so footprint calculations need to be used with caution. There are also different carbon metrics which can be used to assess carbon footprint, including total emissions, emissions relative to market capitalisation, and weighted average emissions intensity, each with different strengths and weaknesses. There is more information here.

One methodological shortcoming is that current carbon footprinting methods don't generally take into account emissions produced or emissions saved from the use of a company's products. One reason is difficulties in fairly allocating the emissions or emissions savings between the many companies involved in production and use of the products. For example, how should the emissions from the burning of coal be allocated between the coal miner, the coal fired electricity generator and the businesses using that electricity?

The same double counting issues apply to products that result in emissions reductions ('avoided emissions'), for example solar panels which over their life can reduce emissions by displacing other sources of electricity production like fossil fuels. These emissions savings are much more relevant to our ethically screened investment portfolios. It's important to calculate and allocate these savings, to help us better understand what emissions savings our investments are supporting.

We explore these issues and potential solutions in our Emissions Crediting Project several years ago. We continue to look for carbon footprinting data and tools we can apply to our investment portfolios to calculate Scope 3 emissions and emissions savings, and to fairly allocate them.

Our renewables investment for a zero emissions world

We also track whether our investment in renewable power generation is enough to help with the massive global shift to renewables required to limit warming to 1.5 degrees. Our analysis showed that:

- our share investment in renewable power generation is proportionately about 6 times that of the global sharemarket, and that
- the renewable generation capacity of our portfolio of power companies is projected to grow at the rate needed to limit warming to 1.75°C.

How we measure this

We used analytic tools from the European 2° Investing Initiative ('2ii') to assess this. We looked at the power generation capacity of our share investments at the end of 2018. The analysis showed that the combined projected increase in renewable power generation (including solar, wind, geothermal and hydro) over the next five years is aligned with the International Energy Agency (IEA) Sustainable Development Scenario (SDS) and the more ambitious Beyond 2 degrees Scenario (B2DS).

The SDS is a scenario of transformation of the global energy system to achieve three key objectives: to limit global warming to well below 2 degrees; to provide universal access to modern energy by 2030; and to dramatically reduce premature deaths from air pollution. The B2DS is a more aggressive energy emissions reduction scenario to limit future temperature increases to 1.75°C by 2100. We look forward to testing our investments against the 1.5°C scenario currently under development by the IEA.

Our operational emissions - net zero since 2016

Our total Scope 1 & 2 emissions (direct emissions from our place of work, our operations and the generation of electricity used in those operations) remain relatively flat year on year. During this time our workforce increased by 9%, decreasing our per capita emissions to 0.77 tonnes of CO2 emissions per year. We keep our emissions low by using 100% renewable electricity, by only printing when essential and using 100% recycled paper. We also source suppliers aligned to our ethics wherever possible.

Our operational Scope 3 emissions include the emissions of every flight, taxi, Uber or personal car trip taken for work at Australian Ethical. Our Scope 3 emissions increased compared to FY18 due to additional flights to Melbourne and New Zealand deemed essential for business. All our Scope 1 &2 and 3 emissions are 100 per cent offset by credits from the Kariba REDD+ project. The project helps farmers in Zimbabwe sustainably increase their productivity to prevent further land clearing.

Category	FY17	FY18	FY19	Trend
Operational Scope 1 & 2 (total)	41.5	50.11	50.23	•
Operational Scope 1 & 2 (per employee)	0.84 (49)	0.86 (58)	0.77 (65)	•
Operational Scope 3 (total)	36.6	36.5	54.69	•
Offsetting of Scope 1, 2 & 3 emissions	100%	100%	100%	•

Units are tonnes of CO² emissions per annum (tCO2-e p.a.)

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