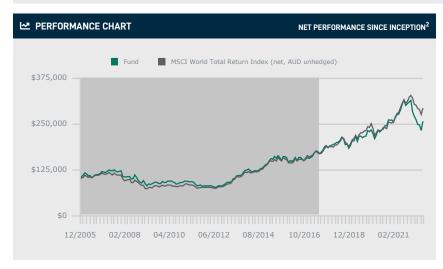


#### PENGANA WHEB SUSTAINABLE IMPACT FUND

#### DESCRIPTION

The Pengana WHEB Sustainable Impact Fund invests in companies with activities providing solutions to sustainability challenges. WHEB have identified critical environmental and social challenges facing the global population over coming decades including a growing and ageing population, increasing resource scarcity, urbanisation and globalisation. The Fund invests in companies providing solutions to these sustainability challenges via nine sustainable investment themes – five of these are environmental (cleaner energy, environmental services, resource efficiency, sustainable transport and water management) and four are social (education, health, safety and well-being). WHEB's mission is 'to advance sustainability and create prosperity through positive impact investments.'

E PERFORMANCE TABLE	NET PERFORMANCE FOR PERIODS ENDING 31 Jul 2022 <sup>1</sup>				
	1 MTH	1 YEAR	3 YEARS P.A.	5 YEARS P.A.	SINCE INCEPTION P.A.
WHEB Sustainable Impact Fund	10.7%	-15.3%	5.9%	8.8%	
Strategy (partial simulation - see below)					5.8%
MSCI World Total Return Index (net, AUD unhedged)	6.4%	-4.3%	9.1%	11.8%	6.7%



TOP HOLDINGS (ALPHABETICALLY)		
Advanced Drainage Systems Inc	Industrials	
Ansys	Information Technology	
Autodesk Inc	Information Technology	
CSL	Health Care	
Daifuku	Industrials	
Danaher	Health Care	
Icon	Health Care	
Infineon Technologies AG	Information Technology	
TE Connectivity	Information Technology	
Thermo Fisher Scientific	Health Care	

SECTOR BREAKDOWN		CAPITALISATION	I BREAKDOWN	CUSTOM SECTOR BREAKDOWN		REGION BREAKDOWN	
Consumer Discretionary	3.5%	2-10bn	26%	Health	26%	North America	56.6%
Consumer Staples	2.1%	10-20bn	22.5%	Resource Efficiency	28.6%	Europe ex-UK	21%
Health Care	28.9%	>20bn	50.3%	Sustainable Transport	10.3%	Japan	9.3%
Industrials	24.1%	Cash	1.2%	Environmental Services	10.9%	UK	6.8%
Information Technology	27.7%			Water Management	7.3%	Asia Pacific	5%
Materials	12.5%			Safety	2%	Cash	1.2%
Cash	1.2%			Cleaner Energy	5.9%		
				Wellbeing	6.3%		
				Education	1.5%		
				Cash	1.2%		

#### IS AIR CONDITIONING A SOLUTION TO HEAT WAVES?

#### **COMMENTARY**

The MSCI World Index was up 6.4% over the month, with the Fund strongly outperforming by returning 10.7%. Having fallen -16.0% in the first half of the year, global equity markets rebounded in July.

In this month's commentary, Ty Lee discusses whether air conditioning is a solution to heatwaves given that they account for about 16% of the total electricity used in buildings globally, a figure which is set to grow dramatically in the coming years.

Earlier this year the Intergovernmental Panel on Climate Change (IPCC) published a report which concluded that the world could still stave off the worst ravages of climate change, but that this required immediate action. It may sound like hyperbole, but we are now in a time of consequences of climate change. This extreme urgency is reflected in the title of WHEB's eighth impact report, 'The time is now – investing in solutions to critical social and environmental challenges.' We unpacked the latest impact report in our most recent investor webinar. Financial planners may complete a short questionnaire available HERE for CPD points.

We are pleased to announce that WHEB's Head of Research, Seb Beloe, has been shortlisted for 'Outstanding Contribution to the Sustainable Investment Industry' as part of <u>Investment Week's Sustainable Investment Awards</u> (UK). Our white paper, <u>Impact Investing in Listed Equities – WHEB's perspective</u>, has been shortlisted for the 'Best Sustainable Investment Thought Leadership Paper' award.

With the growth of ESG investing and its wide range of implementations, impact investors have sought to demonstrate core elements that differentiate impact strategies from the vast range of other investment products labelled as 'ESG' or 'sustainable'. One of these elements is the 'theory of change' that is often implicit within an impact investment strategy. Seb Beloe sets out WHEB's theory of change in our Q2 2022 Report.

Finally, we published our profiles of our <u>portfolio holdings as of 30 June 2022</u> including our assessment of the companies' impact intensity and fundamental quality.

Over the month of July, investors responded positively to pockets of evidence that inflation may have peaked. Medium- and longer-term inflation expectations fell in addition to declines in commodity prices. The US Federal Reserve increased interest rates by 75bps during the month but fears of a looming recession have led many to believe the path of interest rate increases may now slow.

The Fund outperformed the index this month, having returned 10.7%. Resource Efficiency, Cleaner Energy and Sustainable Transport delivered the strongest relative performance. This offset a weaker performance in the Wellbeing theme.

Within Resource Efficiency, Autodesk was the strongest performer. The company sells software and services which helps customers with sustainable design in a number of industries, including architecture, manufacturing, and construction. The stock benefited from more positive sentiment towards higher-growth technology stocks.

First Solar was the strongest performer in the Cleaner Energy theme. The company makes solar modules and the stock benefited from news that US Senator Manchin, in a surprise reversal, announced his support for the Inflation Reduction Bill. The package would include hundreds of billions of dollars for climate and energy programs. In addition, First Solar reported results which showed a strong backlog, further boosting the stock.

The outlook for the year remains uncertain. While the market was receptive to perceived good news during the month, several risks remain. The strength of the labour market and gas prices in Europe are still headwinds to taming inflation. Despite the strong labour market, there remains a risk of recession in many major markets. GDP data in the US already showed a technical recession after two straight quarters of decline. More positively for our strategy, we have seen a significant policy shift in the US as Senator Manchin indicated support for several climate measures which would benefit a number of our holdings.

We expect markets to remain volatile and highly sensitive to macroeconomic data. However, we remain positive about the long-term opportunities for companies delivering positive sustainable impact.

# Is air conditioning a solution to heat waves?

Originally from Hong Kong, I am used to hot summers consistently above 30°C but I have never known a day exceeding 40°C. Who would have thought that I would first experience such heat in London this July? We have seen record-breaking heat waves across the US, Europe and Asia this summer. Most people would turn on their air conditioning (AC) units when temperature reaches 40°C, if they have one. However, space cooling is energy intensive. The use of air conditioners and electric fan accounts for about 16% of the total electricity used in buildings globally. The energy consumption of space cooling is set to grow dramatically due to urbanisation and a growing middle class, particularly in emerging markets. On top of this, climate change is expected to turbo-charge growth in AC. If this is left unchecked, energy demand from air conditioners is expected to more than triple by 2050 according to the International Energy Agency (IEA).

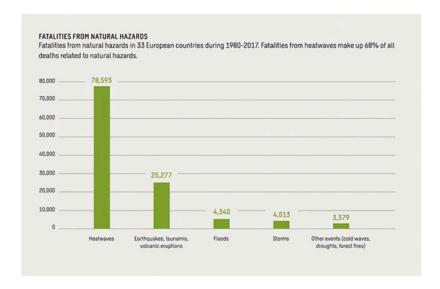
## Energy efficiency in air conditioning

Part of the solution lies in improving the efficiency of air conditioners. Even though efficient technologies are already available, consumers are slow to adopt more efficient AC units due to higher prices. Besides improving efficiency, it is also possible to make air conditioners more climate-friendly by using refrigerants with a lower global warming potential (GWP).

As impact investors, WHEB has been investing in manufacturers which promote the use of more climate friendly air conditioners for many years. One example is **Daikin**. Daikin has developed its own refrigerant R-32, which has a much lower GWP than most commonly used refrigerants in the market. It also won the Global Cooling Prize in 2021, which encourages the design of small AC units with five times less climate impact than market-average models.

#### AC no longer a 'luxury'

While some people may still see AC units as luxury or discretionary items, this is unlikely to remain the case as heat waves become more and more frequent. Extreme heat is deadly and the consequences can be dire. More Europeans died from heat waves than from all other natural disasters combined during the period from 1980-2017. More than 70,000 people died from the 2003 heat wave in Europe. It is estimated that in the UK deaths from heat could triple by 2050.



Due to climate change, access to air conditioning has become an urgent public health issue. Nevertheless, among the world's population living in a hot climate, only 12% own an AC unit. Unsurprisingly, lower income countries have significantly lower air conditioner ownership. Socially disadvantaged populations are also more likely to suffer from heat waves due to the lack of access to air conditioning.

#### Is air conditioning a solution?

However, is air conditioning the solution to the public health issue despite its intensive carbon footprint? Clearly innovations that improve the energy efficiency of AC will help, and WHEB only invests in companies offering these more efficient systems, but there are many other things that can be done to cool cities and communities. Planting trees in cities can help reduce the urban heat island effect and reduce peak summer temperatures by between 1 and 5°C while at the same time capturing carbon dioxide.

Better city designs and more sustainable buildings also help keep heat waves at bay. The IEA estimates that well-designed cities could save up to 25% of the energy used for heating and cooling. WHEB invests in two environmental consulting companies **Arcadis** and **Sweco**. These companies have been working with local governments and municipalities to help cities adapt to extreme weather events and design more resilient buildings.

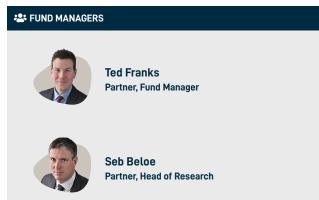
Besides installing air conditioners, there are other things that can be done to keep buildings cool during the summer months. Most people think insulation is only used to keep homes warm during the winter but it works both ways. Insulation theoretically helps keep buildings cool although its effectiveness depends on a lot of factors including the number of windows and heat radiating home appliances. Heat pumps can be a better option than air conditioners. Heat pumps provide both heating and cooling. While the efficiency of heat pumps is more or less the same as air conditioners in the cooling mode, heat pumps are much more energy efficient for heating. Heat pumps typically use up to 75% renewable energy sources (the ambient energy in the surrounding area). According to IEA, heat pumps could save 50% of the building sector's total CO2 emissions.

All in all, air conditioners are not a panacea for the public health issues caused by heat waves. Increasing the use of air conditioners without proper consideration of the associated climate impact would only exacerbate the issue. A more holistic approach would take both social and environmental aspects into consideration. More work needs to be done to incentivise the development of and shift towards more energy efficient air conditioners. There are also various low-carbon solutions which offer a better path towards a more sustainable world.

Written by Ty Lee Associate Fund Manager Our most recent webinar covering our impact report and providing a strategy update is available below:



✓ FEATURES	
APIR CODE	HHA0007AU
REDEMPTION PRICE	A\$ 1.408
FEES *	Management Fee: 1.35%
MINIMUM INITIAL INVESTMENT	\$10,000
FUM AT MONTH END	A\$ 280.22m
FUND INCEPTION DATE	31 October 2007



1. From August 2017, performance figures are those of the Pengana WHEB Sustainable Impact Fund's class A units (net of fees and including reinvestment of distributions). The strategy's AUD performance between January 2006 and July 2017 has been simulated by Pengana from the monthly net GBP returns of the Henderson Industries of the Future Fund (from 1 January 2006 to 31 December 2011) and the FP WHEB Sustainability Fund (from 30 April 2012 to 31 July 2017). This was done by: 1) converting the GBP denominated net returns to AUD using FactSet's month-end FX rates (London 4PM); 2) adding back the relevant fund's monthly ongoing charge figure; then 3) deducting the Pengana WHEB Sustainable Impact Fund's management fee of 1.35% p.a. The WHEB Listed Equity strategy did not operate between 1 January 2012 and 29 April 2012 – during this period returns are zeroed. The Henderson Industries of the Future Fund's and the FP WHEB Sustainability Fund's GBP net track record data is historical. No allowance has been made for buy/sell spreads. Past performance is not a reliable indicator of future performance. The value of the investment can go up or down.

2. The Fund incepted on 31 October 2007 as the Hunter Hall Global Deep Green Trust. The Fund was relaunched on 1 August 2017 as the Pengana WHEB Sustainable Impact Fund employing the WHEB Listed Equity strategy. This strategy was first employed on 1 January 2006 by the Henderson Industries of the Future Fund and currently by the FP WHEB Sustainability Fund.

- 3. Annualised standard deviation since inception.
- 4. Relative to MSCI World Total Return Index (net, AUD unhedged)
- $^{\star}$  For further information regarding fees please see the PDS available on our website.

#### PENGANA WHEB SUSTAINABLE IMPACT FUND

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