

BlackRock

Real Assets

Global Renewable Power Insight 2020

Winds of change

**How to invest in
renewables today**

FOR INSTITUTIONAL, PROFESSIONAL, WHOLESALE, AND QUALIFIED
INVESTORS ONLY – PROPRIETARY & CONFIDENTIAL





David Giordano
Global Head -
BlackRock
Renewable Power



Rory O'Connor
Global CIO &
Head of Europe -
BlackRock
Renewable Power



Freek Spoorenberg
Head of Strategy &
Investor Relations -
BlackRock Renewable
Power

Contents

Theme 1 3-4
Finding best relative
value

Theme 3 6
Position your portfolio for
change

Theme 2 5
Take risks you can
manage

Conclusion 7-8
Adding renewables to the total
portfolio

“
**A renewables allocation builds up
portfolio resilience – through its
independent cash flows and strong
sustainability features.”**



David Giordano
Global Head
BlackRock Renewable Power

The world is changing and so should our investment portfolios. Portfolio resilience has to go beyond government bonds and consider alternative return sources that can provide income and diversification. As the largest opportunity in private infrastructure, renewables is increasingly being asked to play that role in traditional portfolios. At the same time, rising investor allocations, increasing market participants and declining subsidies are changing the investment landscape. For investors today, navigating these ‘winds of change’ will be essential to get the most out of this resilient asset class.

Finding best relative value

Renewables markets are regionally moving through different cyclical phases and at different paces, reflecting local trends in demand, supply and policy. It is important to identify areas of relative value globally and avoid pockets of overheating. A single country or region approach results in reduced return potential and elevated risks as it constrains optionality and diversification by weather patterns, regulatory regimes and capital market conditions.

Take risks you can manage

Investing in renewables is not about avoiding risk altogether. It is about taking risks that are well understood, and being equipped to manage those risks in order to generate resilient, risk-adjusted performance. Construction and late-stage development risks are idiosyncratic and more directly manageable than long-term power price assumptions. At today’s competitive market for operating assets, we see material risk in more mature assets, as the return profile for operating assets is skewed to the downside

Position your portfolio for change

Decarbonization and electrification are reshaping the energy industry and beyond. Just as quickly as renewables has disrupted conventional power generation, the asset class opportunity is itself evolving as it reaches scale. Investors should be equipped to position their investment approach and strategy in line with the market evolution. Being dynamic in portfolio positioning and embracing change are critical to getting the best out of the investment opportunity.

Finding best relative value

Renewables represented **50%** of global infrastructure deal flow in 2019¹, making it the **largest opportunity in the asset class by some distance**, driven by the global energy transition from two thirds fossil fuels to two thirds renewables.

This has presented an enviable breadth of deployment possibilities for investors globally, recognizing it has been accompanied by record capital inflows to the asset class. Over the past three years, one-third of capital raised was renewables-focused, **creating an LP's dilemma in renewables manager selection**². LPs have never had as many renewables fund choices. Managers with experience directly in the sector, deep resources and global reach are best positioned to navigate today's market.

Renewables markets are moving through different cyclical phases regionally. Where capital inflows have been met by a slowdown in greenfield activity or change in policy, **overheated pockets have developed, particularly in brownfield assets**. In the UK, 343 onshore wind farms were commissioned in 2017, versus only 23 in 2019³.

Weathering this uneven landscape requires an understanding and capability to capitalise on relative value by region and sector globally (see chart on following page). **Local trends in demand, supply and policy differ by market**, and while the global opportunity set offers tangible diversification benefits, it takes local and sector expertise to capture them successfully.

Asia Pacific represents the future powerhouse of renewables, with over half of the world's electricity expected to be generated in the region by 2030⁴. With growing populations, economic growth and a smaller installed base of renewables capacity today, the region can expect to lead investment activity over the coming decade.

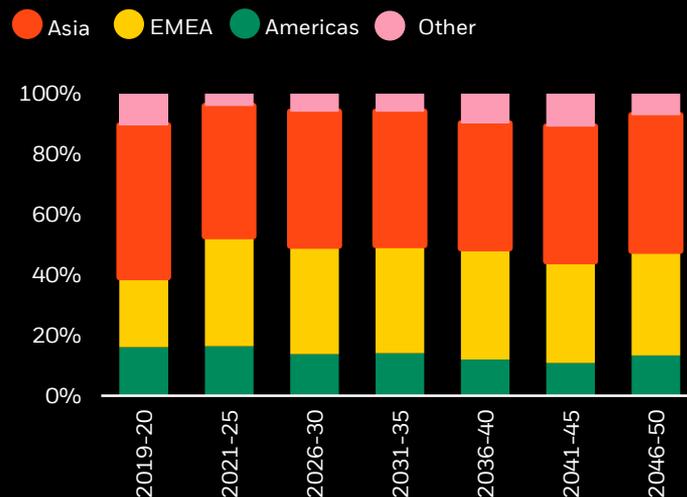
Taiwan and Japan remain home to attractive 20-year feed-in-tariffs for those who can originate an investment pipeline. South Korea has targets to add a remarkable **42GW** in renewables capacity over the next decade – equivalent to the UK's entire installed renewables capacity today⁴.

In Europe, investors need to be increasingly selective when investing in traditional onshore wind and solar. Renewables assets are highly sought after in developed European countries with low yielding bond markets. Offshore wind presents the most scalable European opportunity in our view, and most growth is seen in France, Iberia and the Nordic regions.

The U.S. experiences similar supply-demand dynamics as Europe, however remains the **most active renewables market after China**¹. The surge in growth of commercial & industrial solar assets is generating portfolio opportunities that are often fully contracted with diversified, long-term, fixed power purchase agreements. In addition, the U.S. benefits of a growing contingent of carbon-conscious companies that look to buy cheap electricity from wind and solar projects directly.

APAC: the future powerhouse of renewables

Clean energy investment by region (USDbn)



Source: BNEF, Linklaters, as of September 2019. For illustrative purposes. There is no guarantee that any forecasts and forward-looking expectations made will come to pass

“Asia renewables today is reminiscent of Europe 10 years ago. South Korea is building 42 GW in wind and solar this decade alone⁴ – that’s equivalent to the UK’s entire installed base today.”



Rory O'Connor
Global CIO & Head of Europe
BlackRock Renewable Power

Balancing risk, reward and addressable opportunity



- Europe
- Asia Pacific
- North America
- Latin America


 Bubble size¹ = Market Opportunity: US\$bn investment expected over 5 years based on forecasted capacity additions of wind and solar (2018-2023)

Source: BlackRock, proprietary analysis performed by the Global Renewable Power Team, June 2020. Capacity market data is taken from Bloomberg New Energy Finance. Return is based on market data points and does not reflect investment strategy. This material is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any financial instrument or product or to adopt any investment strategy.

Take risks you can manage

In today's market, brownfield assets have the potential to carry greater risk than greenfield assets. Even if operating assets offer current cash yield, accepting low returns means that investors have less risk buffer if performance is below expectations. Fewer value drivers to optimize operating assets, leave less opportunities to create value and mitigate downside risks.

The return profile of brownfield assets are therefore increasingly **sensitive to long-term power price forecasts**, which is a risk that is difficult to manage in many markets. All of these factors skew the return profile to the downside for operating assets.

Operating assets in current market conditions favour sellers, with heavy competition stemming from core infrastructure funds and well-capitalized strategic players to first-time institutional investors.

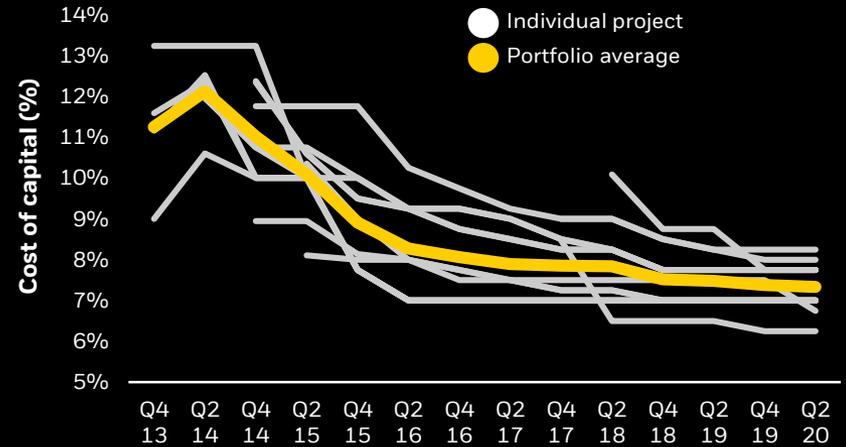
The perception of greenfield assets in renewables has been that they are higher risk, driven often by the discussion around development and construction. We believe this **typecasting of greenfield investment** reflects an overgeneralization of greenfield risks in renewables compared to other infrastructure sectors where greenfield typically comes with more project complexity and longer construction timelines.

Not all greenfield is equal. The early-stage construction and late-stage development phases offer attractive opportunities to secure an investment pipeline with trusted developers, with good visibility on major project milestones and approvals. Investors who are equipped to manage risks associated with these opportunities are in a better position to generate attractive risk-adjusted performance and invest their capital efficiently.

We believe that de-risking a construction and late-stage development project through to operations, offers investors the chance **to move from a buyer's market to a seller's market** (see *top right chart*).

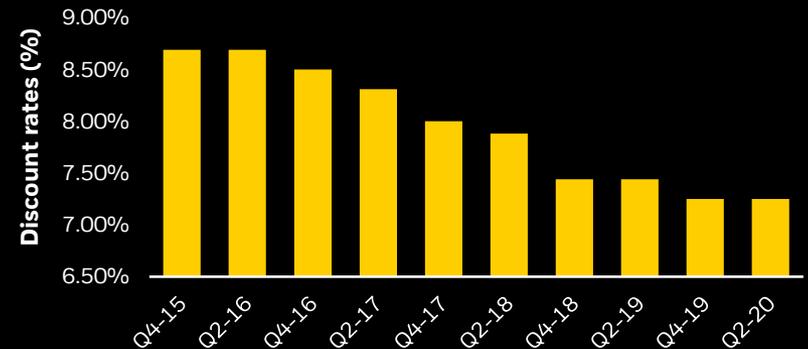
Picking the right market at the right time is important while doing this (see *bottom right chart*). Entering markets and sectors that are seeing higher growth rates and have the ingredients for stronger renewables demand going forward can drive outperformance. Expected demand in a given country could be the result of a growing need for electricity (particularly renewable), favourable support mechanisms or an increase in capital searching for renewables investment. Investors who participate in these markets early will benefit most from discount rate compression and a higher percentage of contracted revenues. This ultimately has the potential to lead to an improved risk-return outcome.

The value of de-risking: moving from buyer's market to seller's market



Source: BlackRock, June 2020. Representative data of projects moving from greenfield to brownfield as part of our renewable power strategies managed at BlackRock.

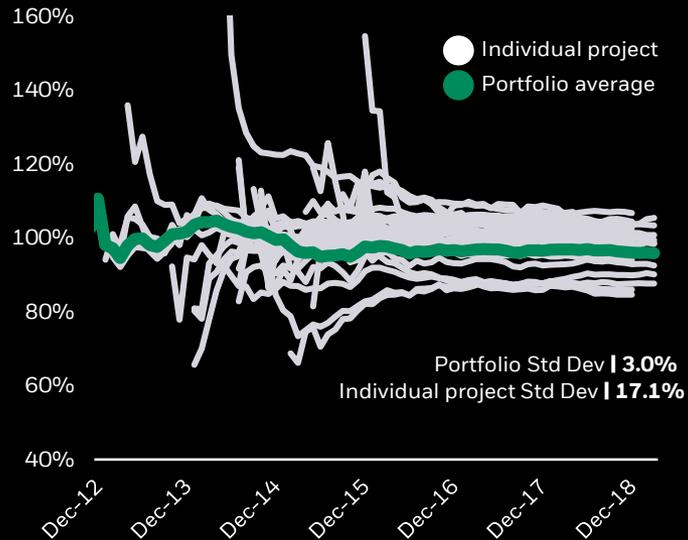
Discount rate compression: picking the right place, at the right time



Source: BlackRock, using proprietary data from BlackRock Renewable Power, June 2020. Implied levered cost of capital for onshore wind, offshore wind and solar assets in UK, France and Ireland markets, independently verified on a semi-annual basis.

Reduced volatility in a global portfolio

Power production versus base case



Source: BlackRock, March 2019. Representative data of renewable strategies managed at BlackRock. Variation is based on 20 year implied uncertainty at the project level.

“
You cannot control wind or sunshine. Global diversification is the only free lunch in renewables.”



Peter Raftery

Global Head of Technical & Commercial
Asset Management
BlackRock Renewable Power

Theme 3

Position your portfolio for change

Today, the world is facing some of its largest fundamental challenges. The findings from the UN's State of the Climate Report, published earlier this year, underlined (again) the urgency for far-reaching climate action from nations across the globe.

Climate change is being met by decarbonization and electrification that are reshaping the energy industry and beyond. Just as quickly as renewables has disrupted conventional power generation, the asset class opportunity is itself evolving as it grows. Investors should be equipped to position their investment approach and strategy in line with the market evolution. Being dynamic in portfolio positioning and embracing change are critical to get the best out of the investment opportunity.

Weather modelling has come a long way over the last decade, and prediction methods continue to improve. Nevertheless, natural uncertainty remains in any single project's energy production, both over the short-term and in the long-term. Global diversification of wind and solar investment naturally (and significantly) **reduces portfolio-level energy production volatility** both in the short and long-term (see chart on left).

Similarly, while power price markets are interconnected across regions and even countries, they remain idiosyncratic, providing additional diversification. Add to this diversification by regulatory regime, geopolitical risk and macroeconomic factors such as growth, base rates and inflation and the result in our view is **renewables is tailor-made for going global today, not regional.**

As renewables markets mature, support mechanisms that were designed to give the industry a leg-up are naturally being scaled back. Innovating new sources of contracted revenues is vital. **Corporate power purchase agreements are one clear route**, given the breadth and depth of companies seeking cheap and clean electricity. 19GW of corporate PPAs were procured in 2019, a 44% rise year-on-year. If RE100 companies meet their 210TWh shortfall by 2030 targets through wind and solar alone, this will represent 105GW of renewables build, or around US\$98bn in investment according to BNEF⁵.

Moving to where the contracted revenues are, is another option. Many countries in APAC still offer long-term, fixed price power purchase agreements, often through state-owned utilities such as in Taiwan, Japan and South Korea. Also, sectors such as commercial & industrial solar, the fastest growing renewables sector in the U.S., can be structured into portfolio investments that offer long-term, contracted revenues across a diversified fleet of small-scale solar projects. The offshore wind sector continues to benefit from government backed contracts, however the entry point of investment is essential, both from a risk and return perspective.

Electricity is replacing oil as the primary source of energy in the 21st century. Investors should look at the full value chain across this multi-faceted and multi-trillion dollar transformation. Increased renewables penetration is also creating substantial and necessary investment opportunity in electricity storage, distribution and consumption.

Conclusion

Adding renewables to the total portfolio

Investors are faced by fixed income yields that are at their lower bounds, equity dividends being cut or suspended, and portfolios carrying greater equity risks than before. At the same time, the **search for sustainability in the overall portfolio** is prioritized and tracked (see next page).

In this light, investors are required to **rethink portfolio resilience and consider alternative return sources that can provide income and diversification** such as renewables. This trend is seen in the forward asset allocation decisions of some of the largest institutions. Recent survey results reported by IREI show that portfolio allocations to renewables will increase from 4.4% to 7.1%⁶ over the next 5 years as **renewables increasingly becomes a standalone allocation**.

Investors should view holistically the income and return characteristics of a renewables strategy. Income from renewables compares favourably to yields in other asset classes and has proven to be **stable over time including during this pandemic** (see top chart on right).

Returns in renewable power projects are primarily driven by the availability of wind and solar resource, the capital costs to build new projects and the price of electricity. These idiosyncratic risks make **renewables a natural portfolio diversifier** and reduce equity risks in an overall portfolio (see bottom chart on right). Investors also increasingly value the inflation hedge renewables may provide.

Portfolio resilience is more than income and diversification. It's making sure the portfolio is well positioned for structural themes. The shift toward sustainability is poised to give **renewables a potential return advantage for years to come**.

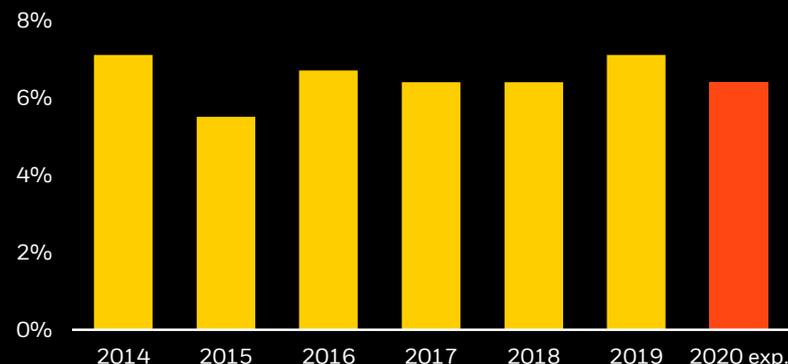
Looking at private markets, and beyond, investors have built up significant exposure to traditional energy and transport, and those areas are being heavily disrupted. As governments draw up Covid-19 stimulus packages, they are increasingly focused on making **the recovery as sustainable and resilient as possible**. The transition to cleaner energy generates abundant investment opportunities in renewables, representing \$10 trillion over the next 30 years⁷, but also **challenges investors allocation decisions of the past and the future**.

As the world is rapidly changing, it is essential to understand the return and risk dynamics of your private infrastructure portfolio, and how these interact with general markets factors such as economic growth, inflation, and sustainability.

We were at the energy crossroads several years ago, and the market has clearly chosen the direction it wants to go. Capturing the growth opportunity in renewables helps building **portfolios that are futureproof**, not only for the next 5 years, but for the next century.

Potential for stable income through cycles

Net cash yield profile of renewables



Source: BlackRock, June 2020. Average annualised net cash yield across BlackRock's current renewable power strategies since inception. 2020 expected yield is based on current forecasts as of June 2020.

Idiosyncratic risks improves diversification

Correlation matrix of renewables

	Global Agg	ACWI Equity	Real Estate	Direct Lending	Private Equity	Renewable Equity
Global Agg	1.00					
ACWI Equity	-0.02	1.00				
Real Estate	-0.10	0.89	1.00			
Direct Lending	0.21	0.82	0.76	1.00		
Private Equity	-0.07	0.82	0.79	0.74	1.00	
Renewable Equity	0.12	0.15	0.16	0.19	0.15	1.00

Source: BlackRock Aladdin, June 2020. Data derived from portfolio asset class mappings, using the Aladdin portfolio risk model. Representative data of renewable power strategies managed at BlackRock used as proxy for GRP Equity as of 2/28/2020.

Important information: Past performance is not a guide to current or future performance and should not be the sole factor of consideration when selecting a product. Any opinions or forecasts represent an assessment of the market environment at a specific time and are not intended to be a forecast of future events or a guarantee of future results.

Renewables delivers sustainability you can measure

US\$1 invested provides **US\$2** of impact¹

		Dollarized Impact (US\$) ¹	Impact Multiple
6	Clean water and sanitation 	Water savings from renewable power generation 141,021,789 m³ water reduced	\$ 284m 0.23x
7	Affordable and clean energy 	Greenhouse gas emissions avoided 39,128,766 tons of CO₂ emissions avoided	\$ 1,737m 1.32x
13	Climate action 		
8	Decent work and economic growth 	New jobs created 7,625 jobs created	\$ 239m 0.16x
11	Sustainable cities and communities 	Community engagement US\$114m lifetime community contribution	\$ 114m 0.08x
Portfolio Total		\$ 2,593m	1.78x

Source: BlackRock, data as of 31 December 2019. 1)Based on representative data of renewables portfolio with US\$1,650m in AUM at BlackRock. Please refer to the methodology and metrics under reference (8) hereafter. Metrics represent impact created over fund life. GRP II is closed to new investors. Sustainable Development Goal images sourced from UN.org, April 2019.

References

1) Source: IJGlobal, 2019 Deal Statistics. Based on number of deals. 2) Source: Infrastructure Investor, 2019 Fundraising Report. 3) Source: Renewable UK, 2019. 4) Source: Bloomberg New Energy Finance, 2020. 5) Source: Bloomberg New Energy Finance, 2020. 6) Source: IREI Institutional Investing in Infrastructure, 2019. 7) Source: Bloomberg New Energy Finance, 2020. 8) Impact methodology: BlackRock's Global Renewable Power Team takes a three-step approach with the ultimate goal of calculating impact that can be measured in dollars and compared across investments. Step 1: Identify key Sustainable Development Goals and associated metrics to be targeted for impact using the Global Impact Investing Network (GIIN)'s IRIS metrics as an effective accounting framework. Step 2: Measure impact created on a consistent and comparable dollarized basis for every potential investment using BlackRock-defined methodology to translate multiple units of impact (tons of CO2, jobs created, water saved, etc.) to dollars. Impact measurement can be aggregated to provide a topline figure for impact achieved (or targeted), which can then be mapped to SDGs and compared against global targets. Step 3: Integrate measure of impact into each stage of the investment decision-making process by normalizing dollarized impact by dividing level of impact (in dollars) by the size of total investment (in dollars) to calculate the Impact Multiple (IM) for each investment, allowing us to compare dollars invested to dollars of impact created. Calculating the IM creates metrics that are comparable across different investments which enables application throughout the investment process—not just as a post-investment reporting tool.

Risks

Capital at risk. All financial investments involve an element of risk. Therefore, the value of the investment and the income from it will vary and the initial investment amount cannot be guaranteed. Past Performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy. You may not get back the amount originally invested. Changes in the rates of exchange between currencies may cause the value of investments to diminish or increase. Fluctuation may be particularly marked in the case of a higher volatility fund and the value of an investment may fall suddenly and substantially. Levels and basis of taxation may change from time to time. Tax treatment depends on the individual circumstances of each client and may be subject to change in the future. **Infrastructure Funds:** Infrastructure Funds invest exclusively or almost exclusively in equity or debt, or equity or debt related instruments, linked to infrastructure assets. Therefore, the performance of an Infrastructure Fund may be materially and adversely affected by risks associated with the related infrastructure assets including construction and operator risks, environmental risks, legal and regulatory risks; political or social instability; governmental and regional political risks; sector specific risks; interest rate changes; currency risks; and other risks and factors which may or will impact infrastructure and as a result may substantially affect a fund's aggregate return. Investments in Infrastructure assets are typically illiquid and investors seeking to redeem their holdings in an Infrastructure Fund can experience significant delays and fluctuations in value. **Liquidity Risk:** The Infrastructure Funds' investments may have low liquidity which often causes the value of these investments to be less predictable. In extreme cases, the Fund may not be able to realize the investment at the latest market price or at a price considered fair. **Valuation risk:** Given the uncertainty inherent in the valuation of assets that lack a readily ascertainable market value, the value of such assets as reflected in the Infrastructure Funds' net asset value may differ materially from the prices at which the Fund would be able to liquidate such assets. **Lack of available investments:** There can be no assurance that the Infrastructure Funds will be able to locate, attain and exit investments that satisfy its investment objectives, or that the Infrastructure Funds will be able to fully invest its committed capital. **Redemption risk:** Infrastructure Funds are generally illiquid and therefore an investment is intended for long-term investors who are able to accept the risks associated with an illiquid investment and are able to commit their funds for the duration of the term. Redemptions, to the extent they are permitted, may be limited, postponed or altogether suspended in certain circumstances.

Important information

Regulatory Information: This material is for distribution to Professional Clients (as defined by the Financial Conduct Authority or MiFID Rules) only and should not be relied upon by any other persons. Until 31 December 2020, issued by BlackRock Investment Management (UK) Limited, authorised and regulated by the Financial Conduct Authority. Registered office: 12 Throgmorton Avenue, London, EC2N 2DL. Tel: + 44 (0)20 7743 3000. Registered in England and Wales No. 02020394. For your protection telephone calls are usually recorded. Please refer to the Financial Conduct Authority website for a list of authorised activities conducted by BlackRock. From 1 January 2021, in the event the United Kingdom and the European Union do not enter into an arrangement which permits United Kingdom firms to offer and provide financial services into the European Economic Area, the issuer of this material is:

(i) BlackRock Investment Management (UK) Limited for all outside of the European Economic Area; and

(ii) BlackRock (Netherlands) B.V. for in the European Economic Area,

BlackRock (Netherlands) B.V. is authorised and regulated by the Netherlands Authority for the Financial Markets. Registered office Amstelplein 1, 1096 HA, Amsterdam, Tel: 020 – 549 5200, Tel: 31-20-549-5200. Trade Register No. 17068311. For your protection telephone calls are usually recorded.

Any research in this document has been procured and may have been acted on by BlackRock for its own purpose. The results of such research are being made available only incidentally. The views expressed do not constitute investment or any other advice and are subject to change. They do not necessarily reflect the views of any company in the BlackRock Group or any part thereof and no assurances are made as to their accuracy. This document is for information purposes only and does not constitute an offer or invitation to anyone to invest in any BlackRock funds and has not been prepared in connection with any such offer.

Important information

For investors in Central America, these securities have not been registered before the Securities Superintendence of the Republic of Panama, nor did the offer, sale or their trading procedures. The registration exemption has made according to numeral 3 of Article 129 of the Consolidated Text containing of the Decree-Law No. 1 of July 8, 1999 (institutional investors). Consequently, the tax treatment set forth in Articles 334 to 336 of the Unified Text containing Decree-Law No. 1 of July 8, 1999, does not apply to them. These securities are not under the supervision of the Securities Superintendence of the Republic of Panama. The information contained herein does not describe any product that is supervised or regulated by the National Banking and Insurance Commission (CNBS) in Honduras. Therefore any investment described herein is done at the investor's own risk. This is an individual and private offer which is made in Costa Rica upon reliance on an exemption from registration before the General Superintendence of Securities ("SUGEVAL"), pursuant to articles 7 and 8 of the Regulations on the Public Offering of Securities ("Reglamento sobre Oferta Pública de Valores"). This information is confidential, and is not to be reproduced or distributed to third parties as this is NOT a public offering of securities in Costa Rica. The product being offered is not intended for the Costa Rican public or market and neither is registered or will be registered before the SUGEVAL, nor can be traded in the secondary market. If any recipient of this documentation receives this document in El Salvador, such recipient acknowledges that the same has been delivered upon his request and instructions, and on a private placement basis. **In Mexico**, for institutional investors use only. Investing involved risk including possible loss of principal. This material is provided for educational and informational purposes only and does not constitute an offer or solicitation to sell or solicitation for an offer to buy any share of any fund or security. This information does not consider the investment objectives, risk tolerance or the financial circumstances of any specific investor. This information does not replace the obligation of financial advisor to apply his/her best judgment in making investment decisions or investment recommendations. It is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of Mexico. If any funds, securities or investment strategies are mentioned or inferred in this material, such funds, securities or strategies have not been registered with the Mexican National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, the "CNBV") and thus, may not be publicly offered in Mexico. The CNBV has not confirmed the accuracy of any information contained herein. The provision of investment management and investment advisory services ("Investment Services") is a regulated activity in Mexico, subject to strict rules, and performed under the supervision of the CNBV. BlackRock México Operadora, S.A. de C.V., Sociedad Operadora de Fondos de Inversión ("BlackRock México Operadora") is a Mexican subsidiary of BlackRock, Inc., authorized by the CNBV as a Mutual Fund Manager (Operadora de Fondos), and as such, authorized to manage Mexican mutual funds, ETFs and provide Investment Advisory Services. For more information on the Investment Services offered by BlackRock México, please review our Investment Services Guide available in www.BlackRock.com/mx. This material represents an assessment at a specific time and its information should not be relied upon by the you as research or investment advice regarding the funds, any security or investment strategy in particular. Reliance upon information in this material is at your sole discretion. BlackRock México is not authorized to receive deposits, carry out intermediation activities, or act as a broker dealer, or bank in Mexico. For more information on BlackRock México, please visit: www.BlackRock.com/mx. BlackRock receives revenue in the form of advisory fees for our advisory services and management fees for our mutual funds, exchange traded funds and collective investment trusts. Any modification, change, distribution or inadequate use of information of this document is not responsibility of BlackRock or any of its affiliates. Pursuant to the Mexican Data Privacy Law (Ley Federal de Protección de Datos Personales en Posesión de Particulares), to register your personal data you must confirm that you have read and understood the Privacy Notice of BlackRock México Operadora. For the full disclosure, please visit www.BlackRock.com/mx and accept that your personal information will be managed according with the terms and conditions set forth therein. **For qualified investors in Switzerland:** This document is marketing material. This document shall be exclusively made available to, and directed at, qualified investors as defined in the Swiss Collective Investment Schemes Act of 23 June 2006, as amended. For recipients In Canada, this material is intended for permitted clients only, is for educational purposes only, does not constitute investment advice and should not be construed as a solicitation or offering of units of any fund or other security in any jurisdiction. **In Latin America**, for institutional investors and financial intermediaries only (not for public distribution). This material is for educational purposes only and does not constitute investment advice or an offer or solicitation to sell or a solicitation of an offer to buy any shares of any fund or security and it is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of your relevant jurisdiction. If any funds are mentioned or inferred in this material, such funds may not been registered with the securities regulators of Argentina, Brazil, Chile, Colombia, Mexico, Panama, Peru, Uruguay or any other securities regulator in any Latin American country and thus, may not be publicly offered in any such countries. The securities regulators of any country within Latin America have not confirmed the accuracy of any information contained herein. No information discussed herein can be provided to the general public in Latin America. The contents of this material are strictly confidential and must not be passed to any third party. **In Argentina**, only for use with Qualified Investors under the definition as set by the Comisión Nacional de Valores (CNV). In Brazil, this private offer does not constitute a public offer, and is not registered with the Brazilian Securities and Exchange Commission, for use only with professional investors as such term is defined by the Comissão de Valores Mobiliários. In Colombia, the sale of each fund discussed herein, if any, is addressed to less than one hundred specifically identified investors, and such fund may not be promoted or marketed in Colombia or to Colombian residents unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign financial and/or securities related products or services in Colombia. In Chile, the sale of each fund not registered with the CMF began on the date as indicated for such fund as described herein and the sale of such securities is subject to General Rule No. 336 issued by the SVS (now the CMF). The subject matter of this sale may include securities not registered with the CMF; therefore, such securities are not subject to the supervision of the CMF. Since the securities are not registered in Chile, there is no obligation of the issuer to make publicly available information about the securities in Chile. The securities shall not be subject to public offering in Chile unless registered with the relevant registry of the CMF. In Peru, this private offer does not constitute a public offer, and is not registered with the Securities Market Public Registry of the Peruvian Securities Market Commission, for use only with institutional investors as such term is defined by the Superintendencia de Banca, Seguros y AFP. In Uruguay, the Securities are not and will not be registered with the Central Bank of Uruguay. The Securities are not and will not be offered publicly in or from Uruguay and are not and will not be traded on any Uruguayan stock exchange. This offer has not been and will not be announced to the public and offering materials will not be made available to the general public except in circumstances which do not constitute a public offering of securities in Uruguay, in compliance with the requirements of the Uruguayan Securities Market Law (Law N° 18.627 and Decree 322/011).

Important information

In Hong Kong, this material is issued by BlackRock Asset Management North Asia Limited and has not been reviewed by the Securities and Futures Commission of Hong Kong. This material is for distribution to "Professional Investors" (as defined in the Securities and Futures Ordinance (Cap.571 of the laws of Hong Kong) and any rules made under that ordinance.) and should not be relied upon by any other persons or redistributed to retail clients in Hong Kong. **In Singapore**, this is issued by BlackRock (Singapore) Limited (Co. registration no. 200010143N) for use only with institutional investors as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. This advertisement or publication has not been reviewed by the Monetary Authority of Singapore. **In South Korea**, this information is issued by BlackRock Investment (Korea) Limited. This material is for distribution to the Qualified Professional Investors (as defined in the Financial Investment Services and Capital Market Act and its sub-regulations) and for information or educational purposes only, and does not constitute investment advice or an offer or solicitation to purchase or sells in any securities or any investment strategies. **In Taiwan**, Independently operated by BlackRock Investment Management (Taiwan) Limited. Address: 28F., No. 100, Songren Rd., Xinyi Dist., Taipei City 110, Taiwan. Tel: (02)23261600. **In Australia & New Zealand** Issued by BlackRock Investment Management (Australia) Limited ABN 13 006 165 975, AFSL 230 523 (BIMAL) for the exclusive use of the recipient, who warrants by receipt of this material that they are a wholesale client as defined under the Australian Corporations Act 2001 (Cth) and the New Zealand Financial Advisers Act 2008 respectively. This material provides general information only and does not take into account your individual objectives, financial situation, needs or circumstances. Before making any investment decision, you should therefore assess whether the material is appropriate for you and obtain financial advice tailored to you having regard to your individual objectives, financial situation, needs and circumstances. This material is not a financial product recommendation or an offer or solicitation with respect to the purchase or sale of any financial product in any jurisdiction. This material is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. BIMAL is a part of the global BlackRock Group which comprises of financial product issuers and investment managers around the world. BIMAL is the issuer of financial products and acts as an investment manager in Australia. BIMAL does not offer financial products to persons in New Zealand who are retail investors (as that term is defined in the Financial Markets Conduct Act 2013 (FMCA)). This material does not constitute or relate to such an offer. To the extent that this material does constitute or relate to such an offer of financial products, the offer is only made to, and capable of acceptance by, persons in New Zealand who are wholesale investors (as that term is defined in the FMCA). BIMAL, its officers, employees and agents believe that the information in this material and the sources on which it is based (which may be sourced from third parties) are correct as at the date of publication. While every care has been taken in the preparation of this material, no warranty of accuracy or reliability is given and no responsibility for the information is accepted by BIMAL, its officers, employees or agents. Except where contrary to law, BIMAL excludes all liability for this information. **In China**, This material may not be distributed to individuals resident in the People's Republic of China ("PRC", for such purposes, excluding Hong Kong, Macau and Taiwan) or entities registered in the PRC unless such parties have received all the required PRC government approvals to participate in any investment or receive any investment advisory or investment management services. **For Southeast Asia:** This document is issued by BlackRock and is intended for the exclusive use of any recipient who warrants, by receipt of this material, that such recipient is an institutional investors or professional/sophisticated/qualified/accredited/expert investor as such term may apply under the relevant legislations in Southeast Asia (only Malaysia & Brunei). BlackRock does not hold any regulatory licenses or registrations in Southeast Asia countries listed above, and is therefore not licensed to conduct any regulated business activity under the relevant laws and regulations as they apply to any entity intending to carry on business in Southeast Asia, nor does BlackRock purport to carry on, any regulated activity in any country in Southeast Asia. BlackRock funds, and/or services shall not be offered or sold to any person in any jurisdiction in which such an offer, solicitation, purchase, or sale would be deemed unlawful under the securities laws or any other relevant laws of such jurisdiction(s). This material is provided to the recipient on a strictly confidential basis and is intended for informational or educational purposes only. Nothing in this document, directly or indirectly, represents to you that BlackRock will provide, or is providing BlackRock products or services to the recipient, or is making available, inviting, or offering for subscription or purchase, or invitation to subscribe for or purchase, or sale, of any BlackRock fund, or interests therein. This material neither constitutes an offer to enter into an investment agreement with the recipient of this document, nor is it an invitation to respond to it by making an offer to enter into an investment agreement. The distribution of the information contained herein may be restricted by law and any person who accesses it is required to comply with any such restrictions. By reading this information you confirm that you are aware of the laws in your own jurisdiction regarding the provision and sale of funds and related financial services or products, and you warrant and represent that you will not pass on or utilize the information contained herein in a manner that could constitute a breach of such laws by BlackRock, its affiliates or any other person. The distribution of the information contained herein may be restricted by law and any person who accesses it is required to comply with any such restrictions. By reading this information you confirm that you are aware of the laws in your own jurisdiction regarding the provision and sale of funds and related financial services or products, and you warrant and represent that you will not pass on or utilize the information contained herein in a manner that could constitute a breach of such laws by BlackRock, its affiliates or any other person.

Distributed in the United States by BlackRock Investments, LLC

© 2020 BlackRock, Inc. All Rights reserved. BLACKROCK, BLACKROCK SOLUTIONS, iSHARES, BUILD ON BLACKROCK and SO WHAT DO I DO WITH MY MONEY are registered and unregistered trademarks of BlackRock, Inc. or its subsidiaries in the United States and elsewhere. All other trademarks are those of their respective owners.