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An Asian trade agreement set to bear fruit in years to come

The Regional Comprehensive Economic Partnership should support economic growth over the long term

Recent years have been characterised by nationalism, geopolitical brinkmanship and borders locked shut by a global pandemic. So there is something encouraging about the fact that in November 2020, amid a host of divisive forces, a landmark trade agreement was signed.

This is the Regional Comprehensive Economic Partnership (RCEP), a gathering of 15 Asian nations which between them cover 30% of the world's GDP and 27% of global trade.¹ It marks the first time China, Japan and South Korea have ever participated in the same trade deal.

The symbolism of RCEP is important, standing as a counterpoint to former President Trump's decision to pull the US out of the Trans-Pacific Partnership in 2016, in almost his first act in power. It shows that the Asia-Pacific region can still see the importance in regional blocs even if the US is standing aside.

But how about the practical side? The big-picture numbers are alluring: as much as US\$209 billion added

to world incomes and US\$500 billion to world trade by 2030, according to simulations conducted by Brookings Institute.² About 90% of goods traded in the region will eventually reach zero tariffs, according to a DBS report on 16 November 2020.³

Towards growth in regional trade

The hope is that ease of cross-border trade aids productivity and stimulates growth, which in turn ought to create a positive medium-term outlook for equity markets. There should also be a greater capacity for Asia-Pacific borrowers to raise debt, deepening regional bond markets.

Getting into the minutiae, the picture is mixed. In terms of intellectual property protection, for example, not much changes, and in many cases the avenues for tariff reduction are in places where there weren't many tariffs anyway, particularly among the Association of Southeast Asian Nations (ASEAN) which were already bound by free trade agreements (FTAs).

But the partnership does create incentives to develop supply chains across the region, and gives a considerable boost to intra-regional trade. Also, it's a starting point: RCEP creates a foundation for deeper agreements, such as those relating to labour and the environment, to be built. Financial market integration, already underway in ASEAN, should be spurred more widely across the region by RCEP.

A typical analyst response is that the signing of RCEP does not radically change short-term growth forecasts, but will pay off over the longer term as economic and political integration in Asia lead to greater trade flows and harmonization.⁴ HSBC says that intra-regional trade already accounts for 60% of Asia's overall trade, and expects the figure to grow under RCEP, not only strengthening Asia's role in the global trading system but enabling the next round of economic growth.⁵ That, in turn, should eventually be reflected in the outlook for investable assets, particularly equities.

Who benefits most?

Market participants are trying to work out who benefits most from RCEP, and position themselves accordingly. In terms of tariff savings, South Korea will be the most positively impacted, since it has no bilateral FTA with Japan, its third largest trade partner. There has been no China-South Korea FTA previously either, so that again creates an obvious benefit.

In terms of supply chains, Vietnam is the most frequently mentioned nation to benefit from regional trade, and in particular China-Vietnam or South Korea-Vietnam trade corridors. With this in mind, Singapore's UOB Bank announced a memorandum of understanding with Vietnam's Foreign Investment Agency in November in order to facilitate foreign direct investment (FDI) into Vietnam. UOB says that 40% of ASEAN FDI comes from fellow RCEP members and expects there to be a sharp increase in intra-regional capital flows.⁶

Beyond that, there is the potential of the demonstration effect. India, initially part of the discussions for RCEP, eventually opted not to be

involved, fearing the impact of cheap Chinese imports on its manufacturing sector. But if the trade deal appears to be delivering benefits elsewhere, the door is open to it.

And a Biden presidency is likely to be less volatile and confrontational than a Trump one: even if there seems little political support for the US joining trade networks today, there is the potential for closer engagement, if only because of suspicion of China leading the bloc.

It will take time for RCEP to bear fruit. But in years ahead it should move beyond symbolism into practical support for economic growth in Asia.

Sources:

- 1 Asean <https://asean.org/storage/2020/11/Summary-of-the-RCEP-Agreement.pdf>
- 2 Brookings Institute, <https://www.brookings.edu/blog/order-from-chaos/2020/11/16/rcep-a-new-trade-agreement-that-will-shape-global-economics-and-politics/>
- 3 DBS, 16/11/2020.
- 4 Goldman Sachs, 2020.
- 5 HSBC, Stuart Tate, Navigator Survey, 2020.
- 6 UOB, November 2020.



What Biden might mean for Asia

When it comes to US-China trade, the new president's changes may be more style than substance. But his policies have implications for Asian markets

The election of Joe Biden as US President clearly marks a change of direction for the United States on a host of matters of policy, from domestic stimulus to participation in the Paris Agreement. But what does it mean for Asia?

There are two ways of looking at this: the direct engagement of the US with Asian governments and economies; and the knock-on effect to Asian markets from US domestic positions.

From trade to security

On the first front, China is the obvious place to start, since the US-China trade war became one of the signature policies of the Trump administration. It is tempting to imagine a radically different relationship between the two countries under Biden, and certainly there is an expectation of a more publicly cordial approach, with fewer unpredictable statements.

But in terms of policy, there might not be that much of a difference. As *The Diplomat* puts it: "A hawkish position on China is probably the closest thing that US politics now has to an issue of bipartisan concord."¹ In the

time since Biden served as vice-president to Obama, American public and political opinion has turned against China somewhat, principally out of concern about its strength and ambition. There is very little to gain for Biden in suddenly turning soft or conciliatory with China.

Nomura recently conducted a client survey which showed that 60% of participants believed China preferred a Biden administration, simply because of the better communication and reduced friction, but that 65% expected a honeymoon period between China and the US to last only three to six months. Almost three quarters of them (70%) do not anticipate a reduction in China tariffs in 2021.²

Turning to another broker's opinion, ING expects an approach to China "probably different in style rather than substance",³ and that's a widespread view.

There's also little expectation of Biden seeking to push the US back towards Asian trade deals such as the Trans-Pacific Partnership, which Trump abandoned in 2016 (its other members ratified a revised version



called the Comprehensive and Progressive Agreement for Trans-Pacific Partnership or CPTPP; many of those members have since signed another Asian trade agreement, RCEP). Few expect the US rejoining to be a priority; indeed, some argue that the fact India stayed out of RCEP may make it a natural candidate for more trade with the US.

That being said, it is likely that a Biden presidency is going to be better for the global trade environment, Asia included. Biden is known as a multilateralist in a way that Trump never was, and his trust in the institutions of international trade is likely to help to resolve trade disputes.

So even if it isn't ratified in trade agreements, there is some hope that Biden will, like Obama before him, seek to pivot to Asia. In practice, this will likely mean security ties with Japan, Australia, India and some ASEAN countries, rather than trade and investment explicitly, but it is entirely possible that one can lead to the other. Meanwhile intra-Asian trade will continue to grow.

Implications for asset classes

Then there is the question of what happens to Asian asset classes as a response to Biden's domestic policies and the health of the US.

The clearest example of this is the US\$1.9 trillion economic rescue package Biden passed to support American households and businesses as they recover from the pandemic. Singaporean bank DBS believes it would prompt US growth to rebound from -3.2% in 2020 to +5.5% this year.⁴ That, in turn, would create tailwinds for growth worldwide, so boosting Asia's exporters.

The Biden administration made sustainability a keystone of its election campaign, and there will be a clear focus on renewable energy and infrastructure spending domestically, which should also benefit relevant stocks in this area in Asia, while increasing scrutiny of sectors that are not considered sustainable. (Moody's, for example, says it could "accelerate the

crystallization of carbon transition risks for industrial sectors prominent in many Asian countries; particularly power, automotive, oil and gas, and steel".)⁵

One common view is that emerging market debt will be well positioned as investors move to re-risk their portfolios in pursuit of yield, assuming that US yields remain reasonably low as the country recovers from the pandemic, and that fear of further damage to the global economy recedes. Chinese bonds, in particular, offer a considerable yield differential over US Treasuries.

Sources:

- 1 <https://thediplomat.com/2020/11/what-would-a-biden-administration-mean-for-southeast-asia/>
- 2 Nomura Asia Insights, December 10 2020.
- 3 <https://think.ing.com/opinions/what-does-a-biden-presidency-mean-for-asia>
- 4 DBS CIO Perspectives, February 2 2021.
- 5 Moody's Sector Comment, *Biden administration policies will have limited credit implications for Asia*, December 9 2020.



Why responsible investing has greater potential in emerging markets

Dara White
Global Head of Emerging Markets Equities

Kyle Bergacker
Senior Responsible Investment Analyst

The emerging markets universe has 26 countries and arguably, environmental, social and governance (ESG) issues matter far more in these regions than in developed markets. There is more room for companies to improve and for investors to influence change, for the good of society and investors themselves. That means greater potential for alpha generation and having a positive impact. Emerging markets rely more on natural resources and have more labour-intensive manufacturing businesses, so there is naturally more opportunity for improvement.

ESG standards are beginning to matter more. Consider the growing populations, rising middle class, urbanisation and expanding energy consumption. Clearly you need to improve regulation and governance for these economies to grow in a responsible way. Countries such as China and India are jumping ahead in terms of renewable energy adoption. India has a target of generating 57% of its energy from renewable sources like wind and solar by 2027.¹

ESG investing in emerging markets adds value. Research from the University of Waterloo in Canada shows that the MSCI Socially Responsible Investing (SRI) Index not only ranked higher in terms of mean return than most emerging market portfolios, but also was less vulnerable to negative shocks.²

Finding “quality”

There is a huge spectrum of “quality” – defined in terms of both ESG and investment generally – but I would argue this is greater in emerging markets (EM) than in developed markets. Quality businesses look after the interests of investors, employees and society; they manage capital responsibility and have good corporate governance. Well-run businesses can take market share away from competitors such as state-owned enterprises that aim primarily to provide employment and aren’t as competitive.

Additionally, there are family-run businesses which studies show tend to generally outperform. While they

do not always have great corporate governance, often the family's interests are aligned with investors' interests in terms of long-term growth and avoiding risk.

Clearly, there is also a long list of bad players. While the situation is improving, loose regulations and unstable policy environments do allow bad practice to continue.

Data analysis

Our data models act as a first screen, allowing fund managers to focus their research with greater intensity. A fund manager may, for example, look at a company that the models indicate as being of lower quality but decide it is improving and that is not being picked up by the models quite yet. There is a great opportunity to generate alpha by engaging with these companies to uncover hidden value. That's where our most fruitful dialogue happens.

Columbia Threadneedle Investments' bespoke responsible investment model has more than 250 million data points. We are also working on a platform to go alongside that with more than three billion data points. The data covers about 90% of the MSCI Emerging Markets Index and tells us if a company is making an impact or not. Even if a company doesn't publish a data point, you can infer that through machine learning by capturing related data.

For instance, gallons of water used, or hazardous waste emitted. While there is still less data in emerging markets, corporate disclosures are growing quickly in response to pressure from governments and large investors like sovereign wealth funds and pension funds.

Emerging market themes

Among the themes we are interested in is fintech, which is an exciting area because it increases financial inclusion across our markets. There are huge benefits in moving from cash to digital transactions; this transition is happening quickly in some emerging markets and digital payments are the first step towards digital banking. While recognisable names include Alipay and Tenpay – China's payments duopoly – the likes of StoneCo and PagSeguro³ in Brazil also enable digital payments.

Turning to renewable energy, countries such as China and India are adopting these technologies on a massive scale. Companies in solar and wind have large numbers of potential consumers. Furthermore, China has poured billions of dollars into support for electric vehicles and leads the industry worldwide.

There are also opportunities in education companies as there is a big appetite for online education services that give children in rural areas more opportunity.

The power of engagement

Engagement is important for sourcing data from companies and helping them to improve ESG practices. We make our views known and help companies to improve performance. Say, for example, you are Coca-Cola and water is a key input. Obviously, reducing water wastage improves your income statement and increases free cash flow. Collaborating with companies helps them to achieve a double win – in terms of both ESG and financial performance.

A lot of policy makers are taking action, setting renewable energy targets as well as introducing stewardship codes. We feel that with the right team and tools there is an opportunity to influence and be at the forefront of change. We believe it is a great time to dive in and invest in emerging markets using an ESG strategy.

Sources:

- 1 The Guardian, India plans nearly 60% of electricity capacity from non-fossil fuels by 2027, 22 December 2016.
- 2 Weber, Olaf, and Ang, Wei Rong. "The Performance, Volatility, Persistence and Downside Risk Characteristics of Sustainable Investments in Emerging Markets."
- 3 Mention of specific companies should not be taken as a recommendation to buy.



Expecting an uneven recovery for investment-grade bonds

Companies will not benefit equally from a recovery, making credit selection essential in picking the winners

By Ryan Staszewski,
Senior Portfolio Manager

When financial markets woke up to the coronavirus pandemic's likely level of contagion in early 2020, there was a disorderly flight to safety. Fortunately, though, the huge international policy response that followed restored confidence and markets rebounded.

From peak to trough the FTSE Global Equity Index Series was down more than 20% early in 2020.¹ Bond markets were hit, too, as high yield and investment-grade bonds were initially sold off. Indeed, the months of March and April 2020 were noted for their massive redemptions of both high yield (HY) and investment-grade (IG) mutual funds.

But just as the sell-off was both rapid and deep, so too the policy response was unprecedented. Globally, central banks pumped around US\$6 trillion into the economy via quantitative easing in 2020.² Some central banks, such as the US Federal Reserve, also expanded their toolkit, purchasing corporate bonds for the first time.³ Meanwhile the fiscal response worldwide has been historic in proportions, with governments in many cases

furloughing salaries of employees, as well as providing tax breaks and state guarantees of lending.

With 2021 well underway, bond markets are now past the distress stage and, with stimulus ongoing, are well on the road to recovery. The huge stimulus ensured that almost all fixed income asset classes recorded respectable returns in 2020: many bond yields hit all-time lows while the amount of negative-yielding bonds hit all-time highs. IG bonds also did well: global returns for 2020 as a whole were 7.7%.⁴

Credit selection will be key

But what about 2021? It is clear that an aggressive roll out of vaccines is required before the global economy can return to an environment resembling "normal". In the meantime, economies will remain reliant on stimulus measures to get the recovery up to speed.

In the short to medium term, at least, there are few signs that central banks are easing off the gas. Indeed, we expect them to continue injecting substantial liquidity throughout 2021.



Major central banks such as the European Central Bank and the US Federal Reserve have also called for more fiscal measures to aid economic recovery. In the US, we think there is a strong likelihood of additional large-scale fiscal stimulus under President Joe Biden.

Clearly, bond markets are recovering. But that recovery will be unequal, and some sectors and companies will fare better than others. In such challenging markets, credit selection will be key. This plays into our strengths at Columbia Threadneedle Investments, given our 150-strong global fixed income team⁵ covering research, portfolio management and trading. We are bottom-up investors, calling upon fundamental research from a global team of in-house credit analysts.

As we enter 2021, we expect most IG bonds to weather the storm of Covid-19, despite record levels of corporate debt. Following significant debt issuance in primary markets in 2020, most IG companies have ample liquidity should unexpected

pandemic-related downside risks materialise, which impede the expected global recovery.

In addition, management teams at many companies are now looking to deleverage their balance sheets by paying down debt. On our forward-looking models we see leverage coming down in 2021 and, over the course of the year, corporate leverage broadly returning to levels last seen at the end of 2019 – a major achievement given the damage inflicted to global economies by the Covid-19 pandemic.

Nevertheless, we are keeping a close lookout for warning signs – such as share buybacks, M&A or dividend increases – that management teams are being distracted from such debt reduction plans.

Stimulus is here to stay

What other potential headwinds are there? Perhaps the biggest risk to bond markets is inflation. We have seen slight upticks in prices but, so far, nothing to give us major concern.

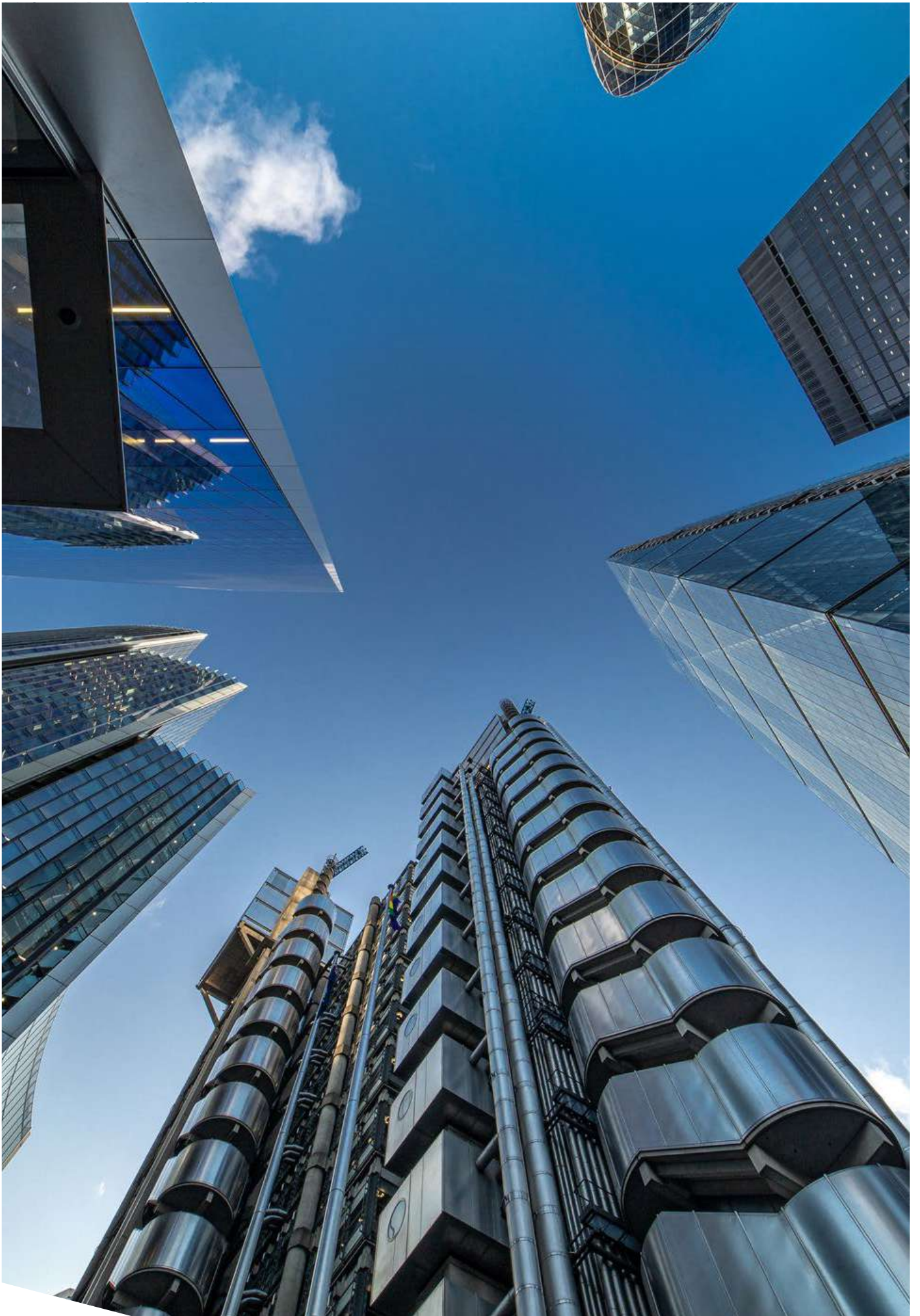
Longer term, we are comforted by the fact that global economies face powerful structural downward pressure on prices, given deflationary phenomena such as technological advances and ageing demographics.

The withdrawal of stimulus is another worry for fixed income investors, given the huge support global policy responses have bestowed on bond – and equity – markets. A fast and effective programme of global vaccine roll-outs could set the stage for a strong economic rebound, reducing the need for policy support.

But even in such a rosy scenario, we believe stimulus measures are here to stay, at least for the short to medium term. That means they are likely to provide support for global bond markets into 2021 and beyond.

Sources:

- 1 Bloomberg, January 2021.
- 2 FitchRatings, Global QE Asset Purchases to Reach USD6 Trillion in 2020, 24 April 2020.
- 3 Bloomberg, Fed Will Begin Buying Broad Portfolio of Corporate Bonds, 15 June 2020.
- 4 ICE BofA Global Corporate Index, January 2021.
- 5 As at March 2021.



Maintaining a global focus: a Q&A with David Dudding

David Dudding is the lead portfolio manager of the Global Focus strategy and co-manager of the European Select strategy

Global equities have been exposed to topics that were very fashionable such as IT and healthcare. How have they impacted you?

We're not thematic investors, nor do we build portfolios from the top down. We prefer to assess individual companies on their own merits, looking for those that can compound-out growth consistently over a multi-year period. This naturally gives us exposure to certain secular trends – ecommerce, cloud computing, health care innovation, etc – many of which proved successful last year. These themes will not disappear in 2021 and many have arguably been accelerated.

Take cloud computing as an example. Corporate IT spend in 2020 was over US\$3.5 trillion, but only a small fraction of this went on cloud computing. But it is growing and its share of overall spend is only set to increase. This will benefit the dominant players in cloud infrastructure (a market that's not easy to disrupt). So while valuations may be stretched in some names, we still have conviction that we can find great companies with a growth runway that more than justifies the current valuation.

In view of a strong rebound in global economies in the wake of mass Covid vaccination programmes and a return of inflation, do you plan to shift the allocation of the portfolio towards more cyclical areas of the investment universe (such as consumption, financial services etc)?

Equity markets are pricing in an economic recovery at a rate faster than previously expected, something we also see reflected in the bond market. Improved economic sentiment is generally a boost for the average company that relies on economic growth to drive their own earnings growth and so in turn benefits value as a style. However, the post-Covid world is likely to be characterized by low economic growth, low interest rates and a build-up of debt. This is unlikely to benefit the average company. So while there will be companies for whom mass vaccination represents the potential end to a temporary headwind (eg, travel and consumer related industries), there are many others for whom this is short-term support. While we have no intention to materially shift the portfolio, we do have exposure to a range of companies that should benefit the reopening of economies. Our focus remains on high-quality companies that we believe can compound out returns over a multi-year time horizon.

For portfolios that are heavily exposed to the US, how will this allocation change in the future? For example, will the big tech companies in Southeast Asia and China (such as Tencent, Alibaba and so on) become possible medium- or long-term targets?

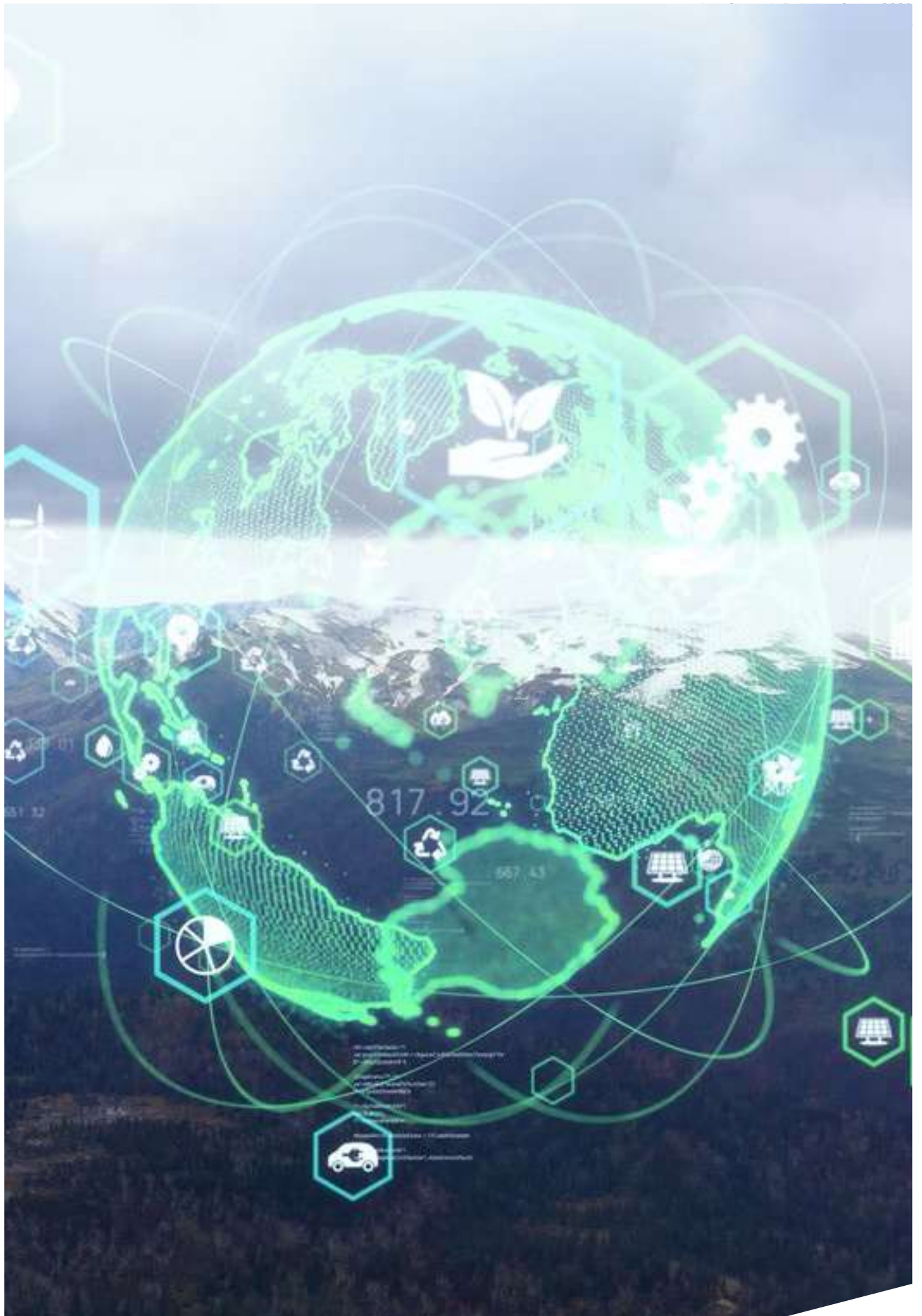
Our exposure to the US is not driven by a top-down view of the US market. It just happens that we find a lot of great businesses in that part of the world. However, these are global businesses. What you also notice is that our exposure to emerging markets is the second largest. This is deliberate and comes from a mix of direct and indirect exposure. We have been adding selectively to emerging markets over the past few months, although not necessarily into big tech. Our focus has been more on the emerging platform businesses or financials, the latter being an industry that can be much less commoditised than its developed market counterpart.

The focus on such a broad investment universe requires a very high commitment in terms of analysis and research. How does this come about in terms of the size of the equity research team and how does it fit in with the strategy's relatively low costs?

We benefit from a very deep research capability and a strong collaborative culture at Columbia Threadneedle Investments. We have analysts across the globe, many of them portfolio managers in their own right, who could all potentially source an idea for us. This gives us direct access to local market knowledge, which is something that is incredibly important to us. It also helps that they share a similar belief in what makes a company great. However, with that level of resource available, it's important to have a disciplined philosophy and process. In addition, we want to understand that we're investing in truly the best company in its industry on a global basis.

How important are the ESG aspects in company valuations and which of the E, S, and G are the most prevalent?

ESG is absolutely key to our process; it is one of the pillars that underpins our research framework and is inextricably linked to our focus on competitive advantage and industry structure. Just as we'd question a management team that allocates capital poorly, so we would question those that don't consider their ESG profile. While governance is clearly key for every investment that we make, we believe it important to focus on the material issues that impact a company when considering the E and the S elements. It is, in part, for this reason that we have developed our own internal RI rating system which focuses on industry materiality. This gives us conviction that we are asking the correct questions and focusing on the data points that matter for that particular company. In our view, this targeted and integrated approach should be supportive of stable, long-term outperformance.



European sustainable infrastructure: in a sweet spot

Ingrid Edmund, Senior Portfolio Manager

In a turbulent 2020, infrastructure was an apparent safe haven, proving relatively resilient. However, the unprecedented shock to the asset class across all industry sectors and geographies at the same time, in a short period of time, has provided food for thought on several issues.

First, infrastructure is critical to a well-functioning economy and society, but not all infrastructure assets are created equal. For example, demand-based transportation assets such as airports and toll-roads were hit the worst. Renewable energy fared well, despite a 5% annual drop in energy demand,¹ whereas renewables outside the electricity sector such as biofuels, as well as conventional energy, suffered more from the impacts of the Covid-19 crisis. Contracted and regulated assets benefited from more stability, while digital emerged as a clear winner. The answer lies in the level of sensitivity to economic cycles, not in the label. This year reminded us that true diversification is key to building a defensive, resilient portfolio in line with the well-established infrastructure narrative.

Second, infrastructure continues to attract significant investor interest. If anything, the prospect of lower interest rates for even longer served to make assets that can deliver resilient cashflows even more attractive. Fund raising for the first nine months of 2020 reached US\$78.5 billion, the second highest rate for that period since 2015.² Furthermore, sustainability as a whole is in vogue, with public market fund inflows totalling more than €50 billion in 2020's third quarter, or 40% of all European fund flows.³

Third, despite the unprecedented drop in economic activity and carbon emissions, global warming is not going away. The drive to accelerate the pathway to a lower carbon future gained renewed urgency. At the same time the pandemic highlighted social inequalities and fragilities in our societies. The concept of business needing a social license to operate gathered momentum, fortifying investor appetite for social investing. European governments enshrined infrastructure investment as a means to stimulate the post-Covid economy via significant green fiscal packages.



Fourth, uncertainty is here to stay. The way we live, work, travel and consume has changed and is likely to have long-lasting impacts on what and how infrastructure is delivered. 2020 showed that even within infrastructure, transitions can happen at warp speed. Digital infrastructure is a perfect example: following the mass migration to work and study from home, demand for data proliferated. This rapidly accelerated a structural trend which has long been coming, with communication infrastructure becoming an integral part of a well-functioning economy. A survey by McKinsey⁴ estimates this acceleration in the order of three to four years is boosting the growth of data centres, for example.

All of which makes us confident that our long-term investment thesis and strategy, which prioritise the themes of technology, disruption and

sustainability, are well placed for the rapid shift in the economic order.

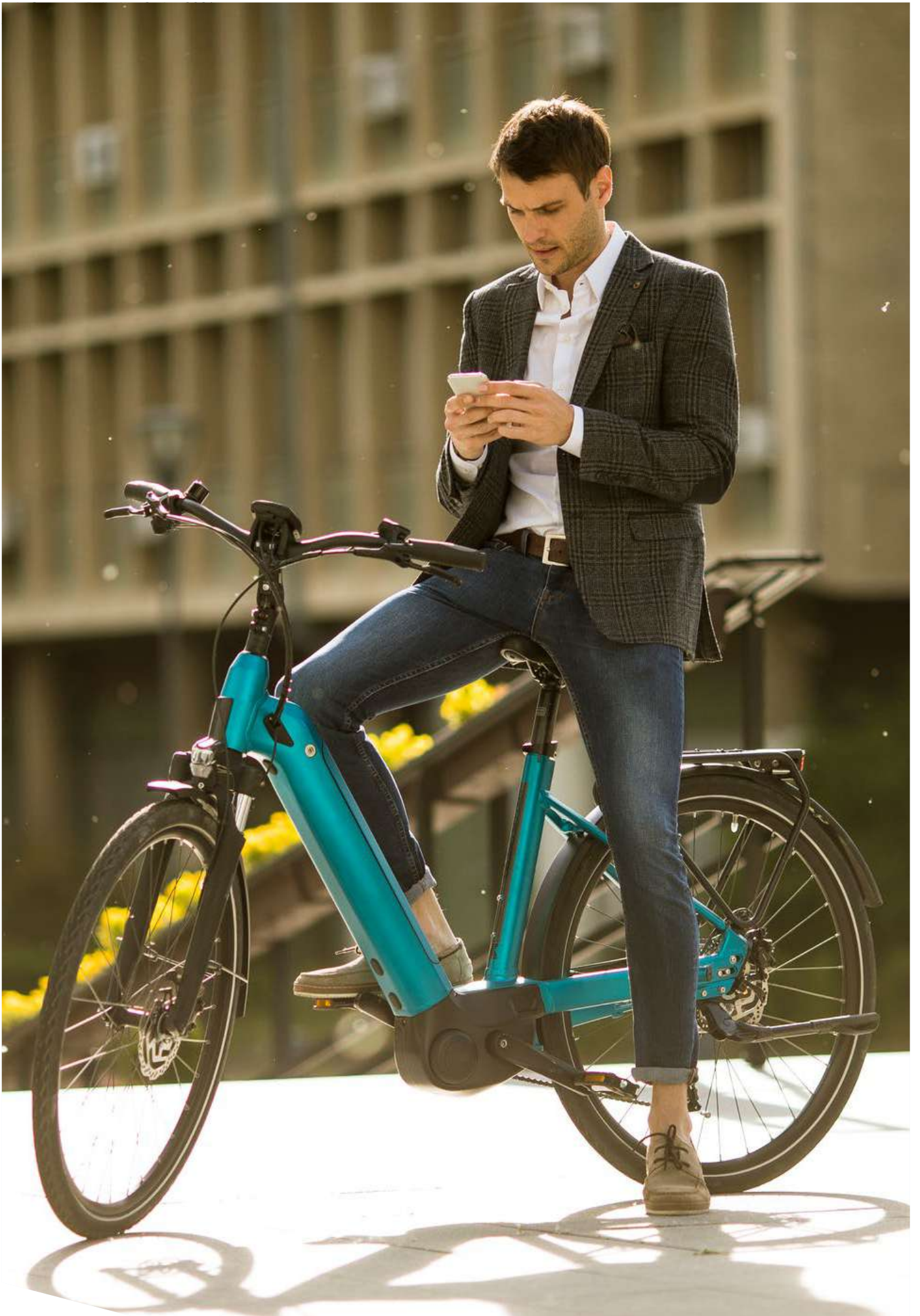
So, where do we believe we can find value in 2021 in core infrastructure? The answer is in the huge amount of investment needed to achieve Europe's goal of a sustainable energy transition. The EU's Green Deal proposes to invest in excess of €750 billion⁵ in support of this, with initiatives focused on hydrogen, heat and buildings, electric vehicle charging, energy storage and batteries. Much of the opportunity in these sectors is naturally in the mid market.

Many are new sectors, but importantly we believe a significant source of generating alpha is to invest in transition assets – that is to say “brown” assets which provide essential social and economic services, but which have clear and

ambitious aspirations to transition to green. We are excited about the years ahead. The powerful drive for a green recovery can only strengthen our investment thesis and result in more opportunity.

Sources:

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2. Infrastructure Investor; Q3 Fundraising Report 2020. <https://www.infrastructureinvestor.com/fundraising-reports>
3. Morningstar, October 2020.
4. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>, October 2020.
5. <https://www.reuters.com/article/us-eu-bonds-environment-idUSKCN24G1HD>, July 2020.



The electric revolution's coming, and it's on two wheels

The Asia-Pacific region's e-bike industry is ideally placed to be a driving force in the electric revolution globally

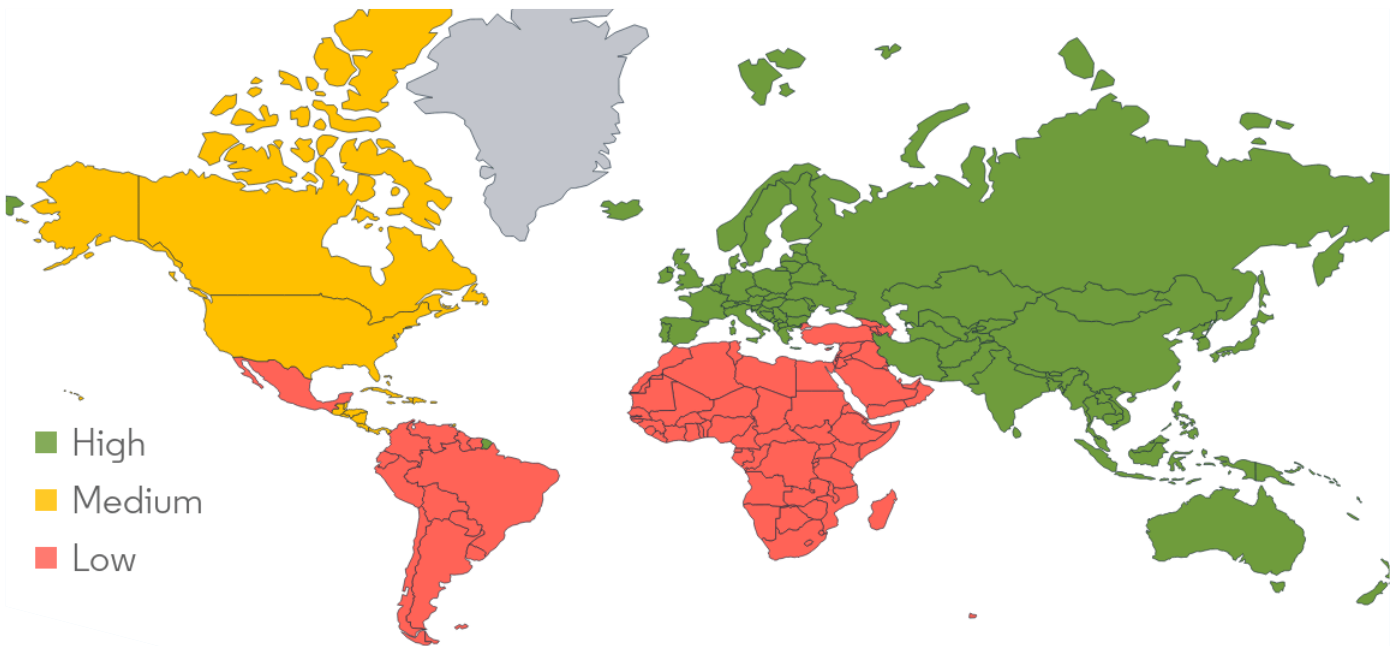
Tesla's stock surged to record levels, Geely-owned Volvo announced an all-electric fleet by 2030 and Volkswagen AG publicised plans for six new battery plants by 2025. All these recent business headlines reflect the growing momentum of everything "e(lectric)-mobility".¹

Although intriguing, these developments represent only a fraction of a much bigger and more complex global equation, encompassing technical innovation, climate change, urban development, sustainability, government policies, change of consumer behaviour and much more. Electric cars may dominate the headlines, but they are not leading the transition to electric vehicles.

Why? Cost and infrastructure issues are still plaguing electric cars' broad adoption. Instead, two-wheel vehicles like electric bicycles (e-bikes), electric scooters (e-scooters), electric motorcycles (e-motorcycles), and micro-mobility devices are leading the way.

When it comes to the number of vehicles on the road, electric two-wheel vehicles are way ahead of their four-wheeled counterparts. It is not in the metropolises of North America or the major cities in Europe where electric vehicles are making the biggest headway – it is in Asia and more specifically, China. In the UK, there are some 140,000 electric vehicles today – quite a surge from just 3,500 in 2013, but in China, 22.7 million of them were sold in 2018 alone – more than in the rest of the world combined.²

The surge of e-bikes is going beyond China. India, Indonesia, Vietnam, Thailand and other Asian markets are embracing electric two wheelers at scale. While the rest of the world is taking their first steps to an electric vehicle future, Asia is already walking at pace. Extending from its already impressive base, the Asia-Pacific market for e-bikes is expected to grow at a CAGR of 10.1% between 2020 to 2027 and to reach US\$10.26 billion by 2027.³

Figure 1: E-bike market – growth rate by region (2021-2026)

Source: Mordor 2020.

The other main growth area is Europe, with the Netherlands and Germany currently leading the charge. More than 40% of the bicycles sold in the Netherlands last year were electric. In Germany, a third of the 4.3 million new bicycles sold had a battery, according to the country's industry association.⁴

An important consumer market, the Asia-Pacific region also is a production hub for e-bikes and related components, like battery cells and charging infrastructure.

Opportunities for investors

With major suppliers like Bosch, Liv Cycling (EnergyPak), Panasonic, Samsung SDI, and Shimano Inc. commanding more than 70% of the global market for e-bike battery packs, the segment is moderately consolidated. But there are still exciting opportunities for investors.

The e-bike battery pack market offers a dynamic growth outlook with a predicted compound annual growth

rate of 13% for the five-year period ending in 2026. Commitments like Samsung SDI's plan to invest US\$1.15 billion into battery production capacities in Xian and Tianjin, China are testament to that potential.⁵

Closely connected to power cells is the market for charging equipment. The market is young, and its potential is largely untapped as yet. Critical areas like speed of charging to reduce vehicle downtime, improved convenience from wireless and on-demand mobile charging, more efficient charging through grid and renewables integration are some of the opportunities. Innovations in these areas are just beginning to emerge and their broad scope creates a highly diverse market with hundreds of competitors.

It should come as no surprise that, in addition to native players like Merida, Shimano or Samsung, international players are also strengthening their presence in the region. Bosch eBike Systems for example opened its new Asia-Pacific

headquarters in Taichung, Taiwan in 2020. It is the latest milestone in a continually growing footprint in Asia-Pacific, after successful market entries in Australia, Japan and New Zealand within the last six years.⁶ Continental also has corporate offices in China, South Korea and Vietnam.

Companies which are successfully competing in the e-bike market already are enjoying the benefits. Giant Manufacturing, the US\$4 billion Taiwanese group, saw revenue jump 55% year-on-year in June 2020. Accell, the US\$730 million parent to brands such as Raleigh and Sparta, earned more than half its revenue from e-bikes last year.⁷

Other companies outside the core bike industry are taking note and trying to hop on the bandwagon. Traditional car and motorcycle manufacturers are among them.

General Motors (GM), Ford Motor Company in partnership with Pedego, Peugeot, Volkswagen, Ducati Motor

Holding in partnership with Thok, all introduced e-bike offerings of some sort in the last two years. Jeep unveiled its efforts as part of a 2020 Super Bowl advertisement, the most expensive TV advertising time available in the US.⁸

The appeal goes beyond the immediate, established players within the mobility sector though. The technological advances brought about by e-bikes have given other industries, as well as private and institutional investors, food for thought.

The future of e-bikes

Where the bicycle's design has arguably remained constrained to a dual triangle frame and a pair of wheels for most of its existence, the e-bike provides the opportunity to create a gadget which can build in software appeal and tech-ready hardware.

This explains the attraction for Foxconn Technology, the main assembler of Apple products, who has joined forces with a fellow

Taiwanese hardware firm, Yageo Group, to delve further into electric vehicle production.⁹

It is part of the rationale as to why Groupe Bruxelles Lambert (GBL), which owns the lion's share of Adidas, took a controlling stake in Canyon Bicycles in late 2020. Joining GBL as an investor is Tony Fadell, a former Apple executive, renowned for his work inventing the iPod and NEST (the temperature-control device). One of Canyon's most recent projects was a prototype for an "electric pedal car", which was rumoured to now receive significant funding following the acquisition.¹⁰

Investors are betting on the continuation of this growth trend. Shares in Giant Manufacturing have risen 43% so far this year and are now valued at 26 times Daiwa Capital Markets' forecast earnings for 2021. Shimano, the US\$19 billion Japanese group which controls roughly half the global market for bicycle components, trades on a forward multiple of 35 times, according to Refinitiv data.¹¹

In summary, the Asia-Pacific region is in a prime position to not only benefit from continued sales growth in the e-bike sector, but also harness significant investment and innovation. We're looking forward to seeing where e-bikes will take investors in the coming years.

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Crisis in the Himalayas: climate change and unsustainable development

Disaster highlights risks from rising temperatures to eight countries in the region

Benjamin Parkin, Financial Times

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Tending to his fields one crisp winter morning, Chandra Singh Rana saw what looked like smoke emerging from the wooded slopes and snow-capped peaks that led to Nanda Devi, one of the world's tallest mountains.

The accompanying roar sent the 77-year-old, his grandson and fellow residents of Reni, a village nestled up in the Indian Himalayas, scrambling for higher ground. A rockslide in the nearby mountains triggered a tsunami of water, stones and mud that hurtled through the steep river valley dividing the village, consuming those unable to escape.

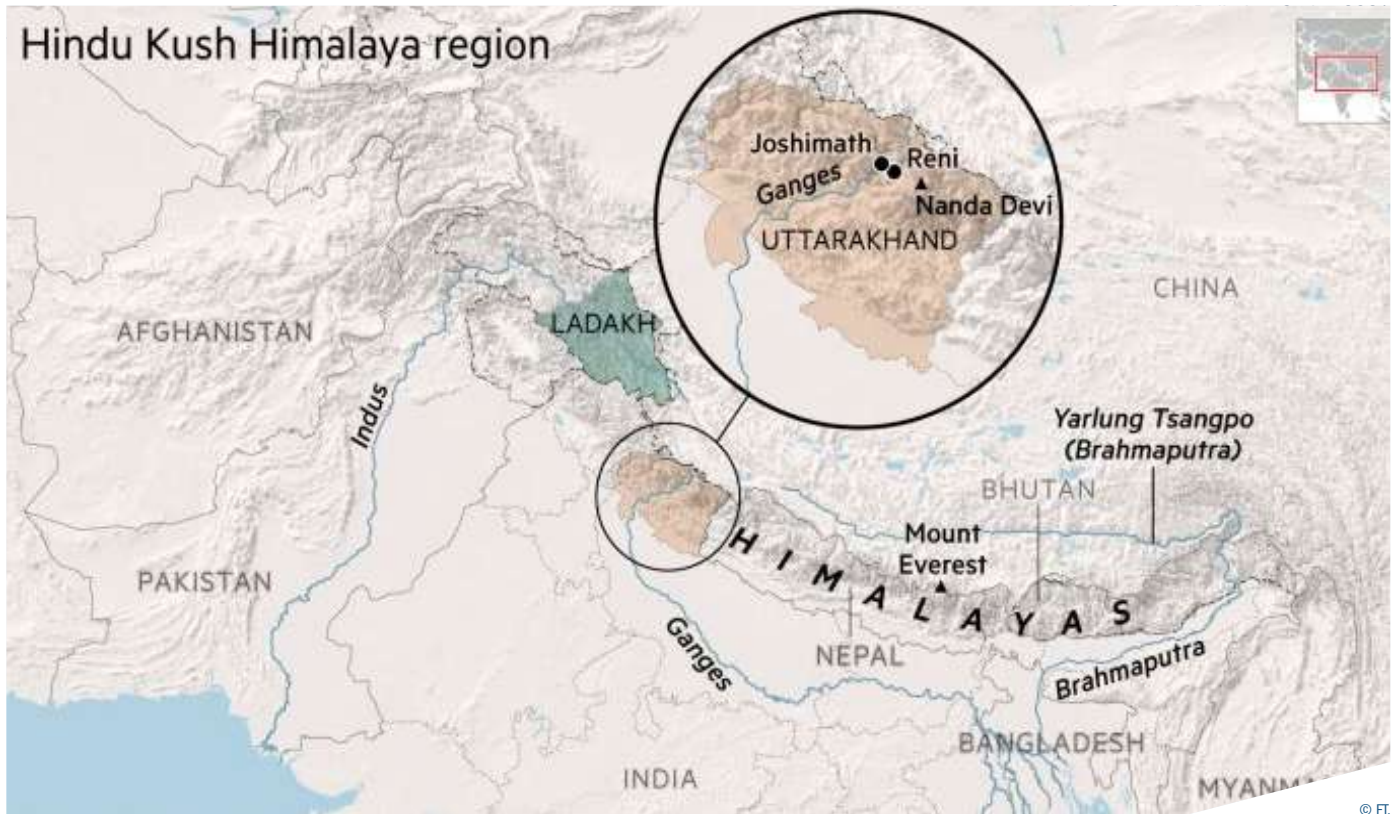
The torrent travelled down river, picking up pace as it tore through a bridge and two hydropower plants, 9 and 15 miles away from the rockslide. More than 200 people are believed to have been consumed by the lethal sludge. Most of the bodies are missing somewhere in the grey crater it left behind.

"It had never happened in my life," says Rana. "It should not happen again. God saved us."

The disaster last month has brought into focus what locals and scientists say is a crisis unfolding



Chandra Singh Rana: 'It should not happen again. God saved us'
© Benjamin Parkin/FT



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in the Himalayas, the world's tallest mountain range.

They say an explosive cocktail of climate change and aggressive road and dam building in the geologically unstable range threatens not just villages like Reni but the people, economies and security of the eight countries in the greater Hindu Kush Himalayan region.

The mountains run from Afghanistan in the west to Myanmar in the east, forming the backbones of countries like India, China and Pakistan. Rivers like the Ganges, Indus and the Yarlung Tsangpo (also known as the Brahmaputra) sustain more than 1.5bn people and industries powering some of the world's fastest economic growth. They also traverse the world's most volatile geopolitical faultlines.

Climate change is amplifying the dangers. Temperatures in the Himalayas have risen faster than in other mountain ranges, according to Maharaj Pandit, a professor of environmental studies at the University of Delhi. The International

Centre for Integrated Mountain Development (ICIMOD), a regional intergovernmental body, says the region will warm above the global average.

India's recent deadly flash flood was a combination of "geological activities... the effects of climate change, as well as the unsustainable infrastructure development that has accelerated the process," says Pema Gyamtsho, ICIMOD's director-

general and a Bhutanese politician. "We know the Himalayan region is very vulnerable but we're not taking that into consideration."

Precarious ecosystem

That Reni – of all the hundreds of settlements carved into the steep mountainous slopes of the Indian state of Uttarakhand — was struck by the flood is one of history's tragic ironies.



Damaged houses above the flash flood-eroded Mandakini river in the town of Tilwara, around 30km from Rudraprayag, Uttarakhand, in 2013
© Manan Vatsyayana/AFP via Getty Images



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Chipko Andolan began in Reni in 1974, when local women fended off loggers to stop a nearby forest from being razed
© Bhawan Singh/The India Today Group via Getty Images

It was this village that helped to spawn the Chipko ecological movement, when local women fended off loggers in 1974 to stop a nearby forest from being razed. The Chipko protests inspired modern environmental activism in India.

Roaring economic growth has in the decades since brought a frenzy of activity to India's Himalayan states, home to 80m people. Towns, including mountainous slums, have swelled in size. Contractors felled forests, cut into mountain slopes and dug tunnels in order to make way for more houses, roads and dams.

The many consequences of climate change on this precarious ecosystem are still being understood. But scientists estimate that Himalayan glaciers will recede by a third by 2100 if the increase in global temperatures is capped at 1.5C – the most ambitious target – with losses far higher if the target is missed.

More than 1bn people “rely on the waters coming from the Himalayas”, says Izabella Koziell of the International Water Management Institute in Sri Lanka. “It can mean increased flooding. It can mean more variable water flows... If they start melting fast, you just have less water. Then the implications are massive.”

The recent tragedy encapsulated the potent mix of natural and human-made dangers.

According to ICIMOD, the rockslide on a nearby mountain melted the ice and snow in its way, smashing through two hydropower plants in its path: the Rishi Ganga plant, near Reni, and the under-construction Tapovan Vishnugad further down river. Their presence multiplied the economic and human toll, their workers accounting for many of the deaths.



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National Disaster Response Force personnel carry a body recovered from debris in Reni last month © AP

Weeks after the disaster, Reni's residents gathered as a priest led death rites for Amrita Devi, a 78-year-old who was lost in the torrent while tending to her fields.

"We are from the village that taught the world about the importance of the environment," says Hira Singh, a 38-year-old in attendance. "It's very hard to start a normal life after this."

Hydropower boom

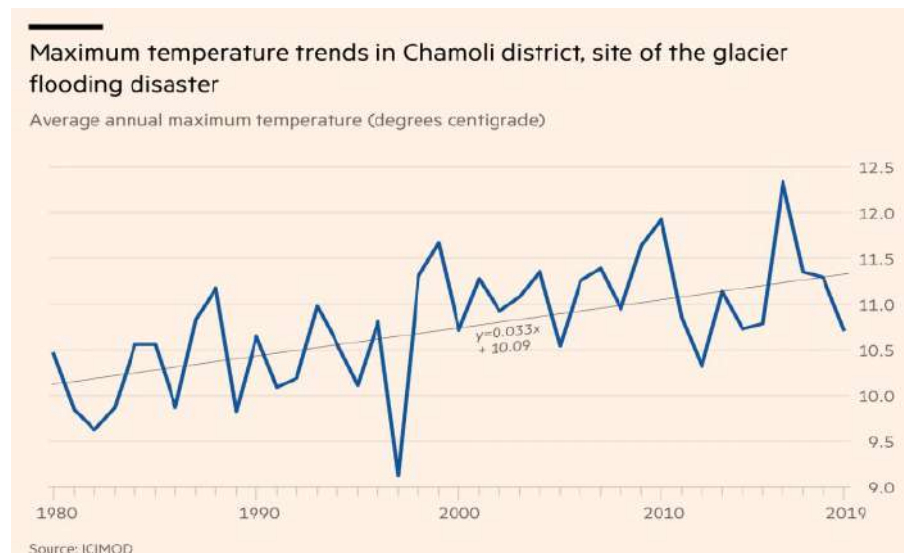
Jawaharlal Nehru, independent India's first prime minister, captured the centrality of dams to his vision for the country by calling them "temples of modern India".

The Himalayan rivers have been a rich source of energy to nations on the mountain slopes. Pandit estimates that 1,300 hydropower plants have been built or planned across the region, with the Chinese developing 750 in Tibet alone.

Already the world's third-largest emitter, India's energy demand is set to grow faster than any other country in the next two decades. Ensuring this added demand is met with sources other than oil and coal is vital to global efforts to reduce emissions. Narendra Modi, prime minister, wants to expand renewable

energy capacity to 450 gigawatts in the next decade.

The extent to which hydropower should be part of India's plans is a source of fierce debate. For supporters, it is vital to fill in for the more variable electricity supply coming from solar and wind.



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India's 500-mile project, known as the Char Dham Highway, will link several Hindu pilgrimage sites in Uttarakhand
© Alamy/Dinodia Photos

“That flexibility is very crucial to the long-term move of India in a green energy space,” says Harsh Shah, chief executive of IndiGrid, a KKR-backed investment trust that owns transmission lines transporting power from Himalayan plants. “Hydro is critical in India’s renewable energy mission.”

But their rampant construction in seismically active mountains has proved controversial. Later in his life, Nehru appeared to sour on such mega-projects. After a flooding disaster in Uttarakhand in 2013 killed about 6,000 people, a Supreme Court-appointed committee found hydropower dams aggravated the disaster and warned against construction in fragile, high-altitude areas.

Authorities are “playing with nature more than they should be doing”, says Vibhuti Garg at the US-based Institute for Energy Economics and Financial Analysis. “We don’t have to go very, very aggressive and build so many plants.”

The share of hydropower in India’s electricity mix has actually fallen from 23 per cent in 2000 to 12 per cent, with the price of other sources like solar falling sharply. Critics argue that what continues to drive the frenetic construction of hydropower plants is not energy security but the revenue they bring to local governments and developers.

“These people are some of the world’s poorest in terms of access to infrastructure... you need to

have a school, you need to have a health centre,” says Anjal Prakash at the Indian School of Business in Hyderabad. “We need to close those projects and reorient, rethink where the investment is going.”

Road building has proved similarly controversial. India is currently building a 500-mile project known as the Char Dham Highway, linking several Hindu pilgrimage sites in Uttarakhand.

Authorities say the project, which involves widening narrow mountain roads to 10 metres, will bring pilgrims, tourists and economic benefits, while allowing ready military access to India’s border with China.

But Ravi Chopra, an environmentalist who led a Supreme Court-appointed committee examining the project, says the tree-cutting required exacerbates dangers like landslides. He added that the project contradicts previous road ministry guidelines against such wide mountainous roads.

Atul Sati, a political and environmental activist in Joshimath, a town near the site of last month's tragedy, says officials are imposing a model of development on the region that does not work.

"We need good roads. We don't need two, three, four, five-lane highways," he says. "Every time [a new hydropower project was built], we raised our voice that it was not safe... We don't learn our lessons."

Fraught geopolitics

Last year, thousands of Chinese and Indian soldiers converged on the crystal blue lakes and barren crags of Ladakh, an inhospitable high-altitude desert. Tension over the contested border separating the nuclear-armed neighbours sparked deadly clashes, and one Indian commander said the countries came to the "brink" of war.

Some of the world's most combustible geopolitical boundaries run through the mountains, from India and China's 2,000-mile border to the Line of Control separating India and Pakistan in Kashmir.

Relations between these neighbours are tense at the best of times, and scientists fear this will only increase as population and economic growth – along with climate change – intensifies

the competition for shared resources like water from Himalayan rivers.

"One of the tragedies has been that climate and environmental issues have increasingly been dragged into the fraught geopolitics of the region," says Aditya Valiathan Pillai of the Centre for Policy Research in New Delhi. The countries should develop "a long-term, pragmatic, apolitical tract on civilisational survival".



Indian Youth Congress activists and supporters wear masks of environmental activist Disha Ravi in New Delhi last month to protest against Ravi's arrest and the recent fuel price rise

© Jewel Samad/AFP via Getty Images



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More than 1bn people 'rely on the waters coming from the Himalayas,' says Izabella Koziell, from the International Water Management Institute in Sri Lanka © Biju Boro/AFP via Getty Images

The eight Himalayan nations last year signed an agreement to work together on climate action. But many say co-operation and data sharing on issues like river flows is hampered by strategic concerns and paranoia.

Dipak Gyawali, Nepal's former water resources minister, says climate change is treated as a remote threat. "For an average politician in the global south, there are too many here-to-here and now-to-now problems," he says. "Climate change is just too far away on the horizon to matter."

Many Himalayan nations suffer chronic water shortages. While the US has nearly 9,000 cubic metres a year of renewable freshwater resources per person, China has 2,000, India 1,000 and Pakistan less than 300, according to the World Bank.

Climate capital

Demand for water to sustain growing cities, agriculture and industry increases the strain on rivers snaking across these volatile borders.

The 60-year-old Indus Waters Treaty, regulating India and Pakistan's shared use of the Indus River, is a long-surviving example of co-operation. But India, the upstream nation, has threatened to divert water when military tensions rise, most recently in 2019.

China has no water-sharing treaties with its Himalayan neighbours. After border tensions with India in 2017, it flexed its muscles by temporarily halting data sharing for the flood-prone Brahmaputra river, which flows from Tibet into north-east India and Bangladesh.

Chinese dam-building on the Brahmaputra has further fuelled alarm in India, which sees it as a potential way to control flows. China's latest proposal to build more hydropower dams on the Brahmaputra, closer to the Indian border, risks adding to this mistrust.

"It's only likely to be a worsening point of tension," says Kyle Gardner of US advisory firm McLarty Associates, and author of a book on the India-China border. "I don't think either side sees much reason to co-operate. China has the upper hand, literally. So the incentive, from a practical, realist international relations perspective, is pretty low."



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Indian Central Reserve Police Force personnel stand guard at a checkpoint along a highway leading to Ladakh, at Gagangeer in Kashmir's Ganderbal district, in September © Danish Ismail/Reuters

Investment push

In India, Modi's government has sought to take a leading role in the fight against climate change. It is reportedly considering an ambitious net zero emissions target by the middle of the century.

It also presents itself as a custodian of the country's rich ecology. But activists fear that it is moving more aggressively ahead with destructive environmental policies to spur private investment, attract foreign companies and bring India out of the severe economic slump caused by the coronavirus pandemic.

This includes opening up sensitive and protected lands for industrial use. The government last year unveiled proposed changes to the environmental impact assessments

process required for infrastructure projects that reduce the role of public and independent expert input.

Critics say this erosion of standards is accompanied by shrinking space for dissent, including on environmental issues.

Authorities last month sparked international condemnation after arresting 22-year-old climate activist Disha Ravi, part of Greta Thunberg's Fridays for Future movement, in connection with recent farmer protests. They accused her of sedition.

Previously "anyone who opposed [projects] would be labelled anti-development", says Manshi Asher of Himalayan-based environmental collective Himdhara. "But now if you say anything you're anti-India."

The residents of Reni, traumatised by their ordeal, have ceased fighting to preserve their environment. Their only remaining demand is that they be relocated altogether, lest a new disaster claim more of the village.

"We never wanted to leave this place. But because of the disaster there's nothing we can do," says Bali Devi, a 72-year-old who was part of the Chipko protests. "Anything can happen here. We never know."

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