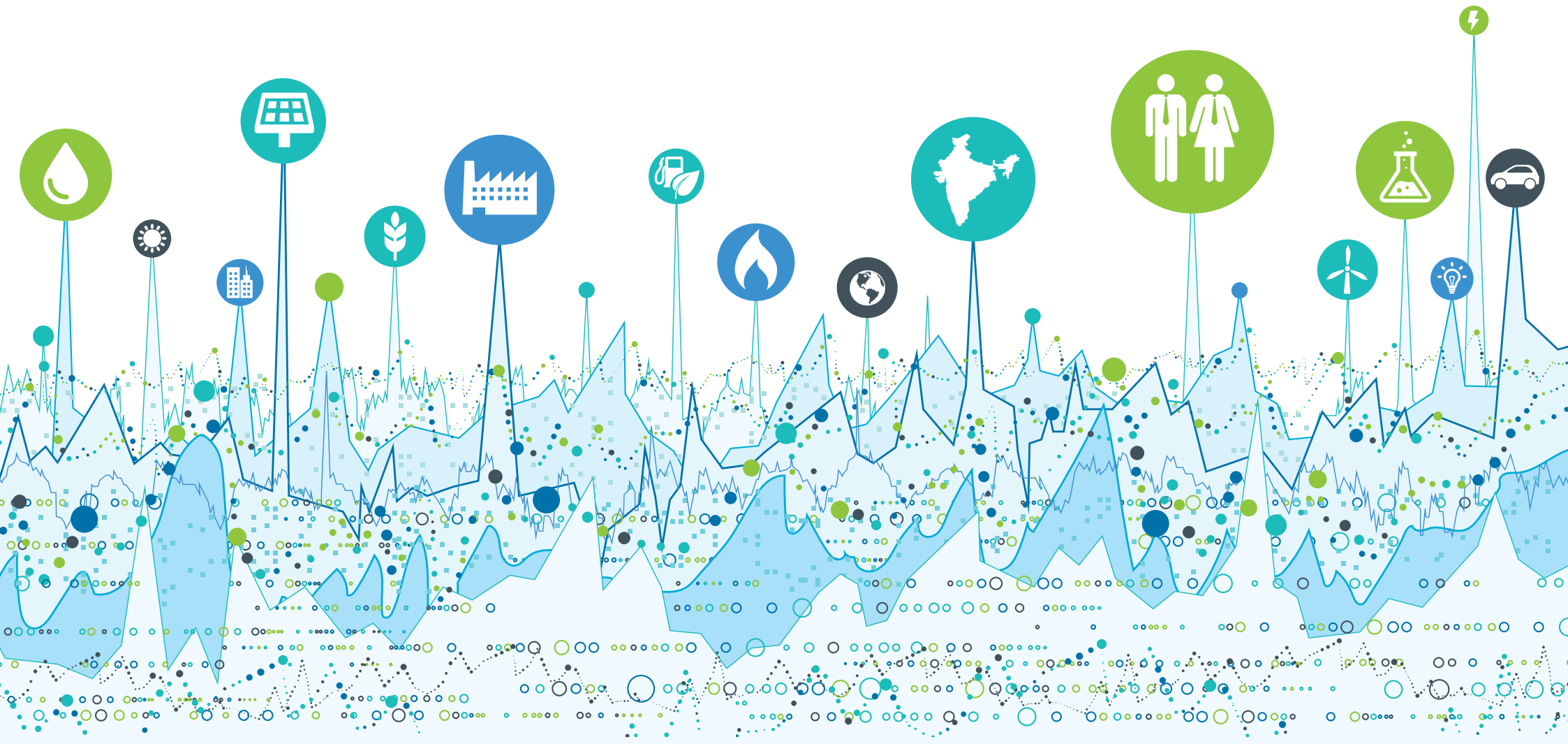


# THE **fDi** REPORT 2021

Global greenfield investment trends





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Beyond  
20

A large graphic on the right side of the page. It features a central black circle with a yellow ring, from which numerous thin lines radiate outwards. Each line ends with a small colored dot in various colors like yellow, blue, pink, and white. The text 'Beyond 20' is overlaid on the graphic, with 'Beyond' in white and '20' in a larger white font.

# There will be investment. But where?



Covid-19 has deeply shocked the world economy and global investment plummeted accordingly. However, a deeper look at the data published in the **fDi** Report 2021 reveals the many different nuances of this main narrative, and provides valuable guidance for the years to come.

Paradigm shift has become the name of the game and disruption will drive new investment, as well as disinvestment, in the near future.

Based on our proprietary **fDi** Markets database, which is the world's most comprehensive service for tracking and analysing cross-border greenfield investment, the **fDi** Report suggests that the pandemic let the genie of the digital economy out of the bottle once for all. Tech providers, whose market dominance appears threatened only by looming antitrust regulations, are seizing the moment and building data centres and cloud infrastructure at unprecedented pace, empowering a new wave of developers and researchers.

The booming demand of digital infrastructure and services has led to a severe shortage of chips in the market, prompting producers of the likes of TSMC, Samsung and Intel to pour billions of dollars into new production capacity. Mass deployment of 5G infrastructure looms further down the line.

Renewable energy is also fulfilling its potential, the **fDi** Report highlights. The sector has dethroned oil and gas as the biggest recipient of foreign direct investment (FDI) for the first time ever. Technology has matured and the rise of ESG finance shifted massive pools of capital towards green energy and cleantech. New winners have emerged. Texas has become a beacon for both wind and solar power projects, while Egypt and Morocco are

finally turning geography into an opportunity by pioneering solar power in the Sahara region.

While disruption has created room for new investors to quickly rise to global status, many incumbent market forces are now facing a challenging zero-sum game. Car producers have rushed to deploy their electric vehicles strategy, but the fate of the hundreds of facilities producing internal combustion engine (ICE) vehicles hangs in the balance. The same applies to international oil companies (ICOs), which seem willing to embrace green energy while gradually divesting some of their core assets.

Disruption forces, combined with a cyclical comeback for those sectors heavily battered by the Covid-19 crisis – tourism, for example – have already triggered a new investment cycle. The big question mark concerns the geographical distribution of this new investment.

Despite much talk and arguing, global supply chains have withstood the Covid storm – shortages were rare and often Covid-19 has deeply shocked the world economy and global

investment plummeted accordingly, while the recent global chip shortage is rather due to a booming demand than some flaw in the semiconductor value chain (regardless of its geography, there is just not enough production capacity in the system at the moment). Besides, more regional supply chains have not necessarily led to more resilience in the system. The European Union has locked horns with the UK's AstraZeneca to secure the sourcing of its Covid vaccines despite producing locally most of the doses it needed.

With arguable economics, the case for more regional, or like-to-like trade and investment, is first and foremost a political one. After two decades of heavy globalisation, 'the triad' is back as the US, the EU and the Asia-Pacific region entrench and strengthen their own regional blocs. Tighter screening of foreign investment has now become the norm, and global powerhouses of the likes of Germany are incorporating principles of technological sovereignty in their industrial policies. A divide between developed and developing economies has emerged already. As much as 60% of global investment projects originated and stayed within OECD countries in 2020, thus crystallising a trend that started at the beginning of the global financial crisis in 2008, when intra-OECD investment made up 41.6% of global investment.

This new, polarised world risks rewiring global investment flows in the years to come. The investment promotion industry has two options: either to comply and uphold barriers to global trade and investment; or else work around politics and facilitate cross-border investment to bring barriers down.



Renewable energy has dethroned oil and gas as the biggest recipient of foreign direct investment for the first time ever

*Jacopo Dettoni is the editor of **fDi** Intelligence, the Financial Times' specialist unit dedicated to foreign direct investment.*

# Global overview

In 2020, both the number of FDI projects and capital investment in FDI plummeted by a third from 2019's levels. fDi Markets recorded 11,223 FDI projects compared to the 16,816 recorded in 2019. They mobilised a total of \$528.2bn, down by 34% from the previous year, while the number of jobs created fell by 40% to 1.36 million in the period.

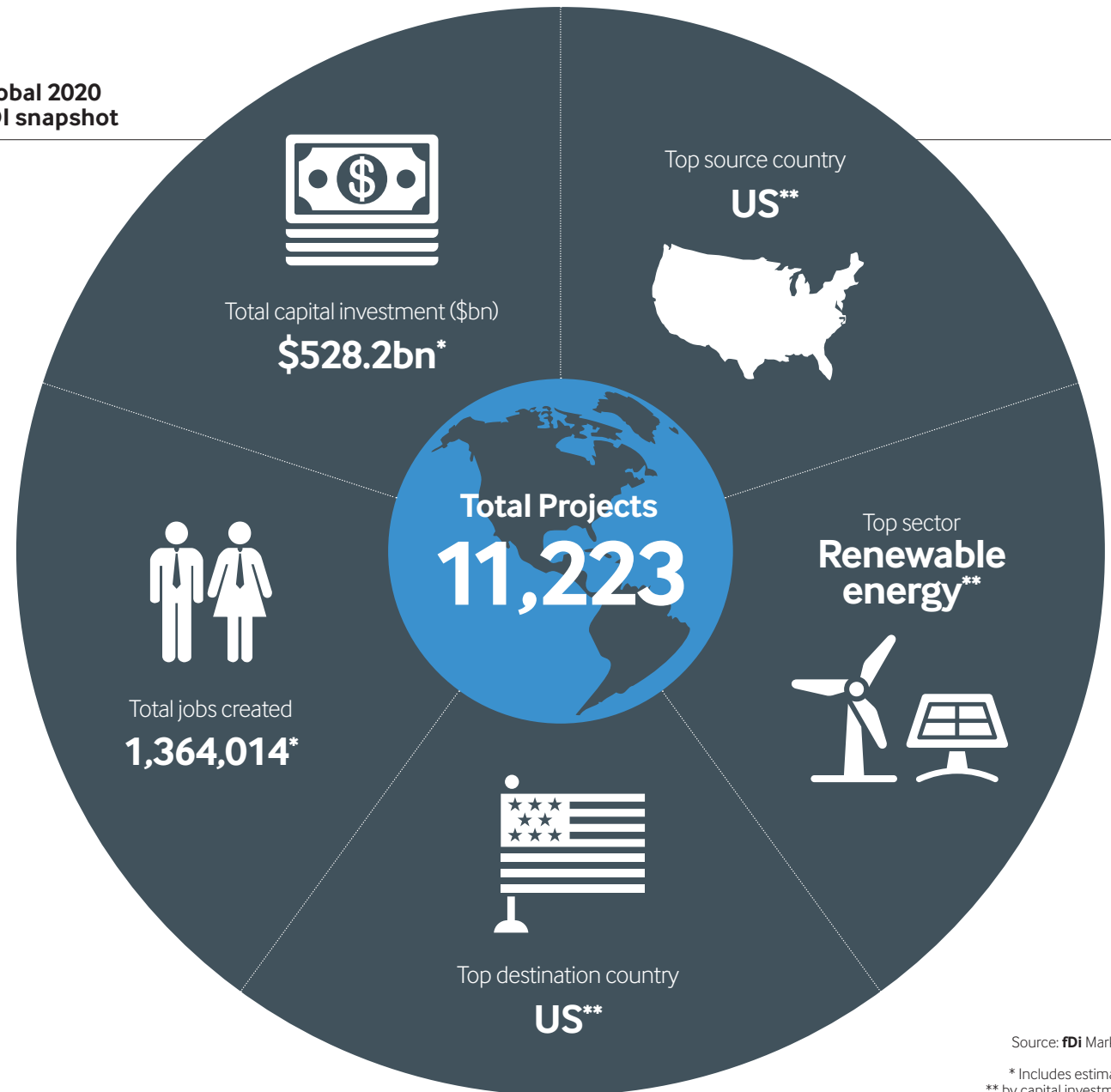
The US has retained its spot as the top destination country, attracting \$61bn of FDI. China, which ranked second in 2019, dropped into third position in 2020 attracting 40% less capital investment.

Asia-Pacific was the top destination region for FDI by capital investment with \$162.2bn-worth of FDI recorded despite a 37% decline in 2020 from the previous year. Western Europe attracted the highest number of FDI projects with 3882 announcements recorded. Western Europe was the leading source region for FDI in 2020, accounting for 49% of FDI projects globally and \$221.5bn in capital investment.

## Key trends in 2020 include:

- For the first time since fDi Markets began recording, renewable energy replaced coal, oil & gas as the top sector by capital investment, accounting for \$87.2bn in 2020.
- The communications sector attracted capital investment for \$56bn, up by 41% from a year earlier.
- The UK was the top destination country for FDI in Europe in 2020, with a total of 868 projects, while California remained the top destination state for North American FDI projects in 2020, but Texas overtook New York for second place.
- Despite the decrease in FDI into Asia-Pacific, project numbers in New Zealand increased by to 54, up by 32% from 2019, and outward investment increased by 3% in the period.

## Global 2020 FDI snapshot



Source: fDi Markets  
 \* Includes estimates  
 \*\* by capital investment

# The big numbers

IN 2020...

**11,223**

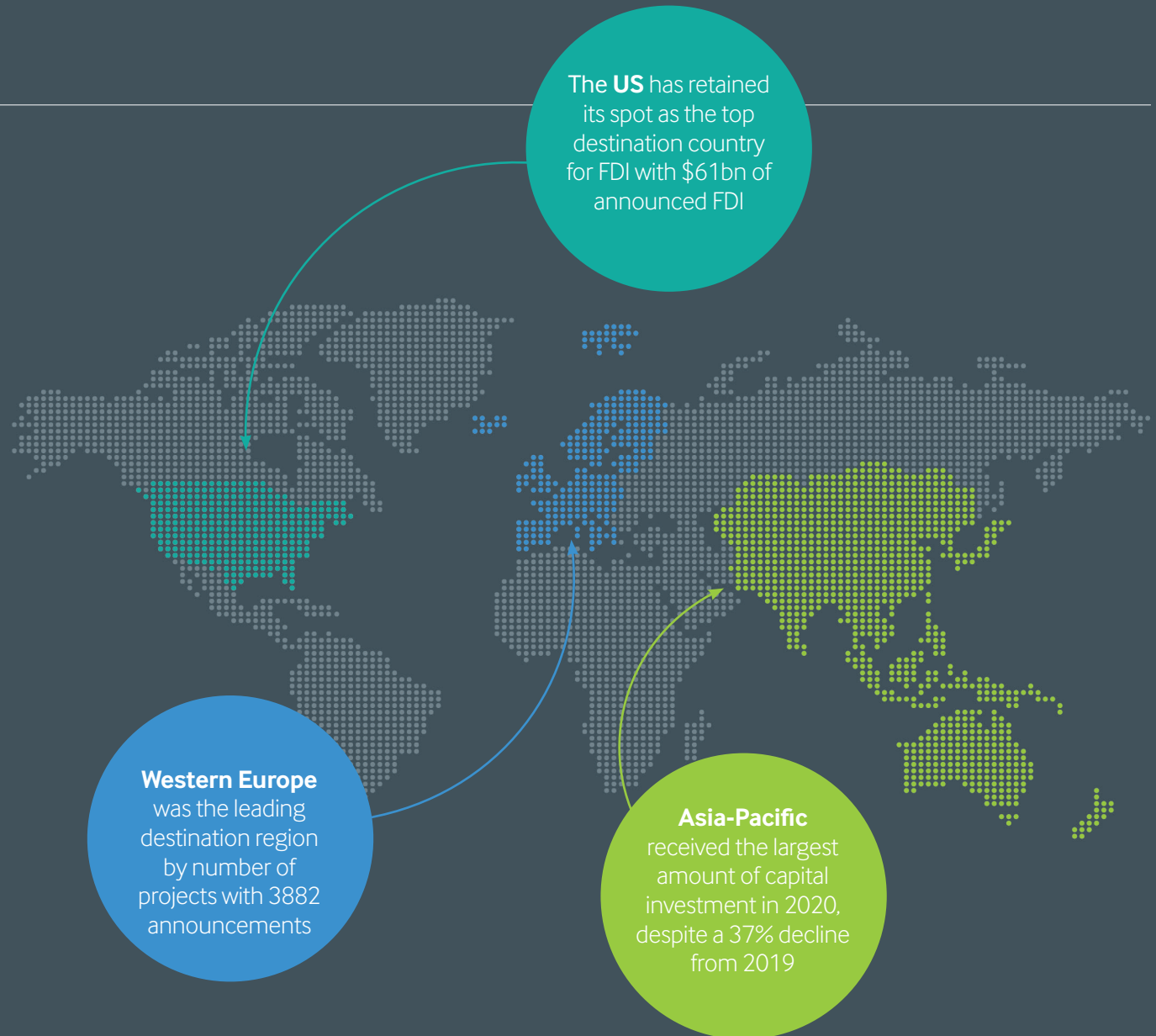
Greenfield FDI projects dropped by 33% in 2020 with 11,223 FDI projects recorded, compared to 16,816 in 2019.

**34%**

Capital Investment declined 34% to \$528bn, compared to \$800bn in 2019.

**1,364,014**

The number of jobs created declined 40% in 2020 from 2,290,986 in 2019.

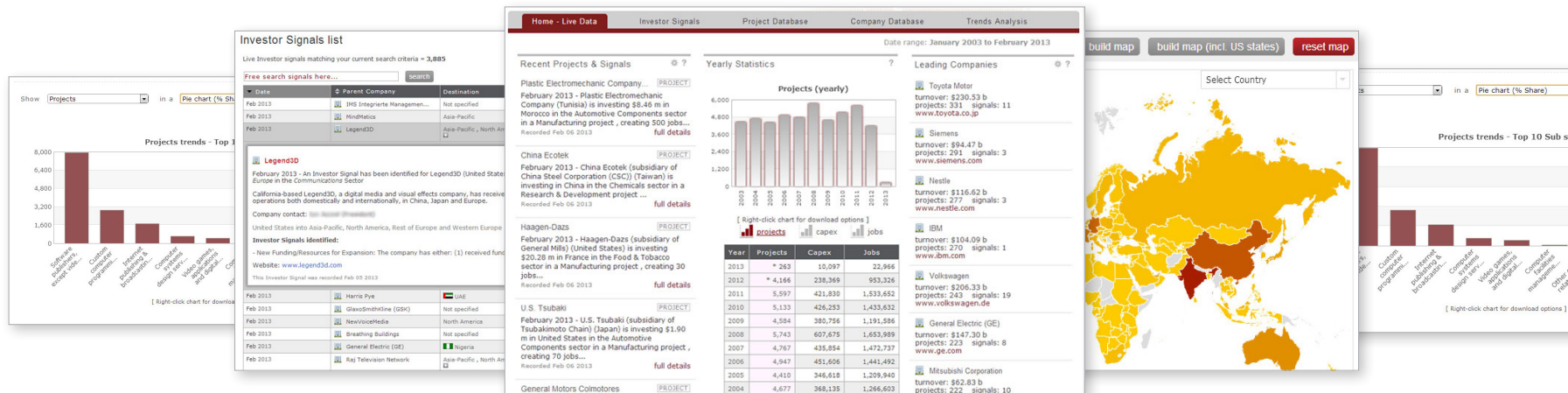




# The 2020 investment matrix

- The communications sector saw cross-border capital investment grow to \$56bn in 2020, a 41% increase from 2019.
- The biotechnology sector experienced the biggest increase in capital investment during 2020, a jump of 88% from a year earlier. An estimated 12,852 jobs were created in this sector in 2020, rising from 8086 in 2019. The medical devices sector, despite drops in capital investment and the number of projects announced, also created more jobs in 2020.
- In 2020, the global hotels and tourism sector experienced a 67% decline in FDI project numbers. Compared to 2019, when companies announced 522 projects, only 174 investments were announced.
- The semiconductors sector saw a large increase in capital investment in 2020, with a rise of 70% from 2019. However, job creation more than halved, falling from 16,356 in 2019 to 7967 in 2020.
- Capital investment into the global textiles sector dropped by 56% in 2020 from a year earlier, while project activity and jobs created fell by 57% and 70%, respectively, in the period.
- The consumer products sector witnessed a rise in capital investment in 2020, with an overall increase of 13% from 2019. In stark contrast, the consumer electronics sector underwent a sharp decline. Globally, project activity in the latter sector dropped by 54% in 2020 from a year earlier.
- The software & IT services sector attracted the most projects in 2020, with the 2226 investments secured representing a market share of 20%. Despite this, there was a 28% decrease in projects from 2019. The software & IT services sector also experienced a 28% fall in the number of jobs created in the same period.
- In 2020, the global coal, oil & gas sector lost the global top spot for capital investment, being replaced by renewable energy. The sector experienced a 62% drop from a year earlier. The renewable energy sector also saw a drop of about 13% in the period, but it still mobilised \$101bn in FDI in 2020, more than any other sector.
- The number of FDI projects into the healthcare sector dropped by 79% in 2020 from 2019. Capital expenditure and job creation also fell by 68% and 82% respectively in the period.
- The aerospace sector faced turbulence in 2020. Measured by project activity, the sector experienced its worst year since 2004. The automotive OEM, automotive components, and non-automotive transport OEM all experienced similar project declines, while also experiencing drops in capital investment levels and the number of jobs created.

# Make smart decisions on crossborder investment

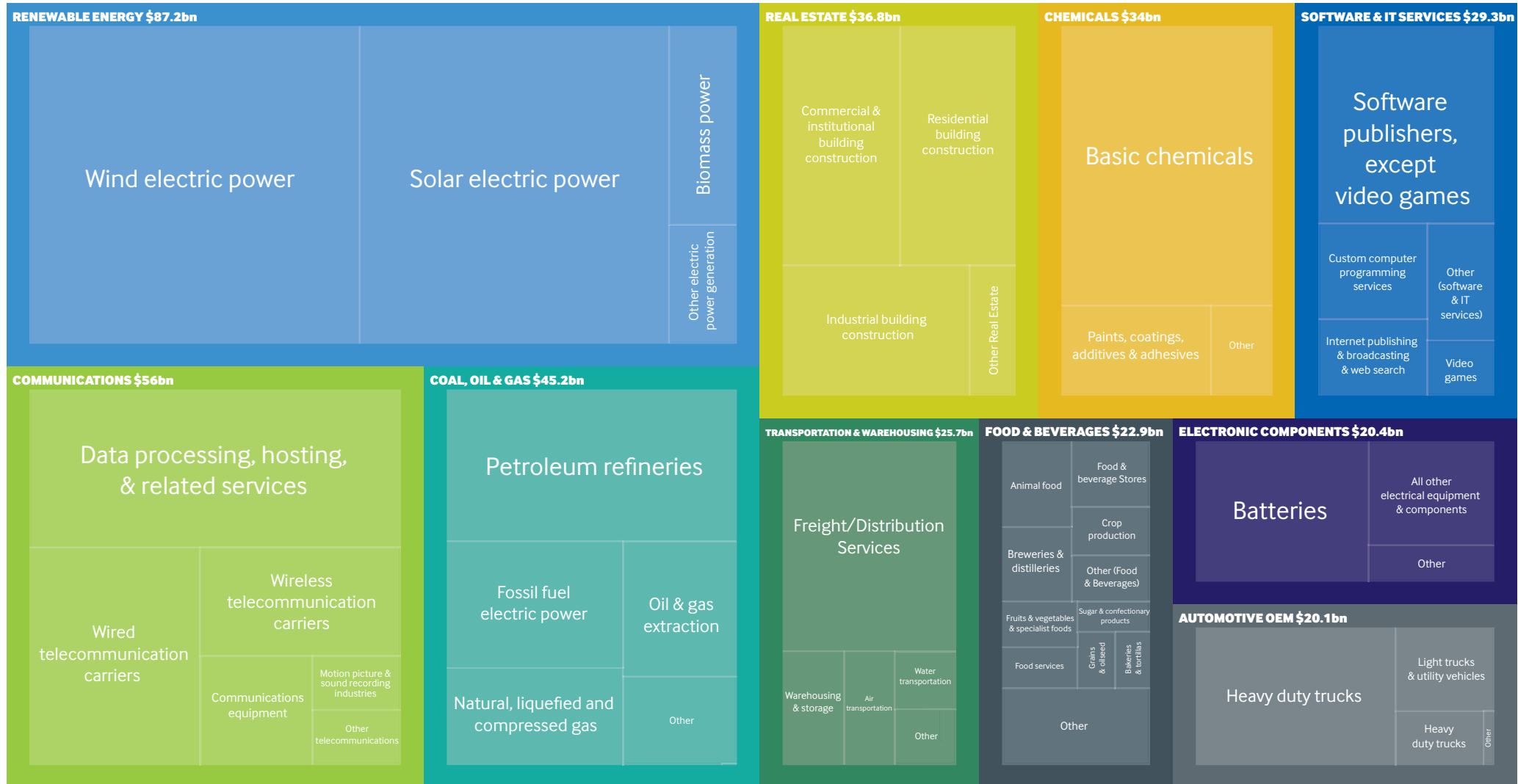


fdi Markets is the most comprehensive service tracking crossborder greenfield investment across all countries and sectors worldwide. This service can be used to:

- Identify target investors for your key markets
- Profile companies within your target sectors
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- Understand the key FDI trends in markets and sectors
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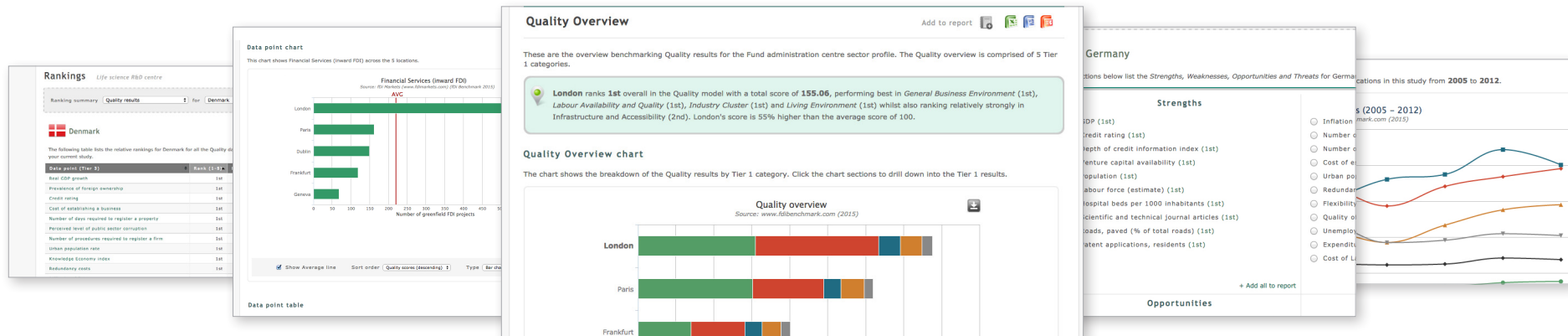


Source: fDi Markets  
 Note: Includes estimates





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# Thriving sectors in turbulent times

Kavan Bhandary, global director, Wavteq



'Catalysing innovation' is the less-discussed narrative around the pandemic. Reeling from the coronavirus' impact, the past year became fertile soil for emerging ideas and new applications of old ones. Entire sectors are reconfiguring themselves to a new reality. The biggest bully in the business playground is Darwin's law. Those quickest to adapt to change are being richly rewarded.

## Remote possibilities

Pandemic-induced lockdowns increased demand for social media and streaming. Consumer spending on in-person activities, i.e., sporting events, movies, and concerts, migrated online. However, this has not increased growth for traditional media companies. The sector's dominance remains with the FAANGD bloc (Facebook, Apple, Amazon, Netflix, Google, and Disney), while legacy media companies, such as Time Warner, and Lionsgate, have made plays towards streaming.

Long term, 5G wireless networks will boost growth in communications. However, geopolitical strife, capital requirements, and supply chain hurdles will delay the rollout. The potential of 5G is fuelling investments in

artificial intelligence, blockchain, data storage, cloud computing, and other fields that will benefit from faster connectivity.

While our reliance on technology continues to increase, the recent chip shortage highlighted global dependency on Asia for electronic components. Europe and the US will actively promote local manufacturing of chips, capacitors, and semiconductors. For example, Apple and Bosch have homed in on Germany as their new base of manufacturing. We expect more companies to follow suit.

Along with our need to be entertained, our desire to learn went online. Traditional educational institutes found new ways of reaching students purely as a matter of survival. Not limited to classroom seats, virtual schools and colleges can reach far larger groups than they traditionally could. The societal stigma around online degrees is reducing, creating market demand for edtech and e-learning.

Companies see edtech as an opportunity to upskill prospective employees as well as their customers. For example, Facebook offers courses on digital advertising. Google announced certificate courses for future employees that would replace four-year college degrees.

Lifelong learning will be the norm, and

## Forecasts

Apple and Bosch have homed in on Germany as their new base of manufacturing. We expect more companies to follow suit

e-learning is set to disrupt and democratise it. Students will be able to personalise their courses, learning style, and delivery mode. Classrooms will be optional.

## From a world of we to a world of me

Digital convenience is set to transform patient care and medical devices. As a side effect of Covid-19, traditional healthcare services adopted remote solutions such as wearables, telemedicine, teletherapy, remote diagnostics, and virtual fitness. Hyper personalisation of treatments, prosthetics, and implants – a consequence of 3D printing, data analytics and AI – creates new opportunities.

Phenomenal work using entirely new techniques such as messenger ribonucleic acid (mRNA) boosted Covid-19 vaccine creation in record time. mRNA holds the key to battling deadly infections, rare genetic diseases, and cancers. The wide-ranging application of these innovations will continue to disrupt healthcare and pharmaceuticals well after 2025.

Groundbreaking ideas require the right circumstances to demonstrate value. Covid-19 was such an opportunity for mRNA.

As people spent more time indoors, consumer spending turned inwards. Expenditure on self care, pet care and home

care increased. These evolving preferences will drive short-term sales in consumer goods, and F&B. Convenience and personalisation will be crucial to customer acquisition across industries, fueling industrial growth through IoT, automation, data analytics, robotics and last-mile delivery.

Thriving e-commerce, intra-Asian trade, and initiatives such as China's Belt and Road have resulted in a logistics sector boom. The proliferation of electric and autonomous vehicles, blockchain ledgers, and automation in warehousing can accelerate long-term growth in logistics.

Companies with heavy investment in industrial automation and robotics saw revenue spike as rivals struggled to keep assembly lines moving. The ecosystem learnt and adapted. By 2025, nearly 30 billion connected devices will be online. Zero accidents, energy optimisation and human-centric products will propel the smart equipment market.

#### Staving off devastation

The financial loss from climate change is expected to hit \$1.26tn. The world's two biggest polluters, the US and China, have announced steps to combat climate change. Seventy-one percent of greenhouse gas emis-



## The automotive sector was dozing at the wheel until Tesla screeched into sight

sions globally come from 100 companies. High polluting industries are on borrowed time, with heavy regulations and litigation to come.

The automotive sector was dozing at the wheel until Tesla screeched into sight. Now, EV incumbents face competition from both existing automobile manufacturers and big tech – Google, Amazon, and Apple. The market for every kind of vehicle, from two-wheelers to semi-automatic trucks, will be disrupted. Several start-ups are already supporting the broader ecosystem around charging stations, energy storage, and smart

grids. The EV market will be fuelled well beyond 2025, as many industries try to reach zero-emission targets.

Ventures will cash in on plummeting prices of solar panel installation while responding to climate change. With falling costs, the US and China are amplifying their solar capacity. Expect a red-hot solar energy and renewables sector for the foreseeable future.

While 'gigafactories' is the buzzword of the moment, several factors contribute to the expanding energy-storage market. The price of lithium-based batteries has fallen annually.

Government incentives have increased in recent years. Further, in some markets, rising demand for residential energy storage has overtaken demand in the utility sector. As renewables and solar become viable, this trend may spread to other regions as well.

The economic opportunity of the green revolution is no less than the industrial revolution. Once considered a noble way to lose money, investment and innovation in cleantech – waste management, recycling, energy efficiency, and energy storage – are on the up. Cleantech needs time to develop strong government frameworks, policy incentives, and business consolidation to see dominant players emerge. Once that happens, the additional capex investment required for mass adoption can be expected.

The crisis also broke down many barriers to change. If, as many predict, we are on the cusp of a new era of innovation, businesses can help repair society's fractures. New opportunities around resilience, value creation, personalisation, and sustainability emerged from the crisis. These are set to invigorate many sectors for the next two years and some well beyond. Those who will win will be companies with clear-headed policies and actions around innovation.

# Asia-Pacific

## Key trends in 2020 include:

- Foreign investors announced 2294 projects worth \$162bn in 2020, which represents a 37% decrease in terms of capital expenditure from 2019.
- China, once again, was the largest recipient of capital investment in the region attracting \$29.7bn of FDI, equating to an 18% share of regional FDI.
- New Zealand bucked the trend as it saw FDI projects soar to 54 in 2020, a 32% jump from 2019.
- India overtook China and emerged as the top destination for FDI in Asia-Pacific by project numbers with a total of 372 projects in 2020, gaining a regional market share of 16%.
- FDI projects in Japan decreased to 197 in 2020, a 14% decline from 2019.
- Capital investment into Australia grew to \$18.1bn in 2020, a 13% increase from 2019, despite a 21% decline in the number of inward projects in the same period.
- Brunei was the fifth largest recipient of FDI by capital investment in Asia-Pacific in 2020 with an increase from \$400m in 2019 to \$13.7bn in 2020. Growth was driven by Hengyi Petrochemical, a subsidiary of China-based Zhejiang Hengyi Group, which announced a \$13.7bn expansion of its crude oil refinery in Pulau Muara Besar.

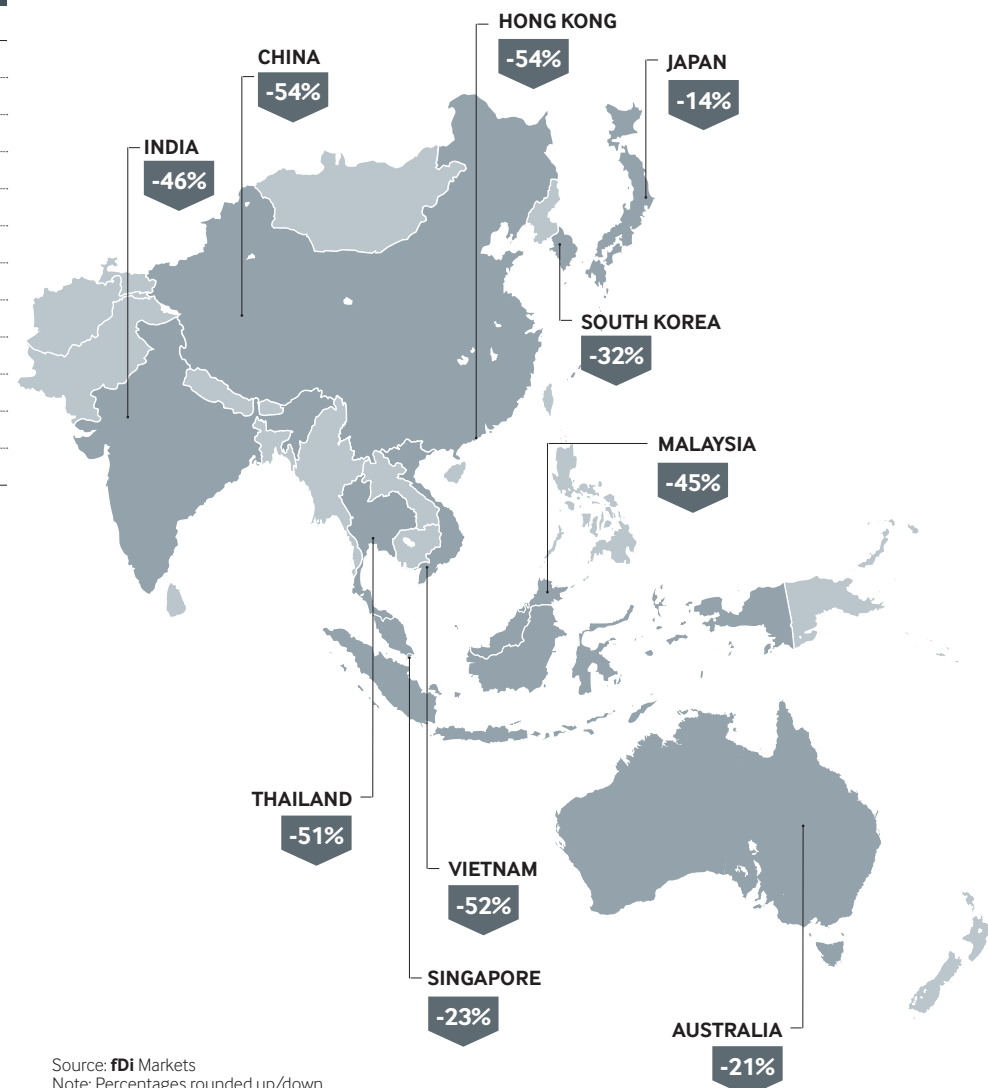
Table 1

### FDI INTO ASIA-PACIFIC BY PROJECT NUMBERS 2020

Country	Projects
<b>India</b>	372
<b>China</b>	359
<b>Australia</b>	295
<b>Singapore</b>	288
<b>Japan</b>	197
<b>Vietnam</b>	127
<b>Malaysia</b>	91
<b>South Korea</b>	75
<b>Hong Kong</b>	73
<b>Thailand</b>	67
<b>Other</b>	350
<b>Total</b>	2294

Source: fDi Markets

### PERCENTAGE CHANGE ON 2019 BY PROJECT NUMBERS



Source: fDi Markets  
Note: Percentages rounded up/down

Chart 1

**FDI INTO ASIA-PACIFIC BY CAPITAL INVESTMENT 2020**



Asia-Pacific market share %	Capital investment (\$bn)
18%	China 29.7
15%	India 23.5
12%	Indonesia 20.0
11%	Australia 18.1
8%	Brunei 13.7
7%	Vietnam 10.8
4%	Malaysia 7.2
4%	Japan 7.1
4%	Singapore 6.6
3%	Myanmar 4.3
13%	Other 21.3

Source: fDi Markets  
Note: Includes estimates

Table 2

**FDI OUT OF ASIA-PACIFIC BY CAPITAL INVESTMENT 2020**

Country	Outbound \$bn
<b>China</b>	45.7
<b>Japan</b>	31.0
<b>Taiwan</b>	28.7
<b>Singapore</b>	15.6
<b>South Korea</b>	8.9
<b>Hong Kong</b>	5.0
<b>India</b>	3.6
<b>Australia</b>	3.2
<b>Thailand</b>	2.0
<b>Malaysia</b>	1.7
<b>Other</b>	2.7
<b>Total</b>	147.7

Source: fDi Markets  
Note: Includes estimates

Table 3

**FDI OUT OF ASIA-PACIFIC BY PROJECT NUMBERS 2020**

Country	Outbound projects
<b>Japan</b>	515
<b>China</b>	360
<b>Singapore</b>	190
<b>India</b>	184
<b>Australia</b>	152
<b>South Korea</b>	126
<b>Hong Kong</b>	101
<b>Taiwan</b>	78
<b>New Zealand</b>	46
<b>Thailand</b>	35
<b>Other</b>	64
<b>Total</b>	1851

Source: fDi Markets

**KEY TREND**



Capital investment into Singapore took a minor hit during the coronavirus pandemic, falling by 2% in 2020 from the previous year. Alongside this, job creation in the country increased by 8% in the period.

**Recent major projects**

- **Hengyi Petrochemical**, a subsidiary of China-based Zhejiang Hengyi Group, has announced it will invest \$13.7bn in the second phase of its refinery and petrochemical complex in Pulau Muara Besar, Brunei.
- **Amazon Web Services**, a subsidiary of US-based Amazon, has announced it will open three new data centres throughout Telangana, India as part of its plans to set up a cloud region in the state. The investment will amount to \$2.8bn and will become operational in 2022.
- **Arrow Energy**, a joint venture company of Netherlands-based Royal Dutch Shell and China-based PetroChina, is to set up a natural gas project in Surat, Australia. The company will invest \$6.4bn in the project, which in its first phase will bring as much as 90 billion cubic feet per year of new natural gas to market at peak production.
- **Singapore-based Delta Offshore Energy** is planning to build an integrated LNG import terminal and combined-cycle 3.2-gigawatt power plant in the Bac Lieu province of Vietnam. The \$4bn project is expected to commence operations by the final quarter of 2023.

# Regionalisation and the entrenchment of a triad world

Global value chains, which in many industries have become fragmented across borders after decades of efficiency-seeking investments, were tested throughout 2020. National lockdowns imposed to minimise the spread of Covid-19 and their associated economic shock has revealed their fragility. When China stopped in March 2020, global value chains stopped.

Brewing concerns over globalisation's downsides, the rise of China and critical industries have also been intensified by the pandemic. The combined forces of improving supply chain resilience, protectionism and tech sovereignty is laying the groundwork for increasing regionalisation of the global economy, and some early evidence has emerged already.

## Industries concentrate regionally

The concentration of supply chains in critical industries is nothing new. For instance, in the semiconductor sector, which produces the computer chips crucial to our digital infrastructure, east Asia has grown as a manufacturing hub and now accounts for three-quarters of global production capacity, according to the Semiconductor Industry Association (SIA).

Between 1990 and 2020, the US has seen its

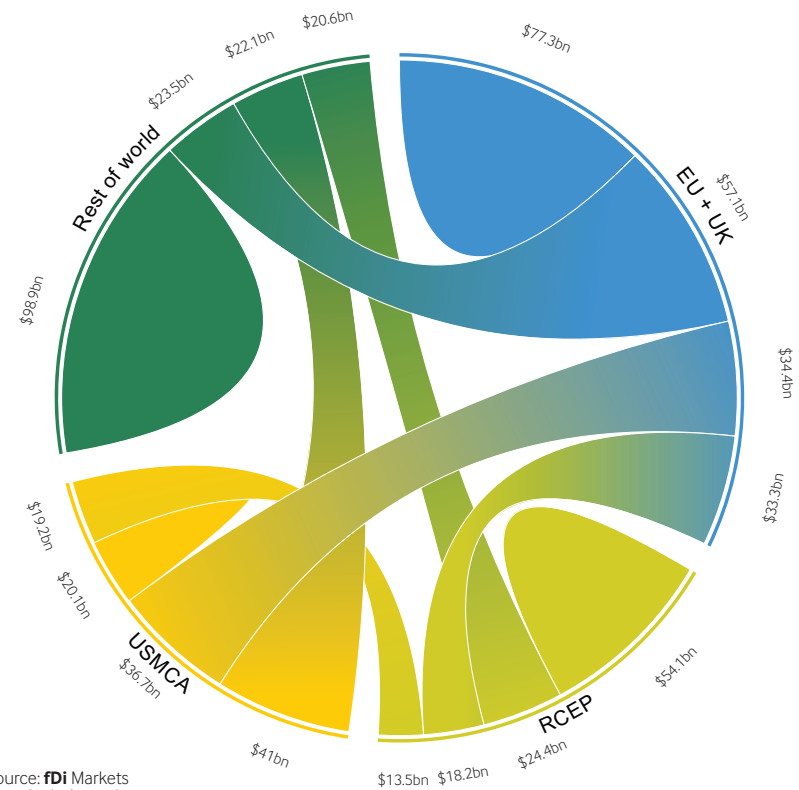
share of global chip manufacturing capacity fall from 36% to 12%. Meanwhile, China's mainland share rose from nothing to 15%, as Taiwan, South Korea and Japan equally entrenched their dominance in the sector.

Amid this historical shift eastwards and a recent global shortfall of chip supply, the EU and US are now intensifying efforts to build domestic capacity and nearby regional supply chains. But they have some catching up to do. Since 2015, China has attracted more FDI projects (39) into semiconductor manufacturing than any other country, while the EU (23) and US (9) trail significantly behind, according to fDi Markets.

In the automotive industry, however, regionalised cost competitive manufacturing hubs have become entrenched. Suppliers of Korean and Japanese original equipment manufacturers (OEMs) have clustered in China, which is home to the world's largest consumer car market. It has attracted over 15% of global FDI expenditure in the automotive components sector over the past decade.

Similarly, Mexico serves the North American market and has garnered 17% of global auto components FDI since 2010. Regionalised automotive supply chains have likewise emerged in eastern Europe – in countries

## REGIONAL BLOCS ACCOUNT FOR A LARGE SHARE OF GLOBAL INVESTMENT



Source: fDi Markets  
Note: Includes estimates





In 2020, intra-EU cross-border investment reached \$57.8bn, equivalent to 48% of the total

such as Poland, Hungary, Romania and Czech Republic – that as a region has attracted \$41.4bn of FDI into automotive components, equivalent to more than 20% of the global total.

#### Investment blocs

Another way to assess regionalisation is through the lens of major trade and investment blocs – in this case the US-Mexico-Canada Agreement (USMCA), European Union (EU), and Asia's Regional Comprehensive Economic Partnership (RCEP).

In 2020, intra-EU cross-border investment (investment into an EU country made by a company based in another member state) reached \$57.8bn, equivalent to 48% of the total. This is a sharp increase from the 40% share made up by intra-bloc investment in 2019, and the highest level seen since 2012.

Meanwhile, FDI within USMCA reached \$20.1bn last year, representing its highest share (22%) of total cross-border investment in the bloc since 2015. Although only signed in November 2020, RCEP saw a similar pattern of intra-bloc investment. FDI within RCEP totalled \$54.1bn last year, representing a 42% share of all greenfield investment in the bloc. This was higher than all previous years apart from the

spike seen between 2014 and 2016, where intra-RCEP investment made up more than 45% of the total regional FDI.

#### Domestic preference

Reassessment of supply chains has led investors to look domestically too. In 2020, US interstate projects – where a US company invests at home into another state – made up their largest share (57%) of total projects on record, up significantly on 2019 where 47% of investments announced by US companies were interstate projects.

As the adage of 'a chain is only as strong as its weakest link' rings true, it seems a new era of regionalisation is taking hold.

# Europe

## Key trends in 2020 include:

- Foreign investors announced 5102 projects in Europe in 2020, which represents a 30% decline from 2019. Capital investment also declined by 18% to \$177.3bn in the same period.
- Announced FDI projects in Western Europe fell to 4157 in 2020, down by 31% from 2019; in Emerging Europe, they fell by 21.9% to 1268 in the same period.
- The UK was the top destination country for FDI in Europe in 2020, with a total of 868 projects. This represented an overall regional market share of 17% despite a 35% decrease on the number of projects in 2019. Capital investment into the UK increased to \$34.4bn in 2020, up by 6% from 2019.
- Germany was the second most attractive destination in Europe for FDI in 2020, recording 733 projects, equating to 14% of the market share. Capital investment into Germany was \$22.8bn in 2020, an increase of 2% since 2019.
- Of the top 10 destination countries in Europe, Ireland was the only country to record a higher number of FDI projects in 2020 compared with 2019, with a 2% increase.
- The Czech Republic limited to 4% the decline in capital investment it experienced in 2020 from the previous year, doing better than other countries in Emerging Europe. The number of jobs created in the Czech Republic rose by 19% in 2020 in the period.

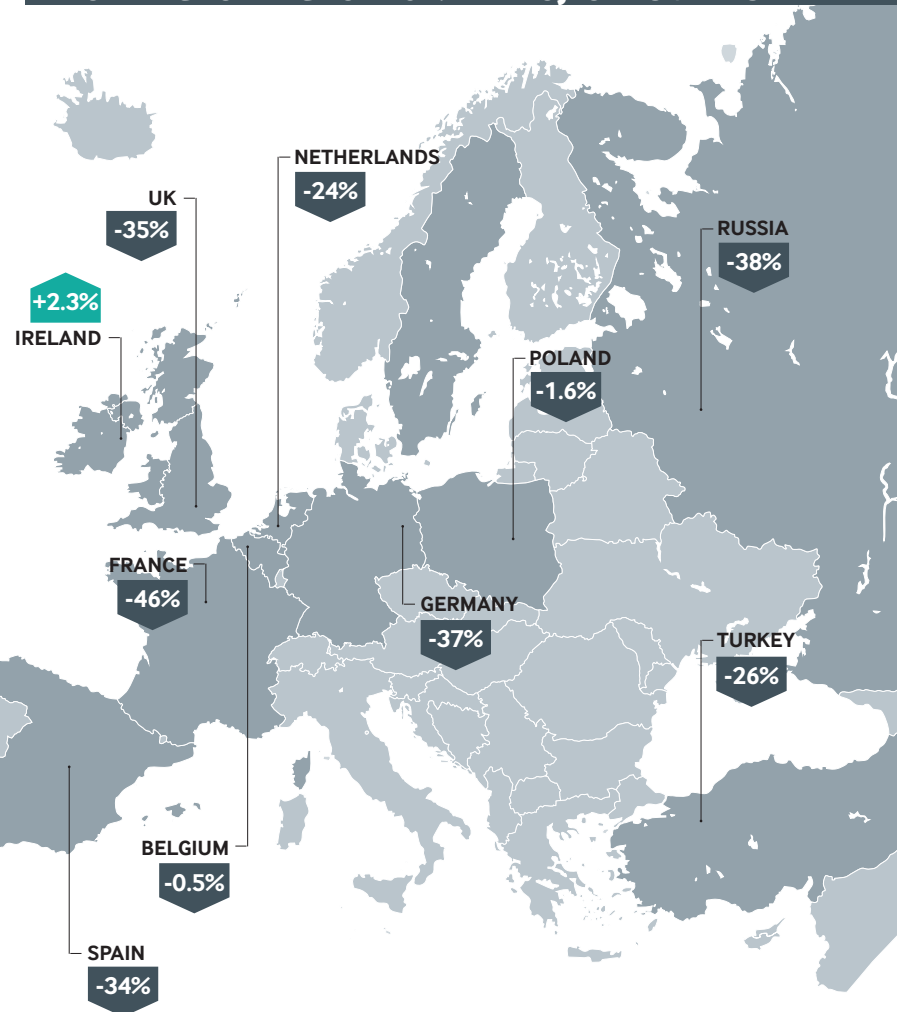
Table 1

### FDI INTO EUROPE BY PROJECT NUMBERS 2020

Country	Projects
<b>UK</b>	868
<b>Germany</b>	733
<b>Spain</b>	448
<b>France</b>	385
<b>Poland</b>	378
<b>Netherlands</b>	255
<b>Ireland</b>	222
<b>Belgium</b>	191
<b>Turkey</b>	160
<b>Russia</b>	156
<b>Other</b>	1306
<b>Total</b>	5102

Source: fDi Markets

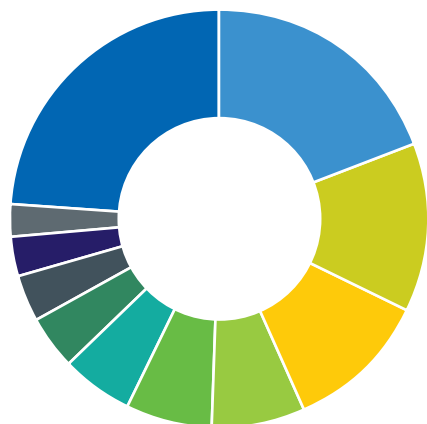
### PERCENTAGE CHANGE ON 2019 BY PROJECT NUMBERS



Source: fDi Markets  
Note: Percentages rounded up/down

Chart 1

**FDI INTO EUROPE BY CAPITAL INVESTMENT 2020**



Europe market share %		Capital investment (\$bn)
19%	UK	34.4
13%	Germany	22.9
11%	Poland	20.1
7%	France	12.8
7%	Spain	11.7
6%	Ireland	9.8
4%	Russia	7.3
4%	Italy	6.2
3%	Netherlands	5.8
2%	Belgium	4.3
24%	Other	42.1

Source: fDi Markets  
Note: Includes estimates

Table 2

**FDI OUT OF EUROPE BY CAPITAL INVESTMENT 2020**

Country	Outbound \$bn
<b>France</b>	35.3
<b>Germany</b>	34.4
<b>UK</b>	33.0
<b>Spain</b>	20.7
<b>Netherlands</b>	17.7
<b>Switzerland</b>	15.2
<b>Norway</b>	15.2
<b>Italy</b>	11.1
<b>Sweden</b>	9.8
<b>Denmark</b>	6.1
<b>Other</b>	39.6
<b>Total</b>	238.0

Source: fDi Markets  
Note: Includes estimates

Table 3

**FDI OUT OF EUROPE BY PROJECT NUMBERS 2020**

Country	Outbound projects
<b>UK</b>	1085
<b>Germany</b>	1015
<b>France</b>	661
<b>Switzerland</b>	551
<b>Netherlands</b>	369
<b>Spain</b>	322
<b>Sweden</b>	286
<b>Italy</b>	243
<b>Denmark</b>	169
<b>Belgium</b>	159
<b>Other</b>	1096
<b>Total</b>	5956

Source: fDi Markets

**KEY TREND**

60%

Switzerland witnessed a growth in the number of FDI projects to 114, up by 18% from 2019. In the same period, overall capital investment increased by 60% to \$2.81bn.

**Recent major projects**

- **Norway-based Equinor**, an energy company, and SSE Renewables, a renewable energy subsidiary of UK-based SSE, have commenced construction of a new wind farm project off the north-east coast of England, UK. Dogger Bank Wind Farm is a 50-50 joint venture between Equinor and SSE Renewables. The project is expected to trigger a total capital investment of approximately €9bn between 2020 and 2026.
- **Telefónica Infra**, a subsidiary of Spain-based telecommunications giant Telefónica, has entered into a joint venture with Allianz Capital Partners for the deployment of fibre to the home (FTTH) in Germany through a 50,000-kilometre network. The project foresees an investment volume of approximately €5bn by 2026.
- **Svolt**, a battery cell manufacturer and a division of China-based Honeycomb Energy Technology, is set to establish two factories in Saarland, Germany. The company is investing \$2.3bn to build the factories that will create 2000 jobs and are due to be completed by the end of 2023. The factories will produce batteries to serve between 300,000 and 500,000 electric vehicles, targeting the European automotive industry.

# STEM investment becomes the priority in digital first economies

Jonathan Wildsmith, production manager, fDi Markets



Science, Technology, Engineering, and Mathematics (STEM) form the cornerstones of the modern economy. The term was originally coined in the early 2000s to frame a discussion around preparing students for 21st century high-tech jobs. Given that STEM workers are regarded as high value human capital, it is no surprise that STEM continues to be a leading theme among policy-makers worldwide.

STEM and its neighbouring economic development agent, FDI, are key drivers of the innovation that lies at the core of modern economic growth. The hybrid term, STEM FDI, seeks to capture high-value cross-border investments in sectors with higher levels of STEM inputs. This will help to understand which economies are receiving larger volumes of value-adding investments.

fDi Markets recorded a total of 3620 FDI projects in STEM in 2020 which represented approximately one third of all projects, retaining the market share it held over the previous four years despite the economic downturn.

Although STEM FDI witnessed a 32% decline in project numbers year-over-year, it mirrored the larger trend that saw global FDI fall by one third in 2020.

More than half of all STEM FDI projects recorded in 2020 were concentrated in the top 10 destination countries. The US was the largest recipient of STEM FDI in 2020, receiving 15% of all STEM-related FDI projects – more than triple that of Germany and almost quadruple the individual figures recorded by India, China, France and Spain. The US received \$38.9bn of STEM FDI in 2020 which accounted for 64% of total capital investment in the US and equated to 13% of all STEM-related FDI by capital investment. Other high-ranking destinations include the UK, Germany, India, and China.

According to OECD data, the US was the largest contributor in terms of gross domestic expenditure on research and development (R&D) in 2019, investing \$612.7bn (Chart 1). While the data predates the pandemic, it highlights how funding research can bolster

Table 1

## TOP 10 DESTINATION COUNTRIES FOR STEM FDI BY PROJECT NUMBERS, 2015-20

Country	2015	2016	2017	2018	2019	2020
<b>US</b>	595	595	685	709	724	533
<b>UK</b>	376	314	318	432	419	283
<b>Germany</b>	278	253	243	263	264	169
<b>India</b>	346	356	283	383	328	154
<b>China</b>	330	272	308	345	303	137
<b>France</b>	150	144	233	231	195	132
<b>Spain</b>	68	78	107	171	191	129
<b>Canada</b>	80	100	103	121	121	122
<b>Mexico</b>	190	226	206	185	219	104
<b>Poland</b>	78	113	97	102	100	101
<b>Other</b>	1968	2065	2120	2498	2430	1756
<b>Total</b>	4459	4516	4703	5440	5294	3620

Source: fDi Markets

economic competitiveness and STEM FDI attraction. That is to say that countries that are investing in R&D are attracting more high-quality investment. In Asia, China's spending on R&D reached more than \$500bn in 2019 and approximately 38% of FDI into China was concentrated in high-value STEM activities. The country is set to increase R&D spending between 2021 and 2025 as part of a plan to improve China's innovation system. It will focus on developing a number of technology areas including semiconductors, healthcare, quantum computing and cloud computing. As the nation builds a stronger tech-focused ecosystem, foreign investors will be enticed by the potential impacts on the local labour force and the yields of technological advancement.

The top 10 destination countries for STEM FDI have consistently attracted investment projects in industries characterised by high-knowledge intensity and economic value added, such as life sciences and ICT. Globally, software and IT services ranked as the top sector within STEM for FDI project numbers. On the other



## Biotechnology and medical devices were the only two sectors to experience year-over-year growth in STEM FDI projects last year

hand, biotechnology and medical devices were the only two sectors to experience year-over-year growth in STEM FDI projects last year.

Vaccine development most notably dominated the headlines in 2020 and it was the large pharmaceutical and biotechnology companies, with STEM workers at their core, that produced viable vaccine candidates. One such company is US-based Moderna which opened a new facility for the production of coronavirus vaccines in Basel, Switzerland in August

2020. The company's chief executive officer, Stéphane Bancel, explained that the company was motivated by the country's "dynamic pool of industry talent, scientists, research organisations, investors and global health policy-makers". Additionally, Tom Hochuli, chief executive officer of Germany-based Vivalogics, following the announcement of its plans to invest \$150m in a coronavirus vaccine site in Boxborough, Massachusetts, stated: "Boston is the largest global hub for cell and gene therapy research and development, so there is also a

great pool of local talent and expertise to draw from to strengthen the Vivalogics team." These comments highlight the importance of building a skilled STEM labour force in order to attract high-value STEM FDI that has made significant impacts on communities.

STEM FDI was not totally immune to the effects of the economic downturn caused by the pandemic. However, the main topic of conversation at the moment is centred around the ability of countries to innovate in the face of changing times and industries with higher levels of STEM contributions have the potential to play an even greater role than they do currently in helping economies and business alike to adapt to not only the post-pandemic world but also new tech breakthroughs and the risks of climate change. Countries with a high volume of FDI projects in STEM industries have evolved dynamic and productive STEM-advancing policies. By not developing a rigorous STEM strategy that advances STEM, there runs a risk of being left behind as a post-pandemic, digital first economy solidifies.

# North America

## Key trends in 2020 include:

- The number of FDI projects into North America in 2020 decreased to 1823, down by 20% from 2019. The region also witnessed a 28% fall in capital investment to \$76.7bn and a 15% decline in job creation to 153,257 in the period.
- The US remained the top destination in the region across FDI projects, capital investment and job creation. Despite a 20% decline in project numbers from 2019, the US retained its regional market share of FDI projects in the region at 84% and attracted \$61bn in capital investment.
- Total capital investment into Canada increased by 45%, to \$15.7bn. This increase has allowed Canada to achieve a regional market share increase of 21%, double that of 2019.
- At state level, Arizona was the largest recipient of FDI by capital investment in the region following the announcement of a multi-billion-dollar investment for the production of nanometre chips by Taiwan’s TSMC.
- Ontario was second only to Arizona as the region’s main hub for capital investment. The state saw a 109% leap from 2019 to \$7.6bn and attracted the largest amount of jobs in the country. This can be attributed, in part, to a \$1.5bn investment from UK-based Fiat Chrysler Automobiles, and a \$1.4bn investment from US-based Ford.

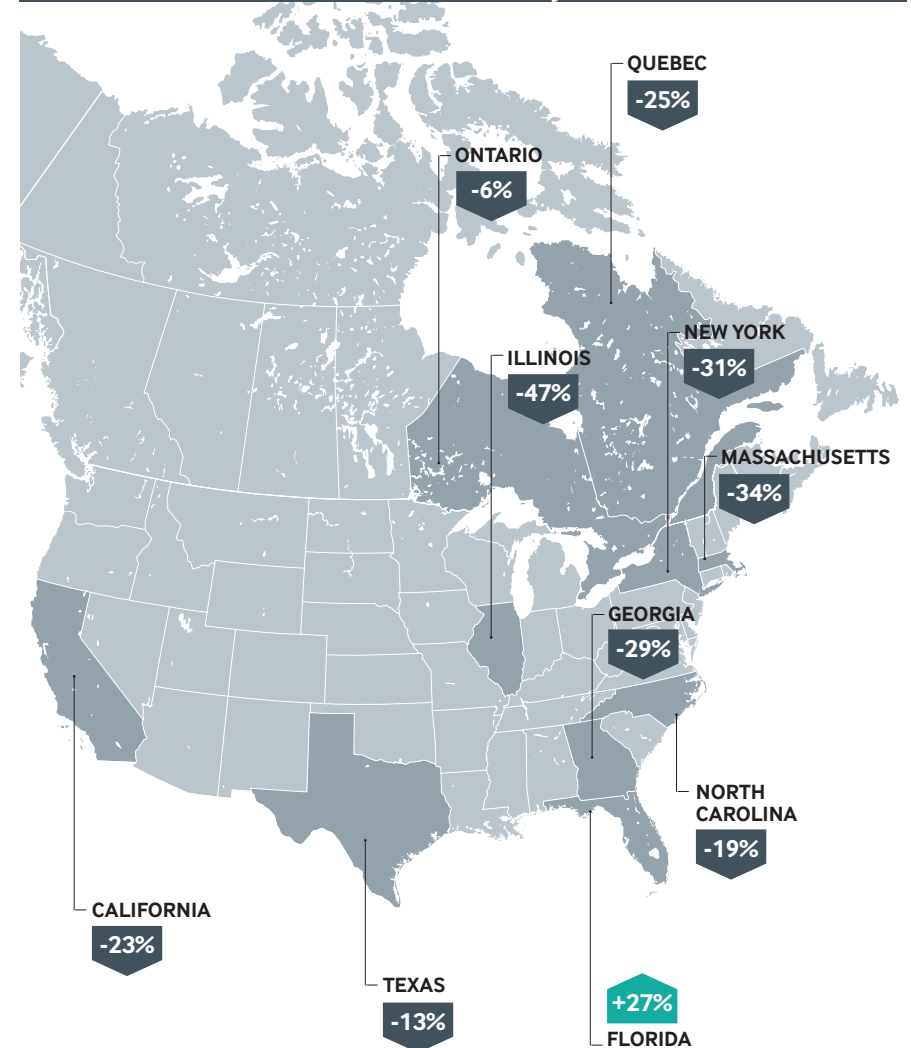
Table 1

### FDI INTO NORTH AMERICA BY PROJECT NUMBERS 2020

Country	Projects
<b>California</b>	195
<b>Texas</b>	160
<b>New York</b>	146
<b>Ontario</b>	146
<b>Florida</b>	113
<b>Massachusetts</b>	64
<b>Quebec</b>	63
<b>Georgia</b>	58
<b>Illinois</b>	57
<b>North Carolina</b>	55
<b>Other</b>	766
<b>Total</b>	1823

Source: fDi Markets

### PERCENTAGE CHANGE ON 2019 BY PROJECT NUMBERS

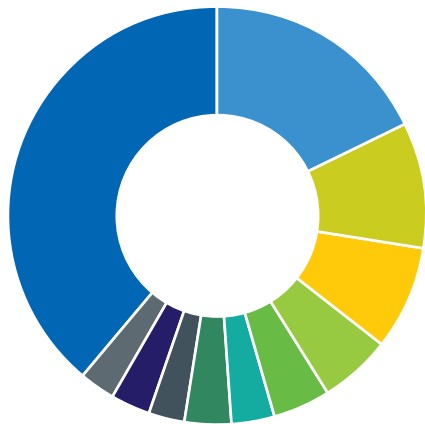


Source: fDi Markets  
Note: Percentages rounded up/down



Chart 1

**FDI INTO NORTH AMERICA BY CAPITAL INVESTMENT 2020**



North America market share %      Capital investment (\$bn)

18%	Arizona	14
10%	Ontario	8
8%	Texas	6
5%	California	4
5%	Georgia	3
3%	New York	3
3%	North Carolina	3
3%	Quebec	2
3%	Florida	2
3%	Illinois	2
39%	Other	30

Source: fDi Markets  
Note: Includes estimates

Table 2

**FDI OUT OF NORTH AMERICA BY CAPITAL INVESTMENT 2020**

Country	Outbound \$bn
California	26.1
Washington	15.6
New York	9.2
Pennsylvania	9.2
Michigan	6.5
Ontario	5.8
Texas	3.8
Massachusetts	3.7
Illinois	3.4
Quebec	3.1
Other	29.0
<b>Total</b>	<b>115.2</b>

Source: fDi Markets  
Note: Includes estimates

Table 3

**FDI OUT OF NORTH AMERICA BY PROJECT NUMBERS 2020**

Country	Outbound projects
California	671
New York	367
Washington	186
Ontario	136
Massachusetts	124
Texas	117
Illinois	99
New Jersey	78
Florida	76
Quebec	62
Other	729
<b>Total</b>	<b>2645</b>

Source: fDi Markets

**KEY TREND**



Florida attracted 113 projects in 2020, representing a 27% increase from 2019. The state also grew its North American market share from 4% to 6%.

**Recent major projects**

► **TSMC** is to invest \$12bn to establish a semiconductor manufacturing plant in Phoenix, Arizona. The plant will produce five-nanometre chips and will add 1900 jobs. It is scheduled to begin operations in 2024.

► **Ford Canada**, a subsidiary of US-based Ford, is to invest \$1.4bn into its operations in Oakville, Ontario, Canada. The project will add electric battery vehicle manufacturing capabilities to the site and will also include the installation of a battery-pack assembly line. It is set to open in 2024, with the first electric vehicles expected to roll off the production line in 2025.

► **Chrysler Canada**, a subsidiary of UK-based Fiat Chrysler Automobiles, is to expand its assembly plant in Windsor, Ontario, Canada. The company will invest \$1.5bn over three years to upgrade its plant and add production lines. It is expected that 2000 jobs will be added to the facility by 2024.

► **US-based online retail giant Amazon** plans to open a new fulfilment centre in Hamilton, Ontario, Canada. The firm will create 1500 jobs at the 79,430 sq m facility, which is scheduled to open in 2021.

# Investment switches to renewable energy

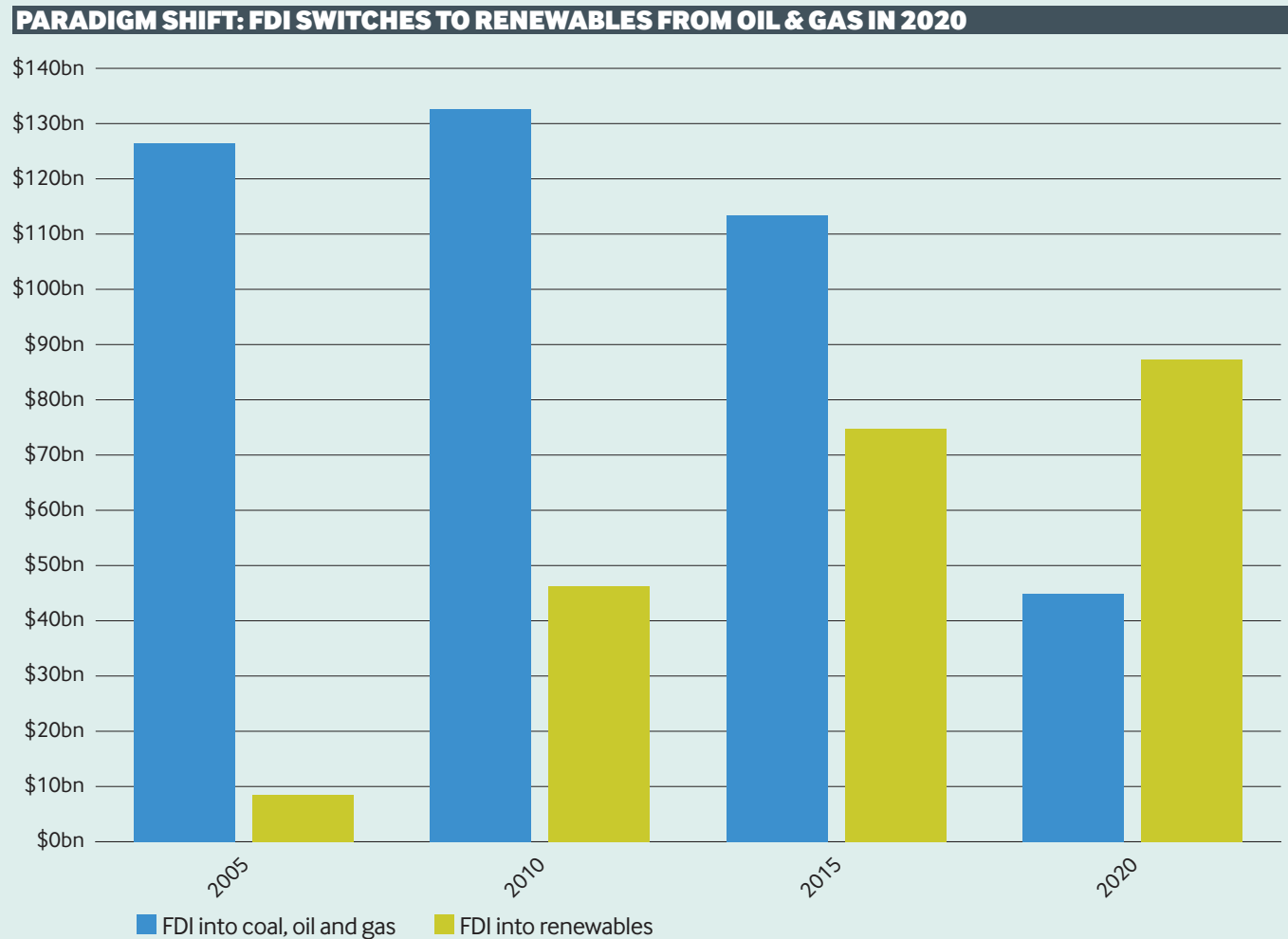
While countries struggle with the continued global health crisis, another is just around the corner. Climate change and the need to decarbonise economies to minimise its devastating effects is more important than ever, with companies and countries increasingly under pressure to improve on environmental, societal and governance (ESG) issues.

In the run-up to the long-awaited COP-26 climate summit in November 2021 – which was postponed for a year due to Covid-19 – the shift to green energy is accelerating.

In 2020, greenfield foreign investment into renewable energy exceeded flows into fossil fuels for the first time on record, according to fDi Markets. Renewables FDI totalled \$87.2bn last year, down 10% from a record high in 2019, while flows to the coal, oil and gas sector plummeted by 61.2% to \$44.8bn. This was the lowest annual total of FDI into fossil fuels since records began in 2003.

A similar pattern is seen with FDI projects. As cross-border renewables projects fell by 10% to 502, from a record high in 2019, FDI projects in the fossil fuel sector fell by 52% to their lowest level (90) on record.

In fact, there have been more cross-border greenfield investments made into renewable energy than fossil fuels every year since 2011, but these numbers have diverged over the last five years. In 2020, there were over five times as many renewable FDI projects as traditional energy projects.



Source: fDi Markets  
Note: Includes estimates

### Renewable leaders

As investment into the green transition reached a pivotal moment in 2020, so too have the roadmaps for public and private sector actors. The EU, China, South Korea and Japan all announced net-zero emission targets, along with oil majors such as Total, BP and Shell.

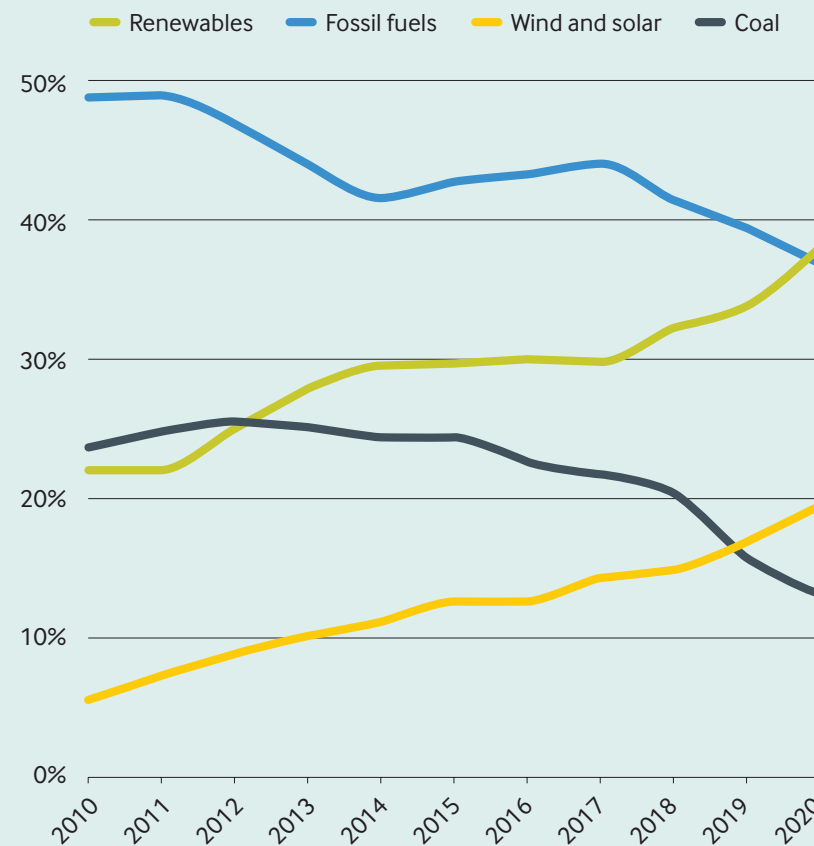
FDI into European renewables grew by 67% to reach a record \$41.1bn. This was driven by a surge of investment into six countries in particular – the UK, France, Portugal, Ireland, Poland and Italy – which attracted over \$1bn more green investment in 2020 than a year earlier. In 2020, renewables also overtook fossil fuels as the EU’s main source of electricity.

In terms of FDI projects, the US continued to be the leading destination globally, attracting 64 projects, which was more than double the number seen in all countries, apart from Spain and Poland, that attracted 35 and 33 projects, respectively.

While Chile overtook Brazil as the leading Latin American destination for renewables projects in 2020, Brazil attracted more capital (\$6.1bn), ranking third globally behind the UK (\$21.0bn) and US (\$10.5bn).

In Asia-Pacific, Australia magnetised \$4.5bn of foreign investment into greenfield renewable energy projects, followed by Japan (\$2.5bn) and China (\$1.5bn). Meanwhile in the Middle East and Africa, the UAE held onto its top spot, attracting \$2.4bn of renewables FDI, while Zambia saw an estimated injection of over \$700m into

**LANDMARK MOMENT AS RENEWABLES OVERTAKE FOSSIL FUELS AS EU’S MAIN SOURCE OF ELECTRICITY**



Source: Ember

its renewable energy sector following large solar investments announcements made by PowerChina.

### Solar and wind stay in charge

Wind and solar developments continued to make up the vast majority (91%) of global announced renewables investment last year, continuing the dominant position seen since 2012, but at a much higher rate than its all-time share (73%). Biomass was the third largest contributor with 6% of total cross-border capital.

In 2020, wind overtook solar power as the leading renewables sub-sector, with \$28.5bn of pledged foreign capital, compared with solar’s \$9.3bn. However, in terms of FDI project numbers, solar (277) far outperformed wind (152), due to the typical size and nature of investment into each renewable energy source.

# Middle East and Africa

## Key trends in 2020 include:

- The number of FDI projects into Africa and the Middle East decreased to 1031 in 2020 from 1795 in 2019. Moreover, capital investment in 2020 only reached close to half of the 2019 total figure.
- The United Arab Emirates remained the top destination for projects in the region, receiving 327 projects and increasing its regional market share from 23% in 2019 to 32% in 2020.
- The Democratic Republic of Congo experienced a 140% increase in project numbers, from five in 2019 to 12 in 2020. Capital investment into the country grew to \$1.1bn in 2020 from \$566m in 2019, an increase of 95%.
- The top 10 destination countries increased their regional market share of projects from 69% in 2019 to 76% in 2020. The top 10 regions have also increased their market share of capital investment to 77% in 2020 compared to 62% in 2019.
- FDI into South Africa by number of projects fell by 21% from 2019 to 100 in 2020. In the same period, capital investment rose from \$3.5bn to \$3.8bn.
- Egypt experienced a large fall in FDI in 2020. In terms of capital investment, the country received \$12.2bn of investment in 2019 and just \$1.3bn in 2020. The number of projects going into the country fell by 70% in the same period while the amount of jobs created by inward FDI projects fell by 76%.

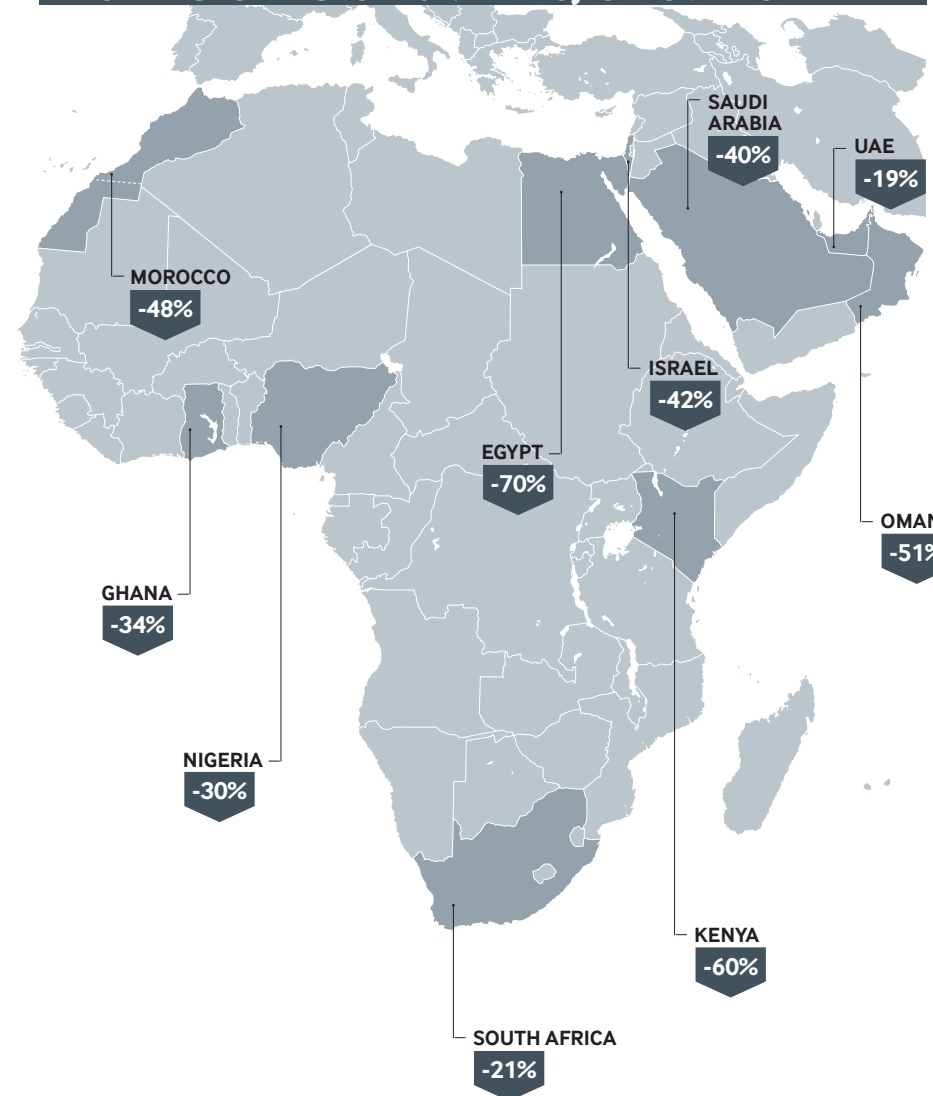
Table 1

### FDI INTO MIDDLE EAST AND AFRICA BY PROJECT NUMBERS 2020

Country	Projects
<b>UAE</b>	327
<b>South Africa</b>	100
<b>Saudi Arabia</b>	73
<b>Morocco</b>	54
<b>Nigeria</b>	53
<b>Israel</b>	44
<b>Egypt</b>	43
<b>Kenya</b>	35
<b>Ghana</b>	29
<b>Oman</b>	23
<b>Other</b>	250
<b>Total</b>	1031

Source: fDi Markets

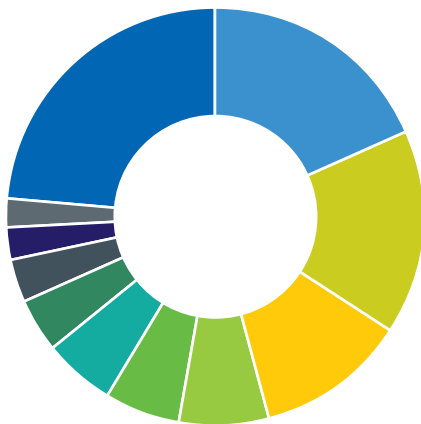
### PERCENTAGE CHANGE ON 2019 BY PROJECT NUMBERS



Source: fDi Markets  
Note: Percentages rounded up/down

Chart 1

**FDI INTO MIDDLE EAST AND AFRICA BY CAPITAL INVESTMENT 2020**



Middle East and Africa market share %      Capital investment (\$bn)

18%	Saudi Arabia	10.4
16%	UAE	9.0
12%	Nigeria	6.7
7%	South Africa	3.8
6%	Oman	3.4
5%	Angola	3.1
4%	Morocco	2.4
3%	Israel	1.9
2%	Egypt	1.4
2%	Ghana	1.2
23%	Other	13.3

Source: fDi Markets  
Note: Includes estimates

Table 2

**FDI OUT OF MIDDLE EAST AND AFRICA BY CAPITAL INVESTMENT 2020**

Country	Outbound \$bn
<b>UAE</b>	5.9
<b>South Africa</b>	3.3
<b>Saudi Arabia</b>	3.0
<b>Israel</b>	2.7
<b>Mauritius</b>	1.4
<b>Bahrain</b>	0.6
<b>Qatar</b>	0.4
<b>Egypt</b>	0.3
<b>Nigeria</b>	0.3
<b>Kuwait</b>	0.2
<b>Other</b>	1.0
<b>Total</b>	18.8

Source: fDi Markets  
Note: Includes estimates

Table 3

**FDI OUT OF MIDDLE EAST AND AFRICA BY PROJECT NUMBERS 2020**

Country	Outbound projects
<b>UAE</b>	148
<b>Israel</b>	120
<b>Saudi Arabia</b>	42
<b>South Africa</b>	40
<b>Mauritius</b>	21
<b>Egypt</b>	20
<b>Bahrain</b>	14
<b>Nigeria</b>	13
<b>Tunisia</b>	8
<b>Cote d Ivoire</b>	7
<b>Other</b>	58
<b>Total</b>	491

Source: fDi Markets

**KEY TREND**



South Africa has strengthened its position as a source of FDI. The country increased outward capital expenditure by 27% in 2020, rising from \$2.6bn in 2019 to \$3.3bn in 2020.

**Recent major projects**

- **Air Products**, a subsidiary of US-based Air Products and Chemicals, has announced plans to invest \$5bn to establish a green hydrogen plant in Neom, a planned city under construction in Saudi Arabia. The plant will be jointly owned by Air Products, Saudi Arabia's ACWA Power, and Neom.
- **IHC Food**, a food production company and a subsidiary of UAE-based International Holding Company, announced plans to develop and cultivate farmland in Abu, Hamad, Sudan in a \$225m deal. The project is a joint venture with DAL Group and will see the development of 40,470 hectares.

- **Sweden-based pulp and paper company Greenland Resources** is to invest \$2.8bn to set up a new production facility in Ghana. It will be set up in two phases: the first to build a nursery for plantation over 210,000 hectares of land area, and the second to build the pulp and paper mill, with 1.5 million tonnes per year output capacity for the domestic and west African market. It will create 3500 direct jobs.

# Latin America and the Caribbean

## Key trends in 2020 include:

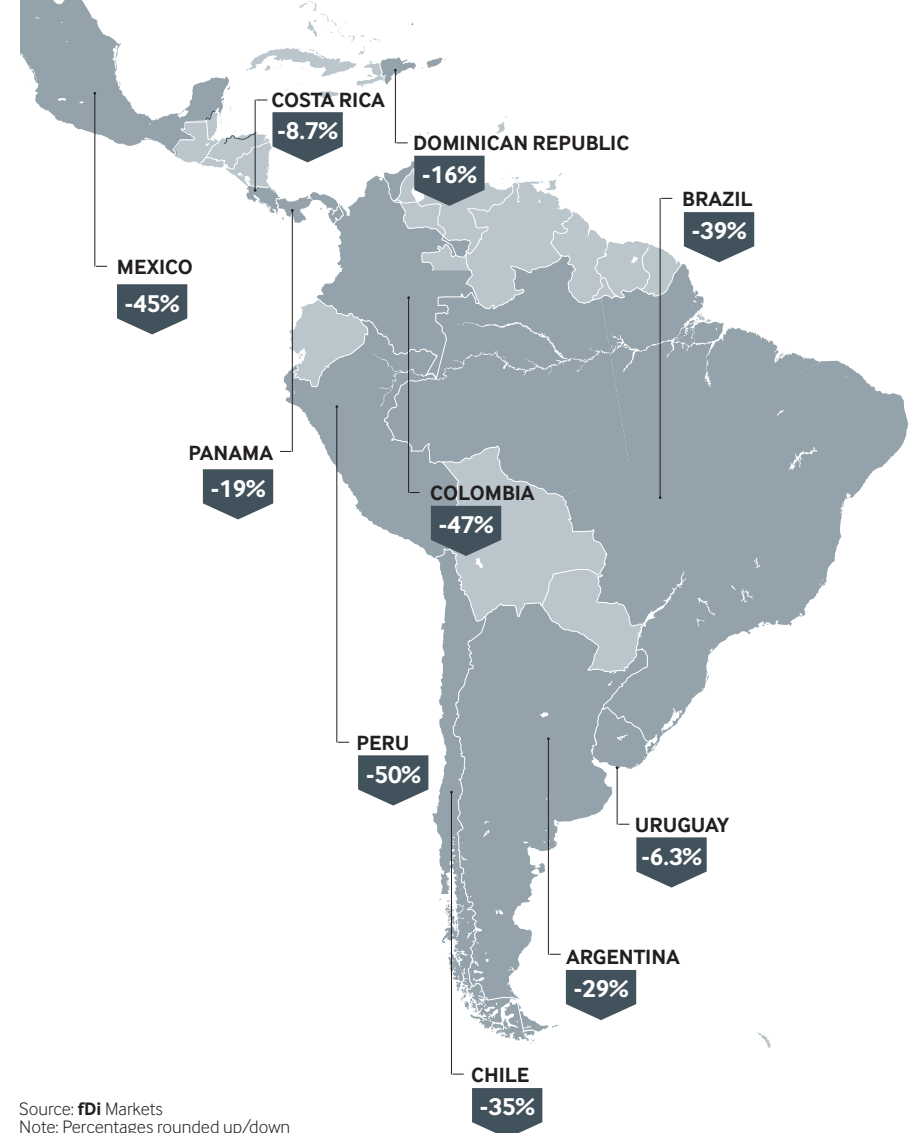
- Announced FDI projects into Latin America and the Caribbean decreased to 973 projects in 2020, down by 37% from 2019. In the same period, capital investment decreased by 49% to \$55.4bn.
- Mexico was once again the top destination for FDI in the region with a total of 273 projects in 2020, giving it a 28% regional market share. Capital investment nonetheless decreased to \$13.3bn in 2020, down by 46% from a year earlier.
- Brazil and Colombia also held their spots at second and third place in the region in terms of project numbers but experienced an year-on-year 49% and 56% drop in capital investment, respectively, in 2020.
- Costa Rica and Uruguay fared relatively well in 2020, experiencing a modest 9% and 6% decrease in project numbers from 2019.
- In 2020, Paraguay saw a leap in capital investment to \$3.4bn, up by 283% from 2019. This can be almost entirely attributed to a \$3.2bn investment from pulp producer Paracel. Meanwhile FDI project numbers into Paraguay dropped by 29% in the same period.
- Argentina and Costa Rica also experienced increases in capital investment, with a 4% and 13% rise, respectively, in 2020 from a year earlier.

Table 1

FDI INTO LATIN AMERICA AND THE CARIBBEAN BY PROJECT NUMBERS 2020	
Country	Projects
Mexico	273
Brazil	215
Colombia	96
Costa Rica	95
Chile	77
Argentina	58
Peru	35
Panama	22
Dominican Republic	16
Uruguay	15
Other	71
<b>Total</b>	<b>973</b>

Source: fDi Markets

PERCENTAGE CHANGE ON 2019 BY PROJECT NUMBERS

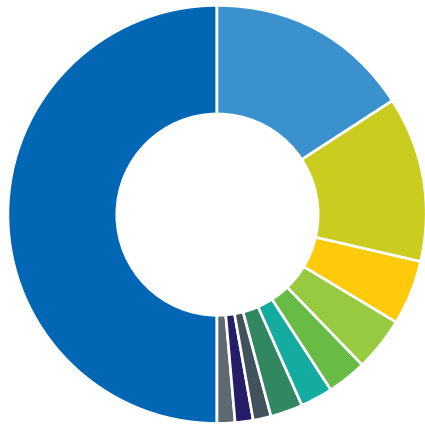


Source: fDi Markets  
Note: Percentages rounded up/down



Chart 1

**FDI INTO LATIN AMERICA AND THE CARIBBEAN BY CAPITAL INVESTMENT 2020**



Latin America and the Caribbean market share %      Capital investment (\$bn)

31%	Brazil	17.0
24%	Mexico	13.3
10%	Chile	5.5
8%	Argentina	4.3
6%	Paraguay	3.4
5%	Colombia	2.6
5%	Dominican Republic	2.5
3%	Peru	1.7
2%	Costa Rica	1.4
2%	Panama	1.3
96%	Other	2.4

Source: fDi Markets  
Note: Includes estimates

Table 2

**FDI OUT OF LATIN AMERICA AND THE CARIBBEAN BY CAPITAL INVESTMENT 2020**

Country	Outbound \$bn
Mexico	1.9
Brazil	1.7
Chile	1.3
Bermuda	1.2
Argentina	0.7
Panama	0.6
Colombia	0.4
Guatemala	0.3
Honduras	0.1
Peru	0.1
Other	0.2
<b>Total</b>	<b>8.6</b>

Source: fDi Markets  
Note: Includes estimates

Table 3

**FDI OUT OF LATIN AMERICA AND THE CARIBBEAN BY PROJECT NUMBERS 2020**

Country	Outbound projects
Brazil	86
Mexico	55
Argentina	37
Chile	34
Bermuda	17
Colombia	9
Panama	7
Peru	7
Cayman Islands	6
Guatemala	6
Other	16
<b>Total</b>	<b>280</b>

Source: fDi Markets

**KEY TREND**



In 2020, Paraguay saw capital investment to \$3.4bn, up by 283% from 2019. This can be almost entirely attributed to a \$3.2bn investment from pulp producer Parcel. In the same period, FDI project numbers into Paraguay dropped by 29%.

**Recent major projects**

- **Pulp producer Parcel**, ultimately headquartered in Sweden, is investing \$3.2bn to construct a pulp mill in Concepción, Paraguay. The factory will produce 1.5 million tonnes per year of bleached eucalyptus kraft pulp for the global market. It will create 4000 direct jobs with start-up estimated for 2023.
- **Turkey-based ANEX Tourism Group** will invest \$1.8bn to open a new hotel in Punta Cana, the Dominican Republic. The Selectum Luxury Resort will have 500 rooms in its first stage, reaching a total of 7000 rooms by 2024.
- **Pan American Energy Group**, an oil and gas exploration and production company which operates as a joint venture subsidiary of UK-based British Petroleum, has invested \$1.5bn to build a new refinery in Campana, Argentina.
- **France-based Engie**, a natural gas and electricity company, is to invest \$827.9m in northern Brazil for the construction, operation and maintenance of an 1800 km power transmission line, a new substation and the extension of three other substations. Construction commenced in 2020.

# Top foreign investors in 2020



Luxembourg-based office provider International Workplace Group (IWG) retained the top spot for FDI created in 2020 with 145 projects, following record revenues of more than \$3.3bn in 2019. Western Europe was the main destination market for the company in 2020, where it made 75 investments – a 12% increase on the previous year's figures – followed by Asia-Pacific (24) and North America (18).



US-based online retail company Amazon ranked as the second most active investor in 2020. The company invested in 129 projects, up 40% on the previous year. Three quarters of these were logistics, distribution and transportation operations, while 8% were directed towards research and development FDI projects in its e-commerce, cloud computing, digital streaming, and artificial intelligence businesses. The Seattle-headquartered company was also the second largest contributor of capital investment in 2020.



Seven of the top 20 investing companies mainly operate in the capital-heavy coal, oil and gas and renewable energy industries. Investments by Zhejiang Hengyi Group, Equinor, Royal Dutch Shell, Total, Enel, Delta Offshore Energy and Genertec were worth \$51.5bn in 2020, equating to 10% of all capital invested globally.



Hungary-based property developer Wing and US-based industrial real estate developer Panattoni were among the most active investors of 2020. Both companies heavily directed their focus towards the emerging Europe market – more than 70% of Panattoni's FDI projects were in emerging Europe while all of Wing's were in emerging European countries.



The largest contributor of FDI by capital investment was China-based Zhejiang Hengyi Group, which through its subsidiary Hengyi Petrochemical, recorded a single project worth \$13.7bn. It was the second largest overseas investment by a China-based enterprise and the largest FDI project into Brunei recorded by fDi Markets.

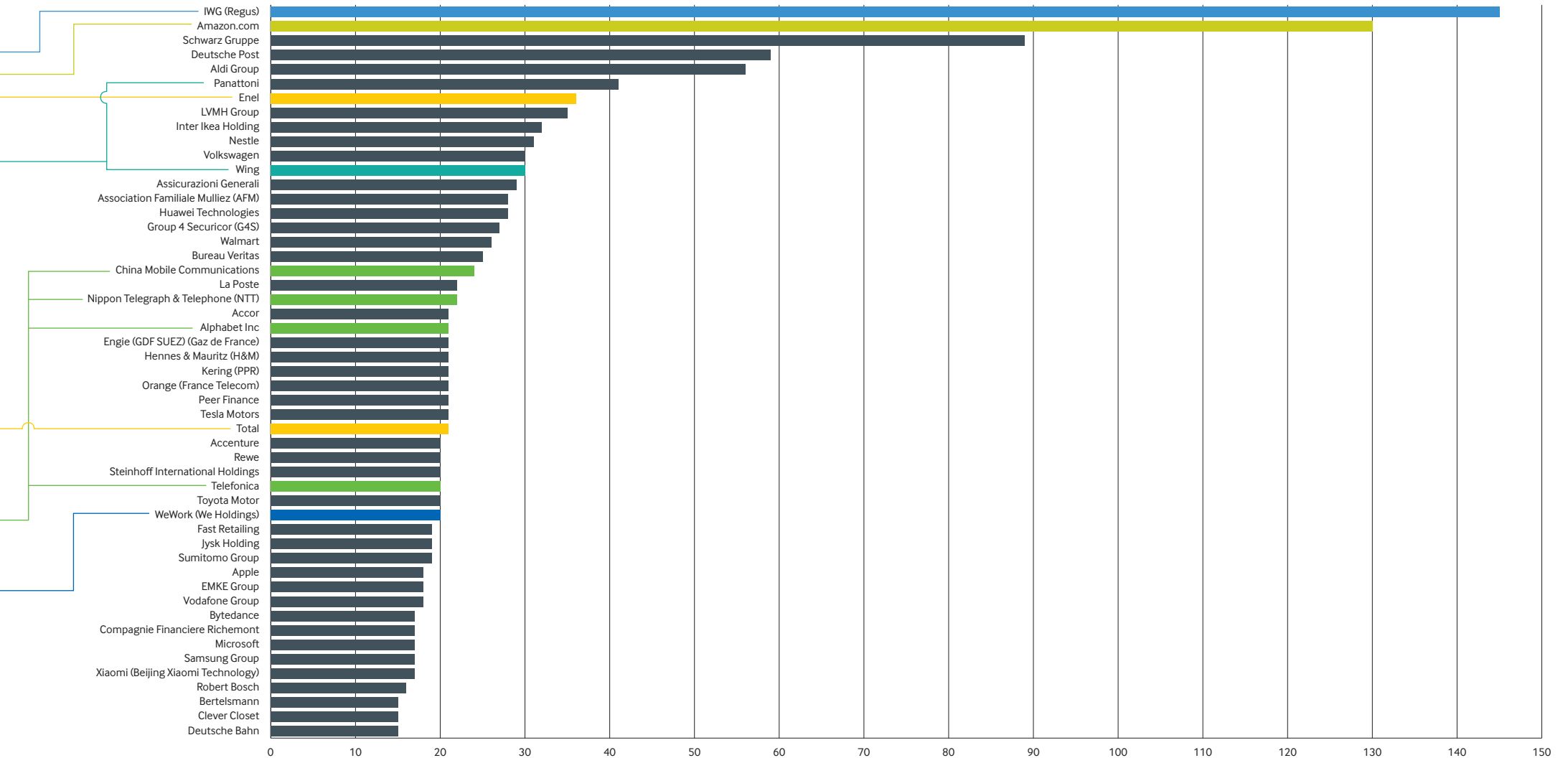


Investments by companies operating in the communications sector were the driving force behind the sector's 41% increase in capital investment in 2020, even though project numbers were down on the previous year's figures. Amazon, principally through its cloud computing subsidiary Amazon Web Services, China Mobile Communications, Nippon Telegraph & Telephone (NTT) and Alphabet, the parent company of Google, were the top active investors in the communications space, albeit the top investor in communications-related projects by capital investments was Spain-based telecommunications giant Telefonica.



IWG's US-based rival WeWork crawled into 2020 after several large-scale corporate changes and workforce redundancies prior to the pandemic. Following several years of aggressive global expansion with a peak in 2018 of 196 FDI projects, WeWork recorded 86% less projects in 2020 (20) than in 2019 (146).

**TOP 50 MOST ACTIVE FOREIGN INVESTORS WITH ANNOUNCED PROJECTS IN 2020**



# About fDi Intelligence

## About fDi Intelligence

**fDi Intelligence** – part of the Financial Times Group, is recognised globally for its credible full range of investment promotion and research solutions. Relied upon by the most prominent FDI professionals, we have provided in-depth commentary and comprehensive data and intelligence since 2001 and continue to pioneer new groundbreaking products to better serve our clients.

## Products and services include:

**fDi Markets** – is the most comprehensive greenfield FDI tracking database on the market, from the Financial Times. We have an unrivalled track record of real-time data since 2003. Our data is chosen to power the most influential global FDI analytics, decision making and identify future opportunities and trends.

**fDi Benchmark** – is the only comprehensive analysis tool that compares costs and qualities of investment destinations. Its unique patented algorithmic technology is used by locations, intermediaries and investors alike to assess global footprint strategies.

**GIS Planning** – offers a suite of industry-leading online GIS data and mapping tools to attract investment, support business and facilitate research and analysis. The interactive SaaS tools are robust, intuitive and mobile responsive, engaging potential investors directly on Investment Promotion Agency websites.

**fDi Intelligence magazine** – firmly established as the world's premier publication for the business of globalisation. Published on a bi-monthly basis with an ABC-certified, highly targeted circulation of more than 14,000, fDi provides corporate decision-makers with an up-to-date image of the ever-changing global investment map.

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## Drive investment to your location

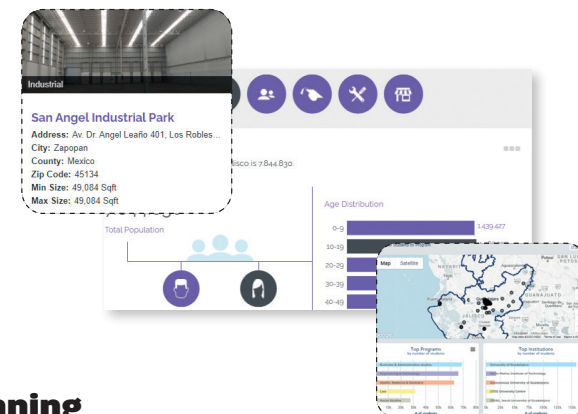
GIS Planning is a customised web application that provides comprehensive demographic and industry data businesses need to make successful location decisions in your community. Features include:

- Property search
- Demographic analysis
- Industry mapping
- Thematic mapping
- Seamless website integration

Discover our latest online data tool in collaboration with Invest in Jalisco:  
[investin.jalisco.gob.mx](http://investin.jalisco.gob.mx)

**Learn how your organisation can benefit today.**

**Contact us on +44 (0)20 7775 6667 or visit [fdiintelligence.com/gis-planning](http://fdiintelligence.com/gis-planning)**





# Drive investment to your location

The partnership of fDi Intelligence and GIS Planning makes us the world's leading online investment promotion service, with the most powerful and comprehensive portfolio of online products and services to help you to drive investment into your location.

Our portfolio of services includes:



Track crossborder greenfield investment across all countries and sectors worldwide with the most comprehensive database on the market.



Benchmark the competitiveness of countries and cities worldwide in more than 65 sectors with the only online tool in the industry.



Provide the comprehensive demographic and industry data businesses need to make successful location decisions in your community.

**Learn how your organisation can benefit today. Contact us on +44 (0)20 7775 6667 or at [fDi@ft.com](mailto:fDi@ft.com)**