



Renewable Energy

The green investor: why institutional investing holds the key to a renewable energy future

octopus

A brighter way



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Foreword

There has never been a more pressing time to think about renewable energy investment. This report identifies what drives institutional investors towards the asset class and what is holding them back. We believe these roadblocks can be overcome and, at the end of the report, we suggest how.

At the end of 2018, the Intergovernmental Panel on Climate Change (IPCC) issued the starkest warning yet on the risks of rising global temperatures. Despite all the efforts to date, global emissions are still rising, and the impact of a two-degree increase on our planet would be catastrophic.

This increase will devastate ecosystems, mean ice-free summers in the Arctic, cause widespread coral die-offs and see crop yields diminish. In turn, these will cause mass relocations, and water to become an increasingly scarce resource, according to IPCC research.

Avoiding these unimaginable changes requires trillions in investment, strong global leadership and long-term thinking.

The combination of these three vital elements is found in institutional investors. This is the group whose influence can catalyse the transformation required to reduce global warming.

This report, the first Renewable Energy Investment Report from Octopus, demonstrates that institutional investors are increasingly investing in renewable energy markets. Almost half of those already invested in the renewables sector, as surveyed within the report, are set to increase their allocations to renewables by up to 10% over the next five years.

Among global respondents already invested and those yet to invest in the sector, allocations to renewable energy are expected to almost double from **4.4%** to **7.1%** over the next five years. This amounts to an additional \$210 billion commitment to renewable energy from those surveyed.

“
Acting now
is not an
option; it is
a necessity.”

Bloomberg New Energy Finance¹ estimated that \$10 trillion will be invested in zero carbon generation capacity between 2018 and 2050, with \$8.4 trillion of that going into wind and solar. To put this into perspective, the total investment into wind and solar equates to roughly twice the global market capitalisation of the oil and gas sector.

Therefore, while the increasing focus on renewable energy by institutional investors is welcome, given the scale of investment required, we believe far more needs to be done to help institutional investors allocate even more funds into renewable energy assets.

Fortunately, the step change needed will be bolstered by increasing enthusiasm – not just from institutional investors per se, but also their underlying investors. According to a survey by Morgan Stanley,² **86%** of millennials cite investing with a focus on Environmental, Social & Governance (ESG) impact as a central goal.

And by 2020, the spending power of these green investors will have overtaken that of Generation X, and will continue to grow. But renewable energy investment is not just about ESG. While it has a fundamentally positive impact on the planet, the asset class is also unique in delivering an attractive risk-adjusted return that diversifies away from equities and bonds into predictable cash flows.

¹Bloomberg New Energy Finance: [Transition in Energy, Transport – 10 Predictions for 2019](#); published 16 January 2019.

²Morgan Stanley: [Sustainable Signals New Data from the Individual Investor](#); published 9 August 2017.

This report not only identifies the key drivers for institutions investing into renewable energy, it also points to why investors might be holding back from investing, by setting out the challenges for those entering the sector and factors that will encourage increased allocations to this asset class.

Crucially, the roadblocks identified – concerns around energy price uncertainty, liquidity issues and lack of in-house renewable asset management skills and resources – are surmountable. As a specialist renewable energy investor, our purpose is to accelerate the transition to a low-carbon future by helping investors to invest into renewable energy, while also delivering an attractive risk-adjusted return.

We believe that there are three key ways to help unblock investment into this asset class, as discussed in the conclusion: educating investors on underlying risks,

mitigating those risks through specialist managers, and tailoring investments to investors' requirements.

Acting now is not an option; it is a necessity.



A handwritten signature in black ink that reads "Matt Setchell".

Matt Setchell



A handwritten signature in black ink that reads "Alex Brierley".

Alex Brierley

\$210bn
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Executive Summary

Encouraged by the fact that the asset class provides diversification, stable cash flows, and satisfies ESG investing requirements, those already invested in renewable energy assets plan to almost double their allocations from 4.4% to 7.4%.

This is the first Octopus Renewable Energy Investment Report. Institutional investors who participated in the survey for this report manage \$6.8 trillion between them, with \$6.3 trillion of that managed by those already investing in renewable energy. Of this latter group, 42% are set to increase allocations to the asset class by up to 10% over the next five years. Among all respondents, allocations to renewable energy are expected to almost double from **4.4%** to **7.1%** over the next five years – representing some \$210 billion of estimated inflows.

Yet there are hurdles that institutional investors need to overcome on the journey to a renewable future. The report highlights that the challenges faced by respondents include external concerns like energy price risk, internal problems such as a lack of in-house skills and resources, and specific access and liquidity issues with particular asset classes.

Fullerton. Octopus-managed solar plant in Hampshire, generating 4.5GWh/annum.



Key findings of the report



Almost half (42%) of institutional investors already invested in the sector are **set to increase allocations** to renewable energy by up to 10% over the next five years. No investors surveyed plan to decrease allocations.



Diversification (66%), ESG investing (58%) and stable and predictable cash flows (48%) are the **main drivers** for investing in renewable energy assets for those already invested.



The **most attractive regions** for current investment, and potential future investment, are **the UK and Europe**. More than half (55%) of current investors in the sector prioritise investment in the UK and Northern Ireland.



Investors are predominantly **satisfied with the performance** of their renewable energy investments.



The **main driver** that would encourage respondents to increase allocations in renewable energy is **better support from government**, with 52% of all respondents saying this would encourage them to invest.



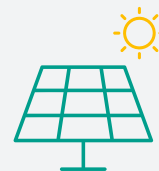
Those invested in the sector plan to **almost double their allocations** to renewable energy from **4.4% to 7.4%** in the next five years.



The key challenges for all investors surveyed are: **energy price uncertainty (56%), liquidity issues (41%) and a lack of in-house skills and resources (35%)**.



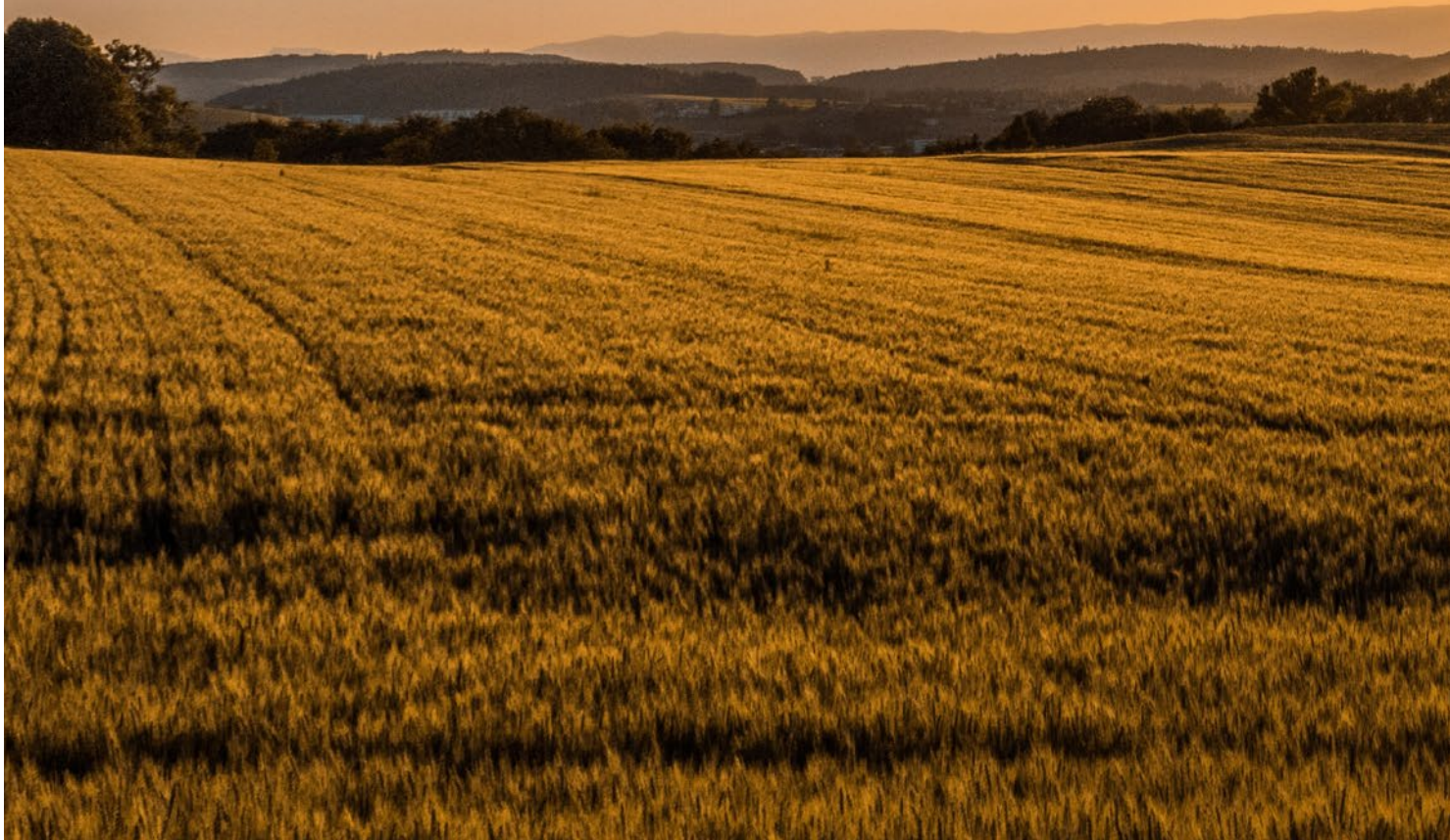
Almost half (**48%**) of existing renewable investors would consider investing in onshore wind power plants.



The **most popular** renewable energy asset class to invest in is **grid-scale solar power plants**, with 43% of those currently invested in the sector holding these assets.

“Institutional investors are waking up to the investment opportunity that comes with securing a renewable future. However, more needs to be done to unblock investment to help tackle climate change.”

—Matt Setchell, Co-head of Octopus Renewables





Institutional investors support a renewable future

Over two-thirds of the institutional investors we spoke to are already investing in renewable energy. Plainly, this is an asset class that is here to stay, with inflows from respondents expected to amount to around \$210 billion over the next decade.

Of those investors surveyed, **67%** are currently invested in renewable energy assets, while **33%** are not. The types of investors surveyed span pension funds, multi-manager funds, insurance companies, strategic investors, high-net-worth family offices, private banks, endowment funds, foundations and sovereign wealth funds. The size of funds managed ranged from less than \$100 million to over \$250 billion.

Interest and investment in renewable energy are here to stay, and look set to

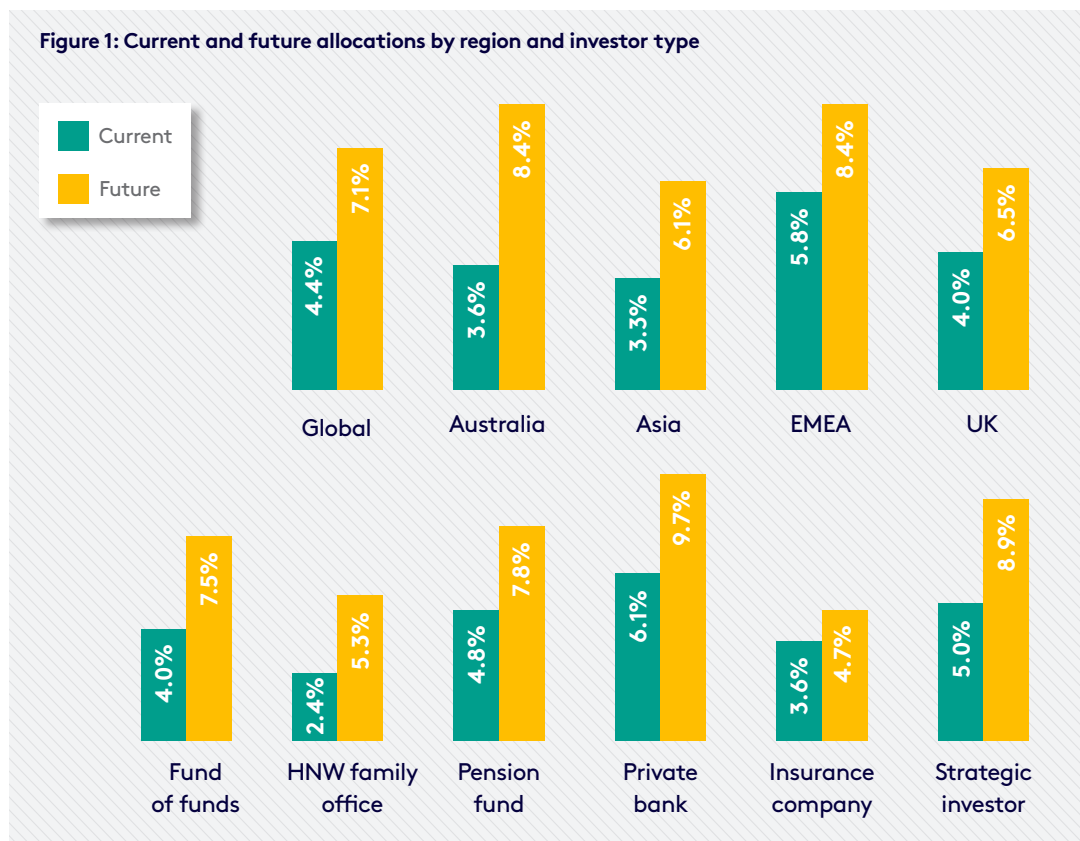
grow. Over the next five years, estimated inflows into the sector from institutional investors surveyed will amount to approximately \$210 billion.

While all investors currently invested in the sector plan to increase their allocations, EMEA investors are leading the way, with the highest level of current and future allocations.

There is already appetite

Respondents already invested in the sector currently allocate **4.4%** of their investment portfolio to renewables (Figure 1).

42% of institutional investors surveyed, who are currently already investing in the sector, are set to increase allocations to renewable energy by up to 10% over the next five years.



And that appetite is growing

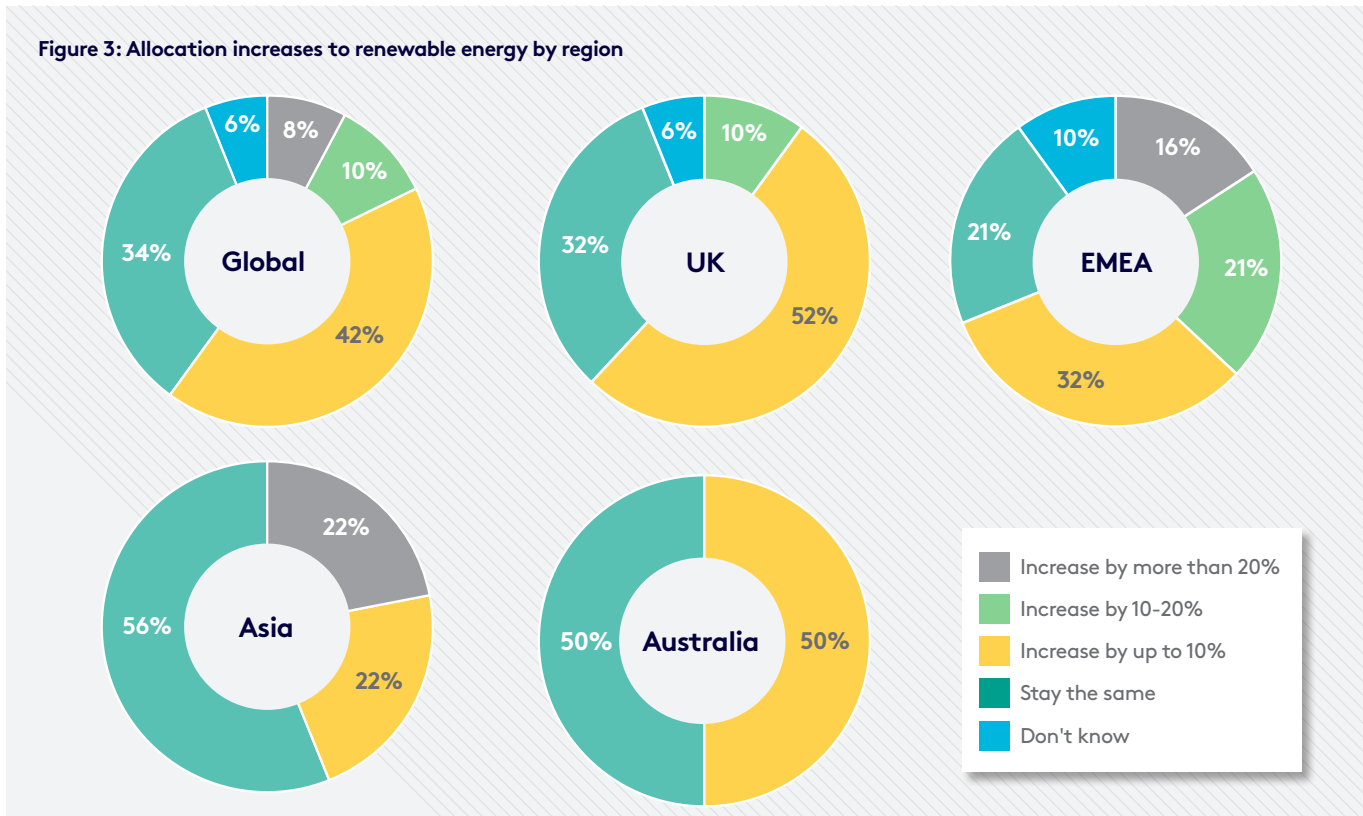
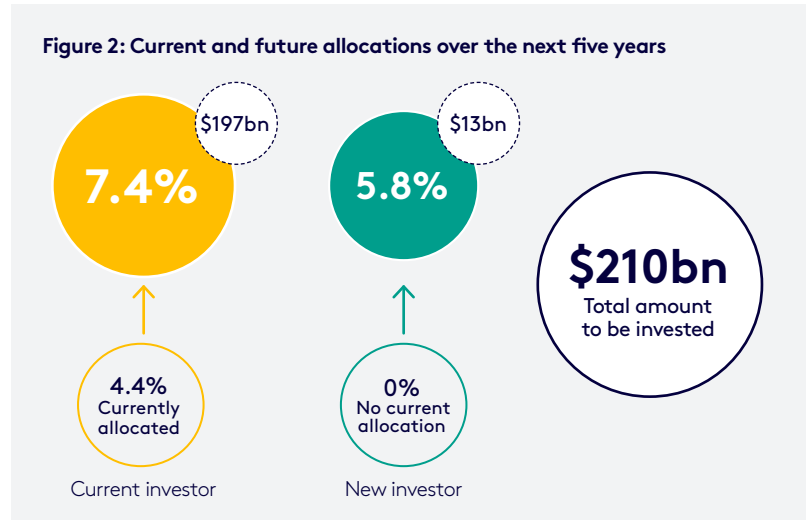
Across those respondents, allocations to renewable energy assets are set to almost double over the next five years, from **4.4%** to **7.4%**, accounting for inflows of \$197 billion into the sector.

Moreover, over two-fifths (**42%**) of global institutional investors currently invested in renewable energy expect to increase allocations by up to **10%**, with none planning on decreasing investment in the sector (Figure 3).

Institutions yet to invest in the sector expect to allocate **5.8%** of funds to renewable energy over the next five years, equating to inflows of \$13 billion (Figure 2).

EMEA investors are leading the way

EMEA investors surveyed have the highest level of current and future allocations, at **5.8%** and **8.4%**, respectively. Meanwhile, Asia had the lowest, at **3.3%** and **6.1%**, respectively (Figure 1).



What is driving the renewables race?

The report reveals there are three main drivers that prompt investors to turn to renewables: the need to diversify, a desire for stable and predictable cash flows, and rising pressure to adopt ESG investment strategies.

To date, the majority of investors in renewables have been attracted by some type of government subsidy. These subsidies have helped to underpin stable and predictable cash flows over the long term, while mitigating risk. The opportunity for investors to access these assets is still significant, with a healthy pipeline of existing operational portfolios coming to market, and new assets being built in countries where subsidies are still available.

In the future, government support for renewables will come in different forms. That is because renewable energy assets can now compete, in some markets, with other energy assets on a level playing field, as the cost of building new projects has fallen substantially over the last decade.

The key drivers

Diversification, increasing pressure to adopt ESG/impact investing and a desire

52%
of respondents would feel encouraged to increase allocations in renewable energy if they had better support from government.

for stable and predictable cash flows are the three greatest drivers for investing in renewable energy assets among those investors surveyed (Figure 4).

1. Diversification & low correlation with financial markets

Two-thirds (**66%**) of respondents already invested say diversification and the opportunity to invest in an asset class not correlated to financial markets are the main drivers prompting them to invest in the sector.

EMEA renewable energy institutional investors attach particular importance to diversification, with three-quarters (**74%**) saying it is the most important driver. Diversification is also high on the agenda of UK and Asian investors, with **68%** and **67%** of investors, respectively, citing it as the top driver (Figure 4).

Figure 4. Drivers of renewable energy investment

	Global	Australia	Asia	EMEA	UK
Diversification/Low correlation with financial markets	66%	38%	67%	74%	68%
ESG/impact investing (climate change, environmental sustainability, etc.)	58%	0%	78%	95%	45%
Stable and predictable cash flows	48%	100%	11%	53%	42%
Attractive risk-adjusted returns	40%	63%	44%	26%	42%
Long-term yields/income	37%	75%	78%	21%	26%
Inflation hedging	25%	25%	0%	11%	42%
Scalability – access to assets now and future growth in asset class	24%	0%	22%	16%	35%

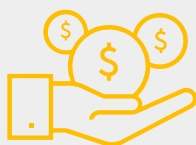
Investment drivers



Two-thirds (66%) of renewable energy investors say **diversification and the opportunity to invest in an investment not correlated to financial markets** is the main investment driver.



Almost half (48%) of renewable energy investors say **the need for stable and predictable cash flows** is the main investment driver.



Four in 10 (40%) of investors say they invest in renewable energy to **capture attractive risk-adjusted returns**.

The above three data points are based on 67 renewable energy investors from a total survey size of 100 institutional investors with \$6.8 trillion AUM.

2. ESG & impacting investing

Meanwhile, **58%** of renewable energy investors surveyed see ESG — or impact investing — as a key driver of why they invest in renewables. In EMEA, this is at **95%**. In Australia, however, none of those surveyed said ESG considerations have an impact (Figure 4).

3. Stable and predictable cash flows

Almost half (**48%**) say the need for stable and predictable cash flows is salient (Figure 4). Among Australian institutional investors, this is seen as a driver among all respondents (**100%**).

4. Attractive risk-adjusted returns

While energy price risk concerns remain high, those already invested in the sector see it as an opportunity to pursue risk-adjusted returns, with four in 10 respondents (**40%**) saying they invest in renewable energy to capture attractive risk-adjusted returns (Figure 4).



The 95%: an ESG awakening

Increasing numbers of underlying investors see ESG considerations as a key element of how they would like their money to be invested. Institutional investors surveyed highlight its growing importance, as they are aware that rising numbers of 'greener' millennial investors will continue to tip the balance.

The ESG investing trend is impacting institutional investment decisions across the globe. Research by McKinsey¹ has found that ESG investing stands at over \$20 trillion in AUM, or around a quarter of all professionally-managed assets around the world.

What is fuelling the ESG focus?

Almost two thirds (**58%**) of institutional investors currently invested responding to the survey consider ESG a key driver for renewable energy investment (Figure 4). And the desire to invest more in renewables because of ESG pressures is particularly

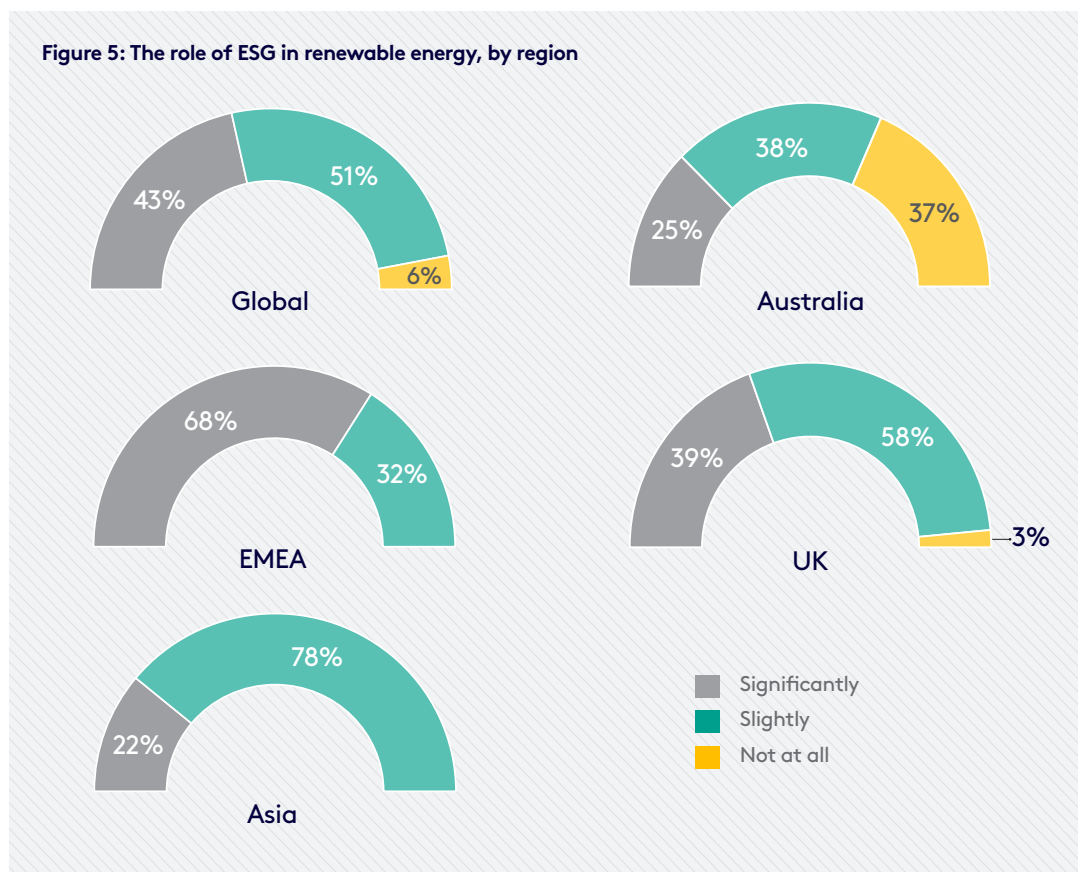
strong in EMEA, with **95%** of respondents citing it as a significant factor (Figure 4).

Moreover, over two-fifths (**43%**) of respondents currently invested say ESG considerations play a significant role in their renewable energy investments. EMEA investors are the most engaged with ESG, with **68%** saying it plays a significant role (Figure 5).

Currently, almost half of institutional investors (**47%**) include ESG in portfolio decisions in response to investor demand and to align with global investment trends (Figure 6). This pressure is likely to increase

57%
of institutional investors surveyed cite protecting their profile and image as the **top reason for including ESG** in portfolio decisions.

Figure 5: The role of ESG in renewable energy, by region



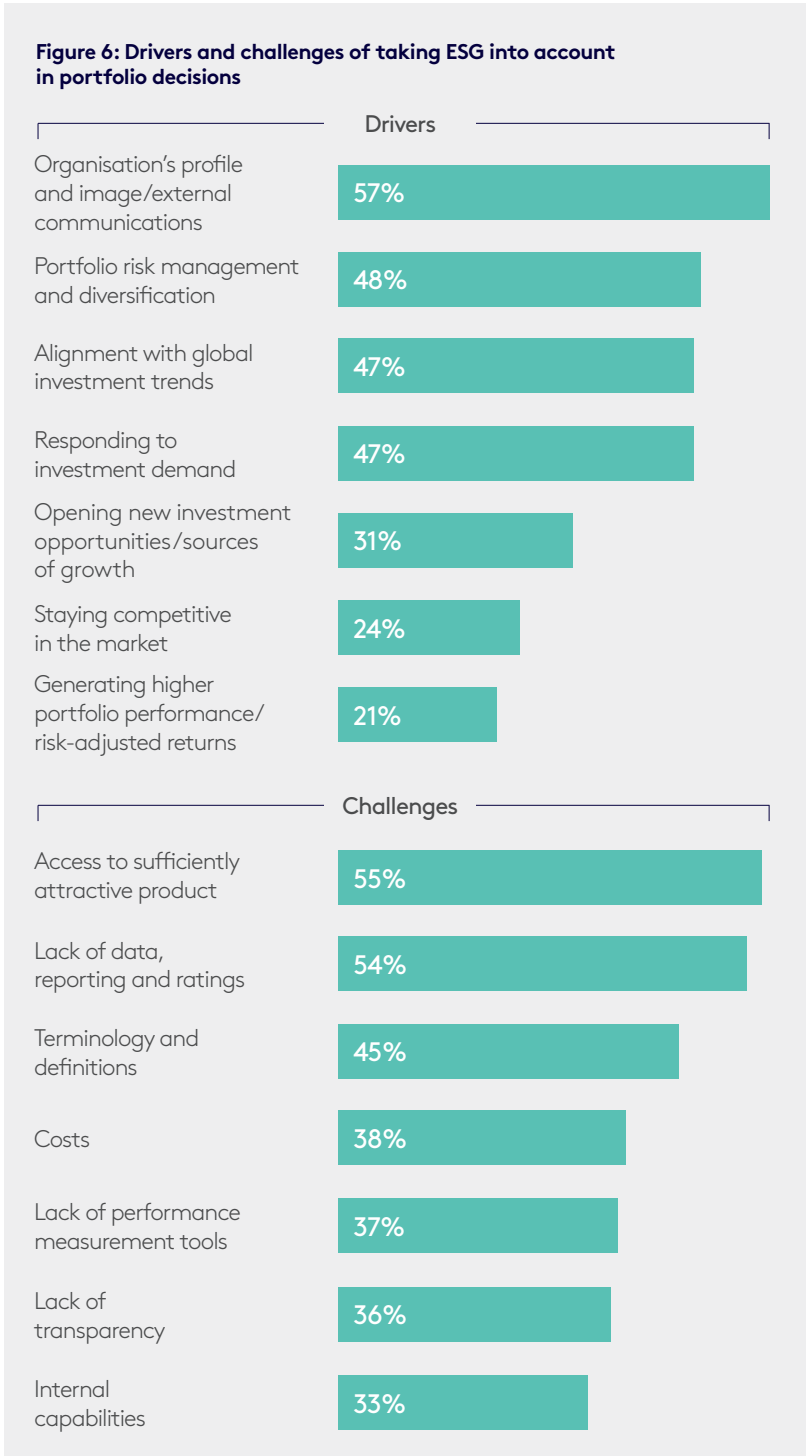
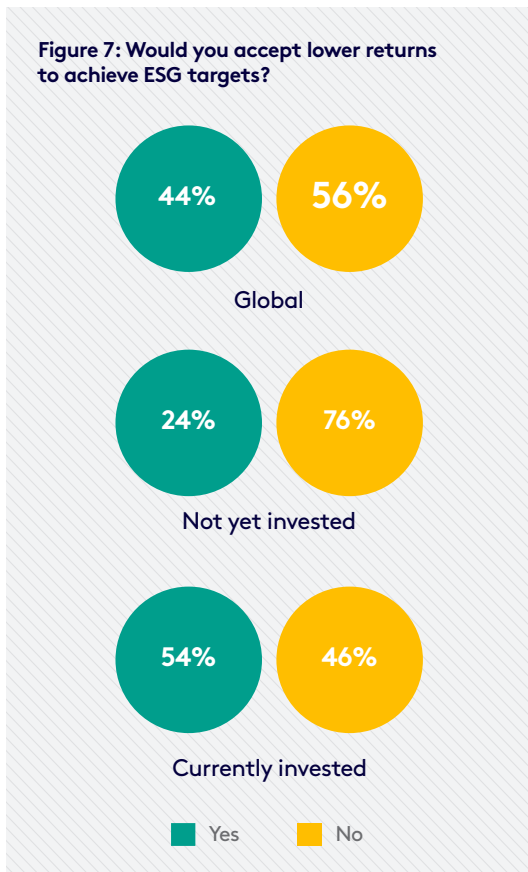
¹McKinsey: [From 'why' to 'why not': Sustainable investing as the new normal](#); published October 2017.

as underlying investors – primarily 'greener' millennials – become increasingly engaged with the characteristics of ESG investing.

Meanwhile, as the profile of ESG rises on the public and governmental agenda, the top reason for including ESG in portfolio decisions for institutional investors is protecting their profile and image, with over half (**57%**) citing this factor (Figure 6).

Not compromising on returns

However, more than half of all investors surveyed (**56%**) say they are not willing to accept lower investment returns to achieve ESG/impact targets (Figure 7).



What kind of renewable future are institutions investing in?

Solar is still the most popular renewable energy asset class among institutional investors surveyed. Yet globally, institutional investors are increasingly aware of the spectrum of asset types in the sector.

Investors might start with a solar investment, due to perceived lower operational risk, and use this as a stepping stone to create a more diverse renewables portfolio.

Onshore wind is a natural complement to solar, as they have similar operational attributes, but combining them brings additional diversification benefits. Increasingly, sophisticated investors are amalgamating portfolios of different renewable assets to tailor their risk-return profile across technologies, jurisdictions and energy price exposure. However, this requires access to scale and expertise in investing, and managing assets across different technologies and countries.

Solar is the shining light

The most popular renewable energy investment among respondents is grid-scale solar panel plants, with more than four in 10 (**43%**) respondents currently invested saying that is where they currently invest, and **40%** saying they would consider investing in these assets (Figure 8).

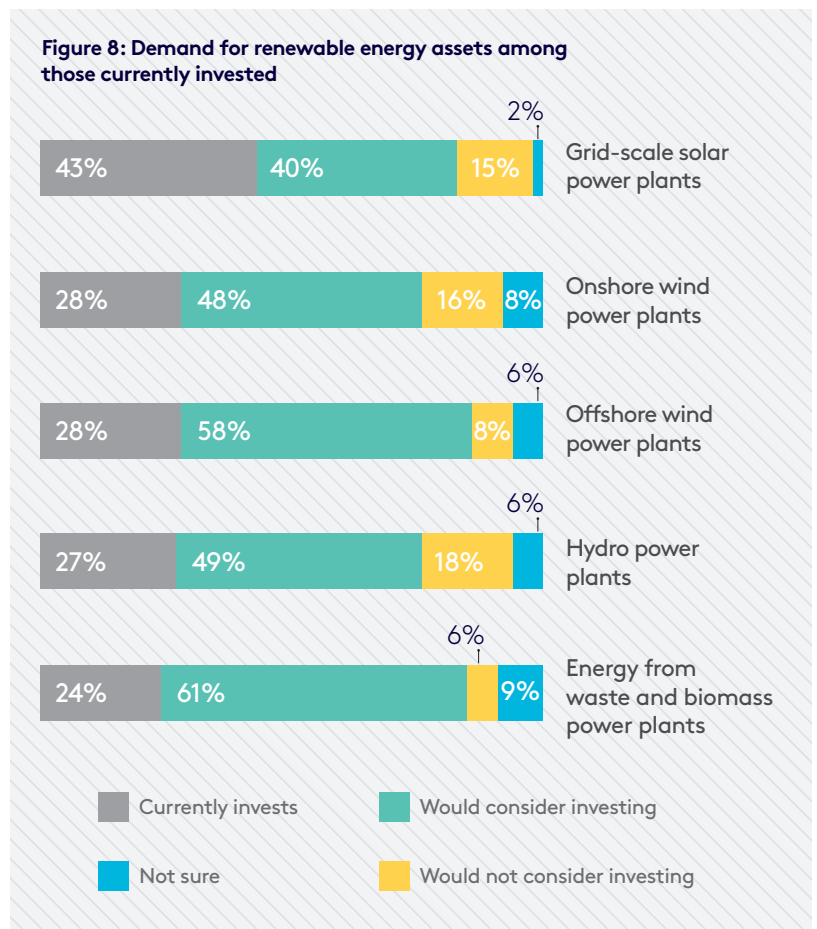


Figure 9: Renewable energy investment by region

	Global	Australia	Asia	EMEA	UK
Grid-scale solar power plants	43%	63%	45%	58%	29%
Onshore wind power plants	28%	25%	22%	58%	13%
Offshore wind power plants	28%	0%	22%	53%	23%
Hydro power plants	27%	63%	0%	26%	26%
Energy from waste and biomass power plants	24%	0%	11%	37%	26%

Almost half (**48%**) of all institutional investors already invested in renewable energy assets say they would consider investing in onshore wind power plants, and **58%** say they would consider offshore assets. Hydro power plants attracted over a quarter (**27%**) of investors, and biomass power plants **24%**. Meanwhile, almost two-thirds (**61%**) of current investors surveyed say they would consider biomass power plant investment, and **49%** say hydro power plants are an option (Figure 8).

But understanding of different assets is deepening

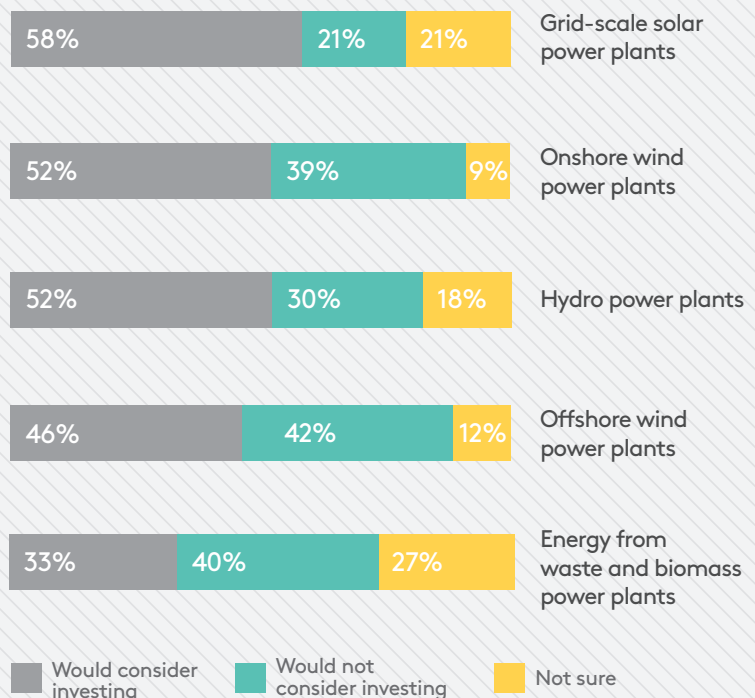
The interest in solar is followed by onshore wind. Both solar and onshore wind are particularly popular in EMEA, with equal numbers of respondents (**58%**) from the region currently invested in both facilities (Figure 9).

This coheres with a growing understanding of the sector, with increasing numbers of sophisticated investors combining different renewable assets in order to tailor their risk-return profile.

Demand among investors not currently invested

Demand among institutional investors not currently invested in renewable energy assets is also strong. Around six in 10 (**58%**) are considering investing in solar plants, while over half (**52%**) say they would look at onshore wind and hydro plants (Figure 10).

Figure 10: Demand for renewable energy assets among those not currently invested



Europe attracts the most investment

More broadly, Europe, and particularly the UK, presents attractive characteristics for renewable energy investors. The region offers diversification, security and the ability to tailor investments, giving access to a spectrum of risk profiles across a wide pool of assets.

Among respondents currently invested in the sector, Europe is the most popular region for renewable energy investment, with the UK, France and Nordic countries topping the list. More than half (**55%**) of those institutional investors already investing in the sector prioritise the UK and Northern Ireland (Figure 11).

Among respondents yet to invest in renewable energy assets, the UK and Northern Ireland are still the most popular regions — with six in 10 (**61%**) investors surveyed saying they would consider investing there — followed by the Nordic countries and Italy (Figure 12). They also registered interest in Japan, Australia, France and Germany (Figure 12).

Institutions currently invested in the sector also exhibit strong appetite to invest in European countries in the future. More than four in 10 would consider investing in Ireland (**44%**), the Benelux (**43%**) and the Nordic countries (**42%**) (Figure 11).

Figure 11: Appetite for renewable energy investment by country or region

	Currently a priority and currently an investment	Would consider investing	Would not consider investing	Not sure
UK and Northern Ireland	55%	25%	15%	5%
France	37%	33%	21%	9%
Nordic countries	37%	42%	9%	12%
Germany	36%	36%	22%	6%
Iberia	30%	28%	32%	10%
Italy	25%	38%	28%	9%
Australia	24%	37%	27%	12%
Ireland	21%	44%	22%	13%
Eastern Europe	18%	39%	31%	12%
Japan	18%	42%	31%	9%
Benelux	16%	43%	28%	13%
India	13%	27%	51%	9%
China	12%	34%	46%	8%
Korea	11%	30%	49%	10%
Africa	8%	28%	51%	13%
Latin America	8%	13%	67%	12%
Middle East	6%	25%	59%	10%

The draw of the UK

The UK emerges as a hotbed of renewable energy investment. The country is the main investment focus for investors surveyed in all regions other than Australia. Almost half (44%) of Asian investors, 74% of EMEA investors and 55% of UK investors say the UK is their current investment focus (Figure 13).

Home bias

Notwithstanding the dominance of the UK, the research also reveals a degree of home bias – respondents like to invest in their own market (Figure 13).

Figure 13: Investment focus by region

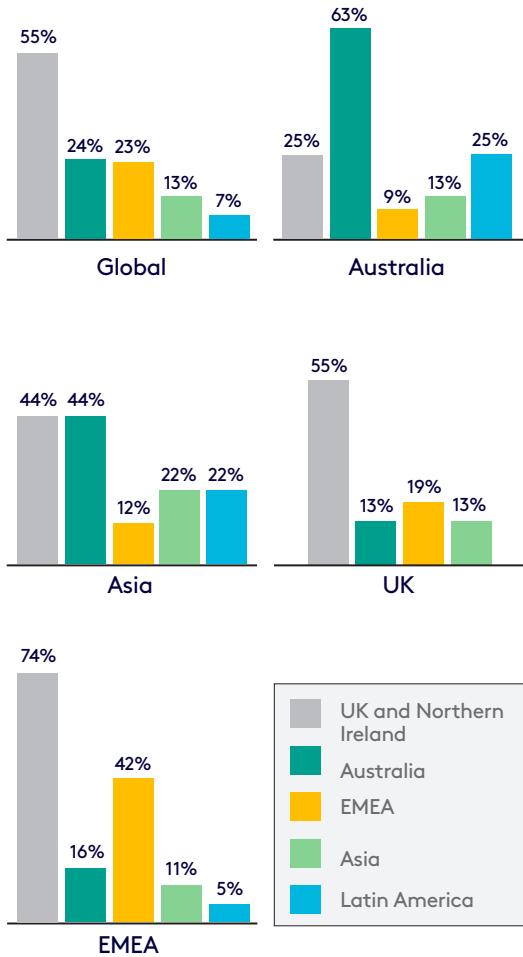
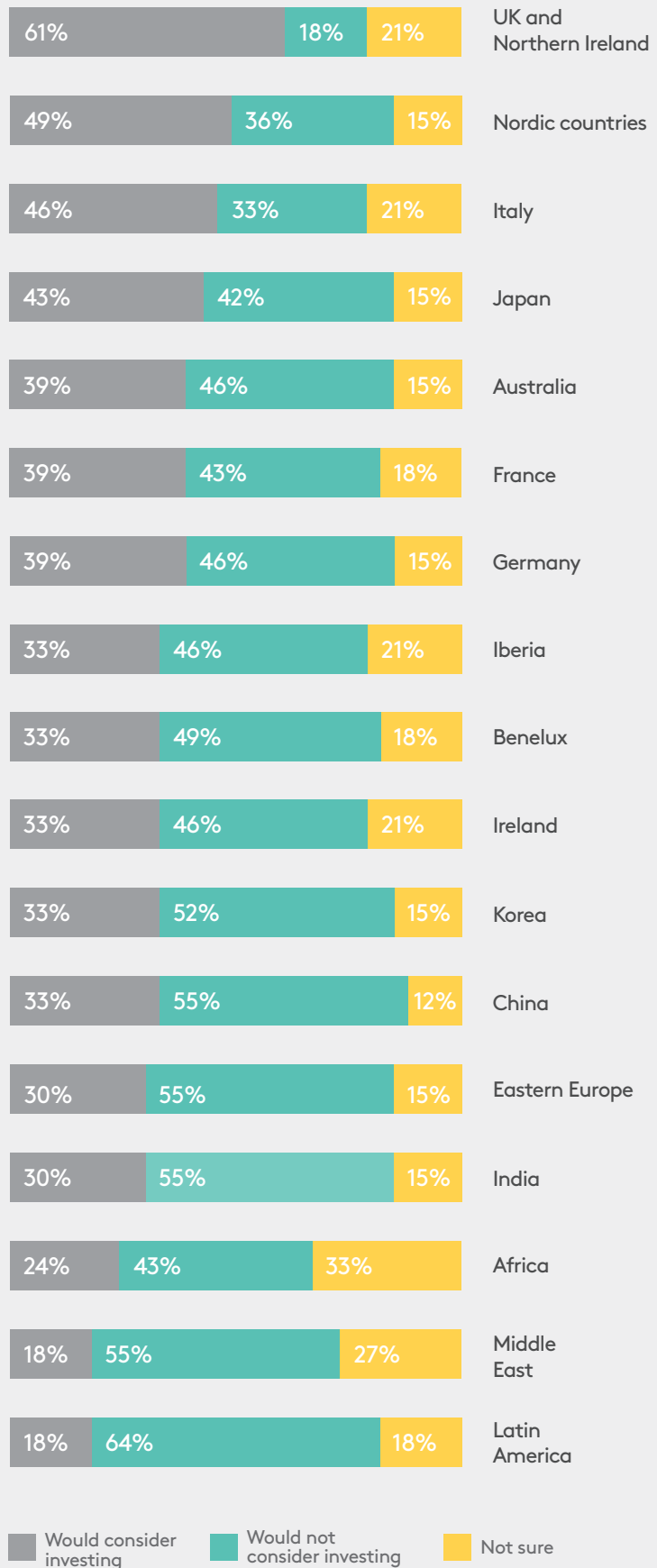


Figure 12: Appetite for renewable energy investment by country or region among those not currently invested



Breaking down the barriers: the road to a renewable future

Institutional investors face challenges: energy price uncertainty, liquidity issues and skills shortages within their organisations. But these hurdles can be overcome, unlocking new investment that the industry, and the planet, needs.

Institutional investment in renewable energy is growing. But some investment is being held back due to specific concerns. This report reveals the top three barriers to investing in renewables are energy price uncertainty, liquidity issues and a skills shortage within organisations.

Most renewable energy investments will have some type of energy price uncertainty – an inherent part of the asset, but also an understandable concern for investors. Government subsidies help mitigate this risk by underpinning a large proportion of

revenues (varying according to subsidy regime). However, investors will still need to be comfortable with revenues that are not **100%** locked in over the very long term.

Typically, investors take a view by understanding the impact on returns in extreme downside scenarios, and the underlying drivers of these movements. This type of analysis demonstrates how renewable energy assets can still deliver an attractive return in circumstances where energy prices are reduced significantly.

Figure 14: The challenges of investing in renewable energy

	Global	Australia	Asia	EMEA	UK
Energy price uncertainties	56%	70%	33%	64%	56%
Liquidity issues	41%	50%	40%	44%	38%
Lack of renewable investment/asset management skills and resources within my organisation	35%	20%	40%	40%	34%
Costs (operating, implementation, execution, exit costs)	34%	50%	27%	20%	40%
Inadequate size/scale of organisation	34%	20%	60%	12%	40%
Governmental/regulatory barriers	33%	20%	20%	48%	32%
Access to investment pipeline	31%	20%	47%	20%	34%
Investment time horizon	23%	10%	33%	24%	22%
Low risk-adjusted return profile	21%	30%	13%	28%	18%
Lack of transparency	21%	0%	27%	24%	22%
Access to, or performance issues with, renewable managers	21%	50%	13%	12%	22%
Lack of diversification	8%	20%	0%	12%	6%
Organisation's investment committee restrictions	7%	10%	7%	8%	6%

In addition, specialist renewable energy investors are becoming more sophisticated in hedging energy price exposures and combining assets that capture different prices to diversify the risk. Changing investor perceptions to energy price risk will be fundamental to unlocking the investment needed into renewables over the coming years.

Liquidity and skills shortages also point to the need for investors to offer scale and sector specialism. Larger renewable managers have teams of people focused on the commercial, technical, legal and health and safety aspects of owning large portfolios of renewable energy assets on behalf of investors. This helps reduce risk, and can help drive increased performance.

The key concerns

Globally, over half of respondents (**56%**) cite energy price uncertainty as a challenge. This is followed by liquidity concerns (**41%**) and a lack of skills around renewable energy investment and asset management within their organisations (**35%**). Cost and inadequate size of an institution were also concerns (Figure 14).

1. Energy price uncertainties

Among institutional investors surveyed, energy price risk is considered the greatest threat to renewable energy return expectations, with over half (**56%**) seeing it as the salient concern. This challenge is seen as greatest in Australia (**70%**), followed by EMEA (**64%**). Over half (**56%**)

Barriers to investing:*



of UK investors see uncertainty around energy price as a worry.

2. Liquidity challenges

Meanwhile, over four in 10 (**41%**) of all respondents surveyed cite liquidity issues as a barrier to investing (Figure 14). This is again highest among Australian investors, at 50%. UK investors worry about liquidity the least, at **38%**.

3. Skills shortage requires outsourced expertise

Over a third (**35%**) of all respondents point to a lack of renewable skills and resources within their organisation as a key barrier (Figure 14). Respondents in Asia and EMEA are most concerned about this, with **40%** of respondents in each region listing it as a concern. A lack of in-house expertise is less of a concern among Australian institutional investors in particular.

4. Ameliorating costs

A third of all respondents (34%) identify costs as a further investment barrier, despite falling prices of renewable energy technologies (Figure 14). This can encompass high transactions costs, and operating and implementation costs, in addition to the cost of developing and maintaining investment teams.

*% of respondents and barriers cited.

What will unlock new investment?

The role of governments around the world, and their continued support towards a renewable future, is clear: the main driver that would encourage respondents to increase allocations in renewable energy is better support from government (**52%**), followed by better pooled investment vehicles (**48%**), and better in-house expertise (**42%**) (Figure 15).

1. Help, not hinder

A third (**33%**) of respondents say that government and regulatory barriers are a challenge when it comes to investing in the sector. This rises to 58% for investors with AUM of \$50 billion or more (Figure 16).

2. Better pooled investment vehicles

Almost half of all respondents (**48%**) say better pooled investment vehicles would

encourage them to increase allocations to renewable energy (Figure 15). This is particularly pressing for Asian investors, **60%** of which said they would increase allocations if they had access to better pooled investment vehicles.

Demand is higher among those already invested in the sector, at **54%** (compared with **36%** of those not yet investing in renewables).

3. Improved in-house expertise

More than four in 10 (**42%**) respondents say better internal expertise is a further factor that would drive an increase in allocations (Figure 15). This indicates a need to outsource investment management to specialist asset managers with high levels of expertise and a proven track record.

Top 3 drivers to unlock new investment:*

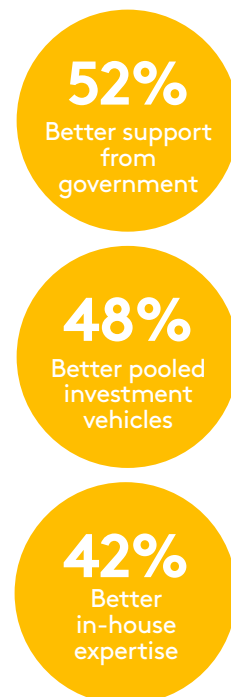


Figure 15: Key drivers for unlocking investment

	Global	Australia	Asia	EMEA	UK	Investor	Potential investor
Better support/policies from government	52%	50%	47%	56%	52%	58%	39%
Better pooled investment vehicles	48%	30%	60%	44%	50%	54%	36%
Better in-house expertise	42%	50%	40%	48%	38%	39%	48%
Greater access to renewable energy assets	41%	40%	40%	48%	38%	48%	27%
Increased investor interest in ESG	36%	30%	53%	36%	32%	40%	27%
Debt guarantees to provide financial security	27%	30%	53%	12%	26%	24%	33%
Inflation indexation to maintain the purchasing power/guarantee returns above inflation	27%	30%	53%	12%	26%	24%	33%
Lower regulatory constraints /barriers	26%	20%	47%	20%	24%	31%	15%
Liability-driven investments to match duration and liabilities profile	6%	10%	20%	0%	4%	6%	6%

*% of respondents and drivers cited.

4. Increasing access

Four in 10 respondents (**41%**) say greater access to renewable energy assets would encourage them to increase allocations to the sector (Figure 15).

Pooled investment vehicles can play a central role here, helping investors to access renewable energy projects and overcoming size, liquidity and knowledge constraints.

Figure 16: Renewable energy challenges by AUM

	Global	Less than \$500m	\$500m to less than \$5bn	\$5bn to less than \$50bn	\$50bn or more
Energy price uncertainties	56%	60%	64%	53%	50%
Liquidity issues	41%	45%	41%	41%	38%
Lack of renewable investment/asset management skills and resources within my organisation	35%	35%	45%	32%	29%
Costs (operating, implementation, execution, exit costs)	34%	20%	27%	44%	38%
Inadequate size/scale of organisation	34%	40%	23%	35%	38%
Governmental/regulatory barriers	33%	35%	36%	12%	58%
Access to investment pipeline	31%	25%	36%	15%	54%
Investment time horizon	23%	30%	27%	12%	29%
Low risk-adjusted return profile	21%	25%	14%	29%	13%
Lack of transparency	21%	0%	27%	26%	25%
Access to, or performance issues with, renewable managers	21%	35%	18%	26%	4%
Lack of diversification	8%	15%	5%	12%	0%
Organisation's investment committee restrictions	7%	5%	5%	0%	21%



Conclusion: accelerating the transition to renewables by unblocking investment

This report has highlighted some key trends among those surveyed:

- **Renewable energy is an attractive asset class for institutional investors**, owing to its diversification from volatile financial markets and the predictable, long-term cash flows it generates.
- **ESG objectives feature highly in investors' decisions to invest** and support the move to renewable investments.
- **However, uncertainty on energy prices and lack of in-house skills** might be holding back investment.

The coming decade will mark a watershed for renewable energy, which is also absolutely vital if we are to tackle climate change — one of the greatest threats facing mankind. Even though the \$10 trillion of investment into zero-carbon energy is a huge funding requirement, arguably the figure needs to be higher — and deployed even more quickly.

Recent predictions from Bloomberg New Energy Finance¹ forecast that investment in 2019 will fall modestly short of the amount invested in 2018 because of volatile stock market conditions. This intensifies the spotlight on the industry that plays a critical role in transitioning the world to a sustainable, renewables future.

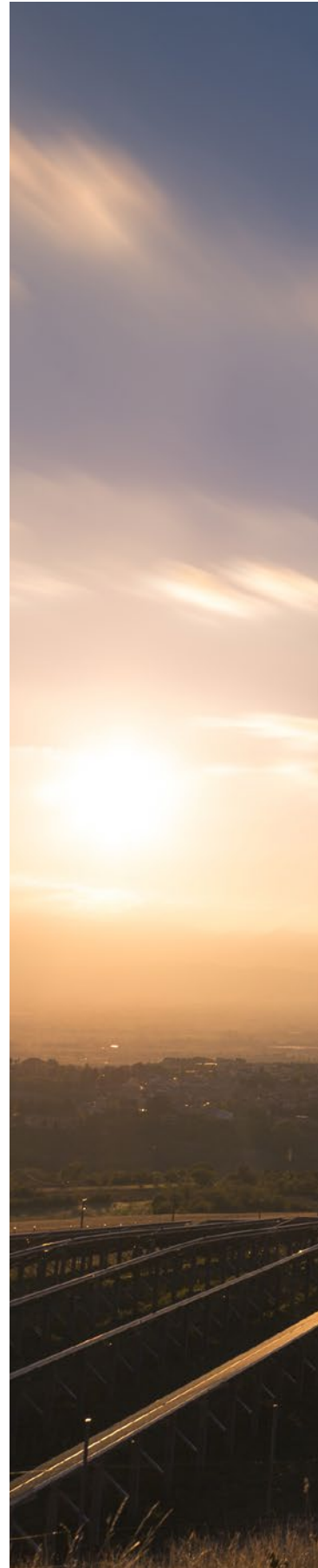
Institutional investors need to make the decision to allocate increasing amounts of funding to renewable projects at the pace required to protect our planet for future generations, while delivering on commitments to their own investors.

We believe that there are three key ways to help unblock investment into renewable energy:

- 1. Educate** investors on underlying risks, particularly energy price uncertainty so that they understand how downsides might impact their returns.
- 2. Mitigate** risk through a team of specialists that reduce both operational and commercial (energy price) risks, alongside using existing scale to benefit investors.
- 3. Create** more choice by tailoring investments into renewable energy assets to combine assets across technologies, jurisdictions and energy price exposure to fit different risk-return appetite from investors.

Renewables will form a growing part of all institutional portfolios, but institutional investors must push harder to capitalise on the resources and capabilities they have to unlock the trillions of funding that this sector needs to flourish, satisfying underlying investors and global development requirements.

This is the moment to grab the opportunity by the horns and to accelerate renewable energy investment, delivering predictable returns to a generation of investors that also requires something even greater: a secure, saved planet. We do not have the luxury of time. The investment industry can, and must, act now.



¹Bloomberg New Energy Finance: [Transition in Energy, Transport-10 Predictions for 2019](#); published 16 January 2019.



Methodology

CoreData Research was commissioned by Octopus Investments to conduct a study of institutional investors to better understand their views about renewable energy investments.

The fieldwork was conducted by CoreData Research between September and October 2018 via an online survey. The sample includes 100 respondents from the UK, EMEA, Asia and Australia. The respondent pool represents a spectrum of organisations including pension funds, fund of funds, insurance company, strategic investors, family offices and private banks.

The total assets under management of the sample is an estimated \$6.8 trillion.

Respondents were classified into two broad categories according to their current allocations to renewable energy – those invested in renewables **(67)** and those not invested **(33)**.

Octopus Group

Octopus is a group of companies that invests in the people, ideas and industries that will help to change the world. We currently manage more than £8.6 billion on behalf of our customers. Octopus Energy, Octopus Healthcare, Octopus Investments, Octopus Labs, Octopus Property and Octopus Ventures are all part of Octopus Group. Of the £8.6 billion we manage, £2.3 billion is on behalf of institutional investors.

33 Holborn. Octopus offices in central London.



We are a specialist investor in real assets, private credit and high-growth small businesses. We offer institutional investors access to sterling-denominated investments in mainstream sectors of the economy. Our assets are long term in nature, cash-yielding and resilient to economic headwinds. The Octopus team is made up of over 125 investment professionals and we have almost two decades' experience of operating in our chosen markets.

Energy Investment at Octopus

Octopus' mission is to accelerate the transition to a future powered by renewable energy. Since 2011, the team has built market-leading positions as an investor and manager of solar, wind, biogas, biomass, landfill gas, and reserve power assets. Octopus is the largest non-utility investor in onshore renewables in the UK, and also the largest commercial solar player in Europe.

As a specialist, innovative renewables investor, we believe there is a huge opportunity to unblock investment by building bespoke portfolios of renewables assets, at scale, and across technologies and countries, to create better outcomes for our investors.

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CoreData research

Established in 2002, CoreData Research is a global specialist financial services research and strategy consultancy with operations in Australia, the UK, the Philippines, the United States, Malta and Colombia. With a primary focus on financial services, CoreData Research provides clients with both bespoke and syndicated research services through a variety of data collection strategies and methodologies, along with consulting and research database hosting and outsourcing services. CoreData Research provides both business-to-business and business-to-consumer research. Its offering includes market intelligence, guidance on strategic positioning, methods for developing new business, advice on operational marketing and other consulting services.

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