

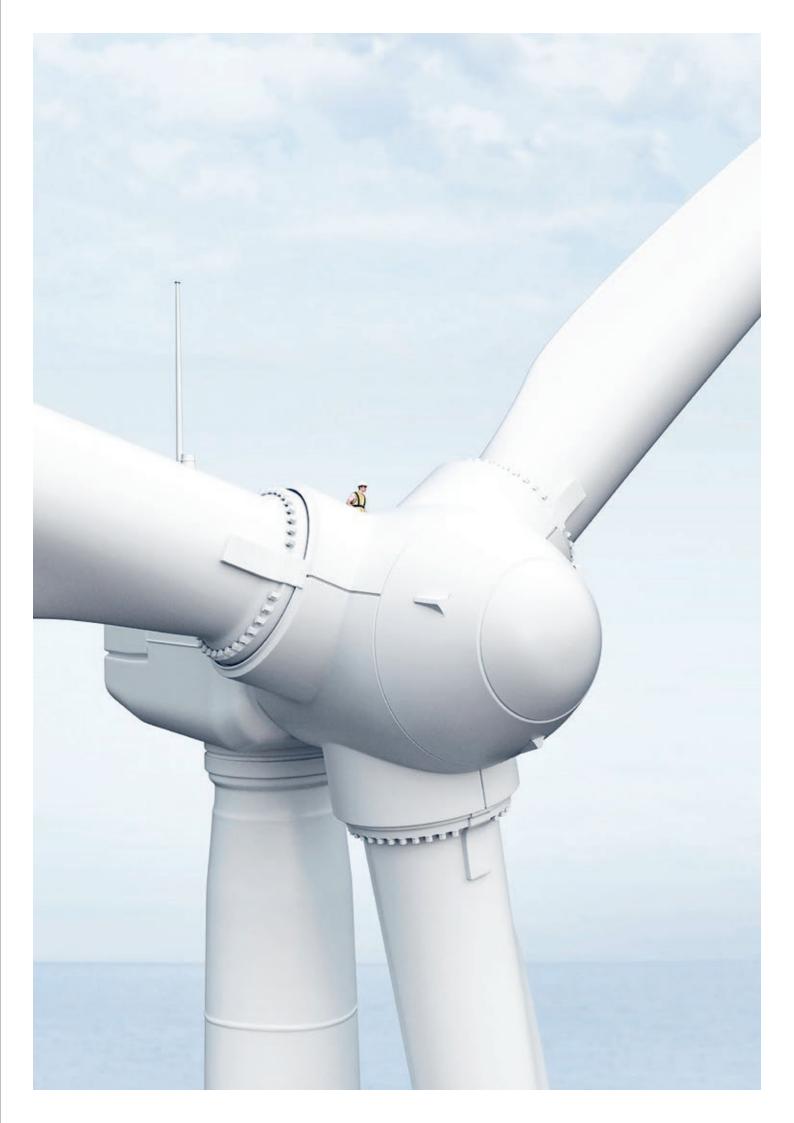
Innovation and impact

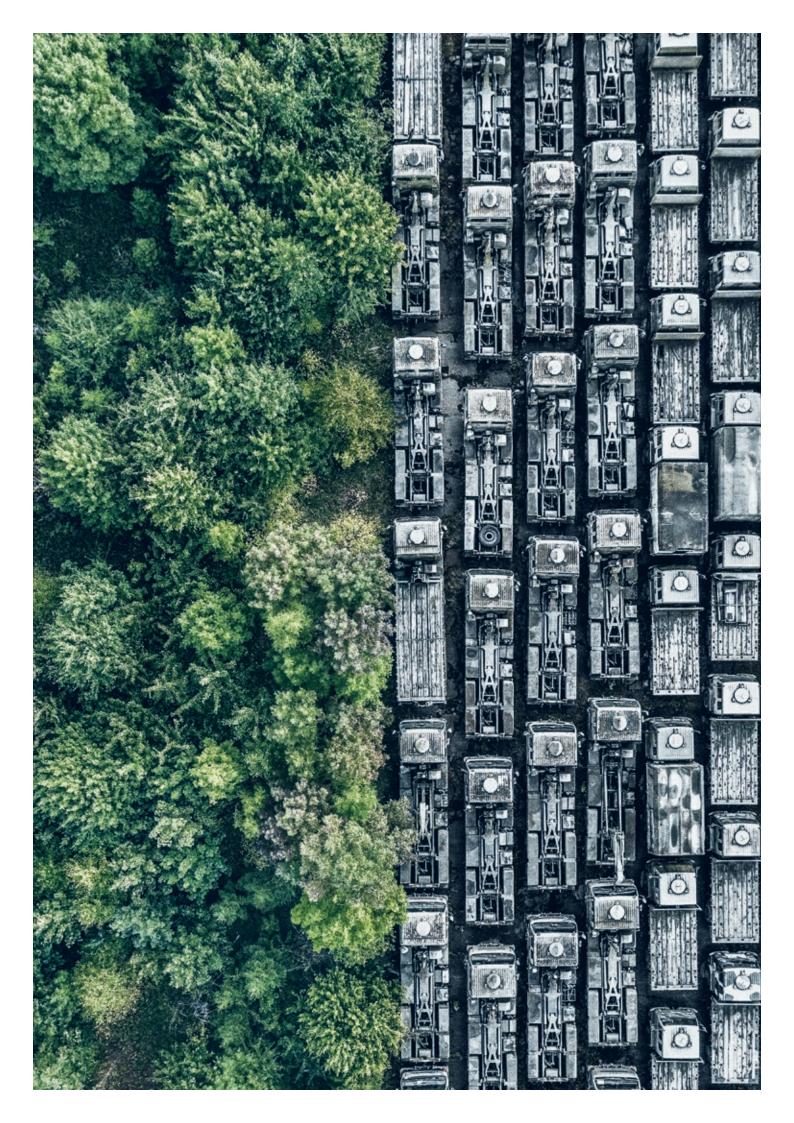


# A few words about our research

This is the eighth of our reports covering billionaires, focusing on their wealth and ambitions during an era of historic wealth generation, business innovation and impact philanthropy. For the first time, we have spoken to UBS's billionaire clients for this report, canvassing 50 of them for their views on how to approach global challenges in a two-stage exercise, including both a survey and questions at a UBS event. UBS Evidence Lab also gathered information about billionaire patent filings relating to smart agriculture. Separately, we have tracked the wealth of more than 2,500 billionaires from 75 markets in the Americas, EMEA and APAC. The results of our research have been analyzed by UBS subject matter experts, who have unique insights into how wealthy individuals are approaching environmental and social challenges through their businesses, investments and new forms of philanthropy. (For more information, see our methodology on page 50.)

Foreword		7
Executive	summary	8
Section 1:	Tackling environmental and societal problems  Driving change through business, investment and philanthrop	10 <sup>Dy</sup>
Section 2:	Spotlight on smart agriculture  Boosting food production	24
Section 3:	Towards an "impact economy"?  Scaling up capital through collaboration	38
Wealth tra	icker	44





# Foreword

Dear reader,

Now in its eighth edition, this report has charted the evolution of the billionaire landscape over close to a decade.

Our latest research – which has surveyed a sample of UBS's billionaire clients for the first time – shows us that in uncertain times, billionaires matter. Many are successful entrepreneurs, changemakers who turn ideas and inventions into innovations that others adopt and follow. As such, they're in a powerful position to deliver not just capital, but also fresh approaches and better ways of doing what's needed to tackle global challenges.

This year's report highlights how many of the wealthiest in society see it as their responsibility to lead the way, using their wealth or resources to help tackle unprecedented environmental and societal challenges.

In the past, philanthropic or impact investment capital would have been channeled towards these issues. Our research shows that billionaires are now using their *business capital* to generate return and impact.

The combination of plentiful long-term capital and innovation has the potential to create huge change and opens up new opportunities for a different approach to investing. We know, for example, that billionaires take a longer-term view than public companies. This makes them willing to entertain longer periods for returns as well as being comfortable investing in companies at varying stages of maturity – unlocking capital for earlier stage companies.

We remain realistic about the ability of private capital on its own to solve the world's problems. While we see this convergence as a clear trend, will it be done in sufficient scale to help meet the UN's sustainability goals (SDGs) and the race to zero carbon? There are reasons for optimism and those who can connect billionaires to opportunities globally, such as UBS, play an important role in this trend.

George Athanasopoulos Head of Global Family and Institutional Wealth UBS Global Wealth Management

Alice Page Head Ultra High Net Worth Solutions Group UBS Global Wealth Management

# Executive summary

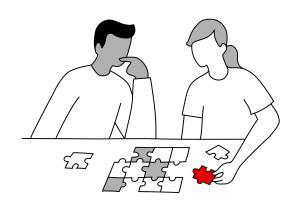


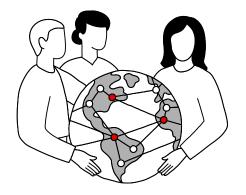
#### Ninety-five percent of surveyed billionaires believe that they should use their wealth or resources to help tackle global challenges.

In our survey of billionaire clients, just over two thirds state it's their responsibility to "lead the way," while almost a third believe they should use their wealth or resources to help tackle these challenges.

## They are doing so across their activities, not just through philanthropy.

With many of today's billionaires being self-made entrepreneurs, they're most commonly driving environmental and social change through their businesses. However, they also do so through philanthropy and investing. Almost a fifth of those surveyed see their capital as a catalyst – helping to create solutions that others can adopt at scale.





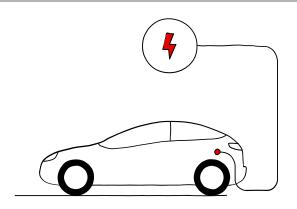
## Turning to legacy, making a positive impact on society is a priority.

Almost half of our clients surveyed say that they want to tackle global challenges for the sake of future generations, with a third stating that they want their resources to have a positive impact on the world.

## They see the greatest opportunities for impact in smart agriculture, clean water and poverty alleviation.

More than 40% of the billionaires surveyed see smart agriculture as one of the areas where they can make the greatest impact, alongside clean water and poverty alleviation. While they also see opportunities in green energy as well as waste management and recycling, they believe government has a greater potential role in these areas.





# Energy and Asia judged best for financial opportunities.

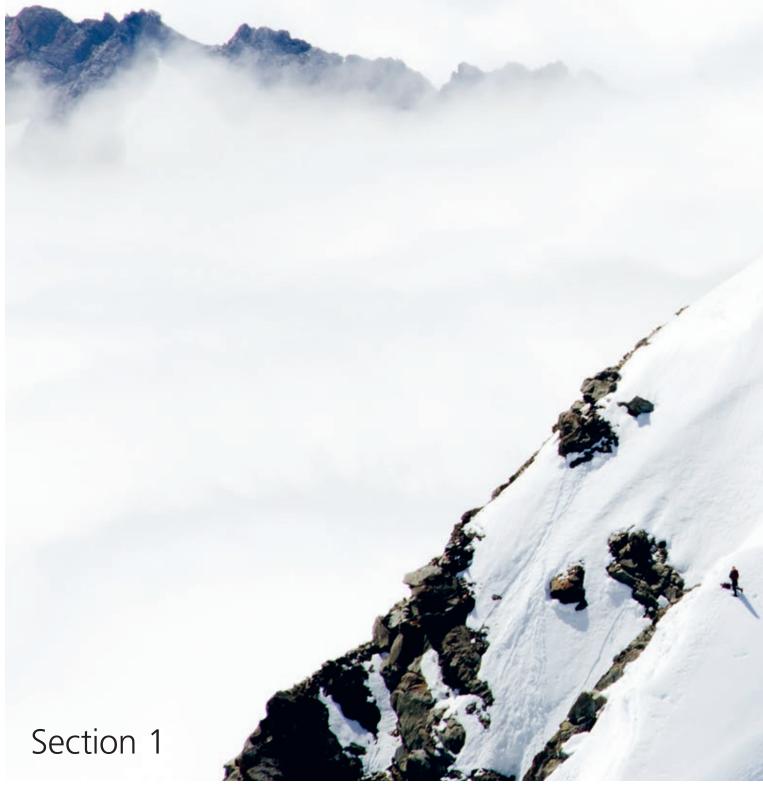
When it comes to purely commercial business and investment opportunities, the billionaires surveyed view the energy sector and Asia-Pacific economies as having the best outlook over the next five years.

## Global collaborations can lead to a new era in finding solutions to the world's problems.

At UBS, we believe that billionaires can make the greatest environmental and societal difference if they connect with others in global collaborations. By doing so, they can scale up capital and new ways of doing things to make a material difference.



# Tackling environmental and societal problems





Billionaires aim to use their wealth or resources to tackle the world's environmental and societal problems – from initiatives that tackle climate change to biodiversity, health, education and inequality. That's the main finding from our survey of UBS's billionaire clients. They're acting across a number of their activities, and a significant minority are prepared to put their capital at risk to trial new models of philanthropy for investors and governments to adopt at scale.

In total, almost all of those surveyed believe they should use their wealth or resources to help tackle global challenges. More than two thirds see it as their responsibility to "lead the way" in tackling global challenges in areas such as green energy, education, poverty alleviation and healthcare. Additionally, almost a third agree that they should use their wealth or resources to help resolve environmental and societal problems.

A European billionaire interviewed as part of the research process explained: "It's really important to have your feet on the ground and be able to understand the power you have and how you could use it in a very powerful and positive way."

## Most billionaires feel responsible for tackling global challenges

Which one of the below statements comes closest to your views about the responsibilities you and your peers have in tackling global challenges (e.g. green energy, education, poverty alleviation, healthcare, etc.)?

67%

It's our responsibility to lead the way on this and use our wealth and/or resources to help tackle global challenges



29%

It's not our responsibility to lead the way on this but we should use our wealth and/or resources to help tackle global challenges

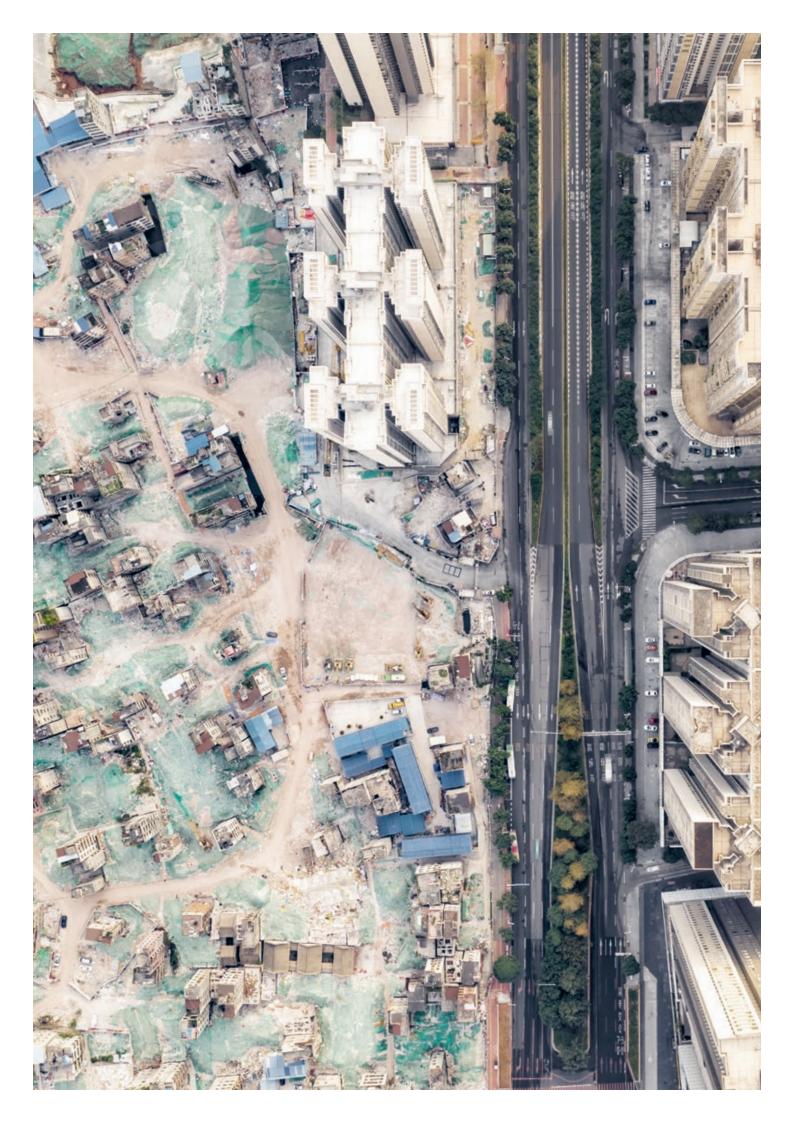


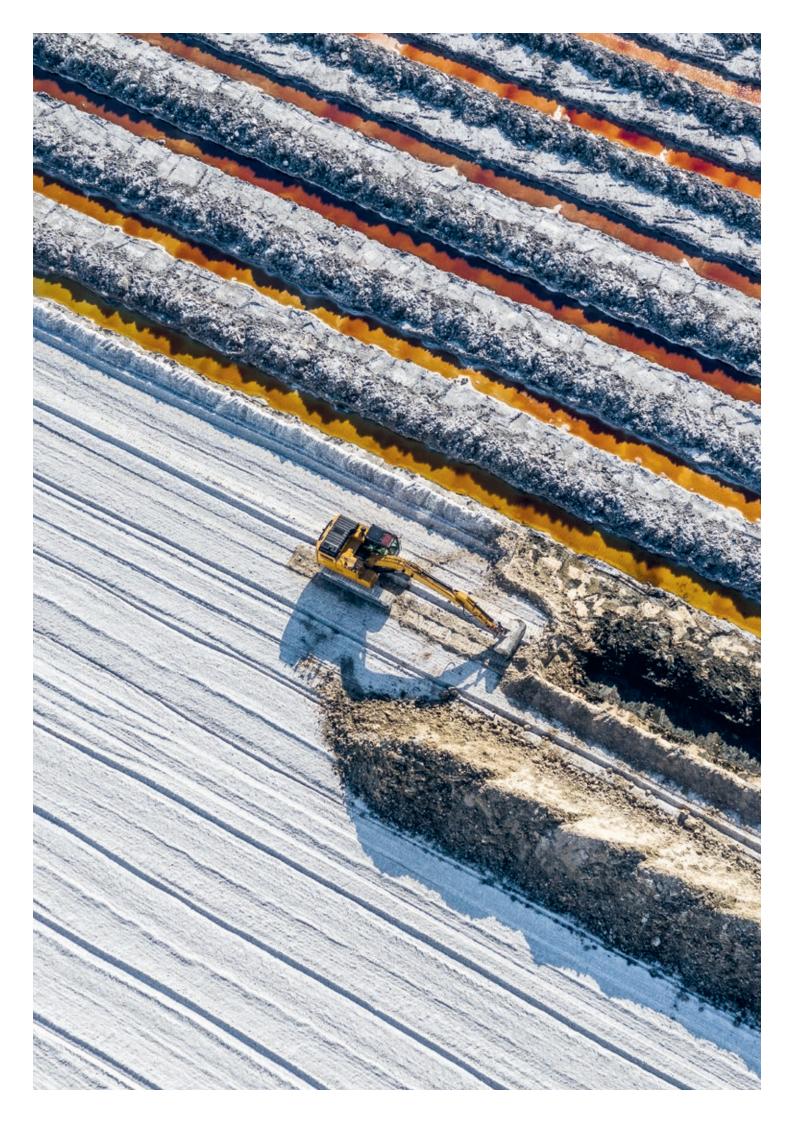
5%

It's not our responsibility to lead the way on this and we shouldn't have to use our wealth and/or resources to help tackle global challenges



Source: UBS Billionaire Survey 2022. Numbers may not total 100% due to rounding





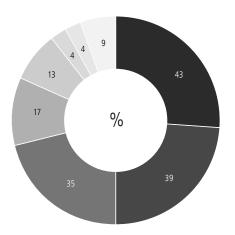
"It's really important to have your feet on the ground and be able to understand the power you have and how you could use it in a very powerful and positive way", a European billionaire explained. Billionaires are using multiple means to drive change. Through businesses, philanthropy and investments, they're developing solutions for today's challenges. Most commonly, over four in ten billionaires report acting through their businesses to address global challenges. Additionally, just over a third are doing so through investing. And almost four in ten are taking action through philanthropy.

Notably, they're likely to have both commercial and altruistic motivations. As the drive for decarbonization intensifies, sectors such as green energy, electric vehicles and solar panels are growing fast. There are also potential investment rewards from venture capital investment in areas like smart agriculture and clean water. What's more, innovative forms of philanthropy such as blended finance are also emerging. Societal change depends not just on innovation but the ways in which innovation is practically deployed.

Indeed, the lines between investing and philanthropy are blurring: almost one in five of the surveyed billionaires see themselves as catalytic capital investors – that is accepting a lower return on their investments, or greater risk, in order to establish more effective ways of solving problems that others can then adopt. This indicates they are prepared to test fresh solutions for problems that can make a difference at scale.

## Business, investment and philanthropy are all making an impact

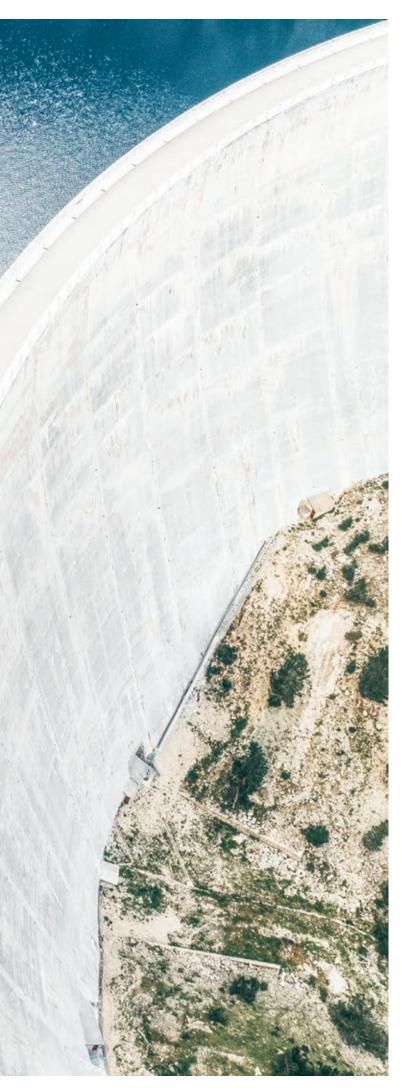
Which, if any, of the following are ways in which you feel you currently get involved in addressing global challenges (e.g. green energy, education, poverty alleviation, healthcare, etc.)?



- Through my business(es)
- Through philanthropy / charitable giving
- By investing in areas connected to the world's global challenges
- As a catalytic capital investor (i.e. I've accepted a lower level of return or a higher level of risk in order to change the financial conditions of an investment and encourage others to invest)
- Raising awareness of the world's global challenges
- By partnering with charities as an advocate and/or ambassador
- Other
- Not applicable I don't feel I currently get involved in supporting global challenges in any way

Source: UBS Billionaire Survey 2022





# From smart agriculture to clean water and education

While there are many high-profile solutions to global challenges being developed by billionaires, there are equally many lesser-known initiatives. It's not just the engineers of electric vehicles, architects of cures for disease in developing countries or mass-producers of solar panels who are having a positive impact.

The survey highlights the areas where UBS's clients see the greatest opportunity to make a difference. From the options in our guestionnaire, smart agriculture, clean water and sanitation, and the broad area of economic development and poverty alleviation were identified by clients as the top areas where they can have the greatest positive impact in the future. Green energy and green infrastructure are also popular choices, with over a third seeing the opportunity to make a positive impact in each area, while access to education is viewed as an opportunity by just under a third. Education and talent development were also viewed as an area of opportunity for making positive impact by the billionaires canvassed at a UBS client event, showing how philanthropy and business often overlap, as well as illustrating the role of outcome-based philanthropy. In the words of one European billionaire: "... it has to be a lot about doing things with education, because we know that every generation starts with the education they receive, and they are the ones that could actually make the world change."

Yet while billionaires may be the innovators who pioneer better ways of doing things, often only governments have the means to use that innovation for widespread change. For instance, in smart agriculture as well as clean water and sanitation the respondents see a roughly equal opportunity for private-sector entrepreneurs and government to make a difference. In areas like green energy or waste management and recycling, however, they believe government has the greater opportunity. When billionaires at our client event were asked where governments could make the greatest positive difference, they highlighted areas associated with regulation, as this often determines whether conditions are favorable for investment and growth.

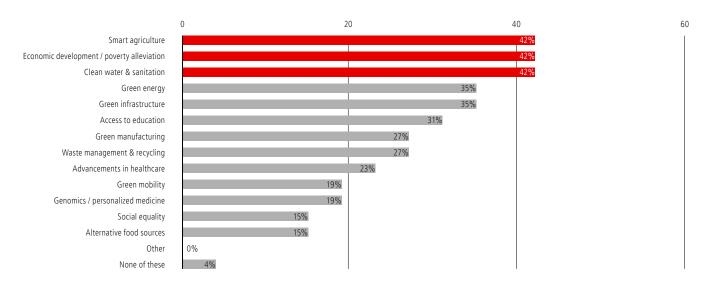
Barriers remain in the field of impact investing. More than a third (36%) of respondents don't think impact investments are sufficiently well established. Almost a third (32%) believe it's hard to measure the investments' actual impact. And almost one in five (18%) worry impact investing could carry a cost in terms of lower returns.

To illustrate how billionaires' capital is having an impact, we have concentrated on smart agriculture (see Spotlight section of this report). Taking what's often a venture capital type approach, billionaires are deploying data, artificial intelligence and automation to transform one of the world's oldest foundational industries.

In the words of a European billionaire: "... it has to be a lot about doing things with education, because we know that every generation starts with the education they receive, and they are the ones that could actually make the world change"

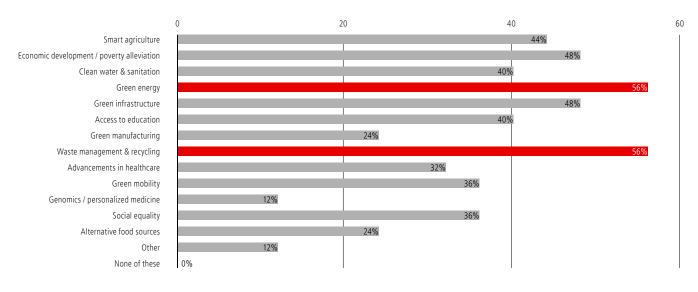
#### Areas of focus for billionaires and governments

Thinking about each of the following areas connected to global challenges ... In which, if any, of the following areas do you think there will be opportunity **for you and your peers** to make the greatest positive impact in the future?



Source: UBS Billionaire Survey 2022

Thinking about each of the following areas connected to global challenges ... In which, if any, of the following areas do you think there will be opportunity for states / government bodies around the world to make the greatest positive impact in the future?



Source: UBS Billionaire Survey 2022



# Legacy: prioritizing impact and values

Just as billionaires are turning their attention to society's greatest challenges, so their attitude to legacy appears to be changing in similar ways. Many of today's billionaires appear most interested in leaving legacies based on positive values and making the world a better place.

When asked about what they would like their legacies to be, just over three quarters of respondents would like to pass down their values and principles to their family and the next generations. Giving an insight into what these values are, almost half (48%) say they get involved in addressing global challenges as it's important to help future generations, with a third stating that they want to use their resources to have a positive impact on the world. But as businesspeople and investors, over four in ten (43%) think that addressing global challenges will help them to combine their values with financial returns. Acknowledging that global challenges may now offer financial opportunities, almost a third (29%) think these areas will be the source of the best future investment returns.

#### Type of legacy to leave behind for future generations

Which, if any, of the following best describe the type of legacy you would like to leave behind for future generations?

Family Give back Solve challenges Economic growth Pass on my knowledge None I would like to pass on my I would like my businesses to I would like my businesses to I would like to give back to I would like to help advance None of these values and principles to my society financially and/or help provide jobs and help solve future societal society and/or pass on my family and/or the next challenges donate to causes that are stimulate economic growth knowledge around a generations important to me particular topic or area

Source: UBS Billionaire Survey 2022

**CASE STUDY** 

#### Engineering the UK's small nuclear power plants

In order to meet its net zero the commitments, the UK is developing a fleet of small modular reactors (SMRs), with funding from a consortium including the French Perrodo family.

The industry consortium led by Rolls-Royce, the UK aeroengine maker, is joining the British taxpayer to put GBP 405 mn into developing the SMRs. Rolls-Royce has funding from US energy company Exelon Generation and the Perrodos through their BNF Resources investment vehicle.

The small, modular design allows the power station parts to be built in factories ready for quick assembly at chosen locations, making them far cheaper than traditional nuclear power stations.

CASE STUDY

#### Slashing aviation emissions by 70%

When Breakthrough Energy Ventures (BEV) announced a USD 50 million grant for Lanzajet Freedom Pines Fuels' sustainable aviation fuel (SAF) plant in October 2022, this was the latest of its initiatives in pursuit of the goal of net zero carbon emissions by 2050.

Backed by investments from more than 30 of the world's best-known billionaire entrepreneurs, BEV is accelerating technological transformation. It's supporting cutting-edge research and development, investing in companies that turn green ideas into clean products and advocating policies that speed innovation.

Lanzajet's plant in Georgia in the United States will be the first in the world to produce alcohol-to-jet SAF on a commercial scale. Projected to be operational in 2023, the plant's SAFs will lower carbon emissions by at least 70% compared with fossil fuels.

## **Energy sector and Asia-Pacific judged best for medium-term opportunities**

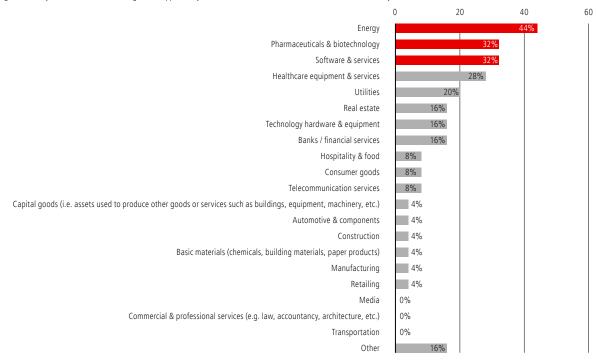
When it comes to purely commercial business and investment opportunities, the billionaires surveyed have clear ideas about where they see most potential in the next five years (irrespective of global challenges). From a sector perspective, they favor energy, possibly due to today's supply constraints and the accelerating secular transition to renewables. At the same time though, they continue to favor technology and healthcare businesses – some of which have fallen from grace in terms of public equity market valuations in 2022.

Regionally, they are primarily looking to Asia-Pacific economies such as Southeast Asia and India, where economic growth remains robust. North America, with its huge domestic market and vibrant entrepreneurial culture, also remains a popular region. While still ahead of the rest of the world, mainland China lags these regions somewhat. Meanwhile, surprisingly few are drawn to Western Europe considering its position as one of the world's major economic blocs.

Yet billionaires aren't entirely optimistic. When asked what concerned them most at a UBS client event, the most common answer was geopolitics, closely followed by inflation.

#### Energy viewed as top sector for business/investment returns

In which of the following sectors do you think there will be the greatest opportunity for business and/or investment returns over the next five years?



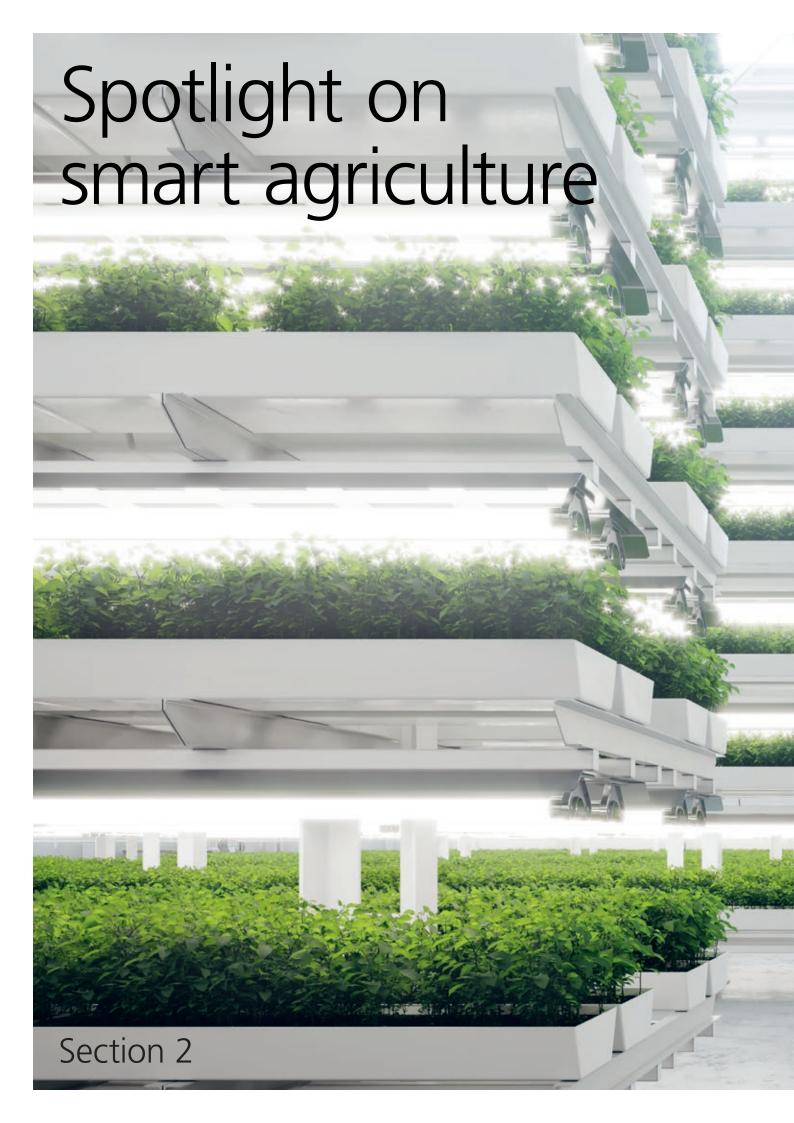
Source: UBS Billionaire Survey 2022

#### APAC and North America are best for business/investment returns

In which of the following regions do you think there will be the greatest opportunity for business and/or investment returns over the next five years?



Source: UBS Billionaire Survey 2022





# Using technology to boost food production

As the world's population approaches record levels, water shortages and war threaten our food supply. Through smart agriculture, billionaires are supporting pioneering food production that's kinder to the environment and closer to home.

With drought in parts of Africa and rainfall declining across many regions of the globe, feeding the world is a fundamental challenge. Today's global population of 7.6 billion is forecasted by the United Nations to reach 9.8 billion by 2050, and current intensive farming methods are considered unsustainable. On top of that, the war in Ukraine is creating food shortages in the Middle East and Africa.

Against this backdrop, just over four in ten of the billionaire clients surveyed see smart agriculture as one of the areas where they can make the greatest impact. For many billionaires, finding ways to raise agricultural productivity is a natural problem to address, as they own tracts of farmland.



Smart agriculture involves the use of technologies like the Internet of Things, sensors, robots and artificial intelligence to raise the quantity and quality of crops. Analysis of agricultural technology (AgTech) funding rounds shows that billionaires such as Bill Gates, Richard Branson and Jack Ma have been active investors, according to Crunchbase data. Similarly, companies associated with billionaires have filed an increasing number of technology patents globally. (See chart on pages 30/31)

#### CASE STUDY

#### Making water flow further

Every year more countries are experiencing droughts, putting a premium on the water we need for drinking and irrigation. Recognizing the urgency, billionaire investors are investing to modernize water infrastructure.

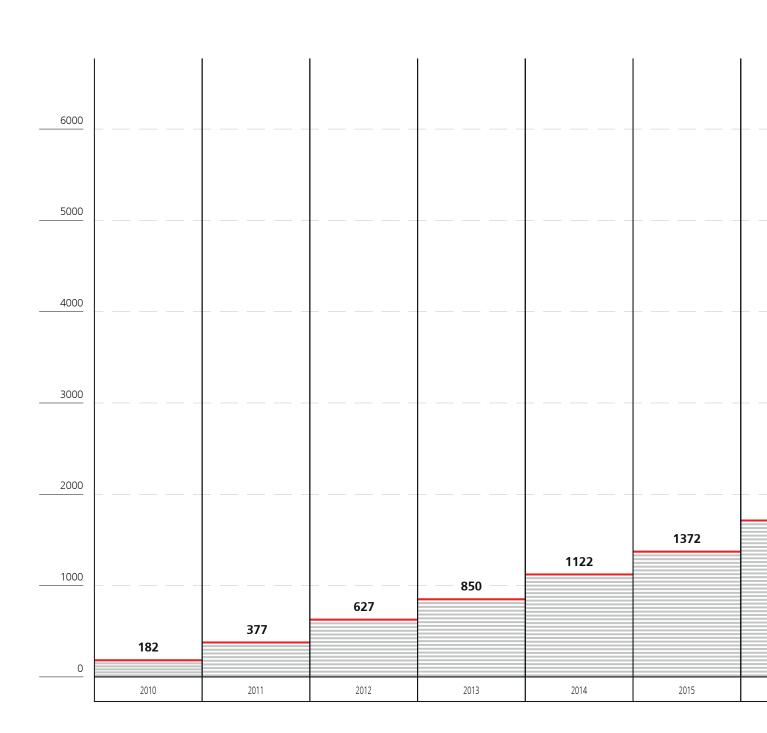
Whether through indoor farms waste water treatment technology or simply the construction of more waste water treatment plants, they are investing to make limited water resources stretch further.

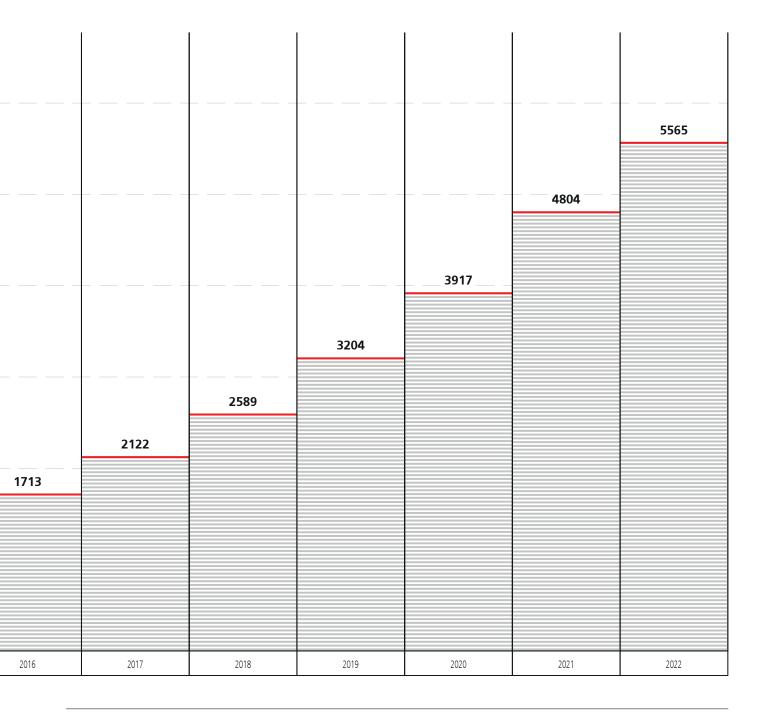
Take Cambrian Innovations, the US waste water company where Laurene Powell Jobs, widow of Apple Inc.'s founder, is reportedly an investor. Using electrically-charged microbes to digest companies' refuse, Cambrian is producing clean water and energy. And, in Ghana, billionaire Joseph Agyepong is building a series of waste water treatment plants through his companies.



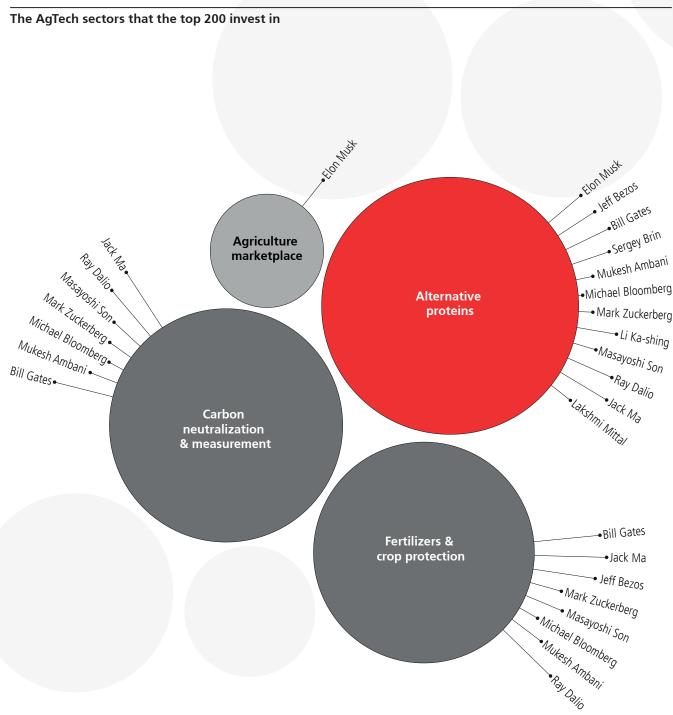
# Rising trend in billionaire smart-agriculture patents

Cumulative number of patents from billionaire-related companies, identified by selected keywords\*





# Where billionaires are investing in agricultural technology



Source: agfundernews.com Data until end of October 2022



#### Agriculture marketplace

B2B e-commerce marketplaces for farmers (with products ranging from seeds to equipment).

#### Fertilizers & crop protection

New fertilizer technologies and methods of crop protection.

#### Industrial genetic engineering

Developing gene-edited crops which are more resilient to drought and produces higher yields.

#### **Alternative proteins**

Plant-based and food-technology alternatives to animal protein. Similar in taste and texture to real meat, they generate fewer greenhouse gas emissions.

### Carbon neutralization & measurement

Reducing carbon emissions by using energy sources and efficient processes that emit fewer greenhouse gases.

#### Supply chain management

The planning and management of all activities involved in sourcing and procurement, as well as related logistics.

#### **Vertical farming**

Vertical or indoor farms grow produce in vertically staked layers. This method of farming increases crop yields, and reduces the amount of farmland needed with consequent environmental benefits.

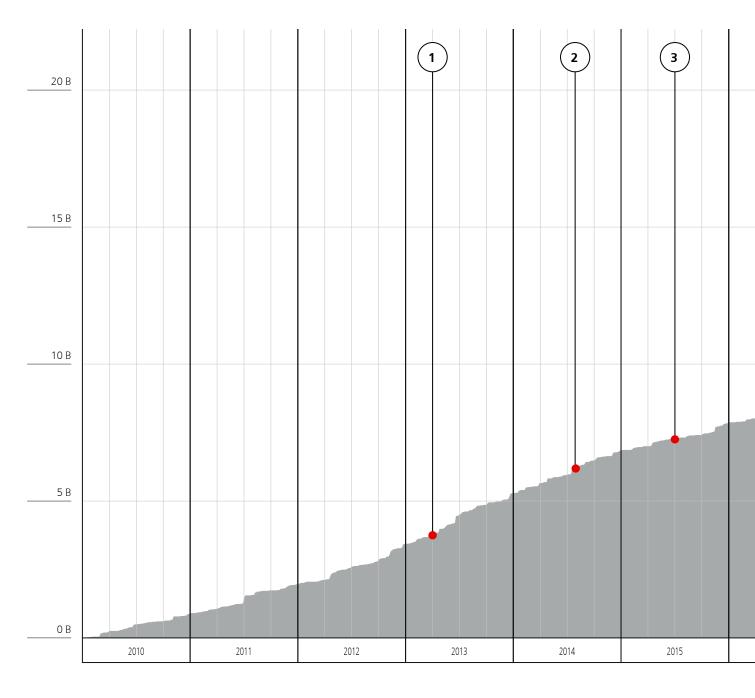
## Smart crop monitoring & management

Smart sensing technology monitors the state of crops, allowing farmers to optimize watering, pest control and harvesting in order to improve productivity.

#### **Smart machinery & equipment**

 $\label{eq:Hi-tech} \mbox{Hi-tech agricultural machinery} - \mbox{including robots, satellites and} \\ \mbox{drones} - \mbox{can reduce CO}_2 \mbox{ emissions and use of ammonia fertilizers,} \\ \mbox{while boosting crop yields.}$ 

# Agricultural technology's major private investment rounds since 2010



#### The biggest private market investment rounds into AgTech companies as tracked by Crunchbase since 2010

#### 1 April 22, 2013

Fertilizers & crop protection Venture Round 13'000'000

Grosvenor Food & AgTech

#### 5 July 19, 2017

Vertical farming
Series B
200'000'000
Finistere Ventures

#### 9 May 26, 2021

Fertilizers & crop protection Series D 250'000'000 Upfront Ventures

#### 2 July 29, 2014

Smart crop monitoring & management Series A 25'000'000 Promus Ventures

#### 6 December 13, 2018

Smart crop monitoring & management Series B 90'000'000 Almanac Insights

#### 10 February 3, 2022

Fertilizers & crop protection
Post IPO Equity
125'500'000
Fall Line Capital

#### 3 June 30, 2015

Smart crop monitoring & management Series B 40'000'000 Promus Ventures

#### 7 February 20, 2019

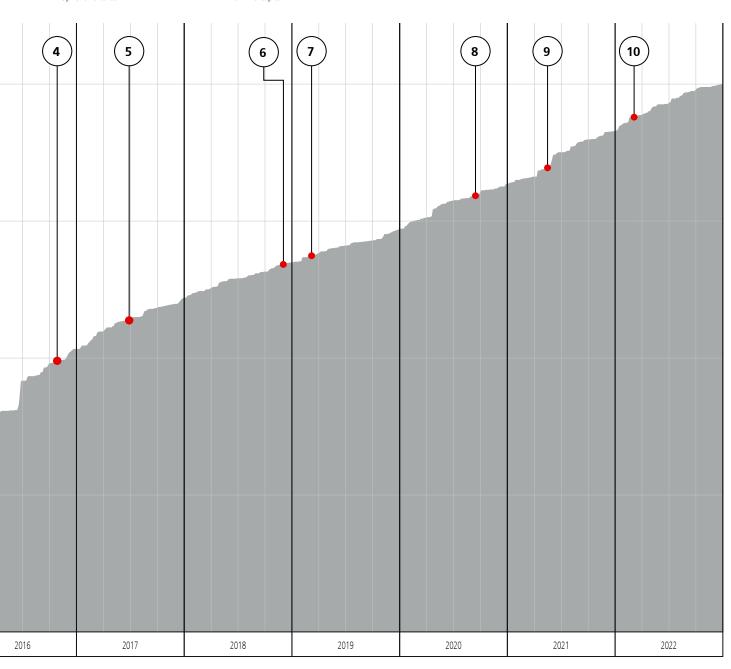
Alternative proteins
Series C
148'000'000
VisVires New Protein

#### 4 December 13, 2016

Fertilizers & crop protection
Series B
33'000'000
Upfront Ventures

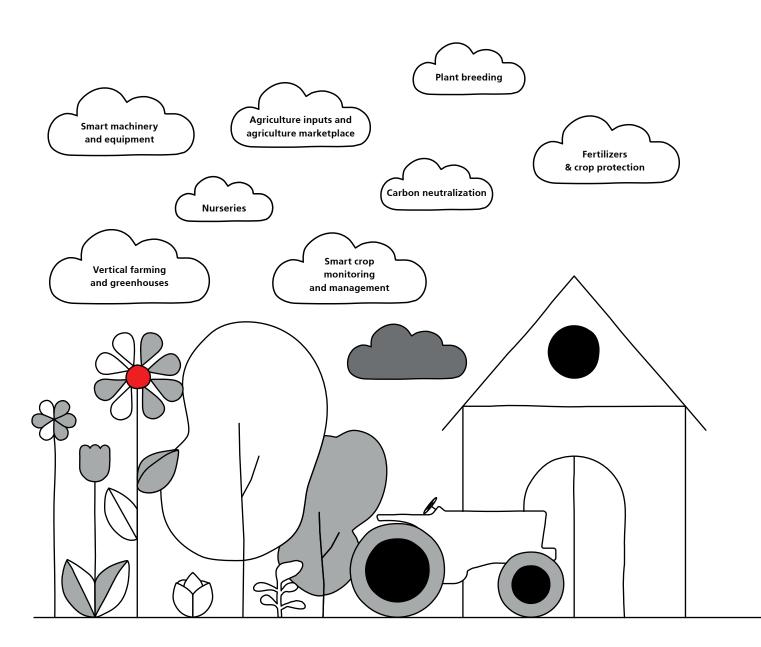
#### 8 September 16, 2020

Vertical farming Series C 170'000'000 Astanor Ventures



# Transforming productivity from farm to table

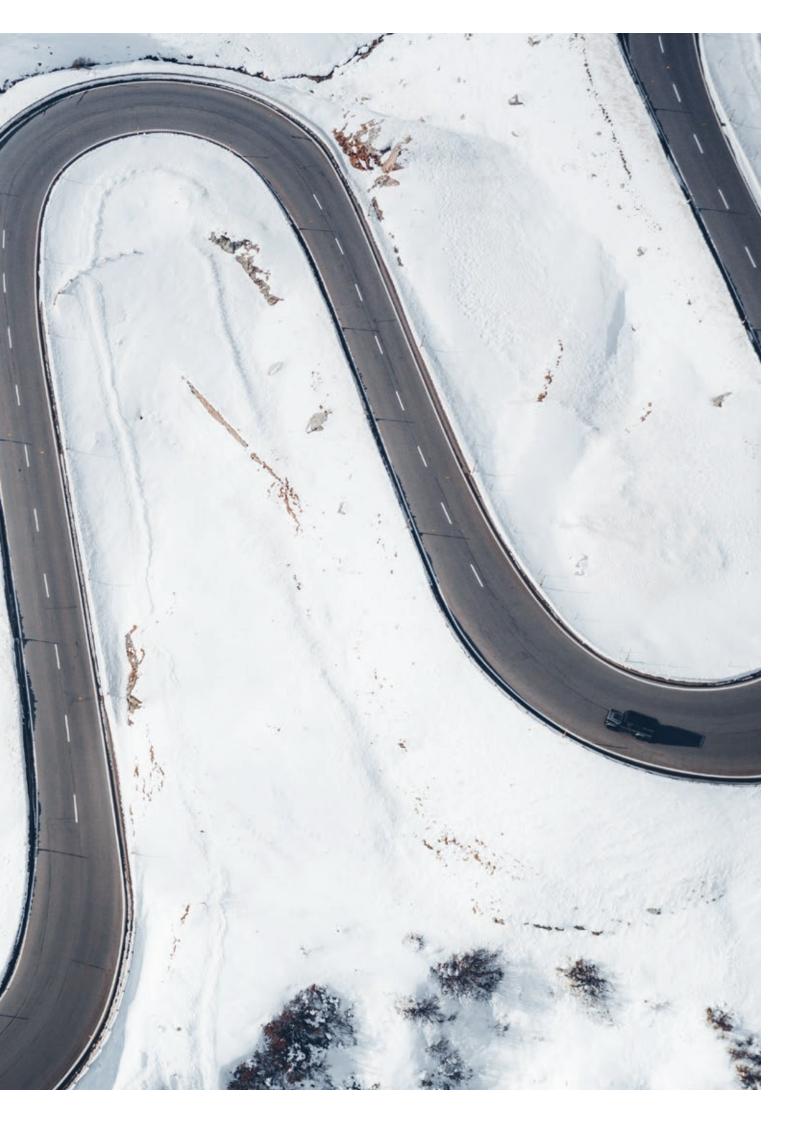
Our research shows that billionaires are most active at the beginning of the farm-to-table value chain, where they see great potential for AgTech to transform productivity and reduce environmental damage. For instance, companies associated with billionaires are trialing ways to decrease cows' methane emissions, cutting herbicide use through targeted spraying and developing smart rice farming technology. Further, they're building indoor or vertical farms, using less water and land (although energy use is high).



Many of these AgTechs are only now being developed. Once widely adopted and scaled up, they have the potential to help solve the problem of feeding a growing population from farmland that's under pressure.



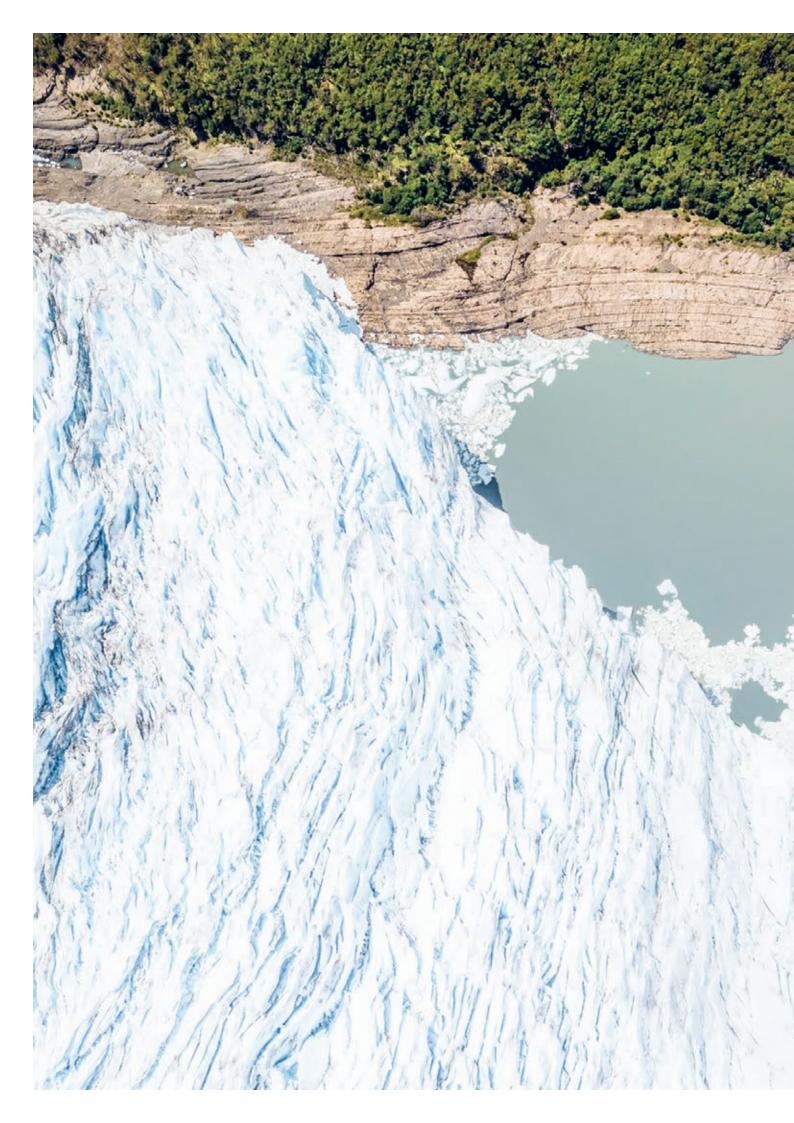


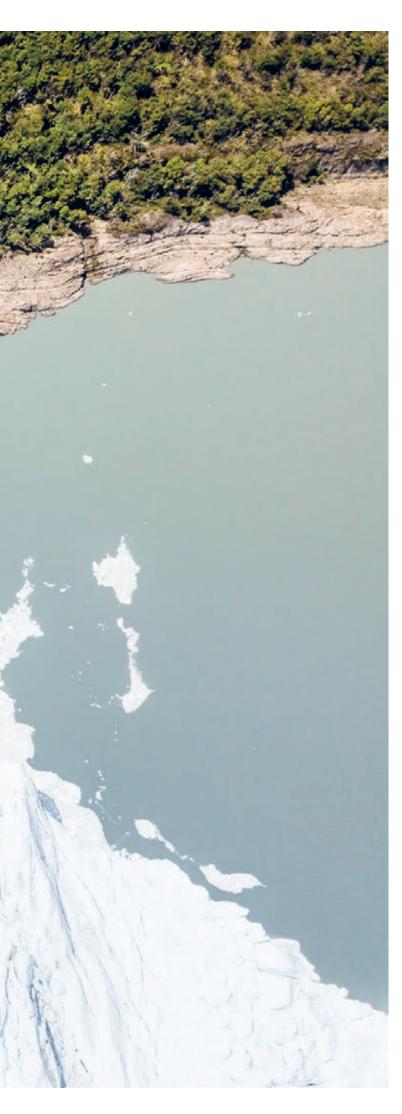


The research conducted for this report suggests that we may be at the beginning of a new era as billionaires turn to solving the great problems of our age. They're in a unique position to do so, as they're often master business innovators, with sufficient wealth to invest for the long term and to take a higher risk of loss.

To illustrate the potential, long-term capital has been used to incubate future for-profit solutions such as MRNA vaccines in business, or to introduce payments-for-results mechanisms in fields such as education that leverage traditional philanthropy with investment capital.







But even the wealth of today's billionaires, standing at close to record levels (see wealth tracker on following pages), is insufficient to meet today's needs. Reaching the UN's 17 sustainable development goals (SDGs) will require an estimated USD 3.7 trillion to fill the annual SDG funding gap.¹ The SDGs span improving health and education, reducing inequality and spurring economic growth – all while tackling climate change and preserving biodiversity. On top of that, an estimated USD 4–6 trillion is required annually for the transition to a low-carbon economy.²

Capital alone is not enough, which is why the long-standing tendency of billionaire entrepreneurs to innovate, collaborate and take long-term risks is vital. The history of business innovation is well documented – the entrepreneurs responsible for some of the greatest innovations such as electricity or the first aircraft have commercialized the inventions of others at scale.

So, are we moving towards an era when billionaires and others apply their capital and ingenuity at scale to solve the world's problems? While this remains to be seen, the survey of UBS's clients in this report is among the encouraging signs that they're doing so – whether through business collaborations, venture capital type funds or new models of philanthropy / blended finance (including those developed by UBS Optimus Foundation).<sup>3</sup>

We believe that we may be at the beginning of just such an era: a transition to an "impact economy." There's an opportunity for billionaires and others to use their capital as a catalyst for better ways of solving today's problems, which can then be scaled up with further entrepreneurial and institutional capital, as well as government backing.

<sup>&</sup>lt;sup>1</sup> Organisation for Economic Development and Cooperation 2021.

<sup>&</sup>lt;sup>2</sup> UN Environment Programme's Emissions Gap Report 2022.

<sup>&</sup>lt;sup>3</sup> UBS Optimus Foundation focuses on social impact in a variety of ways, from traditional charitable giving to social finance (ubs.com/optimus).

# Exceptional wealth volatility: yet rise of innovators continues

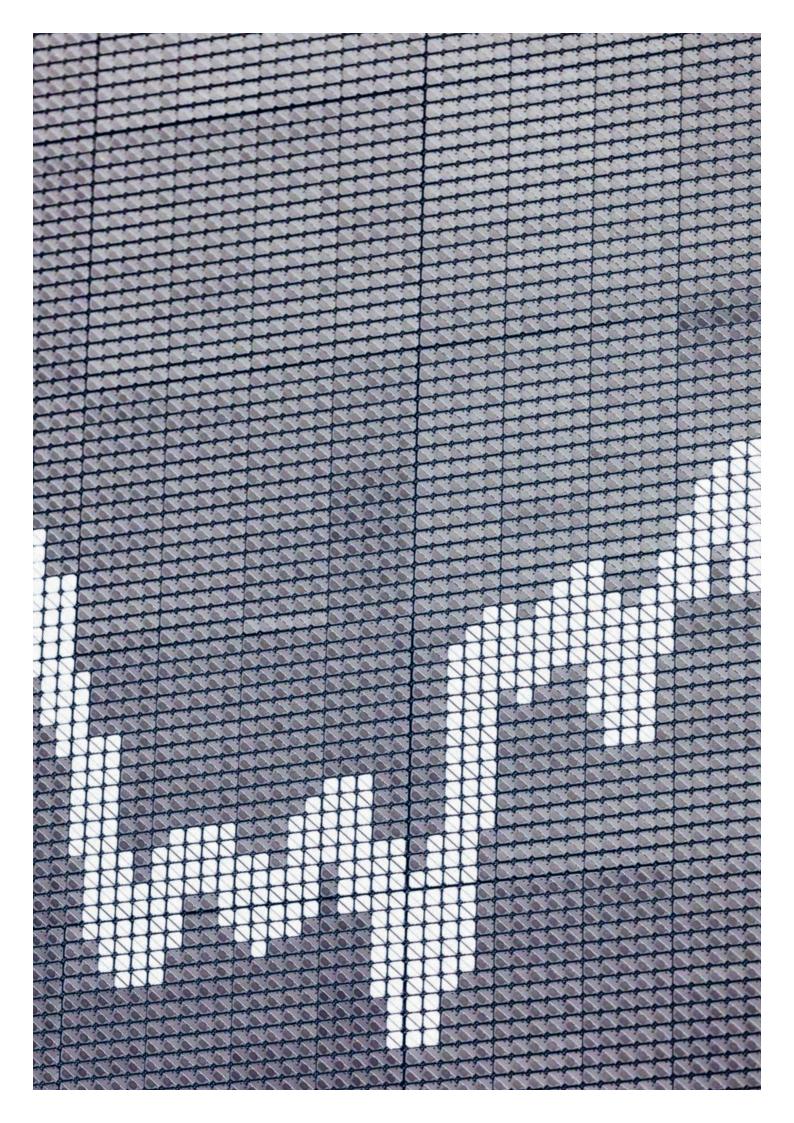
It's a time of shifting fortunes. Rapidly rising interest rates, stop-start pandemic re-openings and war in Europe are feeding market uncertainty and volatility, with wealth created and eroded in almost equal measure. Yet amidst the instability some themes persist – especially the broad concept of smart innovators rising to the top.

While the flux in billionaire wealth is exceptional, the total wealth and number of billionaires was only slightly lower at the March 2022 cut-off date for our data than 12 months earlier. There were 2,668 billionaires worth USD 12.7 trillion in March 2022, down somewhat on a year earlier when 2,755 individuals accounted for USD 13.1 trillion in 2021. (Notably, however, the total wealth and number of billionaires is likely to have fallen further since March 2022 due to declines in asset prices.)

There is a considerable underlying turnover in billionaires behind the data. A fifth (20.4%) of their population changed from 2021 to 2022, as 360 (11.6% of the cohort) saw their wealth dip below a billion dollars, while 273 (8.8%) reached that level.

For context, turnover was higher in 2021, but this was due to the number of new billionaires, as super-loose monetary policy intended to ease pandemic stresses lifted asset prices. In that year, 29.2% of the cohort changed. There were 744 new billionaires and only 84 dropouts.





#### Number of new and dropped-out billionaires by sector in 2022

	Droppe	d-out	Nev	V	Billionaire population			
Organization	No. of billionaires	% of Total	No. of billionaires	% of Total	Final worth USD bn	No. of billionaires		
Automotive	8	10.3%	8	10.3%	518.5	68		
Construction & engineering	3	5.9%	5	9.8%	123.9	46		
Diversified	21	9.9%	14	6.6%	946.3	181		
Energy	9	8.2%	6	5.5%	471.3	97		
Fashion & retail	45	14.9%	21	6.9%	1′616	249		
Finance & investments	30	7.0%	50	11.6%	1′741	392		
Food & beverage	31	13.0%	15	6.3%	935.35	203		
Gambling & casinos	4	14.3%	2	7.1%	107.6	23		
Healthcare	29	11.7%	24	9.7%	709.1	216		
Logistics	4	9.5%	4	9.5%	196.2	35		
Manufacturing	37	9.7%	44	11.6%	1′096	338		
Media & entertainment	10	9.2%	10	9.2%	443.1	95		
Metals & mining	13	15.7%	6	7.2%	379.6	67		
Real estate	35	14.7%	12	5.0%	686.7	192		
Service	24	29.6%	3	3.7%	190.3	54		
Sports	0	0%	3	11.1%	98.6	27		
Technology	57	13.8%	41	9.9%	2′239	348		
Telecom	0	0%	5	13.5%	207.1	37		
Grand Total	360	11.6%	273	8.8%	12,706	2,668		

### From fintech to tech and electric vehicles

Analyzing the results by sector gives insights into new economic themes, as well as the rise of disruptors, some of them in "green" industries.

Notably, finance and investments had the highest number of billionaires (392 in aggregate) as well as one of the greatest turnovers. Taken together, their wealth totaled USD 1.7 trillion. Fifty new billionaires were created during the year, while 30 dropped from the list. Among the new billionaires were fintech disruptors, as well as private equity and hedge fund partners.

Technology, the second most populous sector, also experienced a considerable flux. There were 41 new tech billionaires while 57 disappeared, leaving a total of 348 worth USD 2.2 trillion. This instability reflects the dynamism of a sector where barriers to entry are low and innovation is perpetual.

Finally, manufacturers flourished amid extraordinary demand for durable goods, as well as the emergence of new electric vehicle and battery entrepreneurs. There were 338 manufacturing billionaires in 2022 worth a total USD 1.1 trillion, with 44 new joiners and 37 dropouts.

#### Number of billionaires and their wealth by selected countries

		2021				2022			
Country	Final worth	YoY % difference	No. of billionaires	YoY % difference	Final worth	YoY % difference	No. of billionaires	YoY % difference	
	USD bn				USD bn				
Brazil	211.7	66.6%	65	44.4%	186.7		62	-4.6%	
Canada	231.1	61.8%	64	45.5%	242.9	5.1%	63	-1.6%	
France	512.3	68.4%	42	7.7%	550	7.4%	43	2.4%	
Germany	625.5	40.3%	136	28.3%	608	-2.8%	134	<b>–</b> 1.5%	
Hong Kong	448.2	44.6%	71	7.6%	383.4		67	-5.6%	
India	596.4	90.8%	140	37.3%	749.8	25.7%	166	18.6%	
Japan	225.4	104.9%	49	88.5%	154.5		40	- 18.4%	
Mainland China	2′532	114.7%	626	61.3%	2'027		540		
Russia	578.1	51.8%	117	20.6%	326.9		83	<u>- 29.1%</u>	
Singapore	156.9	73.0%	27	0.0%	106.7	-32.0%	26	-3.7%	
Switzerland	145.5	50.9%	40	14.3%	181.9	25.0%	41	2.5%	
United Kingdom	213.9	38.9%	56	21.7%	199.1		49		
US	4′398	49.1%	724	17.5%	4′701	6.9%	735	1.5%	
Grand Total	10'875	64.7%	2′157	31.8%	10′418	-4.2%	2′049	-5.0%	

# Shifting regional fortunes

Location influenced fortunes to an exceptional degree. India's billionaires prospered as the country overtook the UK to become the fifth largest economy in 2022. Powered by a youthful labor force, it is the fastest-growing of the world's major economies. One hundred and sixty-six billionaires, up from 140 the previous year, increased their total wealth by a guarter (25.7%) to USD 749.8 billion.

While wealth was flat across Western Europe at a total of USD 2.3 trillion, with the number of billionaires falling from 474 to 467 year on year, Swiss billionaires fared better. Although the total number of billionaires living there only increased by one to 41, their combined wealth rose by a quarter (25.0%) to USD 181.9 billion, reflecting the country's position as a hub for finance, as well as pharmaceuticals and commodities trading.

The United States, home to about a third of billionaires globally, was resilient with 735 up from 724 in 2021. Total wealth rose by 6.9% to USD 4.7 trillion.

In the Middle East and Africa, overall wealth rose by 7.5% to USD 279.4 billion, although the number of billionaires fell from 91 in 2021 to 89 in 2022.

By contrast, wealth dipped in countries slow to emerge from the pandemic. Japan suffered from the twin effects of late reopening and a currency that fell significantly during the period, eroding the value of wealth in US dollars. There were 40 Japanese billionaires, worth a total USD 154.5 billion – a fall of almost a third (31.5%) on the previous year.

Mainland China's zero-COVID policy slowed the growth after many years as the world's fastest-growing large economy. There were 540 billionaires, down from 626 a year before. After a decade of significantly increasing, total wealth fell by a fifth (19.9%) to USD 2.0 trillion.

Turning to Eastern Europe, the war in Ukraine severely affected billionaires' wealth. The number of billionaires in the region fell by 27 from 154 to 127, while their total wealth dropped by more than a third (34.7%) to USD 455 billion.

#### Number of billionaires and their wealth by region / subregion

Region	Subregion		2021				2022			
		Final worth USD bn	YoY % difference	No. of billionaires	YoY % difference	Final worth USD bn	YoY % difference	No. of billionaires	YoY % difference	
Americas	Latin America	312.1	72.1%	92	43.8%	284.5	-8.8%	88	-4.4%	
Americas	North America	4′766	49.1%	801	19.2%	5′105	7.1%	813	1.5%	
Americas	Total	5′078	50.3%	893	21.3%	5′389	6.1%	901	0.9%	
APAC	North Asia	2'994	108.9%	765	60.4%	2'442	-18.4%	672		
APAC	South Asia	597.8	90.4%	141	36.9%	751.3	25.7%	167	18.4%	
APAC	Southeast Asia & Oceania	1′122	56.4%	237	22.8%	1′053	-6.1%	245	3.4%	
APAC	Total	4′714	91.3%	1′143	47.9%	4'247	-9.9%	1′084	-5.2%	
EMEA	Eastern Europe	696.9	52.5%	154	21.3%	455	-34.7%	127	<del>- 17.5%</del>	
EMEA	Middle East & Africa	260	33.8%	91	19.7%	279.4	7.5%	89	-2.2%	
EMEA	Western Europe	2′336	51.3%	474	23.8%	2′336	0.0%	467		
EMEA	Total	3′293	50.0%	719	22.7%	3'070	-6.8%	683	-5.0%	
Grand Total	Total	13′084	62.8%	2′755	31.5%	12′706	-2.9%	2'668	-3.2%	

## Methodology

UBS conducted an online survey of its billionaire clients that are booked in Switzerland, Europe (excl. Switzerland), Singapore, Hong Kong, and the US between 29 June to 5 September 2022. The total sample size achieved in the survey was 28 respondents.

In addition, UBS gathered the views of its billionaire clients that are booked in Switzerland, Europe (excl. Switzerland), Singapore, Hong Kong and the US attending an event on 27 and 28 October 2022. The event attendees were asked a series of open-ended questions which captured their spontaneous thoughts. The total sample size achieved was 22 respondents.

#### Patents research methodology

UBS Evidence Lab mines over 125 million patents across over 90 countries to track patent application volume trends over time. To define a patent set for analysis, UBS Evidence Lab will either identify a set of international patent classification (IPC) codes that encompass the technology of interest or develop a lexicon of search terms (i.e. keywords) pertaining to the topic of interest. IPC codes are used by the World Intellectual Property Organization to categorize patents by type. For the purpose of this report we ran the patents analysis on the following selected keywords: plant biotechnology, water management, food waste, food security, weather forecasting, precision agriculture, plant factory, water efficiency, plant-based protein, smart agriculture, vertical farming, water-saving technology, smart farming, indoor farming, agricultural drones, livestock monitoring. The analysis includes only companies with at least 10 patents filled since 2010. The list of companies that came up from our patent analysis was cross-referenced with a list of all companies on our database (publicly listed and private) related to billionaires. Among the total of 441 companies included in this patent analysis, 27 are either owned by billionaires or have billionaire investors. The chart illustrates total number of patents filed in each year (cumulatively). Note: data for 2022 is up until September.



#### **UBS EVIDENCE LAB**

UBS Evidence Lab is a team of alternative data experts who work across 55+ specialized areas creating insight-ready data sets. The experts turn data into evidence by applying a combination of tools and techniques to harvest, cleanse, and connect billions of data items each month. The library of assets, covering over 5,000 companies of all sizes, across all sectors and regions, is designed to help answer the questions that matter to your decisions.

#### FOR MEDIA ENQUIRIES PLEASE CONTACT:

Serge Steiner, UBS Media Relations, +41 (0)44 234 18 24, serge.steiner@ubs.com

Aisling Jamieson-Ewers, Headland, +44 (0)20 3805 4884, AJamieson-Ewers@headlandconsultancy.com

#### **ACKNOWLEDGEMENTS**

#### **Project team UBS**

Matthew Carter Alicia Curry Maximilian Kunkel Michele Lim Jeff Scott Anthi Spiliakopoulou Michael Viana

#### Research team

Stephanie Perryfrost, UBS Evidence Lab Gabriele Schmidt, UBS Global Wealth Management

#### **Data analysis**

Jason DeRise, UBS Evidence Lab Gaurao-Ajay Ghodke, UBS Evidence Lab Klaudia Radziejewska, UBS Evidence Lab Tomasz Sztokfisz, UBS Evidence Lab Maciej Wojewodzic, UBS Evidence Lab

#### **Farner Consulting AG**

Toby Felder Daniel Jörg Philipp Skrabal Nadine Sperb

#### Headland

Iman Barb Aisling Jamieson-Ewers Del Jones

#### **Editor**

Rupert Bruce, Clerkenwell Consultancy

**DESIGN** 

#### **Farner Consulting AG**

Fabian Bertschinger Laura Dröfke Fabian Sigg



This document has been prepared by UBS AG, its subsidiary or affiliate ("UBS").

Certain information and data herein have been sourced from Forbes Media LLC.

This document and the information contained herein are provided solely for informational and/or educational purposes. Nothing in this document constitutes investment research, investment advice, a sales prospectus, or an offer or solicitation to engage in any investment activities. The document is not a recommendation to buy or sell any security, investment instrument, or product, and does not recommend any specific investment program or service.

Information contained in this document has not been tailored to the specific investment objectives, personal and financial circumstances, or particular needs of any individual client. Certain investments referred to in this document may not be suitable or appropriate for all investors. In addition, certain services and products referred to in the document may be subject to legal restrictions and/or license or permission requirements and cannot therefore be offered worldwide on an unrestricted basis. No offer of any interest in any product will be made in any jurisdiction in which the offer, solicitation, or sale is not permitted, or to any person to whom it is unlawful to make such offer, solicitation, or sale.

Although all information and opinions expressed in this document were obtained in good faith from sources believed to be reliable, no representation or warranty, express or implied, is made as to the document's accuracy, sufficiency, completeness or reliability. All information and opinions expressed in this document are subject to change without notice and may differ from opinions expressed by other business areas or divisions of UBS. UBS is under no obligation to update or keep current the information contained herein.

All pictures or images ("images") herein are for illustrative, informative or documentary purposes only, in support of subject analysis and research. Images may depict objects or elements which are protected by third party copyright, trademarks and other intellectual property rights. Unless expressly stated, no relationship, association, sponsorship or endorsement is suggested or implied between UBS and these third parties.

Any charts and scenarios contained in the document are for illustrative purposes only. Some charts and/or performance figures may not be based on complete 12-month periods which may reduce their comparability and significance. Historical performance is no guarantee for, and is not an indication of future performance.

Several sources and methodologies were utilized to research and profile the characteristics of billionaires. This information and data are part of UBS's proprietary data, and the undisclosed identities of the individuals not mentioned by name are protected and remain confidential.

Nothing in this document constitutes legal or tax advice. UBS and its employees do not provide legal or tax advice. This document may not be redistributed or reproduced in whole or in part without the prior written permission of UBS. To the extent permitted by the law, neither UBS, nor any of it its directors, officers, employees or agents accepts or assumes any liability, responsibility or duty of care for any consequences, including any loss or damage, of you or anyone else acting, or refraining to act, in reliance on the information contained in this document or for any decision based on it.

UBS Evidence Lab provides data and evidence for analysis and use by UBS Research and its clients. UBS Evidence Lab does not provide investment recommendations or advice.

#### Important information in the event this document is distributed to US Persons or into the United States

Wealth management services in the United States are provided by UBS Financial Services Inc. ("UBS-FS"), a subsidiary of UBS AG. As a firm providing wealth management services to clients, UBS-FS offers investment advisory services in its capacity as an SEC-registered investment adviser and brokerage services in its capacity as an SEC-registered broker-dealer. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business, that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. A small number of our financial advisors are not permitted to offer advisory services to you and can only work with you directly as UBS broker-dealer representatives. Your financial advisor will let you know if this is the case and, if you desire advisory services, will be happy to refer you to another financial advisor who can help you. Our agreements and disclosures will inform you about whether we and our financial advisors are acting in our capacity as an investment adviser or broker-dealer. For more information, please review the PDF document at www.ubs.com/relationshipsummary. UBS-FS is a member of the Securities Investor Protection Corp. (SIPC) and the Financial Industry Regulatory Authority (FINRA).

#### Important information in the event this document is distributed by the following domestic businesses (which have separate local entities to that of the location that prepared the material)

**Austria:** This publication is not intended to constitute a public offer under Austrian law. It is distributed only for information purposes by UBS Europe SE, Niederlassung Österreich, with place of business at Wächtergasse 1, A-1010 Wien. UBS Europe SE, Niederlassung Österreich is subject to the joint supervision of the European Central Bank ("ECB"), the German Central Bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), as well as of the Austrian Financial Market Authority (Finanzmarktaufsicht), to which this publication has not been submitted for approval. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

**Bahrain:** UBS is a Swiss bank not licensed, supervised or regulated in Bahrain by the Central Bank of Bahrain and does not undertake banking or investment business activities in Bahrain. Therefore, clients have no protection under local banking and investment services laws and regulations.

**Brazil:** This publication is not intended to constitute a public offer under Brazilian law or a research analysis report as per the definition contained under the Comissão de Valores Mobiliários ("CVM") Instruction 598/2018. It is distributed only for information purposes by UBS Brasil Administradora de Valores Mobiliários Ltda. and/or of UBS Consenso Investimentos Ltda., entities regulated by CVM.

Canada: In Canada, this publication is distributed by UBS Investment Management Canada Inc. (UBS Wealth Management Canada).

UBS Wealth Management is a registered trademark of UBS AG. UBS Bank (Canada) is a subsidiary of UBS AG. Investment advisory and portfolio management services are provided through UBS Investment Management Canada Inc., a wholly-owned subsidiary of UBS Bank (Canada). UBS Investment Management Canada Inc. is a registered portfolio manager and exempt market dealer in all the provinces with the exception of P.E.I. and the territories.

All information and opinions as well as any figures indicated are subject to change without notice. At any time UBS AG ("UBS") and other companies in the UBS group (or employees thereof) may have a long or short position, or deal as principal or agent, in relevant securities or provide advisory or other services to the issuer of relevant securities or to a company connected with an issuer. Some investments may not be readily realisable since the market in the securities is illiquid and therefore valuing the investment and identifying the risk to which you are exposed may be difficult to quantify. Past performance of investments is not a guarantee of future results and the value of investments may fluctuate over time

For clients and prospective clients of UBS Bank (Canada) and UBS Investment Management Canada Inc., please note that this document has no regard to the specific investment objectives, financial situation or particular needs of any recipient. Neither UBS Bank (Canada) nor UBS Investment Management Canada Inc. is acting as an adviser or fiduciary to or for any participant in this event unless otherwise agreed in writing. Not all products or services may be available at UBS Bank (Canada). Some products and services may be legally restricted for residents of certain countries. For more information on our products and services, visit https://www.ubs.com/ca/en/wealth\_management/planning\_life.html.

UBS does not provide tax or legal advice and you should consult your own independent advisers for specific advice based on your specific circumstances before entering into or refraining from entering into any investment.

You agree that you have provided your express consent to receive commercial electronic messages from UBS Bank (Canada), and any other UBS entity within the UBS global group of companies, with respect to this and other similar UBS events and to receipt of information on UBS products and services. You acknowledge and understand that this consent to electronic correspondence may be withdrawn by you at any time. For further information regarding how you may unsubscribe your consent, please contact your UBS Advisor or UBS Bank (Canada) directly at 1-800-268-9709 or https://www.ubs.com/ca/en/wealth\_management/your\_relationship/how\_to\_get/wealth\_m anagement.html.

This document may not be reproduced or copies circulated without prior written authorization of UBS.

Czech Republic: ÚBS is not a licensed bank in the Czech Republic and thus is not allowed to provide regulated banking or investment services in the Czech Republic. Please notify UBS if you do not wish to receive any further correspondence.

**Denmark:** This publication is not intended to constitute a public offer under Danish law. It is distributed only for information purposes by UBS Europe SE, filial af UBS Europe SE with place of business at Sankt Annae Plads 13, 1250 Copenhagen, Denmark, registered with the Danish Commerce and Companies Agency, under No. 38 17 24 33. UBS Europe SE, filial af UBS Europe SE is a branch of UBS Europe SE, a credit institution constituted under German law in the form of a Societas Europeae which is authorized by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin), and is subject to the joint supervision of the European Central Bank, the German Central Bank (Deutsche Bundesbank) and the BaFin. UBS Europe SE, filial af UBS Europe SE is furthermore supervised by the Danish Financial Supervisory Authority (Finanstilsynet), to which this publication has not been submitted for approval.

France: This publication is not intended to constitute a public offer under French law. It is distributed only for information purposes by UBS (France) S.A. UBS (France) S.A. is a French "société anonyme" with share capital of € 132.975.556, 69, boulevard Haussmann F-75008 Paris, R.C.S. Paris B 421 255 670. UBS (France) S.A. is a provider of investment services duly authorized according to the terms of the "Code monétaire et financier", regulated by French banking and financial authorities as the "Autorité de contrôle prudentiel et de résolution."

**Germany:** This publication is not intended to constitute a public offer under German law. It is distributed only for information purposes by UBS Europe SE, Germany, with place of business at Bockenheimer Landstrasse 2–4, 60306 Frankfurt am Main. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the European Central Bank ("ECB"), and supervised by the ECB, the German Central Bank (Deutsche Bundesbank) and the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), to which this publication has not been submitted for approval.

**Greece:** UBS Switzerland AG is established in Switzerland and operates under Swiss law. UBS Switzerland AG and its affiliates (UBS) are not licensed as a bank or financial institution under Greek legislation and do not provide banking and financial services in Greece. Consequently, UBS provides such services from branches outside of Greece, only. No information in this document is provided for the purpose of offering, marketing and sale by any means of any capital market instruments and services in Greece. Therefore, this document may not be considered as a public offering made or to be made to residents of Greece.

Hong Kong: This publication is distributed by UBS AG Hong Kong Branch. UBS AG Hong Kong Branch is incorporated in Switzerland with limited liability.

Indonesia, Malaysia, Philippines, Thailand: This material was provided to you as a result of a request received by UBS from you and/or persons entitled to make the request on your behalf. Should you have received the material erroneously, UBS asks that you kindly destroy/delete it and inform UBS immediately. The material may not have been reviewed, approved, disapproved or endorsed by any financial or regulatory authority in your jurisdiction. You are advised to seek independent professional advice in case of doubt

Israel: UBS is a premier global financial firm offering wealth management, asset management and investment banking services from its headquarters in Switzerland and its operations in over 50 countries worldwide to individual, corporate and institutional investors. In Israel, UBS Switzerland AG is registered as Foreign Dealer in cooperation with UBS Wealth Management Israel Ltd., a wholly owned UBS subsidiary. UBS Wealth Management Israel Ltd. is a Portfolio Manager licensee which engages also in Investment Marketing and is regulated by the Israel Securities Authority. This publication is intended for information only and is not intended as an offer to buy or solicitation of an offer. Furthermore, this publication is not intended as an investment advice and/or investment marketing and is not replacing any investment advice and/or investment marketing provided by the relevant licensee which is adjusted to each person needs. The word "advice" and/or any of its derivatives shall be read and construed in conjunction with the definition of the term "investment marketing" as defined under the Israeli Regulation of Investment Advice, Investment Marketing and Portfolio Management Law, 1995.

Italy: This publication is not intended to constitute a public offer under Italian law. It is distributed only for information purposes by UBS Europe SE, Succursale Italia, with place of business at Via del Vecchio Politecnico, 3-2012 Milano. UBS Europe SE, Succursale Italia is subject to the joint supervision of the European Central Bank ("ECB"), the German Central Bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), as well as of the Bank of Italy (Banca d'Italia) and the Italian Financial Markets Supervisory Authority (CONSOB - Commissione Nazionale per le Società e la Borsa), to which this publication has not been submitted for approval. UBS Europe SE is a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

Jersey: UBS AG, Jersey Branch, is regulated and authorized by the Jersey Financial Services Commission for the conduct of banking, funds and investment business. Where services are provided from outside Jersey, they will not be covered by the Jersey regulatory regime. UBS AG, Jersey Branch is a branch of UBS AG a public company limited by shares, incorporated in Switzerland whose registered offices are at Aeschenvorstadt 1, CH-4051 Basel and Bahnhofstrasse 45, CH 8001 Zurich. UBS AG, Jersey Branch's principal place of business is 1, IFC Jersey, St Helier, Jersey, JE2 3BX.

**Luxembourg:** This publication is not intended to constitute a public offer under Luxembourg law. It is distributed only for information purposes by UBS Europe SE, Luxembourg Branch ("UBS"), R.C.S. Luxembourg n° B209123, with registered office at 33A, Avenue J. F. Kennedy, L-1855 Luxembourg. UBS is a branch of UBS Europe SE, a credit institution constituted under German law in the form of a Societas Europaea (HRB n° 107046), with registered office at Bockenheimer Landstrasse 2–4, D-60306 Frankfurt am Main, Germany, duly authorized by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanziensteilstungsaufsicht – "BaFin") and subject to the joint prudential supervision of BaFin , the central bank of Germany (Deutsche Bundesbank) and the European Central Bank . UBS is furthermore supervised by the Luxembourg prudential supervisory authority (Commission de Surveillance du Secteur Financier), in its role as host member state authority. This publication has not been submitted for approval to any public supervisory authority.

Mexico: UBS Asesores México, S.A. de C.V ("UBS Asesores") an affiliate of UBS Switzerland AG, incorporated as a non-independent investment advisor under the Securities Market Law, due to the relation with a Foreign Bank. UBS Asesores was incorporated under the Securities Market Law. UBS Asesores is a regulated entity and it is subject to the supervision of the Mexican Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, "CNBV") which exclusively regulates UBS Asesores regarding the rendering of portfolio management services when investment decisions are taken on behalf of the client, as well as on securities investment advisory services, analysis and issuance of individual investment recommendations, so that the CNBV has no surveillance facilities nor may have over any other service provided by UBS Asesores. UBS Asesores is registered before the CNBV under Registry number 30060. Such registry will not assure the accuracy or veracity of the information provided to its clients. UBS Asesores is not part of any Mexican financial group, is not a bank and does not receive deposits or hold securities. UBS Asesores does not offer guaranteed returns. UBS Asesores has revealed any conflict of interest that could have before. UBS Asesores does advertise any banking services and can only charge the commissions expressly agreed with their clients for the investment services actually rendered. UBS Asesores receive commissions from issuers or local or foreign financial intermediaries that provide services to its clients. You are being provided with this UBS publication or material because you have indicated to UBS Asesores that you are a Sophisticated Qualified Investor located in Mexico.

**Monaco:** This document is not intended to constitute a public offering or a comparable solicitation under the Principality of Monaco laws, but might be made available for information purposes to clients of UBS (Monaco) SA, a regulated bank which has is registered office 2 avenue de Grande Bretagne 98000 Monaco under the supervision of the "Autorité de Contrôle Prudentiel et de Résolution" (ACPR) for banking activities and under the supervision of "Commission de Contrôle des Activités Financières for financial activities". The latter has not approved this publication.

**Nigeria:** UBS Switzerland AG and its affiliates (UBS) are not licensed, supervised or regulated in Nigeria by the Central Bank of Nigeria or the Nigerian Securities and Exchange Commission and do not undertake banking or investment business activities in Nigeria.

**Poland:** UBS is a premier global financial services firm offering wealth management services to individual, corporate and institutional investors. UBS is established in Switzerland and operates under Swiss law and in over 50 countries and from all major financial centres. UBS [insert Legal Entity] is not licensed as a bank or as an investment firm under Polish legislation and is not allowed to provide banking and financial services in Poland.

**Portugal:** UBS Switzerland AG is not licensed to conduct banking and financial activities in Portugal nor is UBS Switzerland AG supervised by the portuguese regulators (Bank of Portugal "Banco de Portugal" and Portuguese Securities Exchange Commission "Comissão do Mercado de Valores Mobiliários").

Russia: UBS Switzerland AG is not licensed to provide regulated banking and/or financial services in Russia. Information contained in this document refers to products and services exclusively available through and provided by UBS Switzerland AG in Switzerland or another UBS entity domiciled outside Russia. UBS employees travelling to Russia are neither authorized to conclude contracts nor to negotiate terms thereof while in Russia. Contracts only become binding on UBS once confirmed in Switzerland or in the location where the UBS entity is domiciled. The Wealth Management Advisory Office within OOO UBS Bank does not provide services for which banking license is required in Russia. Certain financial instruments can be offered in Russia only to the qualified investors.

Any attachments and documents with reference to the specific financial instruments do not constitute a personal investment recommendation under Russian law.

**Singapore:** This publication is distributed by UBS AG Singapore Branch. Clients of UBS AG Singapore branch are asked to please contact UBS AG Singapore branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or report.

**Spain:** This publication is not intended to constitute a public offer under Spanish law. It is distributed only for information purposes by UBS Europe SE, Sucursal en España, with place of business at Calle María de Molina 4, C.P. 28006, Madrid. UBS Europe SE, Sucursal en España is subject to the joint supervision of the European Central Bank ("ECB"), the German Central bank (Deutsche Bundesbank), the German Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzidienstleistungsaufsicht), as well as of the Spanish supervisory authority (Banco de España), to which this publication has not been submitted for approval. Additionally it is authorized to provide investment services on securities and financial instruments, regarding which it is supervised by the Comisión Nacional del Mercado de Valores as well. UBS Europe SE, Sucursal en España is a branch of UBS Europe SE, a credit institution constituted under German law in the form of a Societas Europaea, duly authorized by the ECB.

**Sweden:** This publication is not intended to constitute a public offer under Swedish law. It is distributed only for information purposes by UBS Europe SE, Sweden Bankfilial, with place of business at Regeringsgatan 38, 11153 Stockholm, Sweden, registered with the Swedish Companies Registration Office under Reg. No 516406-1011. UBS Europe SE, Sweden Bankfilial is a branch of UBS Europe SE, a credit institution constituted under German law in the form of a Societas Europaea which is authorized by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin), and is subject to the joint supervision of the European Central Bank, the German Central bank (Deutsche Bundesbank) and the BaFin. UBS Europe SE, Sweden Bankfilial is furthermore supervised by the Swedish supervisory authority (Finansinspektionen), to which this publication has not been submitted for approval.

Taiwan: This material is provided by UBS AG, Taipei Branch in accordance with laws of Taiwan, in agreement with or at the request of clients/prospects.

**UK:** This document is issued by UBS Wealth Management, a division of UBS AG which is authorised and regulated by the Financial Market Supervisory Authority in Switzerland. In the United Kingdom, UBS AG is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of regulation by the Prudential Regulation Authority are available from us on request.

**UAE/DIFC:** UBS is not licensed in the UAE by the Central Bank of UAE or by the Securities & Commodities Authority. The UBS AG Dubai Branch is licensed in the DIFC by the Dubai Financial Services Authority as an authorised firm.

**Ukraine:** UBS is a premier global financial services firm offering wealth management services to individual, corporate and institutional investors. UBS is established in Switzerland and operates under Swiss law and in over 50 countries and from all major financial centers. UBS is not registered and licensed as a bank/financial institution under Ukrainian legislation and does not provide banking and other financial services in Ukraine.

© UBS 2022. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.

#### 本資料に関するご留意事項

本資料はUBS AGまたはその関連会社(以下、「UBS」)が作成した資料を、UBS SuMi TRUSTウェルス・マネジメント株式会社(以下、「当社」)あるいはユービーエス・エイ・ジー(銀行)東京支店(以下、「UBS銀行東京支店」)が配布するものです。本資料は情報提供のみを目的としたものであり、特定の金融商品等の売買または売買に関する勧誘を意図したものではなく、金融商品取引法に基づいた開示資料ではありません。また、お客様に特有の投資目的、財務状況等を考慮したものではありません。銘柄の選定はお客様ご自身で行って頂くようお願い致します。本資料は信頼できると判断した情報に基づき作成していますが、情報の正確性、完全性を保証するものではありません。記載内容は過去の実績であり、将来の成果を示唆・保証するものではありません。本資料の記載内容等は作成時点のものであり、今後変更されることがあります。本資料中のイラスト・写真はイメージです。実際とは異なります。手数料およびリスク等は商品毎に異なりますので、詳細は当該商品等の契約締結前交付書面等をお読みください。

#### その他の留意事項

当社およびUBS銀行東京支店は、本資料の使用または配布により生じた第三者からの賠償請求または訴訟に関して一切責任を負いません。または、税務、法務等の助言は行いません。税金の取扱いはお客様の状況によって異なります。また税制や法律は将来変更される場合があります。必要に応じて専門家にご相談ください。

◎UBS 2022 すべての権利を留保します。事前の許可なく、本資料を転載・複製することはできません。キーシンボルおよびUBSは、UBSの登録商標および未登録商標です。

商号等 : UBS SuMi TRUSTウェルス・マネジメント株式会社 金融商品取引業者 関東財務局長(金商)第3233号

加入協会:日本証券業協会、一般社団法人日本投資顧問業協会、一般社団法人金融先物取引業協会

商号等 :ユービーエス・エイ・ジー(銀行)東京支店 登録金融機関 関東財務局長(登金)第605号

加入協会:日本証券業協会、一般社団法人金融先物取引業協会

ubs.com/billionaires

