



ENERGY
Liquefied natural
gas surges

CHAINSAW PLAN
Milei's method
wins over the
markets

STREAMING
Spotify hits
the right note

DOSSIER

A baby at any cost

The fertility industry delivers

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PRECISION

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#Precision

A major national issue

Think back to when Donald Trump declared himself “the father of IVF” in October 2024. Think back to when Emmanuel Macron launched a “major plan to tackle infertility”, which he called a “scourge” and the “taboo of the century”, in January 2024. And think back to 2024 in Russia, which was decreed the “year of the family”, while Moscow actively encourages its citizens to take fertility tests. Just a few examples that show how infertility is becoming a major national issue in multiple countries. It was about time. According to the latest figures from the World Health Organization (WHO), published in April 2023, 17.5% of the adult population will experience fertility issues over the course of their life, “affecting people’s mental and psychosocial well-being”.

Support plans for medically assisted reproduction (MAR) have been put in place to tackle what the WHO refers to as a “major health challenge”. During his campaign, Donald Trump promised that “under the Trump administration, your government will pay for – or your insurance company will be mandated to pay for – all costs associated with IVF treatment”. The measure will boost MAR uptake in a country where 80% of Americans who undergo IVF have little or no insurance coverage, according to a 2018 study by FertilityIQ. The situation puts MAR out of reach for a significant portion

of the population, given that a single IVF cycle in the United States costs an average of \$12,400 (excluding medication), according to the American Society of Reproductive Medicine. And in Switzerland too, the Federal Office of Public Health (FOPH) commissioned an expert report in 2020 to assess whether IVF treatment could be reimbursed under compulsory health insurance. If these measures take effect on either side of the Atlantic, they will boost the entire sector. According to management consulting firm IMARC Group, the global fertility market is set to climb from \$46.1 billion in 2024 to \$142 billion in 2033.

From a human standpoint, this new social awareness of the suffering of couples experiencing infertility is to be welcomed, because to this day, MAR techniques “remain underfunded and inaccessible to many due to high costs,” says the WHO. And yet, it would be nice if the blame wasn’t shouldered entirely by women. It’s still too often women who are held responsible when a couple experiences fertility issues, accused of prioritising their education and their careers and, ultimately, deciding to have children too late. While a woman’s age undoubtedly plays a major part in infertility, the leading reason people seek IVF in Switzerland is male infertility, according to the FSO. Fertility isn’t just a women’s issue!

Happy reading!

BY MARC BÜRKI,
CEO OF SWISSQUOTE




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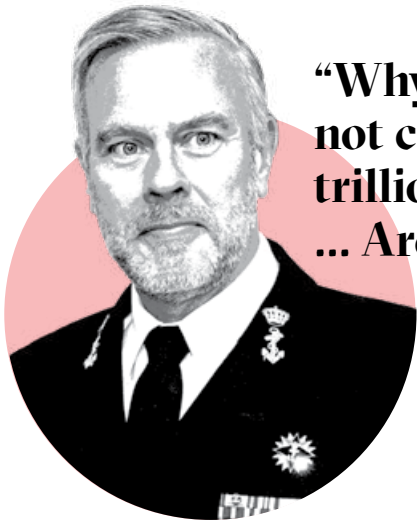
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“Why are you not convinced by trillions of dollars? ... Are you stupid?”

Admiral **Rob Bauer**, chair of the NATO military committee, asking why investors are snubbing the weaponry industry.



An Air China Boeing 787-8 Dreamliner, here in Beijing. Chinese airlines are taking advantage of the ban on European airlines flying over Russia.

TRANSPORT

Chinese airlines say thank you to Russia

European airlines have been banned from flying into Russian airspace since 2022, following a ruling from Moscow as a reaction to sanctions implemented after the invasion of Ukraine. This limitation increases the cost of kerosene for European airlines, which must now go around the giant country to reach Asia. As a result, Scandinavian Airlines, Lufthansa, British Airways and Virgin Atlantic have all suspended some of their

flights to China. That has granted opportunities for Air China, China Eastern and China Southern, which have seen the number of passengers flying to Europe grow by 18% in October 2024, compared to the same period in 2019. The three Chinese companies have increased the number of flights to the United Kingdom, Spain and Italy from 25% to 45% in the first nine months of 2024, compared to 2019.

RANKING

Top five companies on the electric vehicle market
(Based on the number of vehicles sold between January and May 2024)

- 1. BYD, CHINA
1.2 million
- 2. TESLA, UNITED STATES
625,600
- 3. BMW, GERMANY
212,300
- 4. WULING, CHINA
179,700
- 5. VOLKSWAGEN, GERMANY
157,200

Source: EV Volumes

Top five counties that emit the most CO₂ per resident
(In tonnes of CO₂ emitted in 2023)

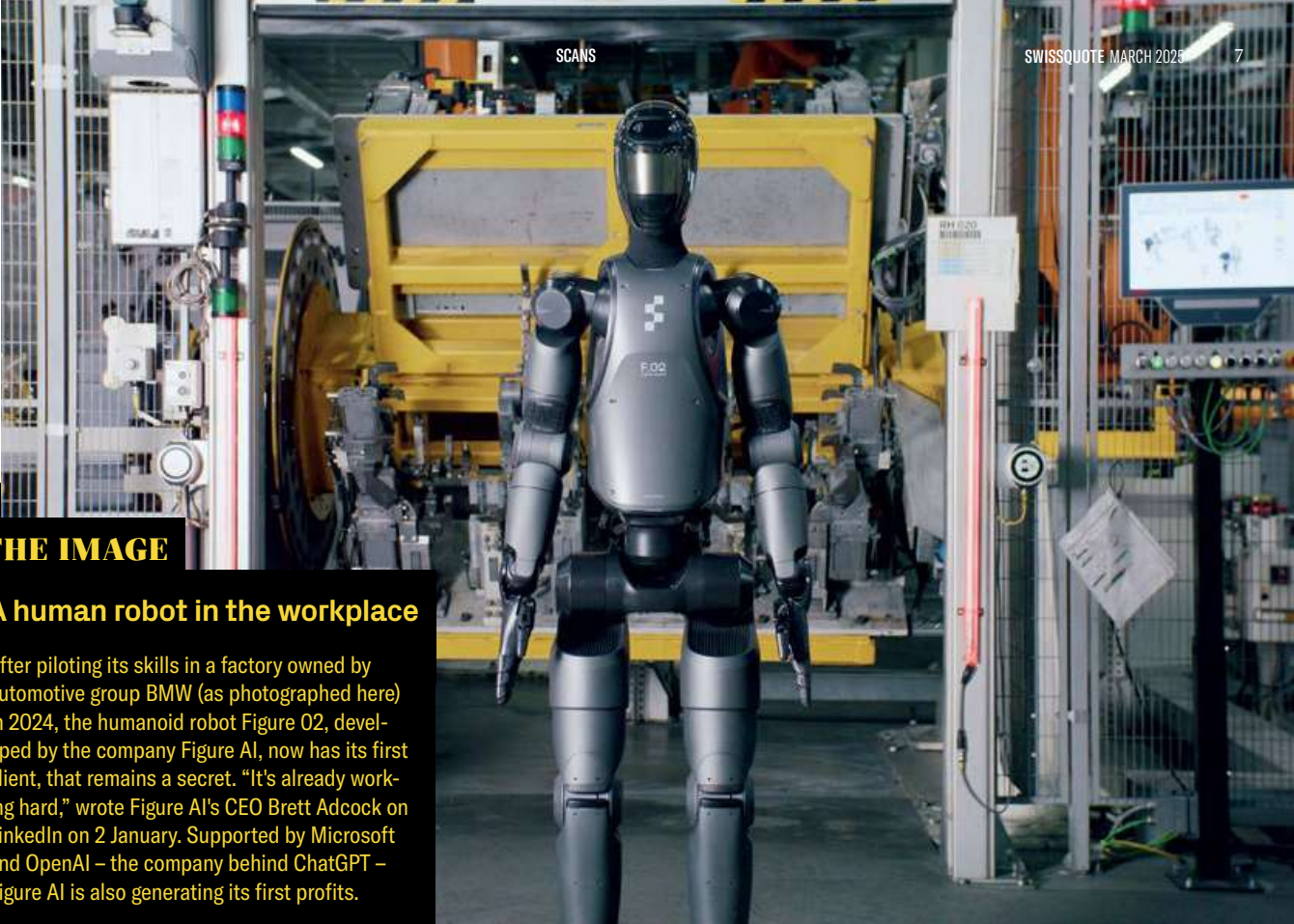
- 1. QATAR
38.8 tonnes
- 2. BRUNEI
25.6 tonnes
- 3. BAHRAIN
23.3 tonnes
- 4. TRINIDAD AND TOBAGO
22.8 tonnes
- 5. SAUDI ARABIA
22.1 tonnes

Source: Global Carbon Budget

+11%

The increase in electricity produced by coal-fired power plants globally since 2015. While most Western countries have renounced coal, developing countries continue to increase their production capacities. Globally, there are now more than 6,500 coal-fired electrical power plants, which make up around 45% of greenhouse gas emissions, according to *The Economist*.

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THE IMAGE

A human robot in the workplace

After piloting its skills in a factory owned by automotive group BMW (as photographed here) in 2024, the humanoid robot Figure 02, developed by the company Figure AI, now has its first client, that remains a secret. “It’s already working hard,” wrote Figure AI’s CEO Brett Adcock on LinkedIn on 2 January. Supported by Microsoft and OpenAI – the company behind ChatGPT – Figure AI is also generating its first profits.



“For as long as possible, we will continue to offer twelve-cylinder motors”

Stephan Winkelmann, CEO of Lamborghini.

CANNABIS

The cannabis market is wilting

In the United States, the legal cannabis market is worth \$9 billion. Since Washington and Colorado legalised the substance in 2012, 22 other states have since followed suit. But sales are stagnant. Revenue from this segment was up only 1% in 2024. The American Cannabis Operator

Index, which tracks the valuation of 29 companies in the cannabis market, fell by more than 90% since 2021. Legal marijuana faces tough competition from the illegal market, which doesn’t abide by laws and taxes, as well as more powerful new products, such as synthetic cannabinoids.



CHIPS

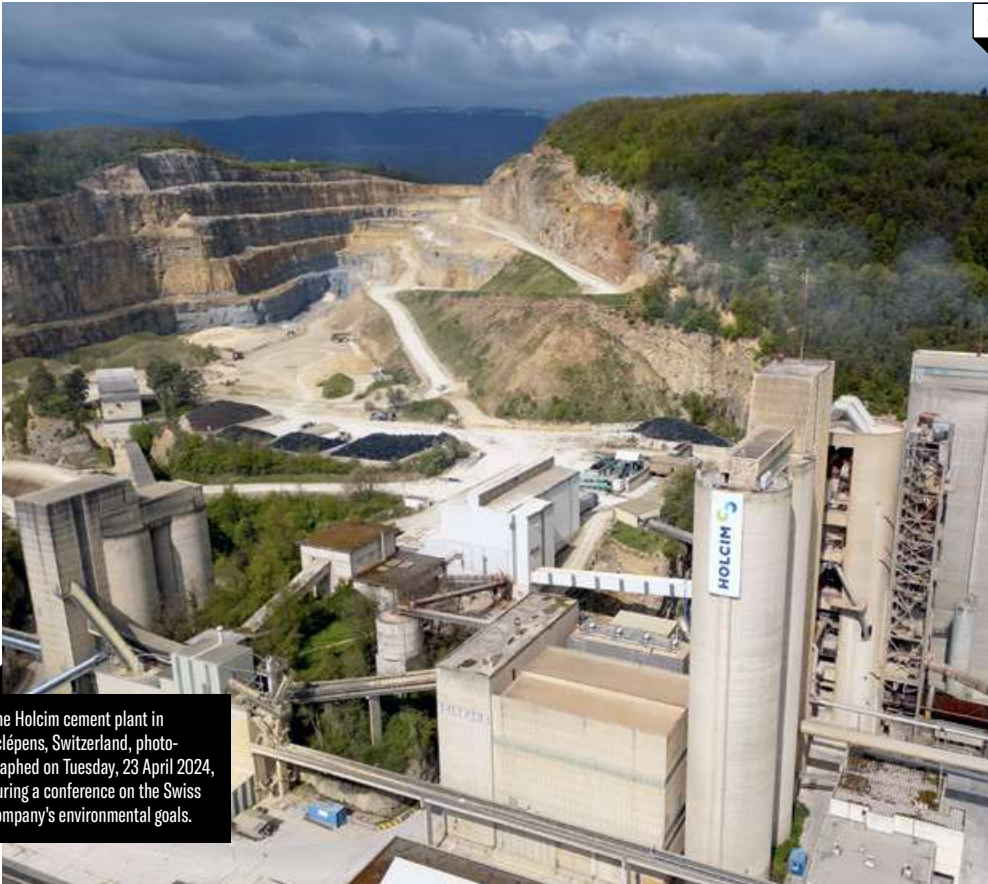
DKSH invests in semi-conductors

A specialist in supply chains, particularly in Asia, Zurich-based DKSH seeks to gain market share in the booming semi-conductor market. It acquired Malay-based group CLMO Technology, which produces testing and calibration services for its parts that are used to make various electronic products. This will help DKSH increase its presence in Malaysia and Vietnam, two key markets. The Swiss group already supplies machines and equipment for packaging the wafers used to manufacture the chips. → DKSH



“Let’s break the Silicon Valley monopoly. (...) European companies can build on top of AI platforms whether they are from France or from the US”

Niklas Zennström, co-founder of Skype.



The Holcim cement plant in Éclépens, Switzerland, photographed on Tuesday, 23 April 2024, during a conference on the Swiss company's environmental goals.

CONSTRUCTION

Holcim seeks a carbon-free future

The Swiss cement giant Holcim is solely responsible for 0.42% of global fossil fuel and cement emissions since the mid 18th century, according to the research group Climate Accountability Institute. Now under pressure to reduce its carbon footprint, Holcim is seeking to divest of its entities that produce the most pollution. It sold its Kenyan division in late December for \$100 million and three years ago, it sold its Indian operations to Adani Group for \$10.5 billion. It also sold factories in Indonesia, Brazil, Tanzania and Uganda, and plans to create a spin-off to take over activities in the United States. At the same time, the Zug-based company is betting on green cement. It has completed approximately 20 acquisitions in that domain and in 2023, it inaugurated its first carbon-free calcined clay production facility, which is a raw material that creates less pollution than lime. → HOLN

THE QUESTION

Pharmaceutical groups are in a race against time to gain market share from Novo Nordisk in the GLP-1 weight loss drug market. Who will win?

“Sales in this segment could reach \$200 billion globally by 2031. The competition against Novo Nordisk and Eli Lilly is expected to gain approximately one-third of this market. In 2027, Amgen hopes to release a monthly or even quarterly injectable, which would be a big difference from the weekly injections that are currently available. But the real change will come from oral drugs, which are much easier to manufacture because they do not require a cold chain, are cheaper to produce – which will have a positive impact on the market price – and more comfortable for patients who might not like the injections. Eli Lilly is ahead on this front but Roche also has an oral medication in its pipeline, after acquiring Carmot Therapeutics. Pfizer and Astra Zeneca are also studying an oral option, but their research seems less promising.”

Karen Andersen, health research analyst at Morningstar.

FASHION

Nike and Adidas lose their lead

Until recently, the sport shoe market was dominated by Nike and Adidas, which alone brought in 63% of total revenue generated by the 15 biggest brands in 2018. This share has now fallen to 51%, according to *The Economist*. The two giants were battered by established brands such as New Balance and Asics, newcomers

such as the French Hoka and Swiss On, and Chinese labels such as Anta and Li-Ning. But Nike and Adidas also made some mistakes, choosing to focus on direct sales, through their own shops and portal, to the detriment of sales made in multi-brand retailers. These shops have turned to the competition to fill their shelves.



A Hoka running shoe, seen here in a shop in Bangkok on 12 September 2024.

\$20 BN

Sales of alcohol-free wine, beer and spirits globally in 2023, up 20% compared to 2022 and more than double sales from five years ago, according to Euromonitor. This can be explained by more and more people adopting a sober lifestyle. In the US alone, 38% of young people aged 18 to 34 don't drink.

HEALTH

A pain-free cervical smear

Roche has designed an instrument that allows women to self-administer a cervical smear test using a pipette with a swab on top, although it is not currently approved in the United States. Once the sample is collected, it is sent to a laboratory to detect 14 types of the human papillomavirus, a family of cancerous viruses. The new tool helps patients avoid an uncomfortable procedure that is normally administered by a doctor, in the



hopes of increasing the number of screenings. In the United States alone, cervical cancer kills 4,000 women each year.

\$320 BN

The amount of damage caused by natural disasters in 2024, up more than 30% compared to the previous year, signalling increased effects of climate change. Approximately two-thirds of the losses occurred in the Americas and the Caribbean, particularly after hurricanes Milton and Helene, that struck Florida two weeks apart.



“I don’t know how we can renovate Notre-Dame in five years but we can’t use the same processes to build solar farms in France”

Patrick Pouyanné,
CEO of TotalEnergies.

+3 M

The number of additional barrels of oil per day from now until 2028, which Donald Trump has set as a goal for production. At the end of 2024, the United States produced 13.5 million barrels per day. It will not be an easy task: the shale basins where oil is extracted are starting to run dry. In order for extraction to be profitable, the price of a barrel must reach \$89, but it is currently hovering around \$70.



Dutch dairy company Friesland-Campina is using Boaver on its 158 farms. This is the first large-scale use of this additive developed by DSM-Firmenich to reduce methane emissions from cattle.

ENVIRONMENT

A controversial anti-methane additive

When cows digest fibres found in grasses, they produce vast quantities of methane, a greenhouse gas. To counteract these emissions, Swiss-Dutch group DSM-Firmenich developed an additive called Bovaer, which can be added to cow feed and works to neutralise the enzymes found in their stomachs. Approved in 68 countries, it has just started

to be used among farmers. In the United Kingdom, the company Arla Foods is testing a pilot across 30 farms that produce milk and butter for the UK market. But concerned consumer groups fear that traces of the additive could be found in food products. They launched a social media campaign and called for a boycott of products that used Bovaer. → DSFIR

TELEPHONY

United Kingdom: behind in 5G

In the UK, Vodafone and Three will merge in the first half of 2025, creating the largest telephony network in the country with 27 million users. To receive approval to merge, the two companies had to commit to spending £11 billion to improve their 5G infrastructure. Indeed, the country has one of the worst telephony networks among developed countries. Download speeds are so slow that it is currently ranked 52nd in the world, according to Ookla's Speedtest Global Index. Users have access to 5G only about 10% of the time. This delay is due to a U-turn from the government, which required operators to get rid of any equipment purchased from Chinese company Huawei by 2027, as the group was accused of espionage. Operators are also subject to planning law regulations, that do not allow new poles to be higher than 30 metres.

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BUST



Boeing humiliated by SpaceX

The Starliner, the reusable spacecraft developed by Boeing, was already delayed several times before its inaugural flight in June 2024. But now it seems to be destined to remain Earth-bound, after failing to return two astronauts who were sent to the International Space Station for a short mission. The two astronauts are still in space and are expected to come back to Earth in 2025 thanks to a SpaceX mission. The trip was supposed to test the capsule before it was deployed on a larger scale. But helium leaks and propeller problems caused the mission to fail. After this fiasco, the US group fired the head of its spatial and defence division. The Starliner, which returned to Earth in September, is now being analysed by Boeing engineers. NASA administrator Bill Nelson said he was certain it would fly again with a crew on board. → BA



“Perhaps one reason the US economy is so successful is a quicker finger on the trigger when top executives do not deliver”

Terry Smith, fund manager at Fundsmith Equity.

LEGISLATION

Apple’s woes in Indonesia

Apple is battling the Indonesian government. Sales of its iPhone 16 have been banned since October because the model does not contain enough components made in Indonesia. A law introduced in 2017 requires foreign companies to manufacture a substantial part of their goods in the country. To meet the requirements of the law, companies can also use raw materials or local employees from Indonesia. In an attempt to lift the ban, in early January, Apple offered to create a factory in Indonesia to manufacture its AirTag location devices – an investment worth \$1 billion. But the Indonesian government decided that the proposal wasn’t enough. Now, Apple risks losing market share in a nation of 280 million residents to competitors Samsung and Xiaomi, which both opened factories in Indonesia.

-23%

The decline at the Chinese box office in 2024. After exceeding the US box office in 2020, China has never returned to pre-pandemic levels. The population continues to avoid crowds and unemployment for young people has reached a record high, which curbs spending. More and more people are turning to streaming films at home rather than going to the cinema.

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G R A F F

Bitcoin: Washington tests the waters, Brussels closes its doors

The idea of adding BTC to government monetary reserves is gaining traction in the United States. Meanwhile, the EU clamps down. BY LUDOVIC CHAPPEX

Two worlds, two drastically different approaches. While in the United States more and more initiatives support making bitcoin a strategic reserve asset, the European Union firmly says no. Everything has picked up since the election of Donald Trump. On 23 January, he issued an executive order entitled “Strengthening American Leadership in Digital Financial Technology” and set up a crypto task force to explore the creation of a cryptocurrency reserve. At the same time, several US states, including Texas, Arizona, Pennsylvania

and Oklahoma, passed legislation as a step towards building their own strategic reserves in bitcoin or other cryptocurrencies. On 15 January, Oklahoma unveiled its Strategic Bitcoin Reserve Act, a bill that would allow the state treasury to invest up to 10% of its assets in BTC. The idea is also making its way through the US Congress. Republican Senator Cynthia Lummis has proposed a bill to acquire 200,000 BTC per year over five years. In all the excitement, comments by the President of the European Central Bank (ECB) could not

have provided a starker contrast. When asked on 30 January about the possibility of adopting BTC in central bank reserves, Christine Lagarde was categorical, saying she was confident that bitcoin would not enter any reserves held by the central banks of EU countries.

Pro- or anti-bitcoin, each side has valid arguments

These remarks were made after the governor of the Czech National Bank, Aleš Michl, said on 29 January that he would consider adding BTC to its reserves, seeing the currency as a way to diversify its assets and keep an independent voice on monetary policy.

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← Christine Lagarde, president of the European Central Bank, at a press conference following a Council meeting in Frankfurt on 30 January.

Whether pro- or anti-bitcoin, each side has valid arguments. On one side, the capped supply of bitcoin, which creates its scarcity, could theoretically make it a useful asset to fight inflation and manage debt. On the other, BTC's extreme and unpredictable price fluctuations present a high risk. In an article published on the business news website Allnews.ch, Charles-Henry Monchau, chief

investment officer of Banque Syz, reminds us that bitcoin's volatility is 3.9 times that of gold and 4.6 times greater than global equities. Not to mention the lack of regulation and its potential use in money laundering. Switzerland will also have to position itself in this global debate. A popular initiative submitted on 31 December proposes amending the

Constitution to allow the Swiss National Bank (SNB) to hold bitcoin in its strategic reserves, along with gold. Yves Bennaïm, founder of the think-tank 2B4CH and one of the initiators of the proposal, said, “We were waiting for the right timing. Now, everything is falling into place.” Before putting the question to the people, the requisite 100,000 signatures will have to be collected by June 2026. ▲

cryptos express

Tesla profits from its stash of bitcoin

As a result of its strategy to invest in bitcoin, Tesla reaped substantial profits in the fourth quarter of 2024. In its business report, the company under Elon Musk announced a net gain of \$589 million over the period thanks to its BTC holdings. It is worth noting that bitcoin prices shot up more than 50% in the last three months of

2024. This alternative cash policy, which began in 2021 with a \$1.5 billion investment in the cryptocurrency, has been a boon for Tesla. The firm has optimised its financial results despite lacklustre electric vehicle sales. Including the gains generated through its BTC holdings, the California-based automaker reported a net profit of \$2.3 billion in the fourth quarter of 2024 and \$7.1 billion for the 2024 financial year.

Jerome Powell, friend to cryptos

Is this just another result of Donald Trump's rise to power? On 29 January at a speech on interest rates, the Chair of the Board of Governors of the Federal Reserve System (Fed), Jerome Powell, commented that banks are “perfectly able to serve crypto customers as long as they understand and can manage the risks”. He also

stressed the need for a clear regulatory framework, calling on Congress to pass regulations on cryptocurrencies. This statement contrasts with his past scepticism about cryptos, perhaps marking a turning point in the relationship between traditional finance and digital assets. In December, Powell made the first step in this direction by comparing bitcoin to gold.

Trump plays with fire

Since his inauguration, Donald Trump has launched a new range of merchandise, including perfumes, sneakers and commemorative watches. These limited-edition goods are now available for purchase in cryptocurrencies, including bitcoin and \$TRUMP, the meme coin created by the US President days before he

took office. This initiative, facilitated by the integration of the Solana Pay payment framework, raises questions about conflicts of interest, given that Trump Organization currently owns 80% of \$TRUMP tokens. The crypto community has criticised the move, and more broadly, the proliferation of meme coins, seeing it as a threat to the legitimacy of cryptocurrencies.

INTERVIEW

European stocks: often overlooked

European stocks are currently under-valued according to Morningstar, which results in opportunities for investment. But the returns aren't immediate. BY JULIE ZAUGG

Seduced by the steady performance of US stocks, investors have been less focused on European markets as of late. But there are many opportunities available, particularly in healthcare, consumer goods and the energy transition. We take a closer look with Michael Field, European markets strategist at Morningstar.

We hear a lot about the booming US market. What's going on in Europe?

European stocks are currently under-valued at around 5%. That puts them in a favourable position compared to US markets, which are now overvalued by 6%, after a long period of under-valuation. This analysis is valid even when

we take into account growth perspectives in the US, as the growth seems to already be incorporated in share prices.

Which industries have the stocks with the most potential?

Companies active in the consumer goods segment, such as Nestlé, Heineken and Anheuser-Busch have struggled over the last two years. Inflation reduced buying power for European consumers and forced companies to raise prices due to the increased costs of raw materials, which had a negative impact on margins. Right now, they are reasonably undervalued, but since they are global companies with a strong growth potential, they should grow again soon. Healthcare is another promising sector. Investors are focused on pharmaceutical groups that are exposed to new weight loss drugs – such as

Novo Nordisk and Eli Lilly – and in turn, they tend to ignore the rest of the sector. Some companies, such as GlaxoSmithKline and Roche, have several promising drugs in their pipelines. They are also heavily diversified, with a presence in segments with lots of opportunities such as oncology.

Shouldn't we also look at sectors that are based on long-term trends, such as decarbonisation?

Absolutely. Major industrial groups like ABB and Siemens benefit from structural trends, such as requirements to reduce CO₂ emissions and the need to improve energy efficiencies. Similarly, some energy companies, such as Engie, RWE and EDP Renewables can take advantage of the modernisation of electrical grids in Europe, made necessary by the increased renewable power supply.

“Major industrial groups like ABB and Siemens benefit from structural trends, such as requirements to reduce CO₂ emissions”

Michael Field, European markets strategist at Morningstar

For investors, is this a short-term or long-term gamble?

The most interesting opportunities will roll out over the long term, rather than in the next six to 12 months. In the oil and gas industry, for example, companies such as BP and TotalEnergies don't have very favourable outlooks in the immediate future. The price of oil is too low and there is too much supply with not enough demand. But in the long term, these companies will become more attractive. We have not yet reached peak oil, as seen by the slowdown in the electric vehicle market, and in the petrochemical industry, it will not be easy to find a substitute for fossil fuel. These companies also all have goals towards renewable energies. In the next 20 years, they could become the giants of the industry.

What are the main factors that could have a negative impact on the performance of European stocks?

The number one risk is the new US presidential administration and the tariffs that will be introduced on imports of foreign goods. European companies escaped the wrath of Donald Trump during his first term, but he has since had time to think and realise that Europe is the primary provider of goods imported into the United States. European companies will not escape tariffs this time around. Some may be implemented quickly, such as for steel or aluminium, and these sectors will be significantly impacted given their already tight margins. Others require approval from Congress, but it has a Republican majority. This could affect automotive companies such as Stellantis, Volkswagen, BMW and Mercedes, which are all very exposed to the US market. Energy groups such as RWE, Enel and Iberdrola will be impacted if Donald Trump cancels the Biden administration's renewable energy subsidies within the Inflation Reduction Act.

European companies are burdened by high energy costs. Could this impact market performance?

This is one of the main risks that Europe is currently facing. We have closed the tap to Russian gas following the invasion in Ukraine, but we haven't really found an alternative. Germany

and France have moved forward with their plans to close nuclear power plants. Fortunately, the price of liquefied natural gas from the United States has decreased over the past two years, a trend that is likely to continue over the next 12 months (see also article on p. 22). This should help ease the pressure for European companies, particularly for big energy consumers such as industrial groups. Political instability is another risk. Germany is preparing for elections that are likely to be messy and the French government is in chaos.

What should we expect in terms of growth and inflation?

We believe that the European GDP will increase at a more sustained rate this year compared to 2024. Inflation also seems to be under control. At 2.4%, it is close to the 2% objective set by the European Central Bank (ECB). Conversely, in the United States, inflation continues to rise, the economy is overloaded and the job market is tight. This gives the ECB more opportunities to lower interest rates, unlike the US Fed. We're expecting a rate decrease of 1% in Europe, compared to 0.5% in the United States. This should help jumpstart the European economy. Consumers will have access to more manageable real estate loans, which will improve their purchasing power, and companies will see their debt costs go down, which will allow them to make more investments. ▲

ARGENTINA

Milei's method wins over markets



Argentina's President Javier Milei shocked the world with images of him wielding a chainsaw, promising to slash public spending. One year into his presidency, many economic indicators are back on track... but things may not be as black and white.

BY BLANDINE GUIGNIER

"Argentina now has a monthly inflation rate similar to that of developed countries"

Marina Dal Poggetto, professor of economics at Universidad Austral

↑ Javier Milei's scathing speech at the World Economic Forum in Davos on 23 January. Lauding his reforms, the Argentine president did not spare his audience.

In his speech delivered at the most recent World Economic Forum, Javier Milei was out for revenge. Just before his diatribe about rampant wokeism, the president called on the nations of the world to follow his lead. "Argentina has become a global example of fiscal responsibility, of commitment to honouring our obligations and, obviously, a

commitment to solve the inflation problem ... and a new way of doing politics." This economic performance, which the president highlights after one year in office, may look stellar, but what if we dig beneath the surface? What is Argentina's economic outlook for 2025?

The first observation is that inflation has improved considerably in the past year. The

consumer price index rose by 2.7% month-on-month in December 2024, down from over 25% a year earlier. "Argentina now has a monthly inflation rate similar to that of developed countries," says Marina Dal Poggetto, professor of economics at Universidad Austral.

But stability has come at a price. "The economy experienced a V-shaped recovery between

the end of 2023 and the end of 2024," says asset manager Mariano Sardans, director of the company FDI. While the Milei government began reducing public spending by around 30%, GDP fell sharply in the first quarter of 2024 (down 2.6% quarter-on-quarter). The cuts, which included laying off more than 30,000 government employees, halting public works and ending inflation-indexed salaries, alongside the steep devaluation of the peso (down 54% in December 2023), have eroded the purchasing power of Argentines. Entire swathes of the economy, such as manufacturing, construction and retail were affected.

However, the trend reversed in the third quarter of 2024, with GDP growth of 3.9% quarter-on-quarter. Charles Wyplosz, economics professor at the Graduate Institute of International and Development Studies in Geneva, has never seen a turnaround like this. "Many economists, starting with myself, thought that Argentina would enter a deep recession, for at least a couple of years. However, despite the much-needed elimination of the fiscal deficit, we have seen a spectacular recovery in the space of six months."

As far as government finances are concerned, the government's obsession with the budget surplus has paid off. As Mariano Sardans points out, "From the moment the government took power, it has shown a primary budget surplus. It saved money, meaning that banks, which were the main investors of pesos in government bonds or Central Bank bonds, were full of pesos. Banks were left with no choice but to make them available to their retail and business customers. And that led to an increase in consumer credit

and mortgage loans." Argentina ended up posting a 0.3% budget surplus for the full year 2024, its first in 14 years.

Stock and bond markets are among the biggest winners with these reforms

Argentina's stock and bond markets are among the biggest winners with these reforms. With the government's \$4.36 billion debt repayment in January, Argentina significantly reduced its country risk index for investors, according to JP Morgan. Moody's also raised its long-term sovereign credit rating at the end of January. However, private investors have not yet flocked to the country. Argentines themselves admitted to us that they have, in the past, gotten too close to the sun with domestic equities. It will take time for them to regain confidence in their stock market, despite the Merval index's 172.52% surge over the year in 2024. Marina Dal Poggetto says that most of this growth is attributable to industries such as energy and minerals, as they benefit from the government's commitment to exploit these resources more in the future. These sectors include companies such as YPF, Vista Energy, Pampa Energía and TGS.

Asset manager Mariano Sardans also highlights potential growth in banking. "Credit to the private sector is still low in Argentina, and there is impressive room for improvement." The OECD estimates that it represents only 6% of Argentina's GDP, compared with an average of around 50% in the rest of Latin America. Javier Milei's government is already set on a series of stimulus measures for the banking sector. →

Institutions such as BBVA Argentina, Banco Macro, Grupo Financiero Galicia and Grupo Supervielle, which are listed on the Buenos Aires Stock Exchange, could end up on the receiving end.

“If one of my foreign clients, from Mexico or the United States for example, told me they wanted to invest in Argentina, I would steer them towards the bond market rather than the stock market,” Mariano Sardans says. “Bonds have a very high ceiling and a very high floor too.” Leonardo Anzalone, director of the Centro de Estudios Políticos y Económicos (CEPEC) in Buenos Aires, agrees, pointing to the high sovereign bonds yields, of about 11% in dollars on an annual basis.

Brutal methods

But not everything is rosy in the land of tango. “Cutting the budget by a third in just a few weeks pushed up the poverty rate,” Charles Wyplosz acknowledges. “His method was brutal, but Javier Milei wanted to leverage his post-election popularity and stun the opposition. What’s more, the opposition failed to mobilise major trade union demonstrations and bring the country to a standstill.” A number of Argentine economists continue to fear the effects of the extreme deregulation of the economy under way and a poverty rate of almost 38.9% in the third quarter of 2024. “While the macroeconomic framework is beginning to look like a solution for a number of factors, there is still a long way to go when it comes to social issues and the direct impact on the population,” says Leonardo Anzalone. A recent report also criticises the government’s method of calculating purchasing power. “Using the current calculation methodology, purchasing power rose

1.5% between November 2023 and November 2024,” the Centro de Economía Política Argentina (CEPA) stated in a press release. “However, if we apply the old weighting from 2017, purchasing power has fallen by 6.8%.”

Another collateral effect of Javier Milei’s deflationary policy is that Argentina has gone from being a cheap country to one of the region’s most expensive for dollar holders. Some sectors, such as tourism, are suffering from the “strong peso” effect, Marina Dal Poggetto says. Last year, Argentina saw an almost 18.5% decline in the number of foreign tourists. The phenomenon could also affect local industry and agriculture, whose export prices are rising. In 2024, however, the trade balance showed a surplus of \$18.8 billion, due to the combined effect of a sharp decline in imports during the severe recession early in the year and better agricultural yields than in 2023, which saw record drought.

With the recovery, the president’s popularity rose by 7 percentage points in December to 53%

Leonardo Anzalone and Marina Dal Poggetto point out that another major challenge facing Argentina’s economy is the lack of reserves in international currencies. “The government uses an exchange rate system which, after an initial jump, only allows the dollar to move 1% to 2% per month,” the professor says. “The Argentine Central Bank’s dollar reserves are low, and new reserves are needed, notably from the IMF. But it is not certain that the IMF will provide fresh money, as the institution does not approve of the country’s ‘crawling peg’ system. Converse-

ly, in the middle of an election year, the government is certainly not going to want to stray from its rigid exchange rate system, which has enabled it to achieve this wonderful situation of low inflation and economic recovery.”

Hope and uncertainty for 2025
The IMF expects GDP growth of 5% in 2025. “We’ll have to see what Argentina’s alignment with the Trump administration brings,” Mariano Sardans says. “The outcome of the legislative elections at the end of the year could also send out a signal. If the current government maintains its power, this confidence will be transferred to the financial market and ultimately to the real economy.” The latest polls seem to confirm this scenario. With the recovery, the president’s popularity rose by 7 percentage points in December to 53%.

Next year, Javier Milei also needs to tackle his campaign promise of dollarising the economy. “He wasn’t talking about it much any more, but it has recently come up again,” says Charles Wyplosz. “I understand the idea of dollarisation and closing the central bank. It’s a way of protecting Argentina against future governments that might be tempted to return to a hyperinflation policy.” However, the monetary and banking expert suggests a number of reasons why dollarisation would be complex. “The country’s dollar reserves are very low. Ecuador and El Salvador did it, but they are small countries compared to Argentina, which is the region’s third-largest economy. I also doubt that the IMF will be in favour of it. But who knows? With Donald Trump’s help and the determination of a radical like Javier Milei, it might still happen!”



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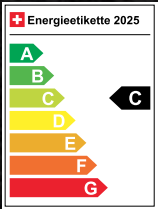
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Further attractive offers for SMEs



ENERGY

LNG: a controversial hero

Liquefied natural gas (LNG) is the new king of global energy and consumption is expected to skyrocket by 50% by 2040. To meet this demand, more than 150 projects are in the works around the world. BY BERTRAND BEAUTÉ

K

yiv has spoken. As promised by Volodymyr Zelenskyy, the gates to the Bratstvo (meaning “brotherhood”) gas pipeline were closed on 1 January. As a result, not a single molecule of Russian gas will travel through Ukraine to reach Europe, whereas 14.65 billion cubic metres of methane (the real name of the gas) travelled this pipeline in 2023. Two years after the sabotage of the Nord Stream 1 and 2 pipelines in September 2022, the gas supply to Europe is limited to two options: the TurkStream pipeline, which transports Russian gas via Turkey, and imports of liquefied natural gas (LNG).

LNG is methane cooled to under 161°C so it then becomes a liquid.

The big advantage over natural gas is that LNG can be transported by sea via gas tankers. In its liquid state, natural gas is 600 times less voluminous than in its gas state, which allows for efficient transport of large quantities. As a result, many areas that do not have access to pipelines can receive LNG, and in Europe, provide an alternative to pipelines coming from Russia.

LNG imports were up 60% in Europe in 2022

In 2021 before the war, 45% of natural gas imported to the European Union came from Russia, but that number dropped to 18% by June 2024, according to a report on the state of the energy union. At the same time, “sales of liquefied natural gas (LNG) have shot up since the beginning of the Ukraine war in 2022”, said Roberta Caselli,

strategist in sustainable investing in the raw materials sector at Global X ETFs Europe. According to a report by GIIGNL, LNG imports were up 60% in Europe in 2022 compared to 2021, reaching 120 million tonnes.

And the market will continue to grow. According to a Shell study published in February 2024, the global demand for LNG is expected to increase 50% by 2040, reaching between 625 and 685 million tonnes per year during

↑
Escorted by tugboats, the liquefied natural gas (LNG) carrier “Arctic Lady” brings a cargo of LNG to the Deutsche Ostsee terminal in the port of Lubmin, Germany, in April 2024.

this time, compared to 401 million tonnes in 2023. “The war in Ukraine fundamentally altered the LNG market, as Europe was forced to replace Russian gas, leading to a strong increase in demand,” said Alessandro Valentino, product manager at VanEck. “Furthermore, emerging markets such as China and India are also stimulating demand. In the short term, this growth is expected to continue.”

The primary beneficiaries are the United States, which has become the top global exporter after being only third in 2022, with a 21% market share in 2023 (4.5 million tonnes exported), and then Australia (19.8%), Qatar (19.5%), Russia (7.8%) and Malaysia (6.7%). Donald Trump's return to power is likely to further accelerate exports of US gas. Indeed, in January 2024, the Biden administration established a moratorium in approving new liquid gas pipelines for environ-

mental reasons, which brought any growth for the industry virtually to a halt. But the game has changed with Donald Trump. In his inauguration speech on 20 January, the US president promised: “We will drill, baby, drill,” in order to “export American energy to the entire world”.

“With Donald Trump back in power, the United States' energy trajectory will change radically,” said Valentino. “Trump's energy policy was always in favour of →



fossil fuels, focusing on energy domination and deregulation. His administration is likely to fast track approvals of liquefaction projects, simplifying the approval process and reducing administrative formalities. It signals a new era of American ambition in terms of LNG, with the expansion of infrastructure to meet growing global demand. Trump's approach is to use LNG as both an economic driver and geopolitical tool.”

Is it too late to invest? “No, the LNG market is not a bubble about to burst”

Otmane Jai, head of Investments at MJ & Cie

And the United States isn't the only country investing heavily in LNG. Around the world, there are many liquefaction terminals in export countries and re-gasification terminals in import countries. According to a report from the NGO Reclaim Finance, published in December 2024, companies in the industry plan to build 156 liquefied natural gas terminal projects globally by 2030. This is incredible business for many of the companies active in the sectors of liquefaction (QatarEnergy, Cheniere, Energy, ExxonMobil, TotalEnergies), engineering and construction (Bechtel Corporation, Technip Energies, McDermott Interna-

tional), maritime transport (Golar LNG, Flex LNG) and re-gasification (Engie, Eni, Uniper, Excelerate Energy).

“Increased LNG production and infrastructure development have created considerable opportunities for companies all across the value chain, from liquefaction to re-gasification and maritime transport,” said Valentino of VanEck. As a result, many companies active in this sector have seen their share prices skyrocket since the start of the Russia-Ukraine war. The share price of US company Cheniere Energy rose nearly 130% between January 2022 and January 2025,

↑ France is Europe's biggest importer of liquefied natural gas (LNG). Here, the FSRU Toscana LNG carrier disembarks in the port of Marseille in June 2024.

and share prices of Technip Energy and Golar LNG were up 125 and 230% respectively over the same period. Is it too late to invest? “No,” said Otmane Jai, head of Investments at MJ & Cie. “The LNG market is not a bubble about to burst. It has plenty of growth outlooks, with jewel companies all along the value chain.” For private investors, it would also be interesting to take a look at lesser-known companies that benefit from the rise in LNG consumption in the sense that they supply key components to the industry, such as French group GTT and Swiss



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company Burckhardt Compression (see inset below).

However there are still a few concerns: some analysts fear that building all this infrastructure will lead to short-term overcapacity. Since Russia's invasion of Ukraine, Europe has already increased its re-gasification capacities from 58.5 billion cubic metres of gas to reach a total capacity of more than 340 billion cubic metres in 2024, according to the European LNG Tracker from the Institute for Energy Economics and Financial Analysis (IEEFA). With terminal construction underway, European capacity is expected to

Activists from the climate action group Ocean Rebellion, at Albert Embankment in London, 4 October, 2024. They are particularly critical of companies that present LNG as a green fuel.



exceed 400 billion cubic metres as early as 2026.

The problem is that European LNG imports fell 18% in 2024 compared to 2023, according to a report by the International Energy Agency (IEA) published on 21 January 2025. And this trend is expected to continue, even as Ukraine's pipeline closure on 1 January “could increase the demand for LNG imports to the EU,” according to the IEA: “2025 is expected to be the peak of LNG consumption in Europe,” confirms Baptiste Leflaive, energy consultant at Colombus

Consulting. “After that, it will fall.” The IEEFA predicts that European demand for LNG will be less than 100 billion cubic metres in 2030, which is notably a significant gap between re-gasification capacities (exceeding 400 billion in Europe in 2030) and consumption.

“The expansion of re-gasification in Europe was a strategic response to an energy crisis, but now we run the risk of over-investment in infrastructures that are not aligned with energy trends over the long term,” warned Valentino. It is vital that we closely re-evaluate future needs.”

Similarly, Shell believes that the gas peak (gas and LNG) has already passed in Europe and Japan, as early as the 2010s, and that demand will never return to pre-pandemic levels. This gas peak is expected to hit North America during the 2030s, and the rest of the world in the 2040s. The IEA believes that the highest gas peak globally will occur before 2030.

In this context, both IEA and Shell predict that most of the growing demand for LNG in the coming years will be from Asia. “European demand for LNG has probably reached its peak given the energy efficiency objectives, the development of renewable energies and decarbonisation goals,” said Valentino. “Now, the →

GTT The tank pro

It is a little-known gem. French company Gaztransport et Technigaz (GTT), which produces tanks for LNG carriers, the massive ships that transport liquefied nat-

ural gas, holds a nearly 80% share of the global market. With the rise in LNG exports, its revenue has steadily increased since the start of the Ukraine war. In the first

nine months of 2024, GTT generated €464.7 million, up 55% compared to the same period in 2023, and had 325 carriers in its order book in September 2024. While the

majority of GTT's activity is associated with LNG, the company is trying to diversify, particularly in hydrogen. All of the financial analysts that follow GTT recommend

buying shares.

FOUNDED: 1933
HEADQUARTERS: SAINT-REMY-LES-CHEVREUSE (FR)
EMPLOYEES: 750
2023 REVENUE: €428 M
→ GTT

BURCKHARDT The compressor king

In order to transfer methane into liquefied natural gas, the gas needs to be compressed and then refrozen, a process that requires compressors in the

liquefaction terminals, gas tankers, and re-gasification terminals. Swiss company Burckhardt Compression is the global leader in this sector. In November 2024, the

company won a major contract in Germany to build a new terminal for liquefied natural gas (LNG). Analysts that follow the company recommend buying or

holding shares, as it is already very well valued.

FOUNDED: 1844
HEADQUARTERS: BASEL (CH)
EMPLOYEES: 2,600
2023 REVENUE: CHF 1.124 BN
→ BCHN

focus is on emerging markets. Asia, and particularly China and India, will stimulate demand in their shift from coal to gas – a cleaner energy. South-east Asia, with growing economies such as Vietnam and Thailand, is also increasing the need for more LNG imports.”

“Gas creates pollution, but less so than coal and oil. It’s a transition energy”

Baptiste Leflaive, energy consultant at Columbus Consulting

But once again, the outlooks are uncertain. “The evolution of LNG consumption will depend on three key factors,” said Otmane Jai. “First, renewable energy policies: are we going to continue to support fossil fuels? Second: will the growth in Asia follow? If China returns to growth,

there will not be any overcapacities. Third: it will depend on the price of gas, as compared to the price of other energies. If LNG prices

are competitive, China and India will gradually replace their coal-fired plants with gas facilities that produce less pollution. That’s market law.” When the price of gas exceeds a certain level, demand in Asia decreases.

This scenario happened in late 2024. “Given the recent price spikes for LNG, which made the gas more expensive than oil, demand fell in Asia,” said Roberta Caselli of Global X ETFs Europe. “Several companies are now trying to resell their shipments of LNG to deliver by the end of winter.”

The last challenge is the environment. According to Reclaim Finance, “the new terminals, in addition to not being necessary, will have a devastating effect on the climate.” According to figures from the NGO, “the 63 LNG export terminals that are expected to be operational by 2030 could leak methane and therefore emit more than 10 gigatonnes of greenhouse gases (GES) by the end of the decade. This is nearly the equivalent of the annual emissions of all the

active coal-fired plants around the world. These terminals will lead to dangerous levels of pollution and health risks for local communities.”

But Alessandro Valentino puts these sombre predictions into perspective: “Increased production and consumption of LNG do not necessarily pose a significant threat to climate goals, as these goals are designed to be achieved sustainably and on a long-term basis. LNG is part of the transition towards reducing dependence on fossil fuels that create more pollution such as coal, particularly in emerging economies.”

Baptiste Leflaive agrees: “Gas creates pollution, but less so than coal and oil. It’s a transition energy. If China and India wish to reduce their emissions, they will need LNG to replace coal. The roadblock to this transition is the price of coal, which remains extremely competitive. As a result, China continues to invest very heavily in its coal-based infrastructure. The real risk is if LNG slows down the adoption of renewable energies.” ▲

Released by the Danish army in September 2022, this photograph went viral around the world. Off the island of Bornholm, the Baltic Sea can be seen boiling after the Nord Stream 2 gas pipeline was sabotaged, leading to a huge gas leak.



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Six enterprises
fertiles

D O S S I E R

A baby at any cost

Roughly one in six people worldwide are affected by infertility. That figure has been climbing over the last 50 years. That should be reason enough to develop the diagnosis and treatment of childless couples. BY BERTRAND BEAUTÉ



© CHRISTOPH BURGSTEDT, ISTOCK

**IVF is now used
in 9% of births in
developed countries,
up from around 2%
in 2010**

S

he turns 40 in 2025. Who is she? Her name is Yelena, Switzerland's first test-tube baby, born in 1985 at Locarno hospital as a result of in vitro fertilisation (IVF). At the time, she was an exception, but those days are over. More than 2,000 babies are born every year in Switzerland after IVF, representing almost 3% of all live births. That percentage has stagnated in our country since 2010 due to less accommodating legislation (see inset, p. 44), but it is rising in most Western countries. An editorial published in *The Lancet* in July 2024 reported that IVF is now used in 9% of births in developed countries, up from around 2% in 2010. →

“Since the birth of the first baby using in vitro fertilisation in 1978, the global IVF market has seen rapid growth,” says Kay Eichhorn-Schott, portfolio manager at Berenberg. “However, it is important that utilization remains relatively low. According to the European Society of Human Reproduction and Embryology, there were about 1 million IVF babies born globally in 2018, which represents less than 1% of the total number of births. The market will continue to grow.”

“The rise of a middle class is fuelling demand. In countries like China, the sector is growing fast”

Kay Eichhorn-Schott, portfolio manager at Berenberg

Marine Dubrac, co-manager of the Wellness fund at Thematics Asset Management, agrees, “Growth in the fertility market is driven by increased demand and supply.” On the demand side, infertility – defined as the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse – now affects 17.5% of the global population, or about one adult in six, according to the World Health Organization (WHO). This figure has been rising steadily over the last 50 years, mainly because adults are deciding to become parents at an ever later age.

“Age – especially for women, but also to a lesser extent for men – is the main factor in infertility,” Marine Dubrac says. “At age 25, a couple has a 25% chance per cycle of getting pregnant; at 35 chances are 12% and after age 40 less than 5%.” For example, in Switzerland the average age of women at

the birth of a child was 32.4 in 2023, compared with 27.7 in 1971, according to data from the Swiss Federal Statistical Office (FSO). The average age of men is following the same curve, at 35.3 today compared with 34 in 2007. “Firstly, we expect a continuation of the trend of women deciding to have their child at a later stage in life, which increases the likelihood of IVF coming into play,” Kay Eichhorn-Schott says. At the same time, demand is driven by more open legislation in some countries making it possible for single individuals and same-sex couples to seek medically assisted reproduction (MAR) techniques (see map on p. 45).

Also, the medically assisted procreation sector is being bolstered by developing countries, especially India and China. “The rise of a middle class is fuelling demand,” Kay Eichhorn-Schott explains. “In countries like China, the sector is growing fast.”

On the supply side, advances in medicine have brought about technologies that improve diagnosis and sperm and egg preservation (oocyte vitrification), along with a whole host of solutions for treating specific reproductive issues. In fact, traditional in vitro fertilisation is just one of many MAR solutions available, which also include artificial insemination, intra-

cytoplasmic sperm injection, preimplantation genetic testing and surrogacy (see also p. 36). “Innovation in the fertility market stimulates growth, a typical phenomenon in the medical sector,” Kay Eichhorn-Schott says. “In fact, innovation is essential to improve the success rates of medically assisted reproduction procedures.”

“It’s a rapidly developing sector, with expected growth of 8% to 10% per year”

Marine Dubrac, co-manager of the Wellness fund at Thematics Asset Management

What does all that mean? The research firm Imarc Group predicts that the global fertility market will grow from \$46.1 billion in 2024 to \$142 billion

by 2033, an average annual increase of 12.65% over the period. The scientific journal *The Lancet* is a little more cautious, estimating that the sector was worth \$34.7 billion in 2023 and expects it to grow to \$62.8 billion by 2033. “It’s difficult to estimate the size of the global fertility market, because it depends so much on what you include in it,” Marine Dubrac points out. “But what we can be sure of is that it’s a rapidly developing sector, with expected growth of 8% to 10% per year.”

This potential has not escaped the attention of investment funds. In a paper published in October 2023, Westcove, a private bank, wrote, “The

fertility services market has consistently garnered strong interest from private equity investors.” A case in point, in January 2023, the US investment fund KKR paid \$3 billion to acquire IVI RMA, a leading global fertility group with more than 190 clinics in 15 countries. More recently, in September 2024, Amulet Capital Partners announced the acquisition of Genetics & IVF Institute, a specialist in sperm and egg freezing, for an undisclosed sum.

In December 2024, French venture capital firm Astorg simultaneously acquired Hamilton Thorne, an assisted reproduction equipment supplier previously listed on the Toronto Stock Exchange, and the reproductive health activities of Cook Medical. With this double acquisition, Astorg →

Demographics: it’s all politics

The decision sent a shockwave throughout the medically assisted reproduction (MAR) sector in Alabama. On 16 February 2024, the Supreme Court of this state – one of the most conservative in the United States – ruled that frozen embryos can be considered “children” under state law. In the immediate aftermath, virtually all in vitro fertilisation (IVF) treatments were suspended, as doctors feared legal action should any cryopreserved embryos become damaged or die. Less than a month later, on 6 March, Republican Governor Kay Ivey reversed the decision, enacting a law protecting those who benefit from or carry out IVF. Where did the turnaround come from? Although conservatives have historically promoted the “traditional family” and are opposed to medically assisted

reproduction, the falling birth rate in Western countries has led them to change their views. In October 2024, for example, Donald Trump declared he was the “father of IVF”. “We really are the party for in vitro fertilisation... The Democrats tried to attack us on it, and we’re out there on IVF, even more than them,” said the new US President, who also pledged during the presidential campaign to make IVF compulsory for health insurance.

“Conservative parties are generally not in favour of MAR, but at the same time they are worried about the falling birth rate,” says Marine Dubrac of Thematics Asset Management. “Because of these demographic and economic issues, I think that MAR will be increasingly authorised and

reimbursed worldwide, which will support the market.” In Russia, a country experiencing a sharp demographic decline, IVF is largely covered by health insurance, and laws authorising it are fairly liberal. MAR is open to single women and unmarried couples, with no age limit. A study published in *The Lancet* in May 2024 showed that more than half of all countries have a fertility rate that is too low – less than 2.1 live births per female – to maintain their population levels. The authors predict that by 2050, three-quarters of countries will fall below replacement-level fertility. And by 2100, this could concern 95% of countries. In Switzerland, for example, FSO data pointed to a birth rate of 1.33 children per female in 2023, compared with 2.7 in 1964.

© DANIEL LEAL/AFP

“Currently, only 2% to 3% of births a year worldwide require MAR, which makes it a niche market”

Marine Dubrac, co-manager of the Wellness fund at Thematics Asset Management.

“Private equity is all over the fertility market,” Marine Dubrac notes. “Many highly innovative companies have been bought

out by these firms in recent years. So we’re likely to see a series of IPOs in the sector as they withdraw.”

In the meantime, few companies focused solely on fertility are publicly listed. And, apart from Vitrolife and CooperSurgeries, they are often micro-businesses, such as the Germany company NanoRepro and Singapore’s NewgenIVF (see our selection on pp. 46 to 51). “Legislation on medically assisted procreation still varies significantly from one country to another, making it difficult for global players to emerge,” Marine Dubrac says. “What’s more, although its fast growth is driven by major innovations, the market is still in its infancy. Currently, only 2% to 3% of births a year worldwide require MAR, which makes it a niche market. Over the very long term, companies active in the field could be a worthwhile investment, although short-

term stock market performance is likely to be volatile. For unsophisticated investors, the sector is complicated and lacks maturity.”

Kay Eichhorn-Schott is more optimistic. “Given the strong long-term growth fundamentals, we believe that the fertility sector can be attractive to private investors,” he says. The Berenberg portfolio manager expects the market to become more streamlined in the short term, after which larger players will emerge. “In recent years, we have seen consolidation in the fertility clinic sector, and chains have formed, especially in the United States.” “These groups don’t want to deal with a large number of suppliers. By choosing fewer providers, they will stimulate consolidation among IVF equipment manufacturers – an industry in which Vitrolife and Cooper Companies are currently the biggest players.”

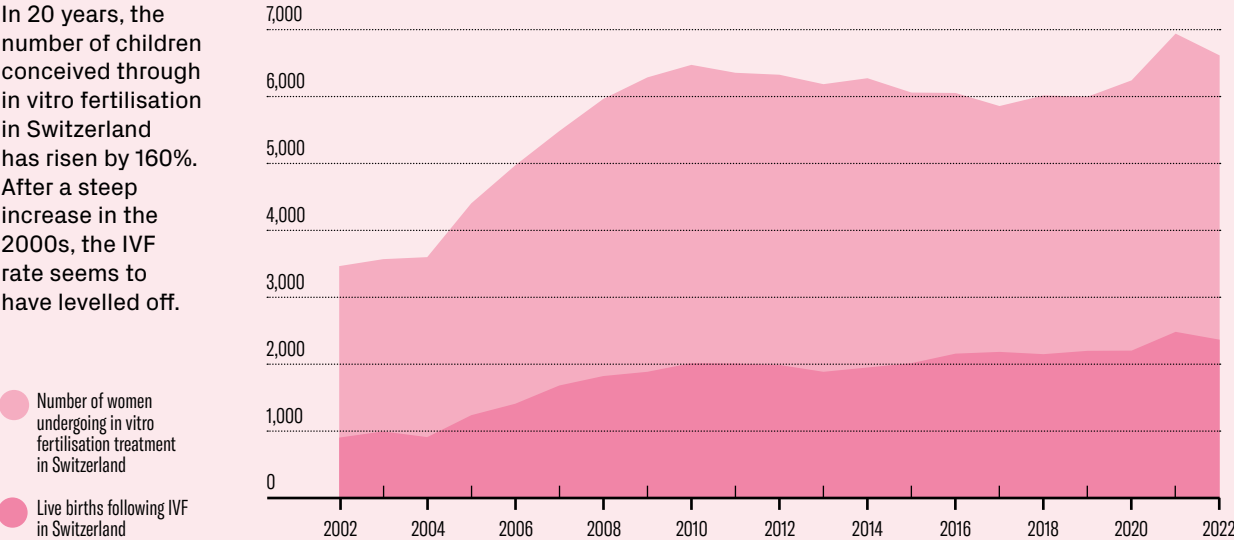
Medical treatments are booming

Since the first in vitro fertilisation (IVF) in 1978, infertility treatments have advanced phenomenally in both quantity and quality.

BY BERTRAND BEAUTÉ, INFOGRAPHIC: AURÉLIEN BARRELET

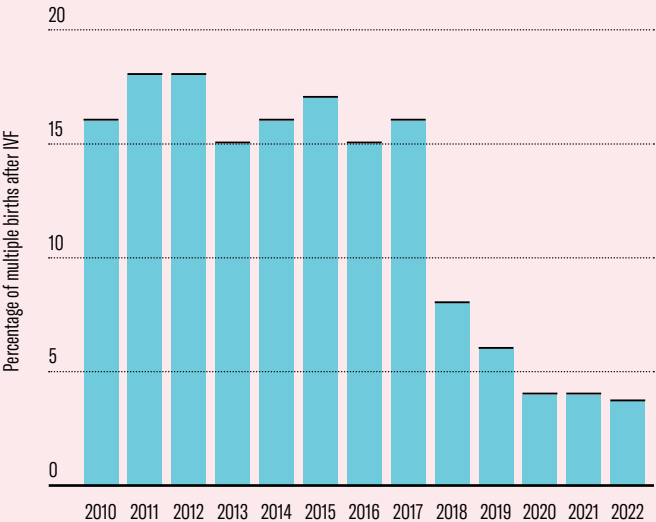
IVF rates stagnate in Switzerland

In 20 years, the number of children conceived through in vitro fertilisation in Switzerland has risen by 160%. After a steep increase in the 2000s, the IVF rate seems to have levelled off.



Decrease in multiple births

The rate of multiple births (twins, triplets and higher) after in vitro fertilisation has fallen sharply in Switzerland, from 16% in 2010 to 3.7% in 2022.



Top 5 European countries

With looser laws than its neighbours, Spain is the European leader in medically assisted procreation. Alone, the country accounts for 15% of all IVFs performed in Europe.

	Country	IVF cycles performed (2022)	Percentage of European market
1	ES	165,000	15.0%
2	FR	142,000	12.9%
3	DE	128,000	11.6%
4	IT	101,000	9.2%
5	UK	84,000	7.6%
	CH	12,500	1.1%



← An embryologist places tubes containing oocytes (egg cells) frozen by vitrification in a storage tank filled with liquid nitrogen, in the OVA IVF clinic laboratory, in November 2023, in Zurich.

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SOURCES: OFFICE FEDERAL DE LA STATISTIQUE (OFS), EUROPEAN SOCIETY OF HUMAN REPRODUCTION AND EMBRYOLOGY (ESHRE)

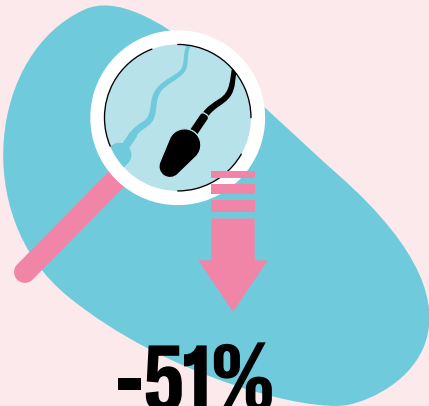
FERTILITY

Some key numbers



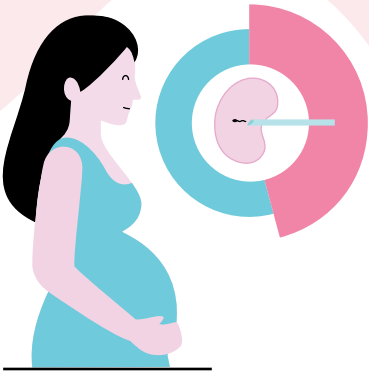
+208%

Expected growth in the global fertility market from \$46.1 billion in 2024 to \$142 billion in 2033, representing an average annual rate of 12.65% over the period.



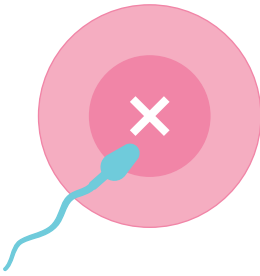
-51%

Plunge in the average sperm concentration over the past 45 years, from 101 million sperm per millilitre of semen in 1973 to less than 49 million in 2018.



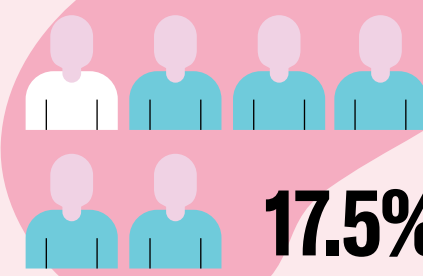
46.1%

IVF pregnancy rate for women in Switzerland in 2022.



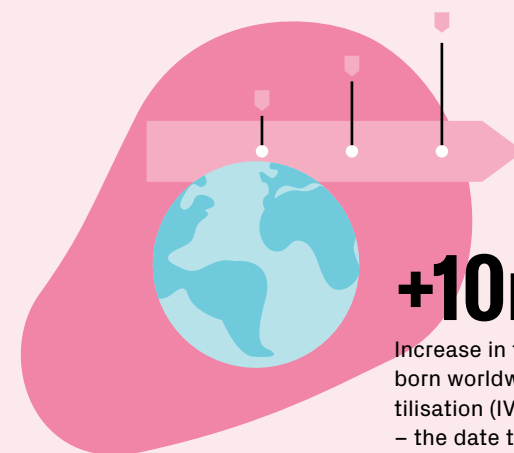
+15%

Increase in infertility worldwide since 1990.



17.5%

Percentage of the adult population worldwide experiencing infertility issues during their lifetime, i.e., almost one in six people.



+10m

Increase in the number of children born worldwide after in vitro fertilisation (IVF) since 25 July 1978 – the date that Louise Joy Brown, the world's first test-tube baby, was born.



12.8%

Percentage of children born prematurely after IVF in Switzerland in 2022 – down from 20.6% in 2017.



34.6%

Birth rate from IVF for women in Switzerland in 2022.

7 methods under a microscope

Assisted reproductive technology can be quite technologically advanced, and several public companies play a key role. Here is an overview...

BY BERTRAND BEAUTÉ

If there is no confirmed pregnancy after 12 months of regular, unprotected sexual activity, heterosexual couples are advised to seek medical attention if they wish to have a baby. Doctors will analyse fertility data from the two partners (including blood tests, hormone levels, genetics, ultrasounds, hysteroscopy, laparoscopy, semen analysis, etc.). Based on the results of this testing, some couples may choose to move forward with assisted reproductive technology.



1



Hormonal stimulation

Infertile does not mean sterile. In many cases, couples who are unable to conceive after 12 months may not be able to naturally conceive in the future. If there is no clear cause or evidence of hypofertility within the couple, the first line of treatment is to improve natural fertility through hormone injections (gonadotropins), either artificial or human, which for women stimulate ovulation and for men encourage sperm produc-

tion. Some of the top hormone manufacturers are US-based Merck & Co and Swiss group Ferring Pharmaceuticals, which is not listed. According to the firm Precedence Research, the human gonadotropin market was worth \$2.15 billion in 2024 and is expected to reach \$2.94 billion in 2034, which is an annual growth of 3.2%. This is driven by fertility treatments, particularly in vitro fertilisation, which also requires hormonal stimulation.

2

Artificial insemination (AI)

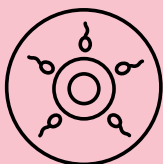


Intrauterine insemination (or artificial insemination) is a simple technique, and the first trials on humans date back to the end of the 19th century. Sperm produced after masturbation are placed directly in the uterine cavity of the woman during ovulation using a flexible tube (catheter). This reduces the travel distance for the sperm and avoids cervical mucus. Artificial insemination can be conducted either with sperm from the partner or sperm from a donor. Artificial insemination by partner is recommended if the partners cannot have sex, if there is reduced number or activity of the sperm or if the cervical mucus is

not permeable enough. Artificial insemination with donor sperm is recommended if the partner does not have any spermatozoa in the ejaculated sperm, if there is increased risk of a genetic disorder, or if two women or a single woman wishes to be pregnant. In both cases, hormonal stimulation can be offered to increase the success rate of the procedures. In Switzerland, artificial insemination by partner and by donor are priced at approximately 800 Swiss francs and 1,800 Swiss francs, respectively. Additional costs for blood tests, sperm preparation and medications are approximately 500 to 1,000 Swiss francs.

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3

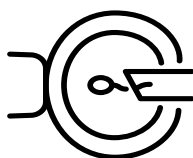


In vitro fertilisation (IVF)

In cases where targeted sexual activity, hormonal stimulation and intrauterine insemination do not result in pregnancy, or are insufficient, in vitro fertilisation could be the next option. With this method, after hormonal stimulation, eggs are released from the ovaries and retrieved, then they are combined in the lab with sperm from either the partner or the donor. After an incubation of 16-20 hours, the zygotes (fertilised eggs) are created. After a growth period in an incubator (embryoscope), one embryo (or sometimes two) is transferred into the uterus. The remaining embryos are cryopreserved for later use.

IVF is primarily used in cases of female infertility (endometriosis, fallopian tube obstruction, etc.). One cycle of conventional IVF is priced at approximately 6,500 francs in Switzerland (not covered under basic insurance), in addition to the blood tests and other procedures (200 to 500 francs) as well as the cost of medications (1,500 to 3,000 francs). The first baby to be conceived via IVF was Louise Brown, born 25 July 1978 in the United Kingdom.

4



Intracytoplasmic sperm injection (ICSI)

A type of IVF, intracytoplasmic sperm injection (ICSI) is a procedure done in a laboratory where sperm is injected directly into the cytoplasm of an egg that was previously retrieved from a woman. The first ICSI baby in the world was born in 1992 at UZ Brussel in Belgium. Compared to traditional IVF, ICSI is helpful for men with a very low spermatozoa count who wish to become fathers. In Switzerland, IVF-ICSI is priced at approximately 7,000 francs (not

covered under basic insurance) in addition to the blood tests and other procedures (200 to 500 francs) as well as the cost of medications (1,500 to 3,000 francs). The global IVF and IVF-ICSI market was valued at \$857 million in 2023, by the firm Markets & Markets, and is expected to reach \$1.65 billion in 2029, an annual growth of 11.7% over the period. Companies such as The Cooper Companies and Vitrolife supply all the materials needed for a complete IVF cycle.

6



Fertility preservation

Cryoconservation techniques can now be used to preserve fertility, that is, the reproductive cells of a patient (sperm and eggs) and in some countries embryos, in order to delay having a baby. This method is used by women (egg freezing) who wish to get pregnant later in life, as well as for men and women undergoing treatment that could leave them sterile (testicular cancer, particularly). In Switzerland, egg freezing costs approximately 5,000 Swiss francs, in addition to egg storage (approximately 400 francs per year) and eventually the thaw and IVF transfer (approximately 2,000 francs).

5

Preimplantation genetic diagnosis (PGD)



PGD is a medical technique in which embryos created via in vitro fertilisation are analysed for genetic markers before being transferred to the uterus. Cells are sampled from the embryo after several days of development in order to analyse their genetic makeup in the laboratory. For couples with serious genetic diseases, PGD can be used to select and transfer an embryo that has no genetic defects into the woman's uterus. For couples who cannot conceive a child naturally (multiple miscarriages, for example), embryos with the highest growth potential are selected and implanted. PGD was done for the first time in 1990

in the United Kingdom. In Switzerland, it has been legal under certain conditions since September 2017. This method is used to detect aneuploidy (an abnormal number of chromosomes in a cell), known as PGD-A, as well as genetic diseases, known as PGD-M. The costs for PGD – starting at 700 Swiss francs per embryo – are not covered by obligatory health insurance. According to Markets & Markets, the global PGD market was valued at \$0.7 billion in 2023 and is expected to reach \$1.2 billion in 2028. Companies in the industry include Vitrolife, Thermo Fisher Scientific and The Cooper Companies.

7

Surrogacy

Surrogacy is a process in which a woman, generally known as the “surrogate”, will carry a child for a separate couple. With this form of assisted reproductive technology, an embryo created from in vitro fertilisation (IVF) or insemination is transferred into the uterus of the surrogate. This is illegal in many countries including Switzerland, France, Spain and Germany. Other countries, such as Belgium and Czech Republic, have no surrogacy-specific laws, which means that it can be done but there are no legal protections for the intended parents if the surrogate decides to keep the baby. Conversely, surrogacy is legal in other countries such as Canada or some American states.



“Some couples can’t afford IVF”

Age, disease, genetics, lifestyle, environment, or sperm quality: infertility is often due to multiple factors. The problem can be a mysterious one, with no magic solution. Interview with Dr Isabelle Streuli, head of the Reproductive Medicine Unit at Geneva University Hospitals. BY BERTRAND BEAUTÉ

Considered by the World Health Organization (WHO) to be a “major health challenge”, infertility is a growing concern as birth rates fall in Western countries. In Switzerland, about one in six adults experiences difficulty having a child in their lifetime. Is there cause for alarm? Dr Isabelle Streuli, senior physician and head of the Reproductive Medicine and Gynaecological Endocrinology Unit at Geneva University Hospitals (HUG), weighs in.

Infertility problems are increasing worldwide. Why is that?

Several factors come into play when it comes to the fertility problems that couples can face. However, a woman’s age is the most crucial factor, as the quantity and quality of eggs decline dramatically as the years pass. These days, women decide to have children later and later, which mathematically increases

the challenges of getting pregnant. After age 40, a woman’s risk of infertility – defined as the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse – is multiplied by six.

Aren’t we placing too much of the burden on women by considering their age as the main risk of infertility?

Men’s age also plays a role, but to a lesser extent. That said, in most cases infertility results from an accumulation of several small factors that affect both men and women. When combined, they reduce the chance of pregnancy. Overall, around 30% of infertility cases involving a couple are linked to the woman, 30% to the man and 20% to both. Therefore, women alone are not to blame! The remaining 20% includes infertility problems →

→ Head of the Reproductive Medicine and Endocrinology Unit at Geneva University Hospitals, Dr Isabelle Streuli poses in front of the HUG Maternity Ward, where infertility cases are treated.



© NICOLAS BIGHETTI, LUND13



↑ An employee carries out an in vitro fertilisation (IVF) procedure at the Fertas laboratory on the premises of the Clinique Générale-Beaulieu in Geneva.

due to unidentified causes. And that is very hard for the couple to accept. They want a clear answer to their problem, and we can't always give them one.

When they are identified, what are the most common causes of infertility?

In women, infertility can be caused by ovulation problems, fallopian tube damage, diseases such as endometriosis, or problems relating to sexuality, such as the inability to have sexual intercourse. In men, it involves sperm count or sperm motility. But it's important to note that

infertility does not necessarily mean sterility, because fertility varies naturally over time. Sperm count in semen fluctuates. Ovulation can be irregular and does not always occur at the same time in the menstrual cycle. After one year, around 15% of couples are unable to procreate naturally and are therefore considered infertile. By trying for a second year, without taking any special measures, this figure drops to 7%. Some couples who are unable to have children naturally would eventually get pregnant down the road if they kept trying. In English,

they refer to this as "subfertility" rather than infertility. However, difficulty in getting pregnant causes significant psychological distress, and it has a serious impact on the relationship and the couple's sexuality. That is why it's important to seek out special medical help.

Several epidemiological studies have shown that sperm counts have fallen over the last 50 years, from more than 100 million sperm per millilitre in the 1970s to less than 50 million today. What are the causes of this decline?

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For the most part, we don't know what the causes are, but scientists suspect it's connected to chemical exposure, especially to endocrine disruptors. The drop is worrying because we don't know when it will stop. But, in terms of fertility, we're still above the WHO fertility threshold of 20 million sperm per millilitre.

The market is full of apps and home ovulation tests. Do they really help couples to get pregnant?

Apps are widely used by couples to track fertility windows, but no scientific study has proven that they're effective. What's more, they all have different algorithms, but I think some of them work well with women who have very regular menstrual cycles. But these people need them the least. As for urine ovulation tests, they improve the chances of pregnancy for women under 40 who are not infertile. There again, these are the people who need them least.

What solutions are available through medically assisted reproduction (MAR) technologies?

First, we will look for the causes of infertility and then, depending on the diagnosis, propose appropriate solutions. The first step is to recommend lifestyle changes, since factors such as obesity, exposure to toxic substances (tobacco, alcohol) or excessive exercise can have a deleterious impact on the chances of achieving pregnancy. Medical treatment will then be proposed. In certain cases of endometriosis or deformation of the uterine cavity by myomas, we may resort to surgery. In cases of ovulation disorders, hormonal treatment may be administered, with or without artificial insemination, provided that there are no severe spermogram disorders. In many

situations, particularly where there is damage to the fallopian tubes, severe endometriosis or severe male dysfunction, in vitro fertilisation is the preferred option. Sperm donation is a possible option in the case of severe male disorders, particularly in the absence of sperm.

"In some countries, fertility has become a big business"

What are the main innovations in MAR since the first IVF in 1978?

There have been many. Intracytoplasmic sperm injection (ICSI) was introduced in the 1990s and has made it possible for men with severe oligoasthenospermia – decreased sperm concentration and sperm motility – to try IVF with their partner. Preimplantation diagnosis of diseases (PGD-M), which has been authorised in Switzerland since 2017, enables couples suffering from or carrying a rare and serious genetic disease to avoid passing it on to their child. PGD-A (pre-implantation diagnosis of aneuploidies, i.e., abnormalities in the number of chromosomes) is aimed at couples undergo-

ing IVF, and ensures that only embryos with the correct number of chromosomes are placed back in the womb, thereby improving the chances of pregnancy and reducing the risk of miscarriage. Demand for PGD has risen sharply since this treatment was first authorised in Switzerland in 2017.

Fertility preservation (gamete cryopreservation) is also developing. This field uses a technique called vitrification, which consists in immersing oocytes directly in liquid ni-

trogen at -196°C to freeze them. It has been a major innovation, since it offers better results than the slow cryopreservation used in the past.

Over the next few years, several other innovations could improve patient care, including non-invasive PGD. This involves genetic testing on the follicular fluid, instead of removing embryonic cells. Robotisation and automation are also being used more and more with MAR technologies.

In Switzerland, the use of IVF has levelled off since 2010, with an average of 2,000 births per year. Why is that?

Unlike hormonal stimulation or →

IVF: prices vary widely from country to country

Country	Cost of an IVF cycle (starting at)	Cost of an IVF cycle with egg donation (starting at)	Covered by the mandatory health insurance system
SPAIN	€ 5,000	€ 7,000	Partial
SWITZERLAND	CHF 5,500	Prohibited	No
FRANCE	€ 4,000	€ 6,000	Full
UNITED KINGDOM	£ 6,000	£ 10,000	Partial
POLAND	€ 2,700	€ 4,500	Partial
UNITED STATES	\$13,000	\$25,000	No

artificial insemination, IVF is not covered by mandatory health insurance in Switzerland. That's the limit. Some couples simply cannot afford this treatment. It is relatively expensive, and it often takes several IVF cycles before achieving pregnancy.

Some couples decide to go abroad where IVF is much cheaper...

They should be wary of the prices advertised on websites, because you don't always know what's included. The bill often sky-rockets after the fact, due to all the tests and medications that are added. It's true that IVF is more expensive in Switzerland. But that's

because it's a complex treatment that requires many hospital and laboratory specialists, and salaries are higher here.

Patients also go abroad for treatments that are not authorised in Switzerland, such as IVF with donor eggs and surrogacy. What do you think of this reproductive exile?

In some countries, fertility has become a big business with medically assisted reproduction centres whose aim is purely commercial. Patients are sometimes hostage to this system, because once you've started treatment to become a parent, it's very difficult to stop before

you've actually become pregnant. This pushes some patients to try multiple IVF cycles and go into debt. To deal with this situation, we try to maintain our role as doctors. We talk to patients and present them with all the options. If, for example, a woman needs an egg donation to make her wish of getting pregnant a reality, we inform her that she cannot do it in Switzerland but that the technique is available elsewhere. On the other hand, surrogacy is a different matter. Swiss law is much more restrictive, and intermediaries can even go to prison. So we cannot advise our patients to seek surrogacy abroad. ▲

Exile and injustice

In 2015, Geneva resident Adva Grundman chose to travel to the Czech Republic for in vitro fertilisation (IVF) treatment. Why? The price. "In Switzerland, medically assisted reproduction (MAR) is still very expensive and not reimbursed, unlike countries such as France, where four IVF cycles are covered by the national healthcare system," Adva Grundman says.

"As long as this is the case, part of the population will not be able to afford the technique here. And the logical consequence is that couples will seek assistance in other countries." In the Czech Republic, for example, the price of an IVF cycle starts at about €2,500, as opposed to at least 5,000 Swiss francs in Switzerland (see table on p. 43).

But the main reason why couples who cannot have children go outside the country is not the cost. Most often, they venture beyond their borders to benefit from technologies that are banned in their home country. IVI fertility clinics in Spain state, "The majority of Swiss women who come to see us are there for

an oocyte donation, a practice that is banned in Switzerland.” As a result, several European countries have become fertility havens, including Belgium, Spain, Portugal, the United Kingdom and the Czech Republic. But for couples, “it’s challenging to go to a country they don’t know. If they had other options, they wouldn’t do it,” Adva Grundman asserts.

To support them, Adva Grundman set up ART Fertilité in 2015. “At the time, we were the only French-language website on the subject of reproductive exile. These days, many intermediaries are available to guide couples through the MAR process abroad. However, demand for our services continues to grow, even though we do no advertising.”

But things could begin to shift. On 30 January 2025, the Swiss Federal Council presented a proposal to allow egg donation in Switzerland, which is due out for consultation by the end of 2026. (Finally.) However, we must proceed with caution. Some private fertility centres – occasionally

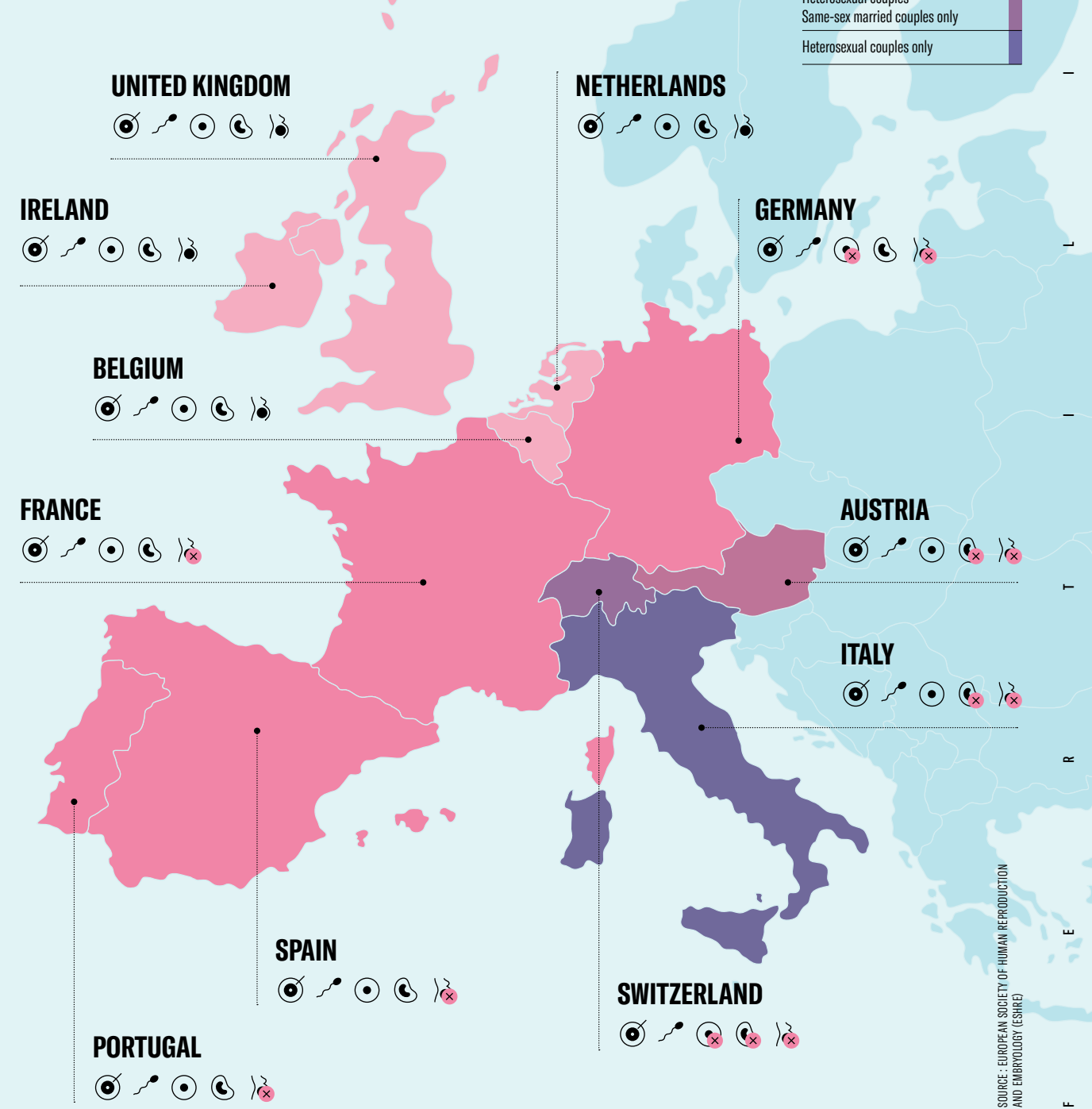
nicknamed baby factories – do not hesitate to turn a profit on the backs and distress of patients desperate to have children. A study published in November 2016 in the *British Medical Journal* sent a shockwave: out of 38 medical examinations routinely offered to infertile couples by British clinics, 27 were not medically justified. That's more than 70%!

Now almost 10 years later, questions involving cost, funding and profit remain. In the editorial “The fertility industry: profiting from vulnerability”, published in *The Lancet* in July 2024, scientists express their concern, “In the UK, more than 60% of IVF is privately funded and one cycle can cost £5,000 or more. Insufficient public funding and regulation alongside the high demand for fertility treatments have driven the commercialisation and financialisation of ARTs (Assisted Reproductive Technologies).” And the journal deplores the fact that these clinics prescribe (and charge for) unnecessary supplements and services throughout the MAR journey.

ART, but not for everyone

Legislation, prices and reimbursement for assisted reproductive technology (ART) vary widely depending on country.

INFOGRAPHIC: AURÉLIEN BARRELET





fertile companies

A handful of companies specialise in diagnosing or treating infertility, as well as providing support through pregnancy. We have hand-picked a few of them for you.

BY BERTRAND BEAUTÉ

NanoRepro The rapid test

Founded in 2006 and listed on the stock exchange since 2008, German micro-company NanoRepro develops rapid diagnostic tests for professional and personal use. Its products are CE certified, which means they are authorised in the European Union. The top of the list includes FertiQuick (fertility test), OvuQuick (ovulation test) and GraviQuick (pregnancy test). In this segment, NanoRepro’s main competitors are Swiss Precision Diagnostics – a 50/50 joint venture owned by P&G and Abbott Laboratories –

which markets the well-known Clearblue brand of ovulation and pregnancy tests.

Despite the competition, this small German company is growing fast. Its revenue rose from €3.2 million in 2023 to €4.4 million in 2024

“The market for ‘at-home’ assistance, which includes apps, ovulation and pregnancy tests, and

hormone supplements, is developing rapidly,” says Marine Dubrac of Thematics AM. Despite the competition, this small German company, which also sells rapid detection tests for infections and allergies, is growing fast. Its revenue rose from €3.2 million in 2023 to €4.4 million in 2024. Its share price, on the other hand, fell 30% year-on-year. No analysts are following the stock independently.

FOUNDED: 2006 **HEADQUARTERS:** MARBURG (DE)
EMPLOYEES: 20 **2024 REVENUE:** €4.4 M → NNG



Vitrolife The IVF expert

Once the pandemic lockdowns were lifted, the number of IVF procedures soared. People were making up for lost time. That was all it took to propel the share price of Swedish company Vitrolife to record highs. At end-2021, the stock was trading above 550 Swedish krona, justifiably. The company develops and markets products and systems that span the entire in vitro fertilisation (IVF) journey: oocyte retrieval and sperm separation devices, fertilisation and culture media, as well as tools for embryo evaluation and transfer. Its main customers are IVF clinics and hospitals, as well as research laboratories.

Since life returned to normal post-pandemic, the Vitrolife share has settled back down to levels more aligned with the

↑
Vitrolife develops embryo analysis software. Here, two specialists are analysing embryos obtained during IVF.

company’s size, i.e., around 225 Swedish krona at the end of January 2025.

The company is the only pure-player whose products cover the entire IVF cycle

The decline may seem dramatic, but Vitrolife still has some advantages worth considering in its sector. The company is actually the only pure-player whose products cover the entire IVF cycle. Its business model has also proved successful: convincing clinics to buy its machines, then selling them dedicated consumables throughout the life cycle of the equipment. With the acquisition of Igenomix in 2021 for €1.25 billion, Vitrolife has diver-

sified into the lucrative sector of reproductive genetic testing. In the first nine months of 2024, the Swedish company generated around 20% of its revenue from equipment sales – 40% from consumables and 40% from genetic tests – with a margin of over 50%. With that, the company has been able to pay its shareholders a small dividend – a rare feat for a company of this size – thereby enhancing its appeal to analysts. The three specialists who follow the stock recommend buying Vitrolife, which has lost two-thirds of its value since the 2021 overperformance. That makes its current price a good entry point for investors.

FOUNDED: 1994 **HEADQUARTERS:** GOTHENBURG (SE)
EMPLOYEES: 1,100 **2023 REVENUE:** SEK 3.512 BN
→ VITR

Natera
Genetic testing

The company is growing fast. That is how one might define the US-based company Natera in a few words. In the fourth quarter of 2024, Natera generated revenue of \$472 million, a 52% increase from the same period a year earlier (\$311 million). That is because the company is active in the fast-growing sector of genetic testing. Panorama, its star product, is a prenatal screening test for genetic diseases using a simple blood draw from the mother, thus avoiding amniocentesis, a much more invasive procedure.

Horizon determines the risk that couples could pass on serious genetic conditions

Among the many tests Natera has on the market, a whole range is aimed at planning a family. For example, Horizon is a screening test performed before or during pregnancy that determines the risk that couples could pass on serious genetic conditions to their child. Another test is Spectrum, a pre-implantation genetic test (PGT) that can detect

Developed by Natera, the Panorama test can detect certain genetic diseases in an embryo simply by taking a blood sample from the mother.
↓

aneuploidy (extra or missing chromosomes) and structural chromosome rearrangements in embryos during in vitro fertilisation (see also p. 38). This testing increases the chances of a successful IVF while eliminating the possibility of genomic diseases. Natera produces other genetic tests outside the fertility sector, especially in oncology. Almost all analysts who follow the stock recommend buying Natera shares.

FOUNDED: 2004 HEADQUARTERS: AUSTIN (US)
EMPLOYEES: 4,400 2024 REVENUE: \$1.7 BN
→ NTRA



Progyny
Fertility insurance

The seasons come and go, with no two being the same for Progyny fertility insurance, which covers the costs of medically assisted reproduction, mainly in the United States. In February 2024, the company's CEO announced that "2023 was another exceptional year for Progyny," with record revenue of more than \$1 billion for the first time in its history, a 38% increase compared with 2022. The company's shares were trading above \$40 at the time. Everything was going well. But the rest of 2024 ended up being a long downhill slide, worsened by Amazon's decision in September 2024 to change fertility insurance providers for its employees. In early November, Progyny's share price hit a low of less than \$15. Then came a rebound. Donald Trump's electoral victory seems to have done Progyny a world of good. Since the beginning of 2025, the stock has jumped 30% in value. During his campaign as a presidential candidate, he promised to make coverage mandatory for in vitro fertilisation.

If Donald Trump requires company insurance policies to cover IVF, Progyny's revenues could soar

In the United States, companies decide whether to take out insurance for their employees to cover the costs of medically assisted reproduction. And Progyny is the only fertility in-

surance company listed on the stock exchange. From in vitro fertilisation to pre-implantation screening to egg freezing, its benefits span the entire range of care from pre-conception to menopause. The company's customers already include some very big names, such as Uber, Google and Microsoft. If Donald Trump requires company insurance policies to cover IVF, Progyny's revenues could soar. The fertility insurer currently has more than

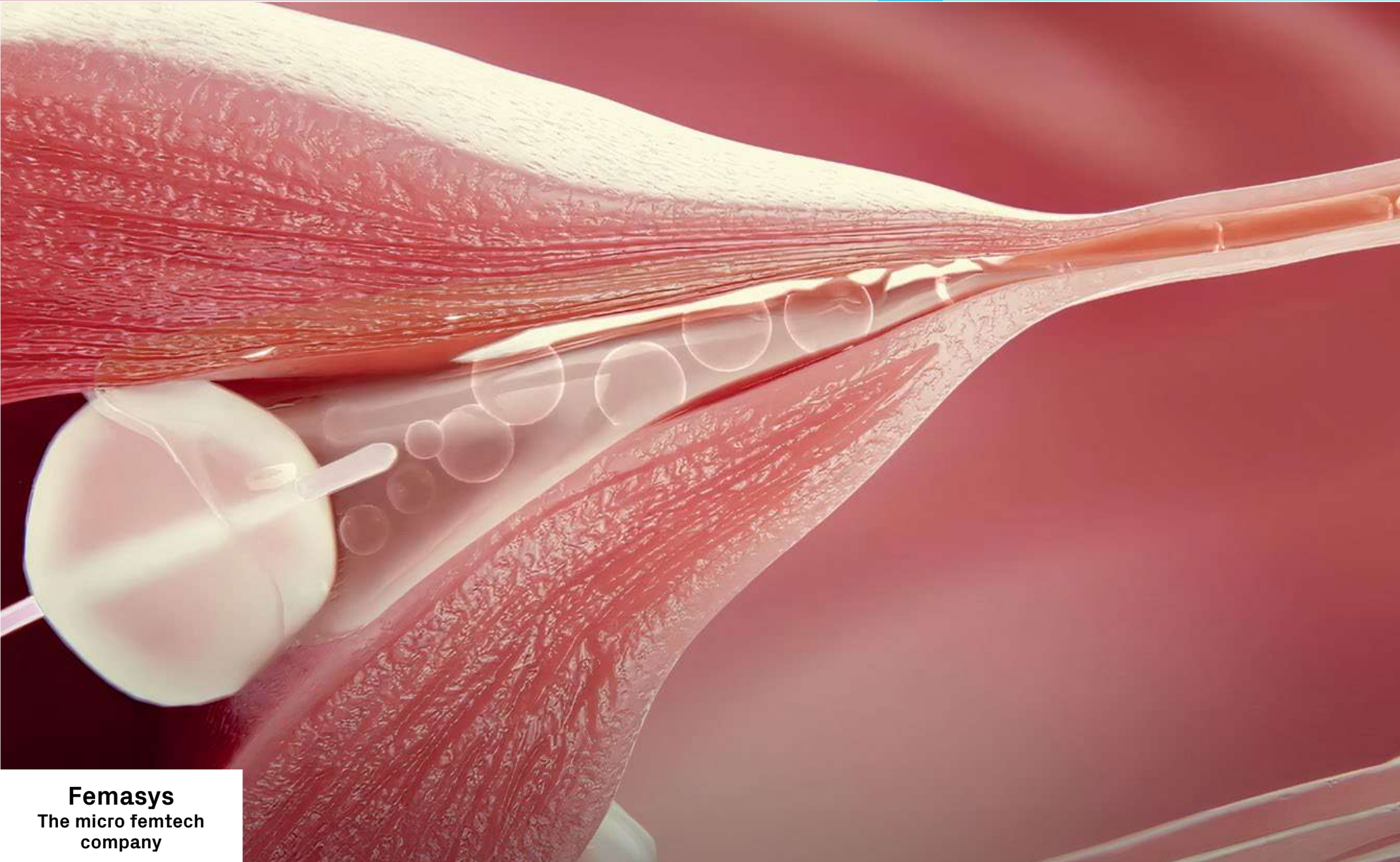
↑ Progyny CEO Peter Anevski, flanked by actress Kellee Stewart (left) and journalist Allie LaForce, in New York in April 2022.

500 corporate customers, representing more than 6.5 million employees. But it remains dependent on its key accounts, as seen with Amazon's decision to switch to one of its competitors, the Maven Clinic. Amazon accounted for 13% of Progyny's revenues in 2023. Most analysts recommend holding shares.

FOUNDED: 2008 HEADQUARTERS: NEW YORK (US)
EMPLOYEES: 1,000 2023 REVENUE: \$1.089 BN
→ PGNV



© ISTOCK / JOHN LAMPASKI, GETTY IMAGES



Femasys
The micro femtech company

Focused entirely on women’s health (femtech), US firm Femasys develops and sells four products, three of which relate directly to fertility. The first, FemaSeed, is used in artificial insemination to deliver sperm precisely into the fallopian tubes. It has regulatory approval in Canada, the United States and

Europe. The second, the FemVue Saline-Air Device, creates bubbles for better contrast during ultrasound scans of the fallopian tubes. This improves diagnosis of tubal infertility, or blocked fallopian tubes. FemVue has regulatory approval in Europe, Canada, Japan and the United States. The last product in the fertility line-up

↑ The FemCath intrauterine catheter, developed by Femasys, is used to analyse the fallopian tubes, which are often responsible for infertility.

is FemCath. Approved by the Food and Drug Administration (FDA), this intrauterine catheter is also used to examine fallopian tubes, which are often the cause of difficulties in conceiving. Despite the company’s recent approvals to launch the product, it has generated paltry revenue – barely \$1 million in 2023 – and the com-

© FEMASYS

The four analysts who follow the company believe in its potential

pany continues to lose money. All of this explains why the share was trading at just over \$1 at the end of January. Even so, the four analysts who follow the company believe in its potential. They all recommend buying the stock.

FOUNDED: 2004 HEADQUARTERS: SUWANEE (US)
EMPLOYEES: 35 2023 REVENUE: \$1.07 M → FEMY

CooperCompanies
The US giant

“Every 30 seconds, a baby is born using CooperSurgical products worldwide,” CooperCompanies boasts on its website. A competitor to Swedish firm Vitrolife, CooperSurgical – a subsidiary of CooperCompanies – develops and sells all the products needed for the various medically assisted reproduction (MAR) methods available, including cryopreservation machines, incubators for embryo growth, and instruments for transferring embryos into the fallopian tubes after in vitro fertilisation (IVF). In 2024, CooperSurgical generated revenue of \$1.29 billion and expects 4% to 6% growth in 2025, to reach between \$1.347 billion and \$1.372 billion in revenue this year.

In 2024, CooperSurgical generated revenue of \$1.29 billion and expects 4% to 6% growth in 2025

Alongside its fertility activities, CooperCompanies has a second business unit, CooperVision, specialising in ophthalmology and contact lenses. The revenue breakdown in 2024 was 33% for the fertility business unit (CooperSurgical) and 67% for the contact lens business (CooperVision). Most analysts recommend buying CooperCompanies shares, which have climbed almost 10% since the start of 2025 (end-January).

FOUNDED: 1958 HEADQUARTERS: SAN RAMON (US)
EMPLOYEES: 16,000 2024 REVENUE: \$3.9 BN → COO

PORTRAIT

Spotify sings a new tune

The global leader in streaming music announced its first-ever profit in 2024, thanks to successful diversification in podcasts and audiobooks, as well as an influx of paid subscribers. Its share price has skyrocketed. We take a closer look.

BY JULIE ZAUGG

↑ Daniel Ek, the Swedish founder of Spotify, now a billionaire.

IN FIGURES

100 M

The number of songs that can be streamed on Spotify. 100,000 new songs are added each day to the catalogue.

+\$110 BN

The valuation of Spotify in early February, and the share price tripled in value over one year.

39%

The percentage of active Spotify users that had a paid subscription in 2024.

67%

The percentage of revenue for the music industry that comes from streaming. Comparatively, the sale of physical albums is only 16% of total revenue.

© TORU YAMANAKA, AFP / SPOTIFY

It was a banner year. In 2024, Spotify turned a profit for the first time in its history. The reigning champion of streaming music generated a profit of 1.14 billion euros, compared to last year's loss of €532 million. The number of paid subscribers increased to 252 million in Q3 2024, up 12%, while the number of monthly active users is now at 640 million.

These stellar results caused the share price to soar (more than 300% over one year), a boon to the Swedish company listed on the NYSE, according to data from Matthew Dolgin, an analyst at Morningstar. As of early February, the price was \$550.

How did Daniel Ek, a tech genius who started out building websites while he was still in school, create a platform that became the world's largest streaming service? After being denied a

In 2024, Sabrina Carpenter claimed Spotify's most-streamed spot. Here, the Swedish company features her in an advert in Times Square, New York.

job at Google at the age of 16 because he didn't have a university degree, the young Swedish entrepreneur created an online marketing company and sold it at 23, earning his first million.

At that time in 2006, the music industry was struggling. Global revenue from recorded music went from \$22.3 billion in 1999 to \$18.1 billion in 2006, a descent into the abyss that would continue until 2014, when the industry reached rock bottom, with only \$13.1 billion in annual revenue.

"High-speed internet and the MP3 compression format led to pirating platforms such as Napster and Pirate Bay, which were used to share songs for free," said Eric Drott, streaming specialist at the Butler School of Music at the University of Texas Austin. Apple tried to compete and launched iTunes, but each song was priced at only 99 cents, which was much cheaper than the price of an album.

It was within this context that Spotify was born. Looking for a new business model, →



Daniel Ek knew that the music industry needed a solution to monetise its content. Inspired by peer-to-peer pirate platforms, he created a streaming portal where users could pay for a subscription and access a vast musical catalogue completely legally. The free version was available with advertisements.

“To stand out amongst its free competitors, Ek needed to ensure that his product was the best,” said Paul Resnikoff, founder of Digital Music News. “He focused on playback speeds, or how long it takes for a song to start playing, and reduced it to virtually no time at all. He also ensured that the portal would be available on many devices, including smartphones that had just started to appear on the market.”

In 2008, Ek secured another vital piece of the puzzle: cooperation from music labels. “The four top music labels – EMI, Sony, Universal Music and Warner – provided their entire music catalogues under license,” said Rasmus Fleischer, one of the co-authors of

“The original business model was based on advertisements But that never really brought in that much money”

Rasmus Fleischer, co-author of the book *Spotify Teardown: Inside the Black Box of Streaming Music*

Spotify's CEO Daniel Ek at a press conference in 2011 (New York) in front of the company's first logo, used from 2008 to 2013.

the book *Spotify Teardown: Inside the Black Box of Streaming Music*. Well aware of their advantage, the labels negotiated very favourable terms, requiring Spotify to pay out 70% of its revenue and granting them an 18% share in the company.

Launched in Sweden in 2008 and then the rest of Europe, the platform quickly gained millions of users. But to truly be successful, it needed to expand beyond Europe. “In 2011, Spotify partnered with Facebook to integrate with the social media platform,” said Eric Drott. “This resulted in immediate access to the US market and significant growth.” In just four days, the streaming platform gained 1 million new users.

© BLOOMBERG, GETTY IMAGES / SPOTIFY

But it still faced challenges. Despite growing revenue, Spotify continued to lose money each year. “The original business model was based on advertisements,” said Rasmus Fleischer. “But that never really brought in that much money, especially because the advertising market tanked after the 2008 financial crisis.”

Little by little, the founder of Spotify pivoted the business model towards paid subscribers. “He used a funnel method where Spotify would gain a large number of free users assuming that some would then be converted into paid subscribers,” said Benjamin Black, an analyst that covers the company at Deutsche Bank.

The number of users willing to pay a monthly fee to access the Premium version, which has no adverts or limits on listening time or number of plays, went from 12.5 million users at the end of 2014 to 252 million a decade later. Premium subscribers now make up 39% of Spotify's active monthly users and nearly 90% of its revenue.

At the same time, Spotify continues investing in product improvements. “The platform took a cutting-edge approach, analysing vast quantities of collected user data to offer personalised recommendations,” said Maria Eriksson, social anthropologist at the University of Basel who contributed to the book *Spotify Teardown: Inside the Black Box of Streaming Music*.

This strategy began in 2015 with the feature Discover Weekly, a weekly playlist that was created based on the listening habits of each user. Other similar services followed, with notifications of new releases from favourite artists or songs from a user's childhood. →

Spotify's European headquarters, in the heart of London, houses teams dedicated to R&D. It is the company's largest technical centre outside the United States and Sweden.

ANALYST OPINION

“New sources of revenue with strong growth potential”

Until recently, most analysts believed Spotify was a “good product with a bad business model,” said Benjamin Black, analyst at Deutsche Bank. But things have changed. “With a focus on podcasts and audiobooks, Spotify introduced new sources of revenue that have the potential to grow significantly and recalibrate its business model, which relied too heavily on big music catalogues. That should improve margins.” The platform also continues to gain market share, even while up against tough competition from tech giants. The analyst also notes the savings made in 2023, when more than one-quarter of the workforce was laid off. But in order to continue growing, Spotify must revise its monthly subscription fees upwards. “Prices essentially haven't changed in 15 years,” he said. “There is margin to increase them.” Spotify must also focus more heavily on developing countries, as western markets are starting to become saturated, according to Black. He has issued a buy recommendation. → SPOT



Music recommendations optimised with AI

Spotify now uses artificial intelligence plat- forms to create personalised playlists. It recently started using machine learning to analyse each song’s sound waves and improve recommen- dations. “This grows the user base, reaching people who often consume music passively, such as listening to the radio,” said Eric Drott of the University of Texas Austin.

Despite the incredible increase in paid users, Spotify had struggled thus far to become profitable, even as overall revenue from streaming music exceeded the amount from the late 1990s, reaching \$28.6 billion in 2023. “The platform continues to pay 70% of its revenue to music labels for rights,” said Drott. “And economies of scale aren’t possible here: when the number of users – and therefore streams – increases, the amount paid out for music rights increases as well.”

Furthermore, while Spotify continues to be the global streaming leader with more than a 30% market share in 2023, it is facing stronger competition from tech giants; Amazon, Apple and YouTube all launched very similar music streaming services starting in 2015.

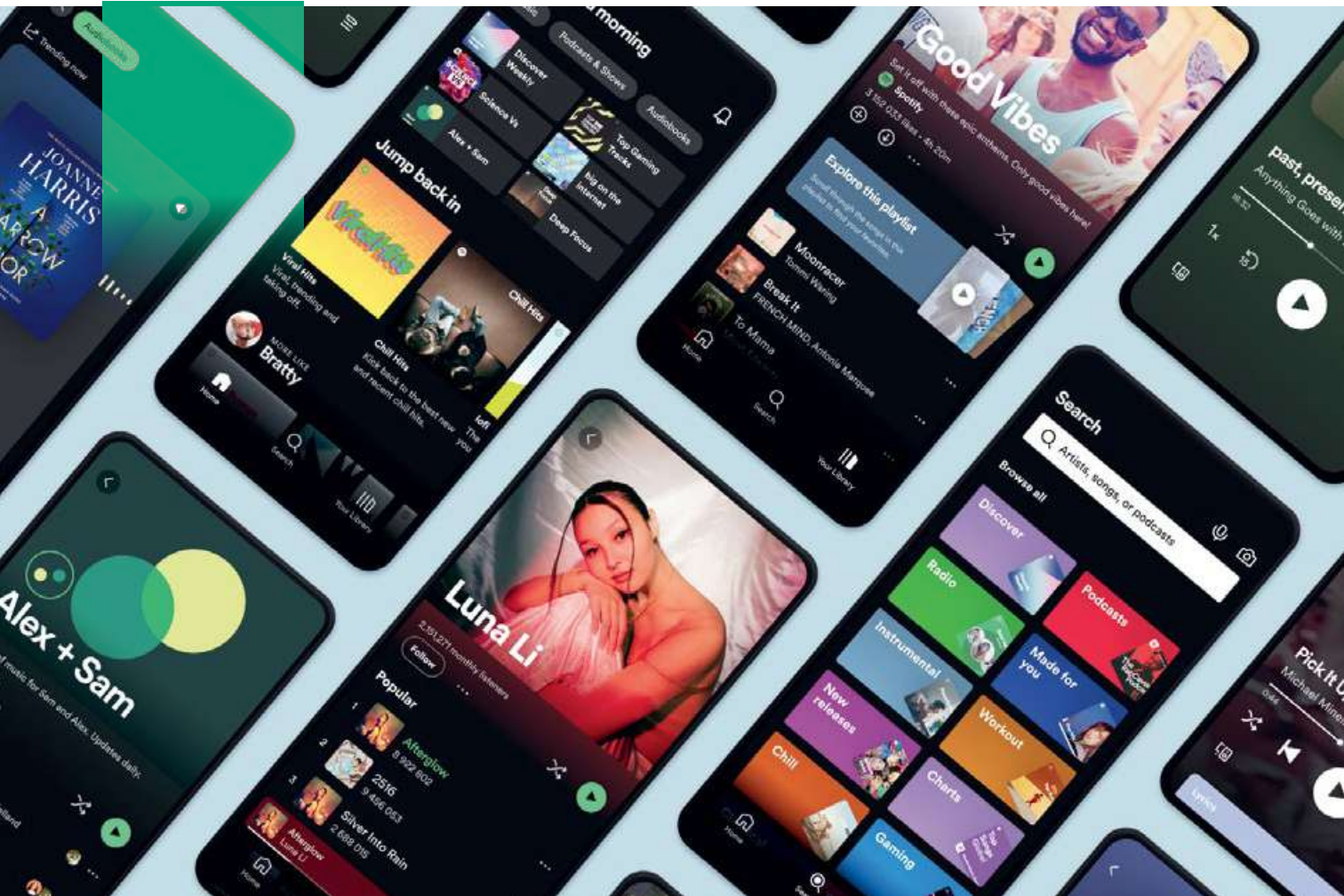
But Spotify, which entered the market a decade earlier, benefits from its pioneer status, according to Matthew Dolgin of Morningstar. “Music streaming isn’t a priority for tech giants, who tend to under-invest in their platforms and don’t prioritise them in their business strategy.” For Amazon, it is essentially a tool to draw listeners to its Prime service. Apple sees its platform as a way to sell more iPhones.

There are also other competitors to Spotify that are more confidential, such as Tidal, Deezer, Pandora and Qobuz. “These services have a better sound quality, a more limited mu- sic selection and pay artists more, which is a selling point for audiophiles,” said Anja Nylund Hagen, of the musicology department at the University of Oslo.

© SPOTIFY / NEKO HEALTH

Spotify is now home to 6 million podcasts and more than 350,000 audiobooks

Spotify’s app has become a must-have for hundreds of millions of users.



Spotify has promised CD-quality sound for several years now, in vain, and it is unknown if the main barriers to top sound quality are technical, economic, or legal.

The amounts paid out to artists – between \$0.003 and \$0.005 per stream – are also often criticised. “The vast majority of artists cannot make a living with what they make from Spotify,” said Eric Drott. “Only a handful of superstars make good money from the stream- ing service.” And even the biggest names take issue with Spotify: Taylor Swift, Joni Mitchell and Neil Young all pulled their catalogues from the streaming platform as a form of protest, but then returned as there was no suitable alternative.

In the wake of this criticism, Spotify was forced to take a radical approach to savings, lay- ing off 2,300 employees in 2023, or one-quarter of its workforce. More critically, the company decided to diversify. “In the past two years, the platform started to focus on podcasts and au- diobooks, two areas that are seeing significant

growth,” said Paul Resnikoff of Digital Music News. “It invested heavily in original content and big names, such as podcast host Joe Rogan, who signed an exclusivity contract.” Signed for the first time in 2020, it was renewed last year for a record \$250 million.

Six million podcasts

In 2024, Spotify also provided new tools to audio and video content creators, allowing them to communicate with their audience and analyse how their content performed. It hopes to gain market share from other podcast plat- forms, particularly YouTube.

Since 2023, Premium users also have access to 15 hours of free audiobooks per month. Some books, such as the fantasy novels from Sarah J. Maas and the classics from J.R.R. Tolkien, top the lists of most listened-to content.

Spotify is now home to six million podcasts and more than 350,000 audiobooks. This diver- sification strategy seems to be successful, with results published in early February. ▲

A network of clinics focused on prevention

Not satisfied with being the global leader in just music streaming, Spotify founder Daniel Ek wants to apply his streaming model to the healthcare industry as well. In 2023, he opened his first clinic Neko Health in Stockholm, a health clinic that aims to provide medi- cal care that is “just as personalised as a Spotify playlist”. Patients have access to a preventative health exam, during which more than 2,000 high-resolu- tion photos are taken of the body. The clinic also offers a blood test, an eye pressure test and an electrocardio- gram. One out of every 10 people will discover that they suffer from a serious health condition, such as diabetes, and 1 in 100 will discover they have a fatal illness that requires urgent intervention, according to Neko Health. A second clinic opened in Sweden and a third in London in autumn 2024. In time, the medical data collected could be used to feed into Spotify’s personal- ised playlists.



Founders of the startup Neko Health, Hjalmar Nilsson and Daniel Ek.

ENERGY

CO₂ capture is for real

After years of experimentation, the first projects designed to extract the CO₂ generated by the most polluting industries have been launched. Most of them are located around the North Sea. BY JULIE ZAUGG

A

plume of greyish smoke rises from the white chimney stack towering over the Ferrybridge waste incinerator plant, south-east of Leeds. “We receive 120 lorries full of non-recyclable waste every day,” says plant manager Steve Tosney. “Incinerating it produces more than 340 megawatts of energy a year, enough to power 800,000 homes.” But this energy production also generates CO₂ emissions.

Starting in 2028, British waste incineration plants will be required to buy carbon credits to offset their emissions. This prompted enfinium, the Ferrybridge site’s owner, to launch a carbon capture pilot plant last September. The unit is set up in a shipping container, consisting of silver pipes and tanks.

“Emissions from waste combustion are cooled and introduced into an absorber, where they mix with an amine-based solvent,” explains Darrell Pariag, who is in charge of the unit. “A chemical reaction binds the amines to the acid gases, extracting the CO₂.” The now carbon-free emissions can be released into the atmosphere. →



← The Ferrybridge waste incineration plant, near Leeds. A pilot carbon capture unit was installed there last September.



↗ The Northern Lights carbon capture and storage facility in Øygarden, Norway.

“Our pilot captures 96% of the CO₂ from our emissions,” he adds. In the future, this carbon could be used in industrial processes, such as plastic manufacturing, beverage carbonation and storage in underwater reservoirs.

628 projects are being developed worldwide, with around 50 that are already operational

Long considered a futuristic technology, carbon capture is now being deployed on a large scale. The Global CCS Institute estimates that 628 projects are

being developed worldwide, with around 50 that are already operational. “These projects are expected to capture more than 400 million tonnes of CO₂ per year by 2050, compared with 50 million tonnes today,” says Tsimafei Kazlou, a PhD student at the Centre for Climate and Energy Transformation at the University of Bergen in Norway.

Europe is positioning itself as a leader. “We’ve been capturing CO₂ here for several decades,” says Chris Davies, director of CCS Europe. “But until now, these projects have mainly involved oil and gas fields, where the CO₂ was extracted to purify the gas or to enhance oil recovery.

Environmental considerations were secondary.”

The emergence of CO₂ emission reduction targets changed all that, bringing a new application: carbon capture in industrial processes. The highest concentration of projects is located around the North Sea, due to its favourable geological conditions. “The seabed here is made up of porous sandstone and limestone, covered by an impermeable layer of rock. This guarantees that the carbon will remain contained for thousands of years,” says Stuart Haszeldine, professor of Carbon Capture and Storage at the University of Edinburgh.

Off the coast of Norway, the most advanced project in this area is Northern Lights. In September 2024, TotalEnergie, Equinor and Shell completed this storage facility, located in a depleted oil and gas field 2,600 metres below sea level. The site can currently store 1.5 million tonnes of CO₂ and will expand capacity to 10 million tonnes by 2030. “Northern Lights will soon receive emissions captured from the Heidelberg Materials cement factory in Norway,” Chris Davies says.

← Construction of the Porthos subsea reservoir has started in the Netherlands. On land, approximately 30 kilometers of pipeline will be buried. And in the North Sea, another pipeline will extend up to 20 kilometers off the coast of Rotterdam.

© PORTHOS / INEOS ENERGY



The CO₂ will be liquefied and transported by pipeline to the Øygarden terminal near Bergen, then injected into the subsea reservoir. Other customers for this infrastructure include Yara Sluiskil, an ammonia and fertiliser plant in the Netherlands, two Danish biomass plants operated by Ørsted and the Norwegian Hafslund Oslo Celsio waste-to-energy plant.

A second subsea reservoir, Porthos, is under construction

off the coast of Rotterdam in the Netherlands. It will have the capacity to store 2.5 million tonnes of CO₂ per year for 15 years from the emissions of four companies, including Air Liquide’s local hydrogen production plant. Eventually, the site could receive CO₂ from various European countries, especially via transport on the Rhine. Porthos is scheduled to launch operations in 2026.

In Denmark, the pilot Project Greensand, completed in autumn

↑ An employee on the Greensand platform in Denmark.

2024, has demonstrated the viability of a reservoir 1,800 metres below the seabed. For the time being, it has been used to store CO₂ from a Belgian chemicals plant owned by INEOS. It could be expanded to a capacity of 8 million tonnes.

The United Kingdom is also moving into the market. At the end of 2024, the government announced a £21.7 billion investment over 25 years to develop two under-water reservoirs near Merseyside →

COMPANIES TO WATCH

AKER CARBON CAPTURE

Founded in 2020, this Norwegian firm is involved in Northern Lights, the world’s first large-scale capture plant, supplying its tech-

nology to capture the CO₂ from the Heidelberg Materials cement plant. Aker also has projects with Equinor in Norway to capture CO₂ generated

by an oil and gas field, with Siemens Energy in the UK to provide solutions for combined cycle gas turbine power plants, and with a paper mill in

the United States. Most analysts have issued a buy or outperform recommendation.

FOUNDED: 2020
HEADQUARTERS: LYSAKER, NORWAY
EMPLOYEES: 149
2023 REVENUE: NOK 1.6 BN (CHF 130 M)
→ AKCCF

CAPSOL TECHNOLOGIES

This Norwegian company, founded in 2014, builds mobile carbon capture units. It has teamed up with the Japanese firm Sumitomo to deploy its

demonstration units at two biomass-powered plants in Sweden. It has also sold its solution to a waste incineration plant in Finland and

two cement producers in Lithuania. In 2025, Capsol Technologies will conduct a feasibility study for the KVA Linth incineration plant in

Glarus with a view to installing its technology to capture 120,000 tonnes of CO₂ per year. Analysts covering the company have issued a buy or strong buy

recommendation.

FOUNDED: 2014
HEADQUARTERS: OSLO, NORWAY
EMPLOYEES: 21
2023 REVENUE: NOK 34.2 M (CHF 2.7 M) → W9K

and Teesside, in the north of the country, each capable of storing 10 million to 15 million tonnes of CO₂.

Other parts of the world are also advancing with these technologies. In 2021, the Swiss company Climeworks (unlisted) brought on stream a direct-air-capture plant in Iceland that injects the CO₂ into basaltic rock. Projects are also under development in many countries, including the United States, Canada, China, Japan, South Korea, Malaysia, Australia and the Gulf States.

The ambitious carbon neutrality targets announced by many countries cannot be achieved without CO₂ capture

Despite its potential, carbon capture is attracting critics. Some accuse it of being a form of greenwashing, propping up the use of fossil fuels instead of foraying into renewable energies. But experts say the technology is essential. “In industries such as cement, two-thirds of emissions come from chemical reactions during production, not from the energy consumed,” says Mathieu Lucquiaud, professor at the University of Sheffield. It takes one tonne of carbon to produce the equivalent amount of lime, one of the main components of

cement. Even if the cement industry, which accounts for 6% to 8% of global CO₂ emissions, were powered solely by renewable energies, it would still generate harmful emissions.

Moreover, the ambitious carbon neutrality targets announced by many countries – the European Union is aiming for 2050 – cannot be achieved without CO₂ capture. Polluting sectors such as aviation, steel, chemicals, agriculture and waste incineration cannot be entirely decarbonised in such a short period of time. Carbon capture can be used to generate “negative emissions” in specific cases, such as the incineration of waste containing a high proportion of organic compounds. “If the CO₂ emitted by biomass combustion is captured, the result is a net negative carbon balance,” Mathieu Lucquiaud points out.

The challenges are not over Major technical and financial challenges are involved in shifting from pilot projects to large-scale implementation. “Many projects are struggling to move beyond the experimental stage, with frequent delays,” says Andrew Reid, partner at the energy consultancy NorthStone Advisers. And the process is still too expensive. Capturing one tonne of CO₂ costs between €135 and €195, while offsetting the same amount via carbon credits costs about €70. “Today, it is cheaper to offset than to capture

emissions,” says PhD student Tsimafei Kazlou. However, experts believe that the technology will become more affordable over time, thanks to

© CLIMEWORKS

economies of scale and public subsidies. Programmes such as Carbon Contracts for Difference (CCfD), tested in Germany, Denmark, Canada and the UK, aim to reduce the gap between

the cost of capture and the cost of carbon credits. In Germany, an initial €4 billion was auctioned in the spring of 2024 as a key step towards the adoption of this technology. ▲

CO₂ collection containers from Climeworks in Iceland. This Swiss company is aiming to achieve megatonne storage capacity by 2030, and gigatonne storage capacity by 2050. ↓



MITSUBISHI HEAVY INDUSTRIES (MHI)

This Japanese industrial conglomerate, which operates in a variety of sectors, is developing carbon capture solutions through its Energy

Systems division. Its technology is being used in a number of projects around the world. The company is also working with international

partners to integrate its solutions into existing infrastructures. CO₂ capture represents only a fraction of its business, but MHI is recognised

as one of the world's technology leaders in this field. A majority of analysts have issued a buy recommendation.

FOUNDED: 1884
HEADQUARTERS: TOKYO, JAPAN
EMPLOYEES: 80,000
2023 REVENUE: JPY 4,657 BN
(APPROX. CHF 27 BN)
→ MHI

GE VERNOVA

General Electric's energy spin-off is developing carbon capture solutions alongside its core activities, which include wind power, natural gas and

power grid management systems. In particular, the US company supplies technologies for power plants equipped with CO₂ capture.

Although newly a stand-alone entity following its demerger from General Electric, it benefits from the expertise and scale of the latter. A majority

of analysts have issued a buy recommendation.

FOUNDED: 2023 (FOLLOWING A DEMERGER FROM GENERAL ELECTRIC)
HEADQUARTERS: CAMBRIDGE, US
EMPLOYEES: 75,000
2024 REVENUE: \$34.9 BN
→ GEV

Nivea

A B R A N D
A S T O R Y

The mother of creams

More than a century old, the famous multi-purpose cream continues to sell millions of units every year.

BY BLANDINE GUIGNIER

It’s a bit like a bottle of Coca-Cola, NIVEA cream is a classic you have to have in your assortment.” No doubt about that for Anna Larnhof, head of body care at Coop. The famous cream in a blue metal tin with white lettering, created in 1911, is a timeless classic. The simplicity and clarity of the packaging explain part of this longevity, says Berlin-based designer Uli Mayer-Johanssen, interviewed by the German media channel Deutsche Welle. The brand is also believed to have remained true to itself. “It stands for quality products and has never sought to promise anything else on the market.” At a price of less than two Swiss francs, the skincare cream has spread far beyond Europe’s borders. NIVEA operates factories in Mexico, India, Indonesia and Brazil, and is experiencing double-digit growth in emerging markets.

If we look at the contents of the small round container, its origins go back even further. In 1890, Prussian pharmacist Oscar Troplowitz bought a laboratory near Hamburg, named Beiersdorf after its founder. Twenty years later, he acquired the patent for Eucerit, an emulsifier that makes it possible to achieve a stable mixture of oil and water from lanolin, a substance derived from sheep’s wool. Working with this agent, he developed the recipe for NIVEA cream. He coined the name from the Latin word niveus or “snow-white”. That was probably because of the colour of the cream, but also because skin whiteness was considered an important standard of beauty at the time. The first tin was beige-yellow with letters in a flowery Jugendstil font. Unlike other skincare products, the product was suitable for industrial production and did not go rancid. As a result, by 1914 the company was shipping it to every continent.

Leisure society

By the 1920s, skiing became popular in winter and swimming in summer. NIVEA responded by

evolving from a beauty cream to a multi-purpose skincare product. New advertisements were launched. They referred to sport and nature. These ads emphasised how the product can protect the skin against the effects of cold and bad weather, as well as its moisturising properties after tanning.

“The key to the product’s longevity lies in the fact that all Swiss consumers have had to have seen it somewhere”

Anna Larnhof, head of body care at Coop

The new, much more modern white typography and the use of the colour blue, synonymous with freedom and freshness, were introduced along with these changes.



↑ The iconic blue tin was adopted a century ago by NIVEA, in 1925.

© ADDBE STOCK

Driven by the new momentum of its NIVEA cream and Labello lip balm brand, Beiersdorf grew rapidly. The Hamburg plant increased from 500 employees in 1924 to 1,400 in 1932. The company experienced difficult times during World War II. First it came under pressure from the Nazi regime because Oscar Troplowitz was Jewish, then its main buildings were destroyed in bombing raids. In addition, NIVEA’s trademark rights

were withdrawn in many countries at war with Germany. However, in the 1960s, the company took off again. Its position was strengthened as tourism spread and the leisure society was born. It produced sun protection products for the whole family and began offering its cream in “milk” form in 1963. The company gradually bought back its lost rights. By the early 1970s, more than 10,000 employees worldwide were working for the Hamburg-based group. As a symbol of the umbrella brand, the blue-and-white logo could be seen on an ever-increasing number of different body care products – from deodorants to shaving care, with the creation of the NIVEA For Men logo in 1986, which became NIVEA Men in 2012.

But competition intensified. NIVEA competes in internation-

KEY DATES

1911

The first NIVEA cream is marketed in Germany. By 1914, almost 42% of sales were generated abroad.

1925

NIVEA adopts the famous blue and white packaging for its flagship cream.

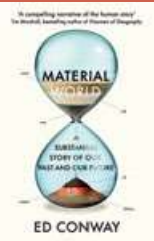
2024

Launched with a single cream, the NIVEA brand now markets more than 500 products in over 200 countries.

al markets with brands such as Dove, which is owned by Unilever. In 2008, NIVEA launched a legal battle to protect its blue colour against the English group. That same year, its parent company was listed on the DAX, the German stock market index (Beiersdorf generates nearly €6 billion in revenue). Three years later, as the cream celebrates its 100th anniversary, 123 million little NIVEA tins are produced worldwide. The group employs over 17,000 people with sales above the €6 billion mark. However, NIVEA’s attempts to break into the makeup market have been somewhat challenging, pitting the company against giants such as the French group L’Oréal. It is therefore refocusing its activities on skincare, and is once again growing globally. In 2023, it recorded sales of €5.3 billion (up 16.2% in one year). This represents 56% of the revenue for the German company, which now has 22,000 employees.

A favourite of grandmothers and influencers alike

In Switzerland, Coop has been selling the product for so many decades that the retailer cannot find the date of its first launch in its archives. “The key to the product’s longevity lies in the fact that all Swiss consumers have had to have seen it somewhere, at least at their grandmother’s house when they were little,” Anna Larnhof says. “Then, each generation tests the product for themselves, to see if it suits them. This year, young female influencers have also started recommending it as a face cream on Tik Tok!” The retail giant employee also agrees with the Berlin-based designer on one point. “The quality standards set by the NIVEA brand, which invests heavily in research and development, partly explain the cream’s success.” Its tin may have remained blue and white for 100 years, but its formula has evolved with new innovations over its life. ◀ ➔



R E A D

Material World

A Substantial Story of Our Past and Future

BY ED CONWAY
WH ALLEN, 2024

Sand. Salt. Iron. Copper. Oil. Lithium. These six essential materials have had a massive impact on the development of human civilisation. Ed Conway, Economics Editor of the UK's Sky News, leads his readers on a fascinating journey around the globe, from the deepest mine in Europe to silicon chip factories in Taiwan to the green ponds where lithium is extracted. With clarity, the author describes the complex processes that transform these raw materials into the objects we cannot go without in our everyday life. His vivid, detailed descriptions shed light on today's modern challenges associated with the extraction and use of these resources, notably in the face of the planet's current climate and energy crises. By examining the geopolitical struggles for control of these resources, Ed Conway finally highlights how they have shaped our world and will continue to shape our future.

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CHF 9 DIGITAL COPY



L I S T E N

The Hustle Daily Show

Behind this short daily dose of irreverent, offbeat and informative takes on business and tech news is one of the top newsletters in finance. In 2014, entrepreneur Sam Parr founded *The Hustle*, which has since grown into a go-to source for business and tech information. Its following of more than 2.5 million subscribers amassed over the years makes it one of the most widely circulated newsletters ever. Software company HubSpot bought it for \$27 million in 2021, one of the largest newsletter acquisitions of all time.

[HTTPS://PODCASTS.APPLE.COM/US/PODCAST/
THE-HUSTLE-DAILY-SHOW/ID1606449047](https://podcasts.apple.com/us/podcast/the-hustle-daily-show/id1606449047)



F O L L O W

Tadas Viskanta

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Director of Investor Education at Ritholtz Wealth Management LLC and Editor of Abnormal Returns.

X (TWITTER) 728 FOLLOWING 132.7K FOLLOWERS

Tadas Viskanta set out to educate his readers about best practices in investing and personal finance. Founder and editor of the blog Abnormal Returns, he brings the best of the finance and investment blogosphere every day to his widely praised newsletter. With over 25 years' experience on financial markets, he is also the author of several scientific articles and a book, *Abnormal Returns: Winning Strategies from the Frontlines of the Investment Blogosphere*. His X feed features at least one new chart a day, along with links to his recent blog posts.



D O W N L O A D

Kino

Pro Video Camera

Hollywood in the palm of your hand

Awarded iPhone App of the Year in 2024, Kino turns a smartphone into a cinematic video camera. And it has something for everyone. Beginners can get started straight away without any time-consuming tutorials, while more seasoned filmmakers can fiddle with the multiple setting options to maximise features on the latest iPhones. The app's functions include recording in ProRes, Log, 4K/120FPS frame rate capture (with the latest iPhone models), and cinema-inspired filters to capture the mood of films by Tarantino or Wong Kar-wai. The app also offers a series of lessons to help budding filmmakers refine their technique.

APP STORE, \$9.99



Albatross

Bespoke online recommendations

NUMBER OF
EMPLOYEES
4

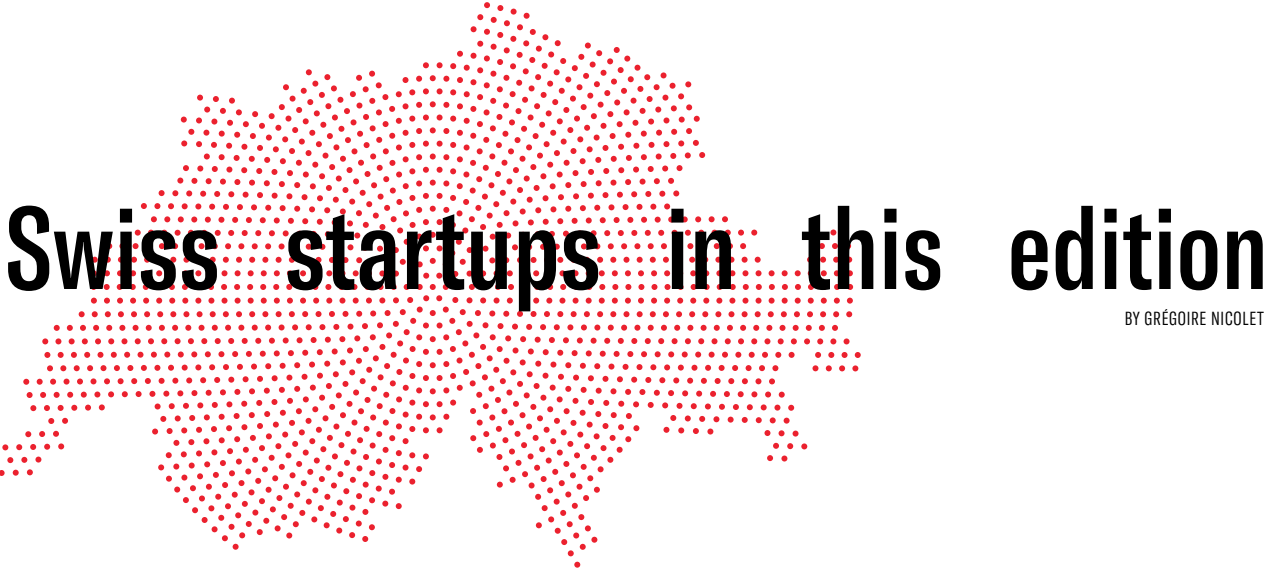
HEAD OFFICE
BAAR

FOUNDED
2024

Founded in 2024, Swiss startup Albatross raised €3 million in its very first month. Its artificial intelligence (AI) improves recommendations for users based on their online retail platforms. Unlike traditional recommendation systems that are based on popular

items or similarities between users, Albatross' technology uses advanced techniques such as deep learning and sophisticated reinforced learning to analyse user behaviours in real time. This offers dynamic and personalised recommendations with the aim of improving conversion rates. Founded by former AI experts from Amazon, Albatross isn't limited to just online commerce. These products also offer the possibility to improve recommendations on

trip reservation sites or online media content. In these cases, AI balances content and advertisements based on the interactions of each user. "Our recommendation models improve in real time with user interests and catalogue changes, including price variations," said Kevin Kahn, CEO of Albatross. "With our models, users can discover the most relevant products for them, with a level of sophistication similar to that of YouTube or Spotify."



BY GRÉGOIRE NICOLET



Corintis

Innovative cooling technology for computer chips

NUMBER OF
EMPLOYEES
40

HEAD OFFICE
LAUSANNE

FOUNDED
2022

An innovative cooling system for computer chips brought Corintis into the second place on the rankings of the top 100 startups in 2024 by Venturelab. With increased use of artificial intelligence, computers need to operate at high performance levels and the machines heat up accordingly. Solutions to cool the components need to keep up.

Water cooling systems are currently the norm for data centres and high-performance personal computers.

Coming out of EPFL, Corintis stands out with its cooling system integrated in the chip itself, and not attached after the fact, which improves thermal management. This technology, which is inspired by the human circulatory system, allows the heat to dissipate up to 10 times better than conventional methods, while also being up to 50 times more energy efficient.

To help chip manufacturers integrate the Corintis system directly into the chip design, the company developed software that calculates heat points and appropriate cooling channels. The company is already working on implementation with the main players in the market. According to CEO Remco van Erp, Corintis is expected to move to mass production in the second half of 2026. To do so, it will use its latest series A financing round, expected at \$24 million, a major achievement in the current environment.

MAKE PRIVILEGES A HABIT



AUTO

The electric Odyssey

The powerful but silent SUV will make you as happy as Ulysses. It lets you enjoy long rides while braving dangers with brio.

BY RAPHAËL LEUBA

Fitted with air suspension, this SUV is not only comfortable to drive but also agile

With the Q6 and its sporty counterpart, the SQ6, Audi is hitting hard in the mid-size electric SUV segment. At 4.77 metres long and 2.4 tonnes, the Q6 is a hefty package, which, like its Q4 and Q8 e-tron siblings, also comes in a Sportback version with a sloping roofline. Although falling short of the same sex appeal as the e-tron GT sedan, the Q6's attractive styling breaks from Audi's more conventional previous ranges. It is distinctive not only for its size, but also for the sizzling gaze of its headlights. Mere slivers inserted under the hood, they are no less effective. The spectacular, customisable light signature also goes for the tail lights, with the ability to warn other users of hazards on the road.

This massive electric SUV has a Type 2 charging port on both sides, with a CCS inlet on the left for rapid DC charging (up to 270 kW). The spacious "frunk", or front trunk, adds to the already ample capacity of the rear trunk (526 L), which offers a deep underfloor compartment. Practicality is flawless, except for one detail. Once seated behind the wheel, you need an elastic arm to close the door. Unless we've overlooked some magic automatic close button? However, we should point out that getting a handle on all the subtle features of a new premium model

requires ever more intuition and self-denial. Plan on 10 minutes just to reset a partial trip to zero. To its credit, Audi does a fairly good job in terms of control intuitiveness, especially when it comes to configuring driving aids and common settings for climate control, the sound system, driving modes, massages or regenerative braking controlled by steering wheel paddles. But a few quirks remain, such as the fog light buttons in the door, along with those on the mirrors. Or the old-fashioned cruise control lever with a tiny switch on the side. Otherwise, as with Ferrari, an interactive screen is displayed before the passenger, who can be entertained or act as navigator-butler, on top of the omniscient virtual assistant that uses ChatGPT. We hope the threesome won't be too chaotic in deciding where to stop to eat...

Bathed in the play of light, the beautiful graphics of the OLED instruments, the augmented reality of the head-up display and the enveloping sound of the Bang & Olufsen hi-fi with speakers in the headrests, the human behind the wheel might actually lose their bearings. And yet, we're still on the ground, because there's a way of calibrating all this without overdoing the effects. The right balance is what makes the Q6 e-tron

quattro so appealing, and this is also true of the way it handles the road. Fitted with air suspension, this SUV is not only comfortable to drive but also agile on narrow roads, thanks to an emphasis on torque at the rear wheels and controlled movements. A fine accomplishment, not to mention the fact that this powerful Q6 has a towing capacity equivalent to its own weight and can increase its ground clearance, to avoid inadvertently damaging the precious nickel-cobalt-manganese batteries. In this sense, the new PPE platform it shares with the Porsche Macan is undoubtedly one of the most versatile on the market, justifying its high price. As does the high quality of the interior, despite Audi's increasing use of recycled synthetic materials. Genuine leather and metal trim are still available as optional extras.

In terms of fuel consumption, the Q6 e-tron quattro's factory figure of 19.6 kWh/100 km nicely outperforms the 26.2 kWh of the previous 55 e-tron. That means you can drive 500 km or more in good weather conditions. On cold December days, we noted an average of 24.5 kWh per 100 km, which still delivers a range of 400 km in varied use. With this performance, the Audi SUV is the siren song of electric power and its chorus about "range anxiety" much less threatening. ▲

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AUDI Q6 E-TRON QUATTRO

AUDI Q6 E-TRON QUATTRO



T R A V E L

EXPLORING MONTREAL

THE FRIENDLY CITY

Bundle up as Quebec's largest city lights up the winter sky. In the coldest season, you can discover Montreal with an invigorating walk in the snow or some warm indoor fun.

BY BLANDINE GUIGNIER



A

As you fly in, you easily spot the typical rectangular pattern of North American skylines. Montreal is built along the St. Lawrence River, with spacious streets dotted with red-brick buildings. Further out, you can make out the city centre with its cluster of skyscrapers. Once outside, the cold is biting. A freezing wind blows in and the thermometer shows -5°C in early December. How can the locals go without mittens and hats?

The answer is: stay underground. Metro corridors are heated, as are the trains. We set down our bags and take the orange line northwest to **Jean Talon**, one of **North America's largest farmers markets**, opened by the city after the 1929 Stock Market Crash. We scan the sampling of local Quebec products, with apples, aged cheeses, seafood, and more. The Érablière Lussier stall catches our eye. This family-run business has been making golden, amber and dark grades of maple syrup for six generations. "The darker the colour, the stronger the taste," an employee explains. We cannot wait to warm up with the selection of flavoured sweets: butter, caramel, popcorn, chocolate... anything can be combined with maple syrup. →

© ISTOCK / TOURISME MONTRÉAL: ALISON SLATTERY



We continue our stroll to nearby “Little Italy”, a neighbourhood packed with restaurants and food shops. In Parc De Gaspé, we notice a pastel fresco. The city is like an open-air museum, featuring hundreds of **murals** to liven up the city’s brick buildings. Feeling peckish, we head for St-Viateur Bagel Shop to taste the wood-oven baked goods, typical of Montreal. The bakery is located near the trendy Mile End district. The international bistros are teeming at lunchtime. As we turn a corner, we see a sort of forest in the distance. A glance at the map shows that it is **Mount Royal, the hill after which the city is named**. Before climbing up to take in the amazing views, we stop to admire Outremont’s opulent mansions and visit Shaar Hashomayim Cemetery, where the famous Montreal singer Leonard Cohen is buried.



Greater Montreal’s warmth may well come from the cultural melting pot of its 4.3 million inhabitants. The Pointe-à-Callère museum of archaeology and history in Old Montreal traces the daily lives of the first peoples and emigrants from the world over in the 19th century, covering the arrival of explorer Jacques Cartier in 1535 and British domination from the mid-18th century onwards. The interactive exhibition is set up in the underground levels, right on the ruins of the first buildings. After spending several hours in the museum, we continue on to Marché Saint-Laurent, a shop and café that exclusively sells locally made products. Next, we have just enough time to visit **Notre-Dame Basilica** before it closes at 4.30 pm. Unlike the somewhat austere exterior, inside the stained glass, woodwork and altarpiece gleam in gold, red, blue and other colours. Since it opened in 1829, the church has hosted celebrity weddings, including Céline Dion’s ceremony in 1994. A short distance away, we tackle another Quebec mainstay: poutine.



WHERE TO STAY

Hôtel Place d’Armes

Located in the heart of Old Montreal on one of the city’s prettiest squares, this four-star Michelin Key hotel has several categories of rooms. All of them are decorated in contemporary design with original brick walls.

RETAIL THERAPY

Marché Saint-Laurent

This shop in the historic city centre exclusively sells locally designed and made goods. You can also enjoy a pastry or a gourmet coffee.

FOOD AND DRINKS

Bar Pamplemousse

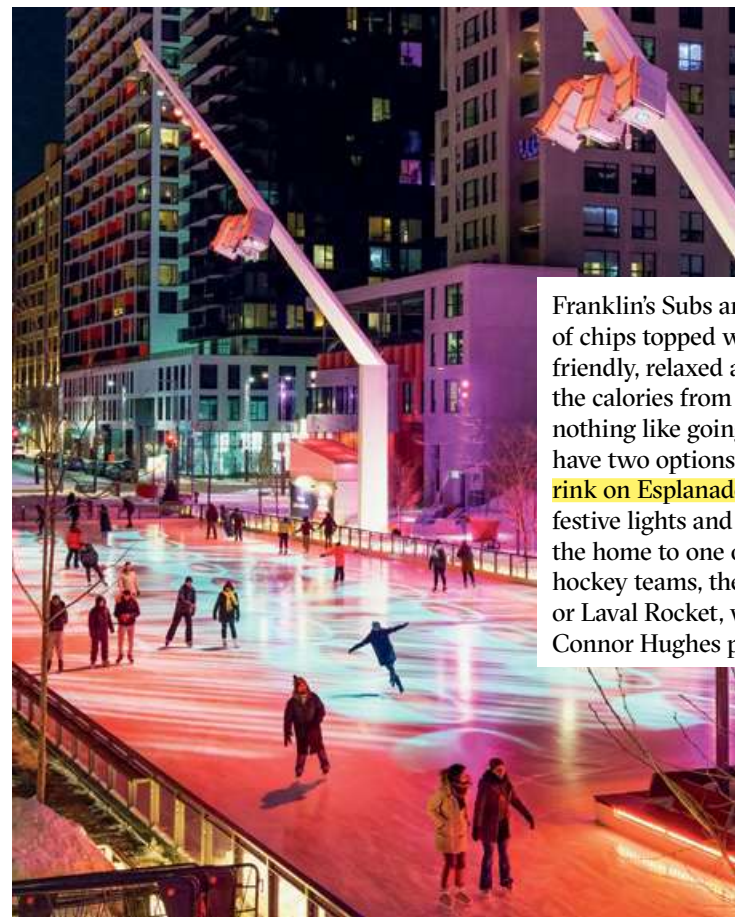
The atmosphere is warm and friendly in this bistro serving Mediterranean-Quebec cuisine. The oysters and burgers, as well as the selection of craft beers on draught, are worth it.

GETTING THERE

Direct flights several times a week with Air Canada and Swiss from Zurich and Geneva.



The next morning, we wake up to see the city now wrapped under a blanket of white. “It’s the first real snow of the season,” says a passer-by. To fully enjoy the winter atmosphere, we slip on our boots and take the metro to Parc Jean-Drapeau. Spanning two islands, this carefully manicured park hosted the 1976 Olympic Games and the 1967 World’s Fair. **A huge steel Biosphere structure is home to a museum dedicated to the environment**. Along the snowy walkways, you encounter chickadees and squirrels, as well as the gigantic, striking sculpture by Alexander Calder, Trois disques. At its feet stretches a breathtaking panoramic view of the city. In the foreground is the Old Port, with its Ferris wheel and Clock Tower, built from 1919 to 1922 as a memorial to sailors who perished in World War I. In the background stand the buildings of Old Montreal, like a teaser to our Day 3 programme.



Franklin’s Subs and Suds serves this dish of chips topped with cheese curds in a friendly, relaxed atmosphere. To burn off the calories from this winter dish, there’s nothing like going to the ice rink. We have two options: **the open-air skating rink on Esplanade Tranquille**, with its festive lights and overhanging café, or at the home to one of the province’s famous hockey teams, the Montreal Canadiens or Laval Rocket, where Swiss-Canadian Connor Hughes plays. →

On the fourth day, it snows, but the streets quickly turn to a layer of greyish white slush. It's called *sloche* here, explains a young man at the entrance to the Museum of Fine Arts. In the hushed atmosphere, we visit the Inuit art gallery, which opened in November. In the centre of the powder pink room is a motorcycle sidecar buried under road signs, masks and caribou antlers. Mattiusi Iyaituk's "Iqaluullamiluuq (First Mermaid) that can Maneuver on the Land (side car)" is one of 120 other sculptures, drawings and installations exhibited in rotation in this space.



We then walk along Rue Sherbrooke, one of the city centre's main thoroughfares, to Montreal's famous English-language university, McGill, which also houses the Redpath Museum of natural history and cultural heritage. In the evening, we grab the last tickets to see the hit play on at the moment in Quebec, a province with over 200 theatres and concert halls! Adapted from Michel Jean's bestseller *Kukum*, it tells the story of Almanda Siméon, an orphan who falls in love with a young Innu man and ends up living as a nomad with his people. As we walk through the snow, we discuss the story, which combines beauty and rugged adventure, to Bar Pamplemousse. We share a dish of Canadian oysters with other night owls. The place also has more than a dozen local beers on draught.

We spend the last few days left before our departure date on a getaway to Mont-Tremblant Ski Resort. Three hours away by bus, the town offers a beautiful glimpse of the Laurentian region. The programme includes a Scandinavian spa, sleigh rides and snowshoe trails. On the flight home, we're already planning our next visit, this time a family road-trip departing from Quebec City! ▲



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From smartphone to console

The Backbone One's (2nd Gen) magnetic adapters are compatible with a wide range of cases and phones to transform iPhones and Android smartphones into hand-held gaming consoles. Inspired by the design and ergonomics of the PlayStation DualSense wireless controller, the compact device lets you centralise all your games and cloud gaming services in a dedicated app, inside an intuitive, well-designed interface.

backbone.com
CHF 129.-



Crystal-clear sound

Designed by the Scandinavian label Transparent, the Small Transparent Speaker combines surprising design with sound performance. With its two full-range drivers that seem to float in a minimalist frame, this active speaker in aluminium and tempered glass comes with Bluetooth 5.0 connectivity. Easy to install and suitable for multi-room systems, it can be placed on a stand or mounted on a wall. For sound lovers, two speakers can be paired to create a wireless stereo system.

transpa.rent
CHF 495.-

Interchangeable art

Install a new work of art in your living room in three seconds flat. The Belgian company Ionnyk lets you do just that with its cordless connected frames. Its e-paper technology is made up of millions of black and white ink capsules to produce digital art protected by anti-reflective glass. The works look just like originals, with a rendering similar to that of silver halide. An ever-growing catalogue featuring more than 1,000 photographs by big names and emerging artists alike, available on the app, means you can change your wall hangings with the click of a button.

ionnyk.com
From CHF 1,682.-



Fingerprint-activated bike lock

A winner of the Eurobike 2024 award, which recognises innovations in the bicycle and ecomobility sectors, the Yardo lock from the German company Abus unlocks using a fingerprint sensor. Say goodbye to keys and codes, so that you can store and manage up to 20 scanned fingerprints on your lock. The lock body is weatherproof and consists of a sturdy 7 mm chain.

www.abus.com
CHF 109.-

Never a wrinkle

Swiss family group and industry leader Laurastar collaborated with BOSS to give its Izzi steamer a makeover. The sleekly designed appliance with its black matte finish is faithful to the German label's aesthetic. It eliminates wrinkles, reduces odours and refreshes garments by eliminating viruses and dust mites using its dry microfine steam, sprayed under high pressure, with no chemicals. Ideal for flawless style at all times.

laurastar.ch
CHF 549.-



Your yoga box to go

The French startup Morphée has designed a pack for gentle exercise and relaxation in motion. Compact, portable and offline, the Flow box features 256 guided audio sessions to get you moving. From its intuitive range of functions, you can choose one of eight disciplines (gentle yoga, power yoga, pilates, postural stretching, flexibility, self-massage, muscle awakening and strength training), an area of your body to work on and the duration of the workout (from 10 to 40 minutes).

morphee.co
CHF 99.95



b o u t i q u e

A LOOK
INSIDE
THE
LAB

A drone inspired by crows

Researchers at EPFL have developed a device with wings that can walk, hop and take flight with no human intervention. It can also move about uneven ground. BY JULIE ZAUGG

Equipped with a pair of white wings, a tail that seems to be made of feathers, and two robotic feet, this drone can walk, hop, climb onto a platform, and then fly into the air, much like a bird. Indeed, researcher Won Dong Shin and director of the Laboratory of Intelligent Systems Dario Floreano were heavily inspired by the crows that live on campus at EPFL (École polytechnique fédérale de Lausanne) when they set out to build a drone that is more agile and versatile than what's available today.

"Fixed-wing drones are more energy efficient than multi-rotor drones," said Dario Floreano. "They can cover twice as long of a distance on a similar charge." Though it is more difficult for these types of drones to take off. "Small drones need to be thrown into the air by hand and larger drones need a take-off ramp," said the robotics expert, who previously was inspired by bees when he created drones for the Vaud-based start-up SenseFly.

This new prototype, called RAVEN (Robotic avian-inspired vehicle for multiple environments), can take off with no human or structural intervention needed, by using kinetic energy (for speed) and potential energy (for height) to jump, much like a bird. On land, it can cover distance on foot, climb over obstacles and jump onto platforms, all actions that keep the drone moving, even on unstable terrain.

This complex design was not without hurdles. "When we add mass – and the robotic feet do weigh a certain amount – it does impact the performance of the drone," said Dario Floreano. "So we had to either

increase the surface of the wings or the power of the motor." To combat this, EPFL researchers tested various types of robotic feet. "We tried to only keep the most essential elements, which would produce explosive power but also remain stable," he said. The final result was a pair of legs equipped with springs and motors to imitate the tendons and muscles in bird legs. The feet are two lightweight jointed structures.

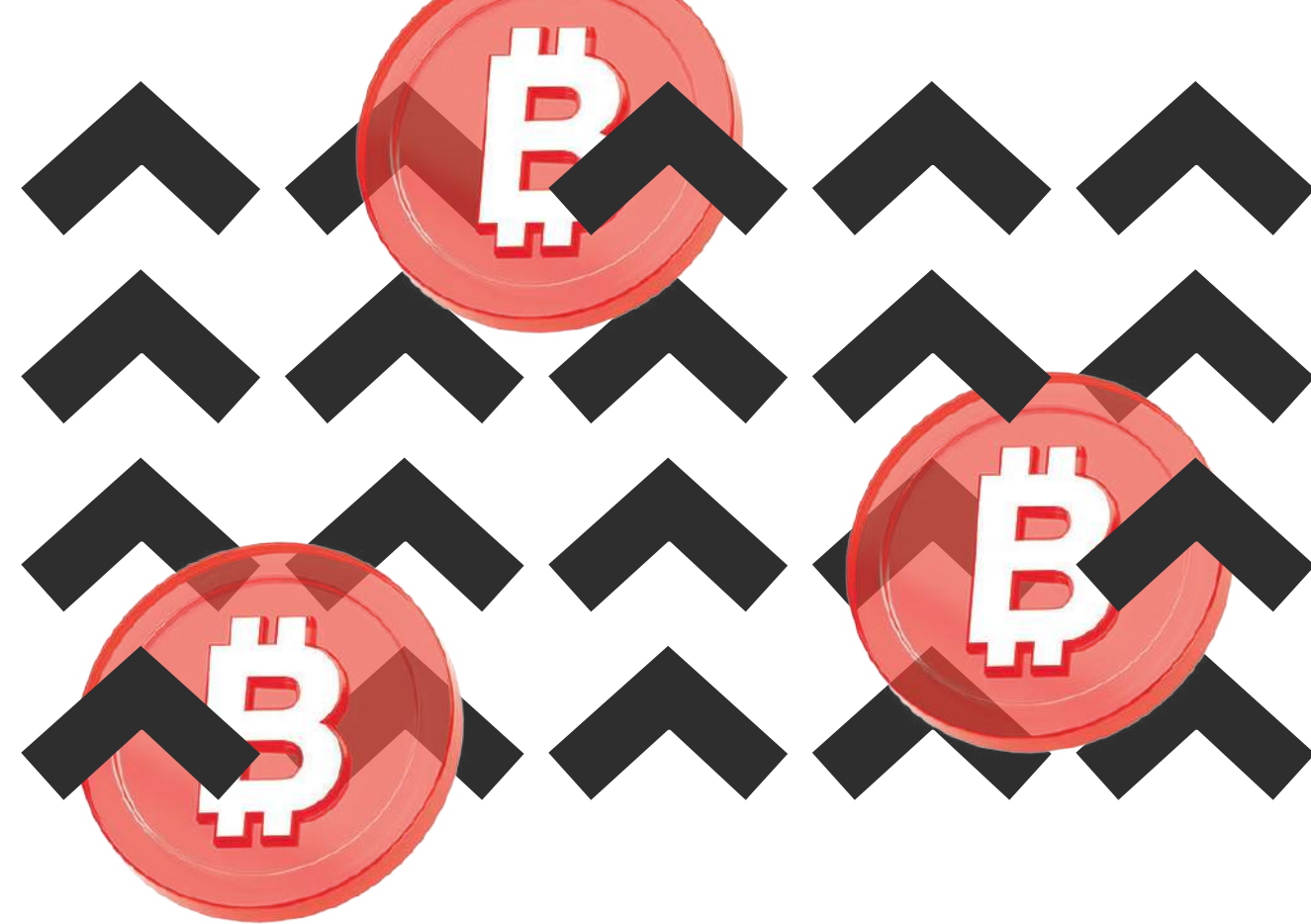
Another challenge is that the drone cannot yet take off on its own. "A human needs to control the movements from afar," he said. Floreano hopes that more sensitive sensors and AI will help solve this problem.

While he doesn't have immediate plans to sell this new drone, Floreano believes that this type of technology could be used by existing companies. "This type of drone can be used to make deliveries without endangering any humans that might be nearby," said the professor. "It could land at a location far from any humans, and then cover the remaining distance on foot."

Similarly, its ability to take off without being hand-launched or using a ramp would be incredibly useful in rescue missions. "It can take off and land several times for searches on land, thanks to the sensors," he said. These features could be applied to several cases in the military, where its range and ability to travel over uneven ground are two incredible advantages.

Time will tell if RAVEN can be deployed in real conditions. The current prototype only weighs 0.62 kilos, but EPFL researchers have already demonstrated that the concept can be applied to a larger structure. ▲

↑
EPFL's RAVEN
drone



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