Austria -
A Global Leader in Green Technologies
LEGAL NOTICE

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Austria has become a highly developed and innovative industrial and business location in the past decades. High environmental standards and Austria’s unique nature have been preserved at the same time.

As a small and open national economy, today we export our products and services to virtually all countries of this earth, and generate almost two-thirds of our gross domestic product through exports. At the same time, the Austrian environmental technology industry has acquired a particularly good global reputation when it comes to the reliability and quality of our products and services. In many respects Austrian environmental technology companies are among the world market leaders today: three fourths of environmental technology companies are active in the export sector, and eco-innovations “Made in Austria” are increasingly in demand worldwide.

Innovations are crucial for the business location Austria. The successful implementation of new ideas creates jobs and supports the development of new markets.
In the process, innovations in the field of environmental technology not only provide a contribution towards a cleaner environment and a higher quality of life for people. The improvement of resource efficiency and the reduction of production costs enable a stable and sustainable economic system. That is why, as Minister of Science, Research and Economy, I am convinced that energy efficiency and the use of renewable energy sources guarantee this sustainability. Numerous examples for the global success of Austrian environmental technology substantiate the reliability, professionalism and high quality standards of Austrian companies as well as the high satisfaction level of their customers.

I therefore invite you to become better acquainted with the opportunities for joint projects with Austrian green-tech companies featured in this brochure!
AUSTRIA
TRADITION & PROGRESS
IN THE HEART OF EUROPE
AUSTRIA
TRADITION & PROGRESS
IN THE HEART OF EUROPE
Austria borders the eight neighbouring countries Germany, Italy, Slovenia, Slovakia, Czech Republic, Hungary, Switzerland and Liechtenstein, and is a member of the European Union, the United Nations and most UN organisations. Vienna is one of four UN headquarters. International organisations such as the IAEA, OPEC and UNIDO are based in Vienna today. The OSCE, the world’s largest regional security organisation, is also based in Vienna.

~8.7 million inhabitants

A further increase to ~9.43 million is expected by 2030
PURE NATURE

Austria is unique in its diversity: extraordinary landscapes, magnificent massifs, crystal-clear lakes and streams, pristine nature, clean air and a healthy environment characterise the image of this incomparable country. About 50% of Austria’s total area is covered by forest.

ART AND CULTURE

Austria is world famous for its art and culture. Important monuments and historically important sites emerged in the course of individual stylistic epochs; many of them are included in the list of UNESCO World Heritage Sites. Austria was not only the centre of European musical life with the First Viennese School (featuring composers such as Haydn, Beethoven, Mozart and Schubert) in the 18th and 19th century, music, theatre, fine arts and architecture from Austria are also still appreciated throughout the world today.

GREEN TOURISM ENJOYS ENORMOUS POPULARITY

Austria is among the most prosperous EU states and scores highly with an efficient and modern industry. Services account for the largest proportion of the economy. Austria is not only among the world’s most well-known and most popular tourism destinations, but it is also a pioneer in the field of green tourism and sustainable tourism. The importance of environmental protection, nature preservation and protection as well as focusing on the sustainability of tourism enterprises also plays a pivotal role in the tourism sector.
INTERNATIONALISATION

As a small, open national economy in the heart of Europe, Austria accelerates the internationalisation of the economy and, above all, wants to substantially expand exports in future markets outside the EU. Austrian export businesses are active regardless of crises in individual global regions and can optimally take advantage of their opportunities, particularly in dynamic countries. Six out of ten euros are generated by exports.

GO INTERNATIONAL

The internationalisation offensive (IO), sponsored by the Federal Ministry of Science, Research and Economy (BMWFW), also helps Austrian exporters and investors to be successful under difficult international competitive conditions. The IO creates sustainable foundations of a dynamic, globally oriented and knowledge-based foreign trade structure. The most important implementation partner is “AUSSENWIRTSCHAFT AUSTRIA”, the foreign trade organisation of the Austrian Federal Economic Chamber (WKÖ) with the “go-international” promotional programme. The focus here particularly lies on SMEs, opening up new markets as well as exports of knowledge and services.

SME STRUCTURE

Small and medium-sized enterprises (SMEs) are the backbone of the Austrian economy:
• 99% of companies are SMEs (= companies with less than 250 employees)
• There are 330,000 SMEs
Due to their willingness to achieve, innovative ability, flexibility and well-trained specialists, SMEs are a guarantor for the success of the Austrian economy.

Schafberg, Salzburg
TECHNICALLY
AT THE VERY FRONT

Good innovations require outstanding ideas and highly qualified experts. Austria sets a good example here. Education and training rate highly. If one looks at educational expenditure, Austria is far above the OECD average.

LEADING
IN RESEARCH

Austria’s researchers enjoy an outstanding reputation worldwide. Since 1995 the research quota has almost doubled. Austria records the second highest R&D expenditures in the EU (3.07% of GDP).
GREEN TECHNOLOGIES – INNOVATION, EXPORT AND ENERGY
ECO-INNOVATIONS
Austria demonstrates great commitment in terms of the environment. In Austria, an intelligent combination of various measures, such as environmental requirements, laws, regulations, government subsidies & grants, contribute to a liveable environment, while at the same time new economic impulses are provided.

**ECO-INNOVATIONS**

“MADE IN AUSTRIA” WILL BE INCREASINGLY IN DEMAND WORLDWIDE.

Austria has a leading international position in fields such as clean energy technologies, water management and waste management as well as eco-efficient construction and exhibits a dynamic development. Sales revenue with eco-innovations have quadrupled in the last 20 years and therefore increased by 18.6% since 2011.

An important foundation of Austria’s success in the green technology sector is the close linkage of research and economy in a dense network of regional clusters and competence centres. In Austria there are several industrial clusters in the field of energy efficiency and environmental technology. They are characterised by internationality and a high research quota of about 7.5%. Such clusters are present in Upper Austria, Lower Austria, Vienna, Tyrol and Burgenland. A particular example is the Green Tech Cluster Styria, which has already been distinguished twice as the world’s best environmental technology cluster.
The global population is constantly increasing, and therefore resources are becoming scarcer. Due to this transformation, environmental technologies are gaining great importance and renewable energies are becoming an indispensable commodity.

**INTERNATIONAL INVESTMENTS ARE BEING MADE**

About two billion dollars are invested globally in energy technologies every year. Markets around the globe are resorting to the comprehensive knowledge of Austrian environmental technology. Continued good development is predicted for the field of green technologies.
Austria is a country that is always one step ahead of the times and is therefore among the leading states in the field of environmental technology and renewable energy. In terms of green technology, Austrian companies and research institutions enjoy a worldwide reputation.

- Innovative and clean energy solutions
- Resource efficiency
- Waste and water management
- Sustainable construction

A large number of environmental patents
FOCUS ON EXPORTS
Environmental technology from Austria is exported all over the world. The market shares of Austrian companies have also increased substantially outside Europe in recent years – particularly in North America, the Middle East, Asia and Africa.

* Every new employee in the green-tech industry creates approximately two additional jobs in other industries.
The Austrian environmental industry generated a turnover of about 10 billion euros in 2015, 72 % of which stem from exports.

Austria is aware of the importance of the green-tech industry for exports and supports international projects with numerous programs.

Within the framework of “go-international” 34 offices and 110 foreign trade centres of AUSSENWIRTSCHAFT AUSTRIA provide support for Austrian companies.
AUSTRIA - A RELIABLE PARTNER

Anyone who does business with Austrian companies can rely on the fact that contracts, agreements and deadlines will be observed. Modern legislation, efficient administration and law enforcement support the economy. Fairness, appreciation and reliability are core values in business life.

It is primarily medium-sized companies and family-owned enterprises that are characterised by a special customer focus, personal service and a high degree of flexibility. This is also reflected in the World Bank’s ease of doing business index, in which Austria regularly ranks among the top 20 countries.
A CUSTOMISED SOLUTION FOR EVERY EXPORT PROJECT

Austria offers a variety of instruments for funding & safeguarding international exports in the green-tech sector, such as: soft loans, export guarantees and export financing. In the process, Austria cooperates with international organisations such as EBRD, IBRD, IFC and EIB.

Investors get everything from one source. As an export credit bank, the Austrian Control Bank (Oesterreichische Kontrollbank-Aktiengesellschaft/OeKB) provides financial resources and customised insurance policies at excellent conditions. They work together closely with the Republic of Austria and the Austrian Federal Economic Chamber. For over 60 years, customers have been able to count on long-term profitability and flexibility. The essential business segments of the OeKB include energy, environmental technology, special machinery, infrastructure and health.
AUSTRIAN ENVIRONMENTAL COMPANIES KEEP PACE SUPERBLY ON AN INTERNATIONAL BASIS AND ARE INCREASINGLY IN DEMAND WORLDWIDE. NUMEROUS AUSTRIAN COMPANIES ARE AMONG THE HIDDEN CHAMPIONS, ESPECIALLY IN THE GREEN-TECH INDUSTRY.
ENVIRONMENTAL TECHNOLOGIES
Austria leads the way on the global market in the following sectors:

Environmental technology
Waste management
Water and wastewater management
Air pollution control

Renewable energy
Hydroelectric power
Solar thermal energy
Photovoltaic systems
Wind energy
Biomass boilers
Heat pumps

WASTE IS NOT WASTE: IT HAS A VALUE

Austria’s waste management is one of the most progressive in a worldwide comparison. Austria garnered first place – next to the Netherlands – in the EU-wide ranking in solid waste treatment. The economic importance of this field is particularly high. Austria is characterised by a high collection and recycling rate. About 800 companies are active in the collection and treatment of waste.

Comprehensive solutions with regard to collection and treatment, transport, sorting, disposal as well as thermal utilisation are of great importance in Austria.

• Since 2016, the Italian capital Rome has also relied on Austrian know-how in the handling of its waste disposal: at the end of 2016, a project was started to deliver waste to Austria by train and dispose of it. A total of up to 70,000 tons of waste from the Eternal City shall be disposed of in Austrian facilities within one year.
WATER AND WASTEWATER MANAGEMENT

Water is a great treasure and irreplaceable asset for the future of coming generations. Austria is one of the most water-rich countries in Europe. The preservation of water quality and the usability of hydroelectric power as well as resource-sparing utilisation in agriculture – now and in the future – are at the centre of efforts for Austria’s policy. The technologies of industrial water treatment include the filtration of wastewater on the one hand, and the preparation of ultrapure water on the other.

• In February of 2016, an Austrian company completed the commissioning of the seawater desalination plant at Al Ghubra in Oman – which produces 191,000 cubic metres of fresh water every day – as a partner in the implementing consortium. It is currently the largest drinking water facility in the country. As a result, drinking water for 1.2 Mio. people is produced.

• The largest sewage treatment plant in the country and the second largest in Africa – another showcase project from Austria in Algeria – is located in the city of Oran.

• In Iraq, 250 large-scale overhead sprinkler systems from an Austrian company water about 25,000 hectares of agricultural land.

• In Laos, the same company is working towards nearly doubling the harvest with overhead sprinkler systems.
AIR POLLUTION CONTROL

High-tech system solutions regarding air pollution control have been developed in the following areas in Austria, particularly due to strict laws:

- Air filters and exhaust air purification
- Pollutant removal
- Process optimisation
- Reutilisation of thermal energy

Not least because in recent years the emission of sulphur dioxide has been reduced by more than 50% in Austria.

The world’s cleanest cement plant, which reduces the emission of dust by half (target value) through the use of the latest technology, is located in Salzburg. This also leads to a reduction in energy consumption.
RENEWABLE ENERGIES
HYDROELECTRIC POWER
Hydroelectric power is the most important source of energy. On average, the countries around the world produce 16 % of their electricity from hydroelectric power.

Thanks to the topography of the Alps, domestic hydroelectric power dominates the generation of electricity in Austria with it amounting to about 60 %. The proportion of hydroelectric power in the overall generation of power in 2015 was 26 %; the proportion of overall energy consumption was also about 26%.

By generating 60 % of its electricity through hydroelectric power, Austria is an international frontrunner and has therefore already more than achieved the EU goal (20 % proportion by 2020).

Austrian companies build, operate and maintain 150 large-scale and 3,000 small hydroelectric power plants worldwide. Austria’s hydroelectric power technology is already exported by more than 60 %.

In particular, small hydroelectric power plants made in Austria are the most efficient thermodynamic way to generate electricity. Austria leads in this segment with a range of innovative products for suitable worldwide solutions:
• For instance, a hydroelectric power plant in Angola is operated with electromechanical equipment from an Austrian company.

• At a tidal energy farm in Scotland, sophisticated Austrian turbines from the same company will be powered by the tides.

• One third of all hydroelectric power plants currently being built in Turkey are supported by Austrian companies.

• A small hydropower turbine built into a buoy will be installed directly in flowing waters or the ocean. Consequently, electricity will be continuously generated thanks to inventors from an Austrian company.

• An Austrian group was awarded the contract for the new construction of the then largest private hydropower plant (HPP) – Dariali HPP – in Georgia.

• The contract for the Nenskra HPP – the largest hydropower plant in Georgia, which is currently under construction – was signed by the same company.
SOLAR ENERGY
POWER OF THE SUN

Using the power of the sun intelligently is an investment in the future. The boom for solar energy in Europe will reach a new peak in the near future. Austria’s companies are best prepared to deal with this development – in their own country and throughout the world. Over one square kilometre of collector area has been produced in Austria. The proportion of solar power in total power production in Austria is about 1.4%; the proportion of overall energy consumption is about 4%.
• Thanks to Austrian technology, the world’s largest solar energy plant located at the campus of “Princess Noura Bint Abdulrahman University” for women in Riyadh provides 40,000 students with hot water and heats the entire campus.

• A company from Austria has equipped the shell for the main building at EXPO 2017 in Kazakhstan. The challenge: to integrate solar panels in a glass sphere with a diameter of 100 metres. This involves 380 individually produced solar cells, which provide the entire main building with energy in a self-sufficient manner. As a result, Austria is providing a pivotal, visible and significant contribution to the EXPO theme “Future Energy”.
• An Austrian company has designed huge solar panels, which will provide hot water, heating and thermal cooling. This company provided the Beijing Summer Olympics with solar energy.

• Another Austrian enterprise from the solar industry exports over 85% of its high-quality solar collectors to over 40 countries.
WIND ENERGY
WIND POWER WITH TECHNOLOGY FROM AUSTRIA

FULL SPEED AHEAD

Wind power plants in Austria generated 5.7 billion kilowatt hours of electricity in 2016, enough to supply 1.6 million households with electricity.

The wind energy industry posted a strong boost with an increase of 25% last year, and the trend continues to go upwards. Technology from Austria causes a sensation within the country: thanks to wind energy, the Federal Province of Burgenland has already been self-sufficient with electricity since 2013. Moreover, one of the high-performance facilities is operated as a research station.

ALWAYS ON THE RISE

Wind turbines have played a major role for over 20 years. The know-how and technologies from Austrian companies provide fresh wind all over the world: 90% of Austrian production and services are exported to Germany and Denmark.
Every second new wind turbine worldwide is equipped with Austrian technology."
Austria realised at an early stage how valuable biomass is as a source of renewable energy. Biogas is also an excellent source of energy, with a great improvement in quality in recent years. Numerous Austrian companies from this sector dominate the international market:

- Two-thirds of German biomass furnaces are from an Austrian provider.

- An Austrian company specialises in the optimised storage of biogas, liquid manure and fermentation residues, and has built the world’s largest storage facility for biogases in Mexico.

- An Austrian company designed and built the first commercial biodiesel plant that can convert different raw materials into biodiesel. Among other things, this includes vegetable oils, used oil from kitchens and animal fats.
• Vienna University of Technology (TU Wien) and an Austrian enterprise are developing a process that will generate electricity and heat from the residues of olives.

• An Austrian company is one of the largest producers of pellet heating systems throughout Europe.

• Another Austrian company produces environmentally friendly and resource-conserving heating plants for biofuels with an efficiency of up to 20,000 kW.
AUSTRIA
IS IN STEP WITH
THE TIMES
VALUES IN WONDERLAND AUSTRIA

ECONOMIC AND ECOLOGICAL PROGRESS ALWAYS GOES HAND IN HAND

Austria on top
The sustainable use of energy and natural resources is paramount for the future development of the environment. In the interests of future generations, it is essential to interconnect economic growth and responsible use of natural resources.
Companies, research centres, universities, political institutions - all the people in Austria associated with green technology have one thing in common: the vision to even further develop the environmental “wonderland” that is Austria.

Austria’s companies are pioneers. Universities are strong partners. Research institutions are the pulse. Policy is the driving force.

This is the ideal prerequisite for outstanding achievements.
AUSTRIA

Confidence in people.

In nature.

In the future.
FEDERAL MINISTRY OF SCIENCE, RESEARCH AND ECONOMY (BMFW):
https://www.bmwfw.gv.at

FEDERAL MINISTRY OF AGRICULTURE, FORESTRY, ENVIRONMENT AND WATER MANAGEMENT (BMLFUW):
https://www.bmlfuw.gv.at/

“GO INTERNATIONAL” INTERNATIONALISATION OFFENSIVE:
http://www.go-international.at

ABA - INVEST IN AUSTRIA:
https://investinaustria.at/de/

AUSTRIAN FOREIGN TRADE PORTAL:
http://www.advantageaustria.org

AUSTRIAN CONTROL BANK (OEKB):
www.oekb.at/de/exportservice

DEVELOPMENT BANK OF AUSTRIA (OEEB):
http://www.oe-eb.at

AUSTRIAN DEVELOPMENT AGENCY (ADA):
http://www.entwicklung.at/

ENVIRONMENTAL TECHNOLOGY PORTAL:
http://ecotechnology.at

AUSTRIAN CLUSTER PLATFORM:
http://www.clusterplattform.at/