



## Economic punch in the heart of Europe

Beneath Austria's awe-inspiring mountains lies one of Europe's most dynamic, open, innovative and internationalized economies, as well as a capital city, Vienna, that ranks as the best place in the world to live, according to several indexes.

# AUSTRIA

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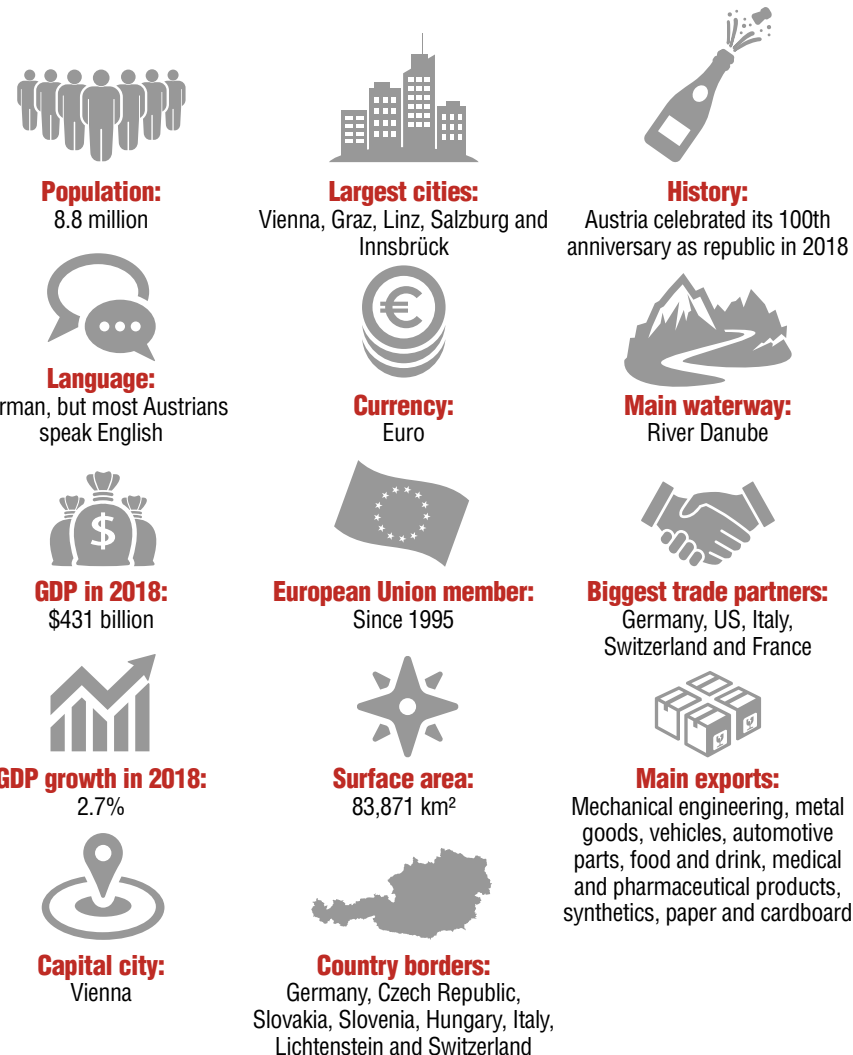
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## Austria in numbers

Located at the heart of Europe, Austria holds historic links to Central, Eastern and South Eastern Europe, and is the gateway to that region's growing economies.



## Contents

### Dynamic and open economy

Investors are increasingly moving to Austria, an open and innovative country that provides easy access to Western, Central and Eastern Europe.

### Top economic performer

One of the best performing economies in the euro area is underpinned by a stable financial sector.

### Advanced manufacturing

Technology and innovation are the cornerstones of Austria's diverse industrial manufacturing sectors.

### Education and research

The European Union's second-biggest spender on research is supported by a network of high-quality institutes and universities.

### The world's most liveable city

Vienna is internationally recognized as having the highest quality of life anywhere in the world.

### Transitioning to green energy

Public and private sectors are working together to meet ambitious investment goals for renewable energies.

### A digital nation is rising

Austria's high-tech champions are at the forefront of digitalization globally.

### A tourism giant

Visitors are drawn to Austria's mountains, rivers, lakes, cities, culture and food, among many other things.

### Sustainable Austria

Austria is a global hotspot for innovative environmental technologies.

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## The land of hidden champions

Austria has proved to be the perfect environment for high quality and research-focused innovative businesses to grow as global leaders.

Austria, a dynamic and prosperous country at the very center of Europe, is a powerhouse of innovation, technology and advanced manufacturing. With one of the continent's fastest-growing economies, the country has created a unique environment that enables businesses to thrive domestically, regionally and on a global scale.

Proof of that is the emergence of multiple 'hidden champions' across the country: extremely successful companies with little global recognition that are among the top three worldwide market leaders in their niche sectors. "Austria has the third-highest number of hidden champions per capita," says Georg Kapsch, president of the Federation of Austrian Industries.

According to Campus 02, one of the country's 21 research-intensive universities of applied science, Austria contains around 200 highly specialized hidden champions, 70.6 percent of which are involved

in industrial manufacturing, especially in sectors such as mechanical engineering, metal technology, the automotive industry, aerospace and electronics. What these market leaders have in common, among other things, is a focus on high-tech research and development, an activity encouraged by various countrywide incentives.

The majority of Austria's hid-

"You don't have to go to Silicon Valley to create successful, high-tech globally operating startups. Austria offers a great environment for such companies to grow as global leaders," confirms Alexander Reissner, CEO of Enpulsion, a startup that has commercialized a breakthrough propulsion system for satellites.

Enpulsion, like most of Austria's

**Austria has the third-highest number of hidden champions in the world. "**

Georg Kapsch, President, Federation of Austrian Industries

den champions are small- and medium-sized enterprises (SMEs), a category of firm that, overall, makes up 98 percent of the country's total companies and is a huge factor in the ongoing success of the economy. Austria provides effective support to its entrepreneurial SMEs and has, for example, created a vibrant ecosystem of startups, serial innovators and technological pioneers.

businesses and all of its hidden champions, has a global outlook. 54.5 percent of the country's total goods are exported, which rises to 64 percent for industrial products and 88 percent for the output of hidden champions.

In all cases, the "Made in Austria" brand has gained an international reputation for being unique, sophisticated, high quality and innovative.



## Free market economy, free trade advocate

International investors are being increasingly attracted to Austria. Birgit Reiter-Braunwieser, director Central and Eastern Europe of promotion agency Invest in Austria explains why.

**PR** Since 2000, the amount of foreign direct investment that Austria has received has gone up by 52 percent to about \$204 billion. Many international investors choose Austria because it is a fantastic place to live — its capital Vienna, for example, has now been ranked by global consulting firm Mercer as having the highest quality of life anywhere in the world for the tenth year in a row. What are some of the other key attractions that are bringing so many investors to the country?

**BRB** On the one hand, there is a wonderful market here: Austria is a highly developed business location with one of the highest purchasing powers in the European Union (EU). It is a small, stable, predictable and neutral economy that is open to competition, which makes it an interesting hub for international companies.

On the other hand, Austria is very competitive because it has an extremely central location that makes it the ideal

makes Austria continue to be a successful business location.

**PR** The US is Austria's third most important trading partner and over 300 US companies have operations in the country. What are the main trends that you are witnessing at the moment in terms of investors and where they are investing?

**BRB** The region of Vienna has been gaining in popularity as a headquarters location. It used to be mainly western multinational corporations that set up regional headquarters here but now it is becoming more and more international and we have growing numbers of Eastern European, Russian and Asian companies. For example, the Industrial and Commercial Bank of China opened a regional hub in Vienna in May.

With regard to Austria-US relations, the US Chamber of Commerce in Vienna is very active. There has been an upswing in US companies coming here — including Amazon, which recently



Austria's parliament building overlooks Vienna's grand Ringstrasse boulevard

sion projects: as an illustration, the industrial automation company B&R was acquired by the multinational technology leader ABB last year and now they are investing over \$110 million in an expansion here because we have the engineering talent that they need.

**PR** At about 25 percent, Austria's corporate tax is lower than in neighboring countries like Germany, where it is nearly 30 percent. What's the impact of this on foreign investment and what are other significant incentives for potential investors?

**BRB** Our neighbors to the east have lower taxes, but 25 percent is a good middle point. Austria is a leader in incentives for technology, including offering a 14 percent R&D tax credit for research-intensive companies. We want to attract more of these companies, and to encourage R&D and innovation, so we will continue to contribute to this through lower and subsidized taxes.

**PR** In today's world, having this kind of hub for international business in this quality of location is an important asset."

Birgit Reiter-Braunwieser, Director Central and Eastern Europe, Invest in Austria

**PR** How attractive is Austria for international startups?

**BRB** The Austrian startup scene has developed tremendously in the last couple of years, and the sector is now dynamic and important. There are a number of direct public-sector subsidy programs for startups and venture capital funding is growing. In comparison with other startup hubs, Austrian companies are particularly strong in technology-intensive business-to-business areas as that is where our talents lie. We have seen several US companies



Birgit Reiter-Braunwieser  
Director Central and Eastern Europe, Invest in Austria

acquire our startups to gain their innovative technologies, such as Stream Unlimited, a digital loudspeaker innovator, which Google has taken a stake in.

**PR** How does the reality of Austria differ from the image people who have not visited the country might have?

**BRB** Behind its beautiful touristic image, you find a highly innovative and modern country, with dynamic entrepreneurs and international CEOs. We score highly in rankings for doing business because we offer things that others don't but that Austria takes for granted, such as safety, political stability, equal rights for foreign investors and intellectual property protection. In today's world, having this kind of hub for international business in this quality of location is an important asset — don't underestimate Austria as a business location.

## Central position and easy market access

Located at the crossroads of Central, Eastern and Western Europe, around 380 multinational companies in numerous sectors have set up regional headquarters in Austria.

Eli Lilly, BMW, DHL, Mars and Hewlett Packard are among those using Austria as a base to gain easy access to the fast-growing markets of Central, Eastern and South Eastern Europe (CESEE). On the other hand, firms from CESEE are increasingly using the country as their entry point to Western European economies. As Michael Lagler, managing partner of leading law firm Schönherr, says, "Austria is the hub for CESEE. If you want to do business in the region, it's the place to be."

Austria's excellent air transportation infrastructure has helped the country achieve this position. Vienna International Airport acts as the regional gateway for long-haul connections, offers flights to over 40 Central and Eastern European destinations and nowhere in

Europe is over three hours away. Other benefits for firms based in Austria include the presence of advisors and employees that speak the region's languages and understand the different markets.

Austria is a hub for collaboration between business, science, politics and culture. An illustration of this is the European Forum Alpbach, an annual event that brings together international decision makers and a young audience to advance interdisciplinary approaches to world issues. 2018's event attracted over 5,000 people from 105 nations, with a highlight being a conversation between the presidents of Serbia and Kosovo on resolving conflict between the states. In this, as in business, Austria is at the center of European integration and global cooperation.



The European Forum Alpbach builds interdisciplinary dialogue

## Regional hub for services

One of Austria's major advantages as a hub for investors in Europe is its experienced and knowledgeable services sector.

When it comes to professional services, the partner of choice for international investors moving into Central, Eastern and South Eastern Europe (CESEE) is likely to be Austrian. The country's services sectors are highly advanced and operate under clear regulatory frameworks. In addition, the best Austrian firms have opened offices in emerging CESEE markets and acquired an in-depth understanding of each country.

In the case of law, "Austria has very developed legal and judicial systems and is at Europe's forefront for intellectual property protection, for example" says Michael Lagler, managing partner of Schönherr, Austria's leading full-service commercial law firm. Headquartered in Vienna, Schönherr is one of the largest operators in CESEE with 14 offices and four country desks. "We offer a high-quality one-stop shop for the whole region and multi-jurisdictional expertise," he explains, adding that Schönherr's lawyers have an outstanding reputation for their expertise, creativity and ability to stay on top of developments in the rapidly changing region.

The firm contains experts in every aspect of commercial law and is the go-to legal advisor for complex cases. One of its specialties is mergers and acquisitions (M&As), Lagler states: "Schönherr is Austria's M&A powerhouse. We have the leading team and multiple awards, including Chambers and Partners' 'Austria's M&A law firm of the year' in 2019." This latest award was the result of representing clients like US investment firm Starwood to acquire a stake in property group CA Immo for almost \$840 million.



Michael Lagler  
Managing Partner, Schönherr

As Austria becomes more innovative, so must its professional services, he says: "That's why we have established a group that focuses on legal advice with respect to technology and digitalization. We have also launched our own innovation hub to develop and implement new technologies. Schönherr wants to continue taking legal advice to the next level and innovation is key for that."

### 10 things you didn't know about Austria

- Austria is the 14th richest country in the world and the fourth wealthiest in the Organisation for Economic Co-operation and Development.
- Ever since the end of World War I, Austria has sworn to a position of permanent neutrality.
- Austria is recognized as offering one of the highest standards of living in the world.
- The Austrian flag is the world's oldest national flag.
- Austria has a very strong coffee culture and has developed a wide range of variations on the beverage.
- The croissant pastry, often attributed to France, was actually first baked in Austria.
- The waltz is also originally from Austria. Invented in the 17th century, it is still regularly danced today and taught in schools.
- Aside from Arnold Schwarzenegger, other famous Austrians include the pioneering psychoanalyst Sigmund Freud, sports-car company founder Ferdinand Porsche and, of course, numerous composers of music including Liszt, Strauss and Schubert.
- Austria has produced many great athletes in various sports from skiing to Formula One motor racing, mountaineering and tennis.
- Austria is the world's biggest consumer of organic food.



# The Austrian economy: One of the best performers in the euro area

The country's diverse and growing economy is supported by one of the world's most stable banking systems.

Austria's gross domestic product (GDP) of \$431 billion in 2018 represented year-on-year real growth of 2.7 percent, significantly better than the European Union (EU) average of 1.9 percent and the strongest growth the country has recorded since 2011. "Austria has had growth rates above the EU as a whole and the eurozone for a number of years now," says Ewald Nowotny, who retires from his position as governor of the Austrian central bank, Oesterreichische Nationalbank (OeNB), this month.

He notes that, "Due to a European slowdown, in 2019 we expect a lower growth rate of 1.6-1.8 per-

**Austria has had growth rates above the EU as a whole and the eurozone for a number of years now."**

Ewald Nowotny, Outgoing Governor, Oesterreichische Nationalbank

cent, but this is still above what will be achieved by Europe overall, and individual countries like Germany and France." This growth reflects a stable and sustainable economy, according to credit ratings agencies: Standard & Poor's (S&P) and Fitch rate the country at AA+, while DBRS ranks it AAA.

Reasons for the high ratings include fiscal policies that have brought a positive budget balance for 2018, regular current account surpluses that reached 2.3 percent of GDP last year and a declining debt ratio.

In addition, says Barbara Kolm, vice president of the OeNB and director of the Austrian Economics Center, a politically independent research institute: "Inflation is low, there is a stable political and social environment, we meet our targets, structural reforms are under way, we see constant improvement in our competitiveness rankings and

companies keep investing."

In fact, "a record amount of new foreign investment entered Austria in 2018," states Nowotny. Inward transactions of \$7.2 billion were distributed across many sectors, including professional, scientific and technical services, manufacturing and real estate.

"A highly diversified economy is one of the factors behind Austria's growth: we have strong industrial capacity but also well-developed services ranging from tourism to professional services. In Austria, you have a country that combines rich cultural traditions with modern research and technology," Nowotny says.

Kolm also highlights a focus on research as an economic advantage: "Austria invests in innovation, and has research and development clusters for numerous industries that attract foreign companies and startups." Further advantages for those firms are a skilled workforce and stable labor conditions with hardly any strikes.

As well as good research infrastructure, the Central European country's excellent transport, energy and other infrastructure makes it a "huge regional energy supplier and vital traffic hub. Look at Austria's railway, for example: 6,300 freight trains traveled between Asia and Europe in 2018, an increase of 72 percent on 2017. That helps us as an export-oriented country," notes Kolm.

The value of Austria's diverse exports rose 5.7 percent to nearly \$170 billion in 2018 and the country supplies a balanced variety of export destinations. While other EU countries, especially Germany, are the most important, Austria has a strong position in the continent's current growth region: Central, Eastern and South Eastern Europe (CESEE). Its next biggest trade partner is the US, with which it has "excellent economic and cultural relations," says Nowotny.



**Ewald Nowotny**  
Outgoing Governor, Oesterreichische Nationalbank

The stability of Austria's economy is underpinned by a banking system made up of 597 institutions that hold S&P rates as one of the 13 most stable in the world and which held assets of \$1.1 trillion in 2018. "Financing in Austria is mainly provided by our strong internal banking sector and so the banking industry is very important for the country," explains Nowotny, who says that the sector is in excellent health, with all banks posting profits in 2018.

### Banks invest in the region

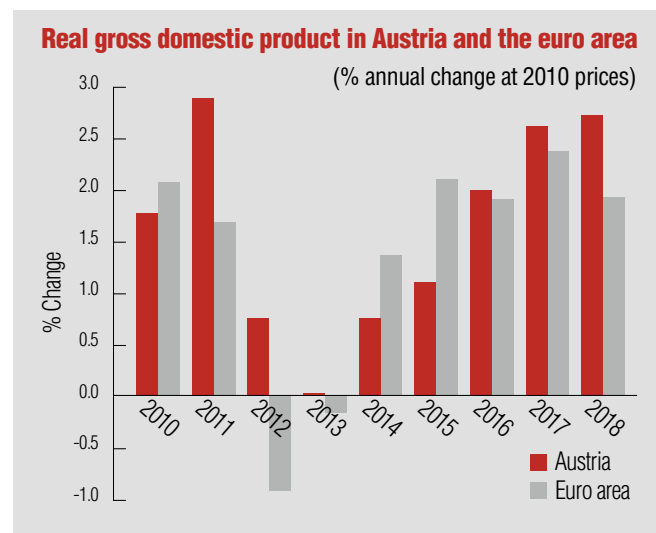
As well as financing the domestic market, many of Austria's largest banks, such as Erste, Raiffeisen and Hypo Noe, were the first international operators to move into CESEE in the 1990s. They are



**Barbara Kolm**  
Director, Austrian Economics Center

benefiting from that expansion, with their subsidiaries in the region posting an aggregate net profit of \$3.24 billion in 2018, up 11 percent on 2017. "Our banks have a unique knowledge of and emphasis on this region, that's one of our strengths," says Nowotny.

The sector's position has been reinforced since 2008's global financial crisis thanks to effective regulatory oversight at the macro-level from OeNB and at firm-level by Austria's Financial Market Authority. Banks have also restructured and adapted their business models to take account of, among other things, the need for risk reduction and for investing in digitalization. In banking, as in the rest of its economy, Austria is focused on the future.



# A dynamic market for expanding banks

Austria provides a supportive environment for financial companies and a gateway to growth in the wider region.

An excellent testimonial to the strength and potential of Austria's financial sector is provided by the country's fourth biggest bank: BAWAG Group, named "Best Bank in Austria" for the fourth year running by Global Finance magazine in May. "Within a decade, we went from a loss-making, under-capitalized bank to one of the top 5 percent in Europe, and the most profitable and efficient one in the Austria, Germany and Switzerland (DACH) region," says Anas Abuzaakouk, a US citizen who is CEO and chairman of the bank's managing board.

Established in 1922 as a trade-union bank, in 2006 BAWAG was bought by a consortium led by US-based Cerberus Capital Management. "In 2017, BAWAG was listed on the Vienna Stock Exchange — it

**In 2006, we had about 1.5 million customers; today, we have around 2.5 million."**

Anas Abuzaakouk, CEO and Chairman of the Managing Board BAWAG Group

was the largest initial public offering in Austrian history, which our team takes great pride in," Abuzaakouk states.

Since privatization, the bank, which concentrates on retail and small- and medium-sized enterprises (SMEs), has been transformed. "We de-risked the balance sheet, focused on operations and reinvested in our retail franchise. In 2006, we had about 1.5 million customers; today, we have around 2.5 million," he says, adding that BAWAG's pre-tax profit was \$640 million in 2018, up 14 percent on 2017, and the bank is on track to reach its pre-tax profit target of over \$670 million in 2019.

### Operational excellence

While other Austrian banks have expanded eastward, approximately 80 percent of BAWAG's business is



**Anas Abuzaakouk**  
CEO and Chairman of the Managing Board BAWAG Group

in DACH, especially Austria, while the remainder is from US and Western European corporate clients. Abuzaakouk explains why: "DACH is a market of 100 million people, economic growth averages about 1.5-2 percent, unemployment is 3-4 percent, clients are disciplined in loan paying, and the countries have strong fiscal and stable regulatory environments — great factors for retail and SME banking."

BAWAG aims to provide its clients with operational excellence and "simple, cost-effective and efficient end-to-end processes, whether it's loans, mortgages, auto leases or current accounts. Our differentiator in this is technology: we embrace technology in every aspect of our business," he states.

As an illustration of this, in June the bank acquired a 49-percent stake in fintech company Finventum. To date, much of BAWAG's growth has come through acquisitions and it is likely to continue playing a role in the consolidation of Europe's banking industry as it continues to grow domestically and in the rest of DACH.

As an American living in the country, Abuzaakouk notes: "It is a dynamic market that can serve as stepping stone and as a core market, thanks to a supportive political, regulatory and commercial environment."

## 5 reasons to pick Austria as your European hub

### 1 Speed to market

Companies can be registered within a week, tax numbers in a day and Austrian entities enjoy one of the world's most extensive double taxation treaty networks.

### 2 Simplicity

One managing director, who can be non-resident, a registered address, and annual financial statements and tax returns are all that is required to run an Austrian limited liability company.

### 3 Incentives

The Austrian group taxation scheme allows the pooling of tax profits and losses of a domestic parent and its domestic and foreign subsidiaries. Innovative companies benefit from a 14 percent tax credit on research and development, and there are specific incentives in place to attract international startups.

### 4 The heart of Europe

Austria is perfectly located at the brink of East and West, and Vienna International Airport provides fast connections to global business centers and 40 Central and Eastern European destinations — more than any other airport in the world.

### 5 Social peace and motivated local workforce

Austrian employees are highly educated, productive and rarely go on strike. Wages are moderate compared with the European-Union average and the country has very flexible labor laws.

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## Technology and innovation: Cornerstones of Austria's manufacturing industry

The Austrian economy is based on strong, highly developed, diverse, innovative and competitive industrial manufacturing.

Trade and industry make up about one third of Austria's gross domestic product and the importance of manufacturing is growing. According to Statistics Austria, the country's 30,023 industrial companies made revenues of about \$276 billion in 2018, 15.8 percent more than in 2016.

"We are a very strong manufacturing nation. The move to digitalization is helping Austria a lot in this regard because it cuts down costs and enables economies of scale," says Georg Kapsch, president of the Federation of Austrian Industries, an association with 4,400 industry members.

Many of Austria's industrial players have now become well-known global market leaders, such as Red Bull in food and drink, PALFINGER and KNAPP in mechanics and machinery, Swarovski in premium jewelry, motorcycle producer KTM, TTTech and Kressel Electric in automotive, Greiner and Borealis in chemicals and plastics, and Infineon Technologies Austria in electronics.

### A propeller for innovation

Small- and medium-sized enterprises (SMEs) make the majority of Austria's industrial output. In 2017, 98 percent of Austria's man-



Austria's KTM Industries is Europe's leading motorcycle manufacturer

ufacturers were SMEs and many are part of a dynamic environment for startups that has put the country on Forbes' European startup hotspot list.

95 percent of young innovative firms saw their revenues grow in 2018, helped by a variety of factors including public-sector support and a dual-education system that provides apprenticeships as well as research-based study. As a result, there is easy access to "highly experienced, trained and educated staff," says Kapsch, while 58.8 percent of startup founders have a master's or higher qualification.

For all Austrian manufacturers, exports are vital and thriving. In 2017, the value of their exports rose 8.23 percent to \$158 billion, 70 percent of which came from other European Union countries and 7.6 percent from the US.

The country's products have such a reputation for quality and innovation that in the case of the automotive sector, for example, it is now hard to find a vehicle made anywhere in the world that does not contain Austrian components. In this, as in many other sectors, Austria's industrial manufacturers are driving global developments.

## A powerhouse in the mechanical and automotive industry

CEO Stefan Pierer explains how being based in Austria has helped him transform KTM Industries into Europe's biggest high-performance street and off-road motorcycle producer, with 4,300 staff selling 260,000 vehicles worth \$1.78 billion a year.

**PR** What are a few advantages of Austria for manufacturers?

**SP** The success of Austrian industry can be explained by several factors. The first is education and our tradition of apprenticeships. At KTM, we have almost 200 apprentices who work alongside well-educated and highly motivated employees. Secondly, Austria has a research and development (R&D) tax refund of 14 percent, which enables us to be quicker than our international competitors. Another factor is access to export financing.

**PR** KTM is Europe's leading motorcycle manufacturer with about 9.5 percent of North America's market. What does your brand represent?

**SP** Our brand means "ready to race."

We are a premium sport motorcycle brand, racing is the driving force of the company and our source of inspiration in innovation. It's a niche activity and what we are doing is extreme, but we love it. We like competition and look for high-performance engines that use cutting-edge and competitive technology. Today, we offer a whole range of off-road and street motorcycles from 125cc up to the peak 1,300cc, where we compete with Japan's Yamaha and Honda.

**PR** How does KTM remain at the forefront of innovation and trends?

**SP** KTM is among Austria's largest spenders on R&D, with a ratio of around 8.6 percent on our sales volume. We are one of the pioneers in electric mobility, for example, and our first electric motor-



Stefan Pierer  
CEO, KTM Industries

bike, the "Freeride e", has been on the market since 2014. In 2018, we decided to enter the e-bike market with our brand Husqvarna Motorcycles because the trend is clear: urban mobility will become electric.

**PR** KTM has a major global presence on five continents, a large sales network with 31 international subsidiaries that attend over 2,800

dealers and importers worldwide, and 54 percent of your sales are made outside Europe. How did you become so globalized?

**SP** Our strategic alliance with India's Bajaj Auto Ltd. that started in 2007 has indeed been very helpful in making us a global player. Bajaj, the second-largest Indian motorcycle producer, was looking for a European technology partner and KTM has been a great match from the beginning. We deliver high-end technology and Bajaj industrializes the engine platforms and produces around 100,000 bikes in India. Through this, we have been able to enter the emerging markets of India, Latin America, China and other Southeast Asian countries.

Our biggest single market is North America. There are a lot of motorsport activities in the US, which makes it exciting for KTM and our US subsidiary, which serves about 500 dealers, is our biggest. We have about a 9 percent share of the US market and two-wheelers are an increasingly popular mode of urban transportation there.

## Machine-making industry fuels the US market

Austria's machinery producers have become market leaders by offering reliable, cutting-edge products and by developing global networks for sales, service and manufacturing.

Manufacturing high-tech machinery for global niche markets is one of Austria's biggest success stories. According to trade body MetalTechnology Austria, 1,200 Austrian companies work in metal technology and machinery, which turned over around \$44 billion in 2018. Over 80 percent of those revenues came from exports, making it third in the world for machinery exports per head of population.

Leading companies in the sector include pulp-and-paper machine maker Andritz, cable railway manufacturer Doppelmayr, plastics specialist the Engel Group and PALFINGER, which has been making innovative lifting solutions for use on vehicles and in the maritime field since 1932.

58 percent owned by the Palfinger family, PALFINGER is one of Austria's strongest industrial groups, earning about \$1.8 billion



PALFINGER's lifting solutions combine quality and innovation

on land, as well as deck equipment and handling solutions for all major maritime industries.

"PALFINGER is number one in everything relating to lifting, not just for products but also in auxiliary services, including software. We want to ensure that our customers get a premium, full-range and turn-key lifting solution," clarifies CEO Andreas Klausner.

### Global group with local service

Wherever they are, PALFINGER has operations close to those customers. It has 35 manufacturing sites in Europe, the Americas and Asia, including five in the US, an important market that it is looking to grow. In addition, it has a sales and service network that consists of its own branches alongside 5,000 independent outlets in over 130 countries on all continents.

Klausner explains why this huge network is important: "We put ef-

fort into being a reliable and long-term partner for customers and suppliers. With our size, market presence and positioning as the top provider, our partners are guaranteed that we are here for the long term. When you combine that with our focus on product applications, innovation and quality, PALFINGER has a clear advantage."

The company leads the sector in technology and innovation as well as sales, he says: "Research and development is focused on our core business but we also study new opportunities, businesses and services. Technology is changing so fast that it's no longer enough to wait for customers' feedback before developing products — we need to see further ahead. So, we have set up a think-tank division called PALFINGER 21st in a Viennese startup environment."

In February, the division launched its first product: STRU-



Andreas Klausner, CEO, PALFINGER

CINSPECT, a digital system that uses drones and artificial intelligence to rapidly inspect bridges and buildings. While at April's Bauma, the world's largest machinery fair held in Germany, PALFINGER presented more smart and data-based new products.

Being family-owned has advantages for stability, states Klausner: "However, PALFINGER grew rapidly through mergers and acquisitions, and became fragmented. So in 2018, we implemented a new structure, the GLOBAL PALFINGER ORGANIZATION, to bring these fragmented elements together. Our management team has been consolidated into a global team to leverage synergies between our businesses to add value."

This strategy is working. 2019 Q1 revenues showed year-on-year growth of 12 percent, Klausner is confident that the full year will be another record one and that PALFINGER will pass \$2.23 billion in earnings by 2022, mainly via organic growth. "We are committed to remaining the number one lifting-solution provider," he says.







Greiner's innovative Vacuette blood collection system

## Austrian plastics industry: Leading by example

Austria's huge and diverse plastics sector includes companies that have become global market leaders by manufacturing products that make the world a better place.

Plastics are big business in Austria, a country containing Europe's largest network for the material, with around 600 companies working in the sector. "In plastics, Austria is the leader of the pack. Many of the world's top players are based here," says Axel Kühner, CEO of Greiner, one of the biggest of those firms with annual revenues of \$1.83 billion.

About 70 percent of the sector's products are being exported, mainly within Europe and to the US, and some have capitalized on this by expanding internationally. Greiner, for instance, operates in 33 countries, says the CEO; "76 percent of our turnover is being generated in Europe and 10 percent in North America but we aim to further develop our activities beyond our continent."

Austrian companies cover all aspects of plastics, from resins to auxiliary inputs and from stabilizers to industrial machinery. Many specialize in one area, while a few, like Greiner, are innovators in diverse fields. The family-owned group's operations include foam production and plastics processing for the packaging, furniture, sport, automotive, medical and pharmaceutical sectors. It is also among the world's top extrusion equipment manufacturers.

"We endeavor to create products that add value to life," Kühner



Axel Kühner  
CEO, Greiner

states, listing vacuum tubes for blood collection, a mattress that absorbs humidity and smart aircraft seat cushions as examples of market-leading Greiner inventions that meet this criteria. "There are so many fields where plastic can add value but we also have a responsibility to leave a better world behind us," he says, highlighting a growing concern of the sector: sustainability.

Kühner explains Greiner's approach to this: "We only propose products that make sense — we were the first European producer to stop using polycarbonates in food packaging, for example. In addition, we actively try to engage in recycling technologies and are improving our processes to enhance the recyclability of products. We are convinced that recycling is key."

## A circular economy is the answer

Austria's manufacturers are at the forefront of technologies and platforms that are helping the world to extract the maximum value from plastics.

With awareness of the need to rethink our linear, take-make-dispose attitude to plastics rising, Austria's innovators are collaborating to accelerate the move to a circular economy in which plastic is not wasted. The latest illustration of this came in June, when Borealis, Europe's second-largest plastics producer, announced it was cooperating on advancing recycling technologies with Erema, the world market leader in plastic recycling machinery.

The agreement will "have a catalytic effect" on the plastic economy, believes Manfred Hackl, CEO of Upper Austria's Erema, while Borealis CEO Alfred Stern explains why a manufacturer is investing in recycling: "Circularity and sustainability are of primary importance to us. We can make a difference and reinforce our position as a global leader while doing so."

Vienna-based Borealis is a global player in base chemicals and fertilizers as well as polyolefin plastics used in, for example, automotive parts, packaging, and the wires and cables used by households and renewable energy generators. 36 percent owned by Austrian oil and gas company OMV and 64 percent by the Abu Dhabi sovereign wealth fund Mubadala, it operates in 120 countries and made a profit of almost \$1 billion in 2018.

### Sustainable investments

Through its activities and those of Borouge, a polyolefin joint venture with the Abu Dhabi National Oil Company, Borealis is growing by investing in state-of-the-art facilities worldwide and innovation. In 2019, for instance, it opened a polypropylene plant in North Carolina and is currently building a facility in Texas. "We see a lot of potential in the US for our differentiated products and technology," notes Stern.

Borealis' investment in innovation to create higher-value



Alfred Stern  
CEO, Borealis

solutions has made it the most patented company in Austria, he says, "We are always looking to increase the performance of our products and bring down costs."

Having pledged to quadruple its recycled-plastic solutions by 2025, Borealis is also heavily investing in sustainable innova-

**Circularity and sustainability are of primary importance to us."**

Alfred Stern, CEO, Borealis

tions. Many of the resultant products could use in-house recycled plastics as it owns two polyolefin recycling plants and will increase its recycling capacities.

Borealis is fast becoming a leading force in the circular economy for plastics through investments like this, its partnership with Erema, its involvement in the creation of the Polyolefin Circular Economy Platform industry initiative and other activities.

Not least of these is Borealis' EverMinds™, a collaboration platform bringing together plastic producers, recyclers and users to find circular-economy solutions. "We need much more collaboration to fix the problems with plastics. Borealis' EverMinds can spearhead this," says Stern.

## Industries tackle global challenges

Given industry's importance to Austria, it is no surprise that it is at the forefront of the transition to Industry 4.0, especially when it comes to preserving resources.

A worldwide revolution is taking place that is transforming industries by introducing new technologies to increase productivity and preserve resources. Austria's most innovative firms are helping the world adapt to the changing environment by exporting technologies that are Industry-4.0 ready.

One of those is Christof Industries, a provider of turnkey industrial plants that works globally for clients in many sectors including pulp and paper, energy, petrochemicals and environmental technology.

Founded in 1966, today it has an annual turnover of around \$550 million and over 4,000 employees. "We offer a 360-degree portfolio from concept engineering to service and maintenance, and have a strong focus on in-house research into state-of-the-art technologies



Johann Christof  
CEO, Christof Industries

that reduce the environmental impact of industries and are based on the circular economy," says CEO Johann Christof.

The group was one of the first to invest in waste-to-energy technolo-



gies in the 1990s. As a result, it is a world leader in biomass renewable energy plants. Its other numerous innovations include turning plastics into oils or chemicals, and technology for converting caustic water.

Many of its solutions are customer specific and created with local partners, as illustrated by a floating waste-to-value plant in Singapore. The group is also the technology partner for AgriProtein, which uses waste as a feedstock to turn flies into protein for agricultural uses — a technology that made Time rate AgriProtein as one of 50 companies that are shaping the future last year.

In 2017, Christof Industries

utilized its decades of experience in waste to commercialize a "zero waste city" project that combines 13 technologies, says Christof: "It takes a city's various waste streams and turns them into products like energy, recyclables, animal feed, biofuels, fertilizer and aggregates."

The group now has a subsidiary in Georgia. "We see a big opportunity in the US for green energy, waste management and conversion, efficiency and the circular economy. Waste technologies that allow cities, countries and industries to operate sustainably exist today and we want to play an important role in executing them," he states.

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## The EU's second-most intensive R&D economy

An ecosystem of businesses, academics and public-sector partners creates one of the world's best places for research.

In 2019, Austria's innovation ecosystem — spanning universities, research institutes, businesses of all sizes and public-sector advocates — will spend around \$14.4 billion on research and development (R&D). That's 3.19 percent of the country's gross domestic product, making it the European Union's (EU's) second-biggest spender on R&D after Sweden.

At the heart of this system is the Austrian Research Promotion Agency (FFG), the state-owned one-stop shop for industrial R&D. Described as "a strong partner that does everything we can to increase the competitiveness of Austria's R&D," by its managing director Klaus Pseiner, the agency has a wide remit including research funding.

In 2018, FFG awarded over \$930 million to 3,854 projects. "We

are focused on connecting companies to researchers and bringing ideas to market," says FFG's other managing director, Henrietta Egerth. Another key public player, the Austrian Science Fund, complements this by funding basic research, "mainly supporting early-career scientists that will be the next generation of leaders," says its president, Klement Tockner.

As a result of such support, the country has a dynamic start-up scene. "As Austria's leading start-up promoter, FFG invested about \$80 million into young businesses during 2018 and many have already found success," says Pseiner.

In addition to assisting Austrian entrepreneurs, the agency helps foreign startups re-locate to Austria. Benefits for those startups, as for all companies, include a tax refund of 14 percent on

© Martin Lusser



**Klaus Pseiner and Henrietta Egerth, Managing Directors, Austrian Research Promotion Agency (FFG)**

R&D and the chance to work in one of over 60 industrial clusters. "Austria's niches include quantum physics, cybersecurity, life sciences, artificial intelligence, energy, information technologies, manufacturing, aeronautics and space," says Egerth; "In all, our research output is at a high level."

Austria's standards are acknowledged in Europe: since 2014, it has been awarded over \$1.2 bil-

lion from the EU's Horizon 2020 research and innovation program. FFG, which manages projects with international partners, has strong ties in Europe. "One of our challenges is to further develop global partnerships," Egerth notes. "Research increasingly takes place in worldwide networks. In that respect, there is unexploited potential in Austrian R&D," adds Tockner.



**Edeltraud Hanappi-Egger**  
Rector, Vienna University of Economics and Business (WU)

taught in English. "About 27 percent of our students are international, although this varies by program. For instance, 90 percent of those on an international taxation PhD program come from abroad and we have an English-taught undergraduate program," says Hanappi-Egger.

New programs are just one way WU is accelerating its internationalization, she adds: "We also recruit faculty members and researchers globally, and are pushing our programs into global rankings." These include a PhD

in finance that ranks in the top 5 percent worldwide and a master's in international management that The Economist rates as the world's fifth best. Reasons for this score include high alumni salaries, faculty quality and WU's international placement schemes.

WU is increasingly internationalizing its research activities as well, she says: "We have outstanding projects focused on innovative aspects of economics, business and business law. We have also founded the first interdisciplinary research institute for cryptoeconomics, which has become a huge knowledge hub, and are planning a program on the digital economy — a field in which WU has the potential to take a leading position."

Aside from that, WU is collaborating with 240 prestigious universities globally, including 47 in the US, covering research and student exchange, academic programs and double degrees. For the rector, this is just the beginning: "I want to see WU expand its international role and become a reference for responsible economics and business."

## Attractive international universities

World-class education and research capabilities draw students, faculty and researchers to Austria.

International students are increasingly being attracted to Austrian universities offering high-quality, research-intensive education. This phenomenon is being seen in many of the country's 22 public universities and 21 universities of applied sciences.

These universities produce over 50,000 skilled graduates every year and are crucial for delivering the research that feeds the country's innovative economy. In 2019, the QS World University Rankings rated five of them as among the world's top 500, led by the University of Vienna, which is associated with 20 Nobel prize winners.

Ranked 38th globally by QS for business and management studies is the Vienna University of Economics and Business (WU), one of Europe's biggest universities in its field. Renowned for its education and research ca-

pabilities — and triple accredited by leading accreditors EQUIS, AACSB and AMBA — WU educates over 23,000 students a year from 110 countries in a stunning campus in Vienna.

Built in 2013, the site includes a number of iconic buildings designed by acclaimed architects including Zaha Hadid. Studying in this inspiring environment is cost-free for EU citizens, while others pay fees of only \$780 a semester. "In Austria, education is considered a public good and is funded by taxpayers," explains WU's rector, Edeltraud Hanappi-Egger.

### Accelerating internationalization

Austria's only economics and business university is a key example of how the country's education institutes are turning into global players. It offers undergraduate, executive, master's and PhD programs, many of which are

## Taking a leap forward in new research fields

Austria's leading universities for research are working for tomorrow by contributing to the development of solutions to the biggest challenges facing global society.

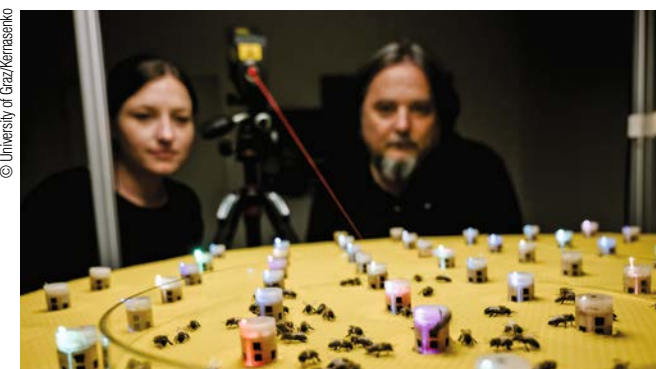
"The role of higher education is to prepare future generations so they can manage a changing world," says Christa Neuper, the rector of the University of Graz, a prime example of an institute that is doing just that.

Austria's second-oldest university educates 31,000 students, with US citizens forming the largest non-European group. It offers 120 increasingly interdisciplinary research-based programs, many taught in English. Their focus is five future-oriented fields of excellence: Climate Change Graz, BioHealth, Complexity of Life (COLIBRI), Dimensions of Europeanisation and



**Christa Neuper**  
Rector, University of Graz

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**Researchers at the University of Graz investigate the swarm intelligence of bees**

Smart Regulation.

"The university contributes to addressing society's major challenges. For instance, we have over a hundred researchers exploring the economic, engineering, social, political and legislative changes needed to manage climate change," states Neuper.

### International research profile

The university has a global network of over 500 partner universities and benefits from close cooperation with

other institutes and businesses in Styria, the Austrian region that tops Europe's rankings for research and development.

Its unique research profile is set to gain further prominence due to an expansion program that is adding about 40 professorships and infrastructure worth €12 million. "We need to keep providing excellent conditions for research so that we can carry on working for tomorrow," Neuper explains.

## A dynamic life sciences cluster

Austria is becoming one of the world's strongest countries for life sciences research, particularly in areas like medicine.

554 life sciences organizations earning over \$13.5 billion a year are based in the region of Vienna. Businesses focused mainly on biotechnology, pharmaceuticals and medical technology include startups and giants like Baxalta, Boehringer Ingelheim, Novartis and Ottobock.

They are supported by cutting-edge research facilities, in-

stitutes and universities, such as the Institute of Science and Technology.

The most important factor in Vienna's heavyweight status in medicine is the Medical University of Vienna (MedUni). With 26 hospitals, it is the largest medical training institute in the German-speaking world and at the vanguard of European research.

"Vienna is attractive for medical research on a global scale," says MedUni rector Markus Müller; "The integration of our hospitals and universities is a strength, for example, as it means we have an huge amount of patient information." This strength has helped MedUni to contribute

to Austria's startup system with spinoffs like MedAustron, which

is using groundbreaking particle therapy to improve the chances of curing cancer.

MedUni is investing over \$550 million in new infrastructure, which will include a campus for its preclinical specialties, says Müller, who adds, "Austria can be among the strongest nations in the world in the field of life sciences."

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The new green campus of Vienna University of Economics and Business



The Vienna State Opera has been flooding the city with music since 1869

## Vienna: The world's most liveable city

For 10 consecutive years, Vienna has topped Mercer's annual quality of living rankings as the world's most liveable city.

Spotless, efficient and extremely innovative, the former Austro-Hungarian empire's capital city scores highly in international rankings, thanks to its excellent public infrastructure and transportation networks, safe and stable environment, and broad range of cultural and recreational activities.

Over seven million international visitors flock to the city every year to admire its stunning architecture, parks and castles, and to enjoy its vibrant modernity, concert halls and museums.

Dozens of international organizations — including the United Nations, OPEC, the Interna-

tional Atomic Energy Agency and the World Wide Fund for Nature — have chosen the city as a base for their headquarters, contributing to turning Vienna into a key player for the promotion of peace, security and sustainable development.

It is also no wonder that the city is firmly established in the top-five most important meeting-cities worldwide, attracting more than 1.4 million event participants to over 4,000 congresses, 8,000 conferences and 5,000 seminars a year.

Despite its position as the world's biggest German-speaking city after Berlin, Vienna is a highly international place and home to over 180 different nationalities. Its strategic location in the heart of Europe also makes it an important transportation hub and corridor for the surrounding destinations of Central and Eastern Europe. In 2018, more than 27 million passengers flew through Vienna International Airport, an increase of 10 percent on the previous year.

### A city of two million by 2030

By 2030, Vienna is projected to be hosting about two million inhabitants — a population level it used to have before the split of the Austro-Hungarian empire — with another quarter of a million people predicted to be living in the surrounding area.

As the biggest infrastructure operator in the municipal area, Wiener Stadtwerke has made it its mission to preserve the quality of life of its inhabitants and to anticipate this transforma-

tion. Day after day, around the clock, the company is working to ensure security of supply in both the energy and transportation sectors.

"We want to provide the best possible quality of life for all of Vienna's residents, at all times of day and night, while conserving resources as far as possible," explains Martin Krajcsir, CEO

**Vienna is one of Europe's fastest growing cities, for which we have a series of expansion plans for inner and outer city areas."**

Michael Ludwig  
Mayor and Governor of Vienna

of Wiener Stadtwerke.

"Security of supply, access for all to services that are daily necessities and their affordability are paramount concerns for us. By 2030 at the latest, Vienna will be home to two million people. So that the city will be just as liveable then as it is today, we are investing almost \$4.5 billion between 2018 and 2022 alone — \$900 million each year," Krajcsir adds.

About half of this will be invested in energy infrastructure expansion and maintenance, and half in the upkeep and expansion of public-transport infrastructure. Wiener Stadtwerke's aim is to take public utilities to the next level and to transform Vienna into a smart and environmentally friendly city of the future.

## Making Vienna fit for the future

By investing in smart energy, Wien Energie is ensuring that Austria's capital maintains its position as the world's most liveable city.

Vienna's reputation as the world's most liveable city is, to a significant extent, down to the work of Wien Energie. Famous for its Vienna Model — a recycling waste heat system exported all over the world — the company is the pivotal supplier of electricity, natural gas and heating to the two million people, 230,000 businesses and 4,500 farms established in the Greater Vienna area.

"Wien Energie is one of the 50-largest companies in Austria by turnover, employing over 2,200 personnel," explains CEO Michael Strebl. "Our portfolio includes electricity, natural gas, district heating, e-mobility, solar energy for businesses and residents, fiber-optic high-speed internet and telecommunications."

A fierce innovator and pioneer, the company has its eyes firmly set on the future. In order to tackle the many urban challenges that face Vienna, Wien Energie has laid out an ambitious and sophisticated plan with multiple objectives, starting with cutting carbon dioxide (CO<sub>2</sub>) emissions.

**By 2030, Wien Energie will provide 600MW of solar capacity alone, which is equivalent to the consumption of 250,000 households or the cities Graz and Linz combined."**

Michael Strebl, CEO, Wien Energie



Michael Strebl  
CEO, Wien Energie

"Our goal is to drastically reduce Vienna's carbon emissions," says Strebl; "In the next five years, we will invest €1 billion into expanding renewable energy production (such as solar and wind), security of supply and innovation." As a result, Wien Energie should be able to add 600MW of solar capacity by 2030 — enough to feed about 250,000 households.

E-mobility is another focus for the energy supplier. "40 percent of our CO<sub>2</sub> emissions come from transportation," he notes.



Solar energy is produced close to the customer in Vienna

In order to cut that, Wien Energie plans to work with citizens to build 1,000 charging stations in Vienna.

"What is unique to Austria is the way in which we integrate citizens into our processes. As a result, they invest in our windmills, photovoltaics and charging stations," he adds.

This customer-centric approach has now become a unique selling point and trademark for Wien Energie, as well as a central part of its smart-energy transition.

"Vienna is the most liveable city in the world — and we want it to remain the most liveable city in the world," concludes Strebl.

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Wien Energie, a partner of EnergieAllianz Austria.

**christof industries**

**Vienna at a glance**

- A population of 2 million by 2030
- The headquarters of over 200 multinationals
- Around 100,000 businesses
- 20 universities and 200,000 students

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# An ambitious energy transition

Austria already leads Europe in the generation of electricity from renewable sources, mainly due to its highly developed hydropower sector. The country's strategy for converting to 100-percent green electricity production by 2030 could provide the blueprint for the decarbonization of power systems worldwide.

In line with the agreement made at the 2015 United Nations Climate Conference in Paris, Austria is working to meet ambitious goals for decarbonizing its businesses and energy system that are spelt out in the country's climate and energy strategy: "#mission 2030".

The goals include expanding renewable energy generation to cover 100 percent of electricity and 45-50 percent of total energy demands by 2030, reducing greenhouse gas emissions outside the European Union trading scheme 36 percent by 2030 and moving toward a climate-neutral economy by 2050. "It's a huge change and we need to act fast," says Herbert Lechner, deputy managing director and chief scientific officer at the Austrian Energy Agency, an important advisory body.

Austria currently generates 71



**Herbert Lechner**  
Deputy Managing Director and Chief Scientific Officer, Austrian Energy Agency

storage capacity." As well as industrial-scale storage, homeowners are being incentivized to store their own electricity by installing solar roof panels together with batteries.

Initiatives like this that decen-

**“The electricity system of the past was created in one direction — from energy supplier to consumer. Now it works in both directions.”**

Wolfgang Anzengruber, CEO, Verbund

percent of its electricity from renewables, with 60 percent coming from hydroelectric facilities. Now, notes Lechner, "The focus is on increasing solar and wind."

As for every country moving toward these renewables, storing surpluses for the time when the sun doesn't shine or the wind isn't blowing is a challenge, he says: "Flexibility and efficiency are key. Hydropower plants and batteries can offer short to medium-term storage but the big issue is shifting excess summer production to winter. We need to build such

tralize energy, digital advances that allow customers to manage their demand and Austria's decarbonization policies will lead to "radical changes in the energy sector, with customers becoming producers and new players entering the market," states Lechner.

## 95 percent green electricity

At the forefront of the transition to smart energy is Verbund. As owner and operator of Austria's electricity grid, "We offer customers various energy management services and rely on smart metering for



One of Verbund's pumped storage hydropower plants

real-time information about demand," says CEO Wolfgang Anzengruber.

Clean energy generation is the main focus for Austria's leading electricity company, he states: "95 percent of our generation is renewable and carbon free. We operate over 100 hydro plants in Austria and roughly 20 in Germany with a total output of 30 TWh, which covers about 40 percent of Austria's electricity demand."

Verbund believes that a third of the additional generation Austria needs to remove carbon from its energy mix can be supplied by building new hydro facilities and increasing the efficiency of existing ones.

As well as working towards this, "Verbund will increasingly develop solar and onshore wind — we already have just over 400 MW of wind-power capacity in Romania, Germany and Austria. In addition, we want to enlarge our portfolio with hydrogen as a future energy source," says Anzengruber.

Verbund's pumped storage hydropower plants in the Alps offer a highly efficient way of storing and releasing energy when needed but the CEO says the company wants to enhance its storage capacities by utilizing batteries and hydrogen to better balance generation with demand.

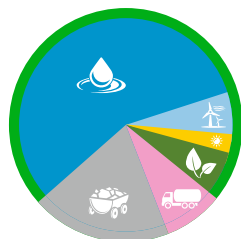
The company will take a step closer to 100 percent renewables when it closes its last coal-fired power plant in 2020. "Our goal must be to fight climate change. Austria's #mission 2030 targets are ambitious, so is the timeline, but what matters is that we do the right things now," he stresses.



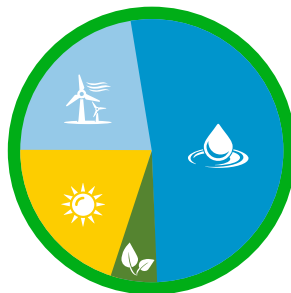
**Wolfgang Anzengruber**  
CEO, Verbund

## Austria's current and future electricity mix

2016 | 52 TWh | 71%



2030 | 88 TWh | 100%



● Hydro ● Other renewables  
● Wind ● Fossil  
● Solar ● Imports

# Storage: The key for secure energy supplies in the move toward renewable energies

Austrian innovations in hydrogen and synthetic natural gas could help the world fight climate change.

Hydrogen's potential in the global future of energy is huge. In a process called "power to gas", it can be made by utilizing renewable energy to split water into its component elements. The hydrogen can then be stored and used as a zero-emissions fuel when needed. "It could change the whole electricity system," says the Austrian Energy Agency's deputy managing director and chief scientific officer, Herbert Lechner.

One reason it has yet to fulfill its potential are the high costs involved in developing new infrastructure to store the gas fuel but an Austrian company has found a groundbreaking solution.

"RAG Austria is Europe's fourth-largest natural-gas storage operator. We are crucial to energy



**Markus Mitteregger**  
CEO, RAG Austria

supply security not just in Austria but in neighboring countries, as our facilities are also linked to their gas grids," states RAG CEO Markus Mitteregger. Cleaner and more efficient than other fossil



fuels, natural gas will be an important source of stored energy for decades to come, not least because it can easily be used to balance fluctuations in solar and wind production levels to provide a stable energy supply to customers.

However, says Mitteregger, "A major research focus for RAG is storage beyond the fossil-gas era. We wanted to know if we could reuse our existing natural-gas reservoirs, with a capacity of about 6 billion cubic meters, for the long-term large-scale storage of hydrogen made from solar energy."

In a major trial, RAG demonstrated that their naturally formed underground reservoirs and associated pipelines are the perfect solution to the challenge of hydrogen storage and distribution.

But during the trial, RAG made an even greater innovative breakthrough. By injecting carbon dioxide into a reservoir with the hydrogen, a microbial reaction occurred that rapidly converted the two gases into synthetic, sustainable and storable natural gas: methane.

"We estimate that 10 percent of gas reservoirs worldwide could be suitable for the microbiological conversion of renewable energy to synthetic natural gas and, once the concept is fully proven which we hope will be by the end of 2019, we will approach potential partners with a view to initiating similar projects in other countries. Gas guarantees secure, sustainable and affordable energy, and RAG wants to prove that it can also be green on a large scale," says Mitteregger.

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## Austria's energy future: Driven by gas and sustainability

Rainer Seele, CEO of energy giant OMV, explains how the company is growing through sustainable diversification.

**PR** Over six decades, OMV has grown into one of Austria's largest industrial companies and it is now a global giant. With more than 20,200 employees, OMV earned over \$23 billion in 2018 from its operations in 30 countries in upstream and downstream oil and gas, petrochemicals and other innovative energy sectors. Could you explain why OMV's geographical expansion has been particularly rapid recently?

**RS** In the past, we had a very strong focus on Europe and nearly 90 percent of our business was on that continent. Today, we have become a more internationalized company, with a focus on diversifying into new regions like Russia, the Middle East and especially Asia. In the latter two regions, we are taking advantage of our shareholdership: Mubadala, Abu Dhabi's sovereign investment fund, has been a shareholder of OMV for 25 years and, together with the government of Austria, it holds a majority of the shares in OMV.

We saw that as an opportunity to start a huge capital commitment towards Abu Dhabi. We have committed about \$4 billion to Abu Dhabi and, within two years, we have built an integrated business model across the entire value chain there that goes from the wellhead to the production of polymers by Boreouge, which is a joint venture between the Abu Dhabi National Oil Company and Borealis, a major Austrian plastics manufacturer that OMV owns with Mubadala.

**PR** OMV is one of five European companies partnering with Russia's Gazprom to build the Nord Stream 2 gas pipeline, which will be capable of transporting 55 billion cubic meters of natural gas from Russia to Europe every year. OMV is investing a bit over \$1 billion into the project — 10 percent of the construction costs. Why is the pipeline important?



Rainer Seele  
CEO, OMV

**RS** We have to prepare for a growing European demand for natural gas because some countries, like Germany, are preparing to switch from coal to gas and, of course, partially to renewable sources of energy. At the same time, we are seeing a very strong decline in Europe's domestic gas production. So, Europe needs to import more gas and has to invest in security of supply.

That security of supply can be increased by diversifying sources and, with that in mind, OMV has signed contracts with Qatar and the US's Cheniere Energy for liquid natural gas supplies. However, we should also diversify import routes and Nord Stream 2 does that. The pipeline comes with a high security of supply because it crosses the Baltic Sea from Russia to Germany and there is no transit country involved, so there is a direct link between European consumers and low-cost Russian gas.

Nord Stream 2 is in full compliance with US and European trade sanctions against Russia; there are opponents to the project but I believe they are driven more by economical than political interests. Some countries, such as Ukraine, are opposed because they want to continue to ship the gas through their country to keep transit income. Others, like the US, would like to sell more of their own gas to Europe, but they will have to compete on prices to do that.



OMV's Schwechat oil refinery near Vienna

**PR** What other major oil and gas projects does OMV have in its pipeline that will help secure Europe's energy needs?

**RS** We have just finished a production investment project in Norway, where Equinor is the operator, which allowed new gas to go on stream at the end of 2018. OMV is also investing in Tunisia and planning a billion-dollar project in the Black Sea in Romania, for which the final investment decision has yet to be made.

**PR** In July, OMV announced a partnership with Verbund to build Austria's biggest solar photovoltaic plant and evaluate the possibility of constructing a hydrogen production facility. Can you tell us more about the importance to OMV of sustainability and diversification?

**RS** Climate change is becoming the top priority within Europe and I am convinced that this has to become a global issue. OMV can contribute with its sustainability strategies. For example, it has announced its intention to reduce the

**OMV is now a very stable performer in the trading markets, has an extremely attractive dividend policy for shareholders and has seen strong growth."**

Rainer Seele, CEO, OMV

CO<sub>2</sub> intensity of its business activities by 19 percent by 2025.

We not only want to clean up the air but also the ocean and are investing in ReOil® technology to recycle plastic waste into high-quality synthetics like crude oil, which we can then recycle into eco-fuels or carbon-neutral petrochemicals. This is still a pilot project, but we aim to develop it to a commercial level with a capacity to transform 200,000 tons of plastic waste a year into quality products.

In addition, OMV would like to change from an oil company, our historical roots, to a gas company and we have already started changing our production split, which is now 60 percent in favor of natural gas. The company will also move further into petrochemicals to reinforce our focus on sustainability — our intention is to use oil more as a valuable feedstock than an energy component in the future.

Overall, we have to invest in profitability so that shareholders will continue to invest in OMV and we can continue to pay dividends and create jobs.

**PR** How would you evaluate the company's recent business performance?

**RS** Diversification has allowed us to stabilize our business. OMV is now a very stable performer in the trading markets, has an extremely attractive dividend policy for shareholders and has seen strong growth — within the last five years we have nearly doubled the size of the company and our earnings in 2018 were at a historic level. A

few years ago, we produced 300,000 barrels a day, now it is almost 500,000 and we are targeting 600,000 by 2025.

We like growth, especially when we can combine it with profitability. In the last couple of years we have more than halved our production costs, which was tough work, and our profitability has increased tremendously. We have clearly said to the financial markets that OMV will continue to be a cash machine and I will continue to increase the cost competitiveness of the company.

## A digital nation on the rise

As digitalization accelerates across all layers of society — from corporations to citizens — a new breed of 'Made in Austria' IT champions take on more speed in the global market.

Closing the digital skill gap and accelerating digital transformation have long been priorities for successive governments in Austria.

Although the country already boasts high-end digital skills compared to other markets, the nation aims to raise the bar even higher by integrating, for example, digital education into the curriculum of Austrian schools at the earliest stage.

A frontrunner in terms of digitalization is the region of Styria in the south east of the country, which has successfully transformed into a sophisticated service hub and tech cluster that hosts world-renowned companies and market leaders such as Andritz, AVL List and KNAPP.

Green tech, software, data management and gaming are some of the strongest and fastest-growing business fields in Styria at present.

"As a country, we don't have many natural resources, but we have human resources," says



Gerald Hofer  
CEO, KNAPP

customers to implement advanced automated distribution centers.

"We are the biggest integrated solution supplier, also dealing with all the data and software processes associated with that," explains Hofer. "That's how we are different to other producers that produce conveyors or shuttles. We do offer equipment, but we actually always deliver fully integrated systems and offer all

**Our customers establish a relation with us not for a moment, but for years and decades. We are a very stable partner on which they can rely."**

Gerald Hofer, CEO, KNAPP

Gerald Hofer, CEO of one of the most outstanding technology players based there, KNAPP. Started by a local engineer in the 1950's, KNAPP has carved itself a global name in the logistics automation systems business.

### Integrated automation

The group has 4,500 staff — including 200 employed by its subsidiary in Atlanta, Georgia — and it has accumulated a long history of innovation and proven performance in helping global

kinds of solutions around smart distribution and production."

To engineer its innovative in-house technologies, KNAPP invests heavily in research and development (R&D) and works closely with researchers at universities, not only in Styria but worldwide. Fueled by its customers' increasing need for its solutions, the group is poised to break the €1 billion turnover bar in the near future, with the US currently accounting for about a third of its business.



KNAPP's logistics automation systems have won numerous international awards

Hofer's aim is to establish KNAPP further as an independent global high-tech brand. "We love to make profits and high turnovers, of course — but what matters most to us is putting in place sustainable and mutually beneficial partnerships with our customers.

70 percent of our business comes from existing customers and our goal is guarantee their success," he concludes.

### High-tech global champions

Styria and Austria as a whole abound with success stories like this. Another example is SKI-DATA: headquartered in Salzburg, the company has become the worldwide leader in physical access control and revenue management systems, offering a broad spectrum of solutions for ski resorts, stadiums, airports and shopping malls.

In the gaming industry, Novomatic has also been redefining standards with its high-tech gaming equipment that enabled the company to reach a turnover of over \$5.6 billion in 2018.

At the top of the R&D podium sits Infineon Technologies Austria. A subsidiary of the German semiconductor-manufacturing giant, the company boasts astronomical R&D spending of \$560 million, 1,800 innovation-dedicated employees and last year announced a further \$1.8 billion investment in a new

semiconductor factory — the largest R&D investment made in Austria over the last few decades.

From electric cars to cell phone and passports, Infineon's products are everywhere and contribute to addressing energy efficiency, mobility and security challenges.

**Austria is a top business place to be and an excellent base for technology in the heart of Europe. This is where life takes place — in a dense and inspirational way."**

Sabine Herlitschka, CEO and Chief Technology Officer, Infineon Technologies Austria

Commenting on the group's choice of Austria as a base, Sabine Herlitschka, CEO and chief technology officer of Infineon Technologies Austria states: "Austria has excellent public universities, universities for applied sciences and research centers that are well connected both in applied research and basic research. It also has big and small companies that interact intensively. This is a typical characteristic of Austria — having an ecosystem that is big enough so that we get the variety, while still being small enough to facilitate seamless cooperation."



# A tourism giant

With almost 30 million international visitors each year and a spotless reputation as a top travel destination that is recognized as the “most tourism-friendly” by the World Economic Forum, Austria is a giant in tourism.

“Nearly 10 percent of Austria’s inhabitants are working in tourism, directly or indirectly. Tourism is a really important sector for the economy — and it’s a growing sector,” explains Martin Winkler, CEO of Austria’s leading private-sector tourism player, Verkehrsbüro Group.

“After Cyprus, Austria ranks second in the European Union in terms of tourism revenues in proportion to the population. That shows how dependent everybody is on the tourism business,” adds Michaela Reitterer, president of Austrian Hotel Association.

The sector accounts for almost a tenth of the country’s gross domestic product, accounts for more than 700,000 employees, and is of vital importance as generator of jobs, revenues and development

for Austria’s regions. Warm and impeccable hospitality are strong characteristics of the country’s tourism offering and, although big international players and brands have invested substantially in it, the sector remains heavily dominated by small, family-run concerns that help safeguard the nation’s culture and traditions.

“Tourism generates a lot of economic activity in our regions,” says Reitterer, “80 percent of a hotel’s expenses are incurred within a 90-kilometer radius of that premises — so we are investing our money in the regions, we buy from the regions and this is a great thing.”

## Unparalleled diversity

The seventh-most visited destination in Europe, Austria scores one of the highest den-



The historic Hotel Sacher in Salzburg

sity of visitors per inhabitant in the world and offers them unparalleled diversity, combining a rich culture and history with stunning natural sites, high-quality infrastructure and excellent gastronomy.

“Austria has a number of unique features that keep on attracting tourists, such as its good foods, its distinct regions, its beautiful landscapes, its safety, its clean environment and its focus on sustainability. We look after our forests and we don’t have much pollution,” says Reitterer.

From the refined elegance of its capital city Vienna, to the majestic Tyrol landscapes, and the magical music and arts scene of Salzburg, Austria has

exactly what it takes to appeal to a wide range of global visitors.

“Austrian tourism is not just about Vienna. It’s not just about its other cities, like Salzburg, and its not only about the valleys and the mountains — it’s about the whole country,” insists Winkler.

His group, which has over 100 years of extensive experience and 3,000 employees, offers a holistic range of services in the fields of leisure and business travel, and also plays a key role as an event and congress organizer. For him, diversity and infrastructure are the keys to continue developing Austrian tourism in a sustainable manner.

## Europe’s #1 ski spot is also a coveted year-round destination

Austria’s spectacular peaks and cosy mountain resorts make a charming ski scene in winter and an adventurous playground in summer.

Over two-thirds of its surface is covered by the Alps and, aside from its countless ski slopes, the country also boasts six national parks, 48 nature parks, 46,000 miles of hiking trails and 9,000 miles of cycling routes.

With so much natural beauty, it is no wonder that Austria is positioned as a preferred European travel destination — not only for winter but also for summer, when it attracts a wide variety of fun, sport and adventure lovers.

Sankt Anton am Arlberg, Ischgl, Sölden, Mayrhofen

and Zell am See are some of Austria’s most popular ski destinations, where local tourism operators are deploying their maximum efforts to remain top of the international league and to offer the latest innovations to visitors.

As example, Verkehrsbüro Group is proposing smart ski helmets with integrated augmented reality to its guests. “We are experimenting with all kinds of new things that will help our customers to enjoy their holidays a little bit more,” says group CEO Martin Winkler.



The magical ski resort of Sölden in the Tyrol region



Stunning landscapes keep Austria at the top of the skiing league



Austria's famous Lipizzaner horses entertain the crowds



The sachertorte is Vienna's signature dessert

## The sound of music and the taste of food

Austria’s musical and gastronomical genius extends far beyond Mozart and schnitzel.

Not many countries can claim such an impressive history of composers as Austria: Liszt, Strauss, Schubert and, of course, Wolfgang Amadeus Mozart are just some of the famous musicians born here.

Mozart’s hometown of Salzburg has become a true mecca for classical music lovers, hosting many year-round orchestras and events such as the ‘Sound of Music’ festival, which attracts over 300,000 fans every

year, while Vienna has also forged a reputation as musical capital of the world.

### A refined experience

Aside from music, Austrian creativity and innovation is also expressed in food. Local cuisine is rich with various Central European influences and includes a wide range of delicious regional dishes, including tafelspitz (beef boiled in a broth and served with apples,

horseradish and chive sauce), erdäpfel salat (Austrian potato salad), selchfleisch (smoked meat served with sauerkraut and dumplings), liptauer (a spicy cheese spread) and wiener schnitzel.

Signature desserts to indulge in are apfelstrudel and the renowned sachertorte, which is best enjoyed in one of the Hotel Sacher’s gorgeous salons where it has its roots.

This glittering landmark hotel is to Vienna what the Plaza is to New York or the Ritz to Paris: a testimony of Austria’s extreme taste and refinement.

**Austria has a long history of being friendly, open and international, and those are some of the reasons for our success.”**

Matthias Winkler, CEO  
Sacher Hotels

“Whether you are in Salzburg or Vienna, the Sacher hotels should be part of your visit because we have a strong history dating back to 1832 and Sacher has always been the place to be in Vienna, for both locals and travellers,” professes CEO Matthias Winkler.

## Viennese property market set for further growth

As Austria’s magnificent capital gears towards the two-million population mark, real estate prices keep soaring, making Vienna a hidden gem for investors.

As economic growth continues, so does the rise of housing prices in the country. According to the Austrian National Bank, real estate prices went up 6.8 percent year on year in 2018 — 5.2 percent in Vienna and 8.4 percent in the rest of the country.

“Vienna’s population is gaining 10,000 to 15,000 people every year, so there is a big need for residences and condominiums — not just in Vienna but across all cities in Austria,” explains Karl-Heinz Strauss, CEO of PORR, the country’s flagship 150-year-old construction group.

“A lot of infrastructure projects will also take place in Austria in the next two to three years: from highway repairs and maintenance, road lanes doubling and new ring roads around cities to railway construction and tunneling. Interest rates are not going to increase in the next few years and, there-

fore, the construction and real estate industry will remain stable,” he predicts.

### Buoyancy in all real estate segments

Its eminence as the “world’s most liveable city” has only strengthened Vienna’s appeal to foreign investors. In 2018, Austria’s real estate market reached almost \$4.4 billion, led by the office and retail segments. Institutional residential investments accounted for about a quarter of this. Austrian law firm Schönherr alone handled over \$2 billion in real estate transactions, many of which were in the residential sector.

For Klemens Hallmann, a successful real estate entrepreneur, mogul and owner of Hallmann Holding, a leading private property group, Vienna is simply “a hidden gem waiting to be discovered by investors.” His group has been involved in real estate proj-



Vienna's real estate prices rose 5.2 percent in 2018

ects for the past 20 years, establishing new construction standards.

“I see a lot of room for improvement in the real estate and construction sector, particularly when it comes to sustainability and energy management. Our challenge as a constructor is to develop housing spaces that are smaller but as innovative as possible, and to combine affordable housing and energy management,” he notes.



## Sustainability: The lessons from Austria

Austria's pioneering approach to the environment is grounded in 150 years of history.

From the Tyrol mountains to the forests of Styria, Austrians' proximity to nature and traditional way of living has engendered a strong national consensus around environmental protection. In fact, the country has been a pioneer for the preservation and sustainability of the natural environment ever since the 19th century with, for example, the establishment of the first University of Natural Resources and Life Sciences in Vienna in 1872.

More recently, in the wake of the climate change crisis, citizen and private-sector initiatives have been multiplying to generate deeper awareness and immediate action around en-

vironmental issues. One of them is the R20 Austrian World Summit that takes place in Vienna every year. Launched by entrepreneur and philanthropist Klemens Hallmann, the event is gaining big global traction and this year welcomed eminent personalities such as Arnold Schwarzenegger, António Guterres, Greta Thunberg and several heads of state.

In Styria, a whole green tech valley has developed to spur new innovations around energy and environmental technologies. About 200 companies, startups and research institutes work there including Saubermacher, a leading innovator in waste management and recycling,



2019's R20 Austrian World Summit in Vienna

## New champions step up for climate action

For CEO and entrepreneur Karl Ochsner, much more can be done at the industrial and commercial level to tackle global climate change.

The Austrian Karl Ochsner, who has been running his family heat-pump business for the past 11 years, strongly believes in Austria's green tech industry and in the substantial role that his products in particular can play going forward. His enterprise, Ochsner Heat Pumps, is a classic "hidden champion" of Austria and a pioneer in the heat pump business, having specialized in this field since 1978.

"We only specialize in heat pumps. We develop and produce heat pumps for small houses for water usage, all the way up to ones for huge buildings and industrial applications," explains Ochsner.

In the last two years, Ochsner Heat Pumps has registered a 30 percent growth in sales, driven mostly by the commercial sector and the large clients that it caters for, such as Google, IKEA and the supermarket chains REWE and Spar. 70 percent of its products are sold outside Austria, in Europe and increasingly China, where heat pumps are looked at as a sustainable alternative by the government.



Karl Ochsner  
CEO, Ochsner Heat Pumps

"Greenhouse gas emissions generated by household heating are higher than the carbon dioxide (CO<sub>2</sub>) generated by land transportation.

"With our heat-pump technology, we can contribute to the United Nations' Paris Agreement goals for CO<sub>2</sub> reduction," Ochsner states, adding that customers using his company's pumps have so far helped to stop 2.5 million tons of CO<sub>2</sub> from being released. "Every heat pump we sell helps this world and fights climate change. We



One of Ochsner's new generation of environmentally friendly heat pumps

have to spread that message," he continues.

### A focus on quality

The company brings 40 years of experience to the table and a high level of innovation. "We focus on the quality and life-cycle of our products. A cheap heat-pump operation based on an air-conditioning unit will only last 10-12 years, whereas our products can last more than 20," insists Ochsner.

Every year, Ochsner Heat Pumps introduces the latest technology and fresh ideas on how to use heat pumps in industrial processes and big buildings. "Customer comfort has increased greatly and we are very focused on services. We don't just sell the product — we want to be there for the customer throughout the entire lifecycle of their heat pump," says Ochsner.

The US is a market that the company is keeping a close eye

**Emissions generated by household heating are higher than the carbon dioxide (CO<sub>2</sub>) generated by land transportation. With our heat-pump technology, we can contribute to the United Nations' Paris Agreement goals for CO<sub>2</sub> reduction."**

Karl Ochsner  
CEO, Ochsner Heat Pumps

on, even though, as Ochsner points out, "Americans need a more 'Californian spirit' when it comes to green technology. In the long term, the US is a huge market and big opportunity. But for heat pumps, you need a political environment that sees green tech and renewable energy as positive, that wants to support it and sees the risks of global warming. That's something we're not seeing from the US at the moment," he advises.



**As a small country we can be a testing ground for new ideas, policies and economic frameworks. That's why Austria has produced many pioneers in their respective fields."**

Karin Kneissl  
Former Minister for Europe,  
Integration and Foreign Affairs



**We are a multicultural hub with a strong heritage at the heart of the continent of Europe and, as Austrians, we have a natural openness built into our DNA."**

Barbara Kolm  
Director  
Austrian Economics Center



**Austrians are some of the most sincere, hardworking and passionate people that I've worked with. As a country, it strikes the right balance and is a lovely place to live."**

Anas Abuzaakouk  
CEO and chairman of the managing  
board, BAWAG Group

Hallstatt's lakeside village in Upper Austria is one of the country's nine UNESCO World Heritage sites







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