

klimaaktiv

the Austrian Climate
Protection Initiative



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We pave the way for the transformation of the energy system

Climate change is one of the greatest challenges of the 21st century. Austria is willing to rise to this task with great determination. With #mission2030, the Austrian climate and energy strategy, we have marked the end of the fossil fuel age in Austria. Our goals are ambitious: By 2030, we want to reduce greenhouse gas emissions by 36 percent compared to 2005 and generate 100 percent of domestic electricity from renewable energies.

The global fight against climate change is not only a moral obligation, but also a great opportunity. To strive for international leadership in this context early on is to create sustainable jobs and new export possibilities. That is what we are focusing on with all our strength. So far, we have already come a long way, but still have much to do. Since 2004, **klimaaktiv**, now Austria's largest participatory climate protection initiative, has played a key role in our efforts focusing on four topics: building and renovation, energy saving, renewable energies und mobility. The **klimaaktiv** team offers professional support in the development and implementation of climate-friendly measures to businesses, households, public institutions and municipalities. By providing a comprehensive and continuously expanding range of information and a large network of partners, **klimaaktiv** makes climate protection possible for everyone.

In this brochure you will learn more about the activities which have been implemented in collaboration with **klimaaktiv**. As different as the measures may be in detail, they have one thing in common: they are the essential basis to achieve our ambitious objectives in terms of climate and environmental protection. I am convinced that, if we all pull together, #mission2030 will be a complete success.



Elisabeth Köstinger
Federal Minister for
Sustainability and Tourism



klimaaktiv – the Austrian climate protection network

With a global agreement on decarbonisation, the Paris COP21 agreement heralds the end of the fossil fuel era. The transformation of our society towards sustainability is a complex, dynamic social process which can only succeed if an increasing number of players actively participate and ensure that change is seen as an opportunity.

klimaaktiv uses its extensive networks to promote the creation of social capital for the transition towards a sustainable society. Under the four thematic headings of building and renovation, saving energy, renewable energy and mobility, klimaaktiv outlines new solutions clearly, sets quality standards, increases the knowledge and competence of the players involved and advises companies, municipalities and private households. This approach has resulted in greater opportunities for the state to be actively involved in the management of solutions to complex collective problems by enhancing and strengthening the traditional instruments of regulation, taxes and subsidies.

klimaaktiv – innovative climate protection governance

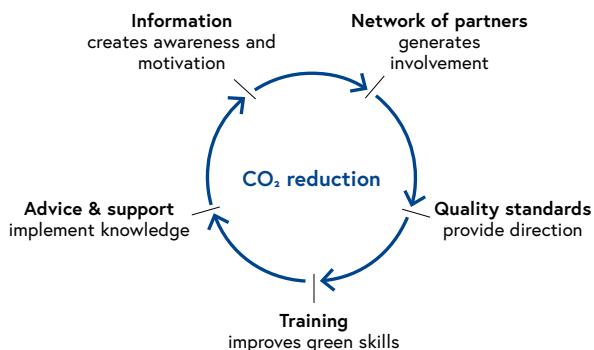
klimaaktiv is the climate protection initiative set up by the Austrian Federal Ministry of Sustainability and Tourism (Bundesministerium für Nachhaltigkeit und Tourismus – BMNT); it is an integral part of Austria's climate and energy strategy. klimaaktiv's primary objective is to launch and promote high-quality climate-friendly technologies and services. In doing so, klimaaktiv focuses on high standards of quality, as to make the market operate at a more efficient and sustainable level.

klimaaktiv takes a systemic and comprehensive approach tackling the issues of reducing greenhouse gas emissions by applying a broad variety of system interventions in cooperation with relevant stakeholders. This makes klimaaktiv unique within the European Union.

klimaaktiv works on five levels

klimaaktiv has developed a fine-tuned activity cycle. The five spheres of influence in the transition cycle initiate a positive feedback process and support all players in tackling the energy transition.

klimaaktiv transition cycle



klimaaktiv provides direction

In dynamic, innovative markets, reliable quality standards are often lacking. To stabilise and support innovative markets, the use of quality standards is important for building up trust between the supply and the demand side of the economy.

Therefore, klimaaktiv focuses on safeguarding quality by

- introducing quality standards for products and services, e.g. klimaaktiv building standard
- introducing quality management systems, e.g. for biomass district heating systems
- empowering consumers to check the quality of services, e.g. with the help of checklists
- providing handbooks and quality tools for professionals
- providing support and advice for planners, e.g. planning audits for complex solar thermal systems

klimaaktiv improves green skills

klimaaktiv coordinates training and education in various subjects and safeguards the high standard of qualifications needed by professionals. The main focus is on advanced vocational training. Pilot training courses and seminars are designed and brought to the training market in cooperation with universities, technical colleges and the educational service of the chamber of commerce. klimaaktiv is making a contribution to the innovative management of advanced vocational training in the fields of renewables, energy efficiency and mobility.

klimaaktiv's competence partners – plumbers, biomass plant owners, planners, chimney sweeps, architects, master builders, energy consultants, ecodrive instructors and mobility managers – all benefit from high quality training and improvement of their knowledge of quality standards.

klimaaktiv provides information

klimaaktiv provides independent information to relevant players and demonstrates direct benefits to consumers of climate protection measures and products. The information material generally avoids moralising and “teaching” and aims to provide practical, relevant information. In 2017, 39 percent of Austrians, and especially people who are young and well-educated, recognised the brand and the positive qualities associated with it: cost-effectiveness, positive image, being modern, dynamism and being ecologically sound. klimaaktiv provides online information platforms to empower consumers, companies and professionals to take action in their context. klimaaktiv attends about 1,500 event days every year; this is made possible because of the broad network activities in Austria.

klimaaktiv provides advice and support

The main target groups for klimaaktiv's advisory activities are companies, municipalities and public administrations, as well as schools, young people and the leisure and tourism sector. klimaaktiv offers expert consulting and technical support to increase manufacturing process efficiency, refurbish buildings, introduce mobility management or redirect procurement to energy-efficient appliances and IT systems. klimaaktiv facilitates the empowerment of existing consultant structures in Austria by providing new support tools, setting up benchmarking systems for energy efficiency and, above all, by training consultants in various subjects.

klimaaktiv in conjunction with grant funding schemes

The impact of the programme is substantially enhanced because it is well integrated with various grant funding schemes. klimaaktiv standards are part of the terms and conditions for funding. klimaaktiv provides advice to beneficiaries, thus improving project quality. In some cases, klimaaktiv provides a fully organised quality management system, e.g. for biomass district heating systems.

klimaaktiv stakeholder and business partner network

Successful climate protection needs drive and commitment from several existing initiatives and networks, as well as from federal states, municipalities and companies. klimaaktiv provides a platform for cooperation between these partners. On the one hand, cooperating with stakeholders and business partners enhances klimaaktiv's expertise and increases its sphere of involvement. On the other hand, partners benefit from growing markets, the innovative expertise provided and the klimaaktiv brand.

Essential factors

- Umbrella brand
- network for cooperation
- high-quality content and standards
- easily accessible expertise
- structured learning
- focus on making a difference

klimaaktiv organisation diagram





Energy efficiency in businesses

Almost 30 percent of final energy consumption in Austria is attributable to manufacturing. **klimaaktiv** has therefore developed a comprehensive package of measures for businesses – a significant contribution to reaching the EU target of improving efficiency by 2030.

Such extensive savings targets can only be achieved with a diverse set of measures. In this regard, **klimaaktiv** focuses on information, consulting and further education and training. Energy efficiency measures that are implemented professionally not only reduce costs but also make a valuable contribution to climate and environmental protection. The considerable potential for savings can be utilised by often inexpensive measures which are easy to implement. **klimaaktiv**'s “energieeffiziente betriebe” (energy-efficient businesses) programme supports industrial manufacturing businesses as well as commercial businesses in the planning and implementation of energy efficiency measures by

- developing standards for the energy-efficient use of compressed air, cooling systems, steam, ventilation, pumps, lighting, etc.
- training energy consultants in cooperation with the federal states,
- granting awards for best practice,
- creating a network of energy consultants, technology suppliers and businesses committed to the cause
- and entering into agreements with project partners.

Technology standards are the backbone of all activities

Particular emphasis is placed on one area of technology which is worked on each year. A technical guideline for this area provides assistance for energy audits and analyses specific measures for improving energy efficiency. **klimaaktiv**'s website provides all the information on previous areas of technology already covered: this ranges from waste heat recovery to compressed air, from pumps, ventilators, ventilation, steam and cooling systems and IT-infrastructure to lighting, as well as guidelines for measuring energy savings.

Training keeps energy consultants at the cutting edge of technology

The training of in-house energy consultants is another important strand of the programme. Training focuses on basic training with the central "ProTool" analysis tool. In addition, targeted training in the various technologies outlined above is also on offer. Over 600 energy consultants have – sometimes repeatedly – made use of this offering; they are supporting businesses throughout Austria in their analysis of energy consumption, the execution of measures and the implementation of energy management. These consultations are being subsidised by the Austrian federal states. With their special expertise and their products, **klimaaktiv**'s partners contribute by increasing energy efficiency expertise which is geared to practice. **klimaaktiv** disseminates this knowledge via its consultants network.

Not only does **klimaaktiv** focus on specific areas of technology, but it also, in cooperation with its partners and energy consultants, analyses selected trade sectors in relation to their energy efficiency potential. Structural and economic information from individual trade sectors are dealt with, as well as the respective energy industry perspective. The trade sector concept provides answers, *inter alia*, to metal construction, dry cleaning, bakery, hair-dressing, motor vehicle and joinery businesses for the following questions: Where is the potential for savings? How efficient is the operation? How can the business be made more efficient?

Becoming even more efficient

Precise analysis can still identify opportunities to lower energy consumption further. This is demonstrated by the example of Getzner Textil in Bludenz (Vorarlberg). The company produces fashion fabrics and damasks. For decades now, energy efficiency has been a high priority. Heat is recovered from the technical processes and fed into the district heating network; the buildings have been subject to thermal renovations. In a second step, the compressed air system was analysed. It must be 100 percent secure 365 days a year and uses approximately 5.5 GWh of electricity annually. Although this system was already advanced, it was still possible to optimise it further with **klimaaktiv**'s expertise. The effect: the compressed-air plant's electricity consumption was reduced by a quarter.

Interested companies can find this and over 300 further implementation measures on the **klimaaktiv** website as examples of improvements in energy efficiency in operational processes.



Building, Renovation & Heating Competences

Energy efficiency in the building sector plays a key role in long-term climate protection and in improving energy efficiency as a whole.

In Austria, about 10 percent of greenhouse gas emissions stems from buildings. The share of total energy consumption was one third. About 40,000 new apartments are built every year. Approximately 1.5 million buildings were built between 1900 and 1980. In order to promote energy-efficient buildings in Austria, the **klimaaktiv** programme “bauen & sanieren” (building and refurbishment) is engaged in influencing all areas of market activity, so that energy-efficient building and utilising renewable sources of energy help to cut back on greenhouse gases. The central component of this strategy is the “**klimaaktiv** building standard”. The programme is represented by specialist partners throughout Austria under the management of the Austrian Society for Environment and Technology (ÖGUT).

The **klimaaktiv** building standard

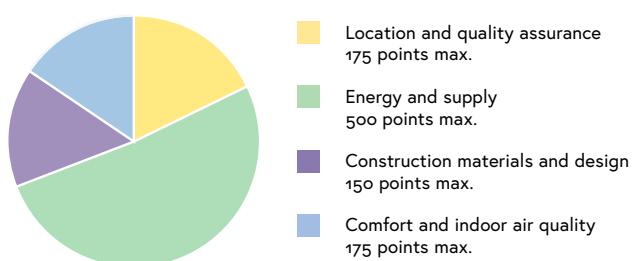
The **klimaaktiv** building standard is Austria's own specific buildings sustainability rating system. It defines the most rigorous energy efficiency requirements in Europe, which at the same time have a beneficial effect on costs: even today, the ‘basic’ rating at national level requires mandatory thermal performance and energy use, which the building code demands from 2021 onwards, both for the construction of new-build and the refurbishment of existing residential and non-residential buildings (“nearly zero-energy buildings”).

In comparison with other building rating systems, the **klimaaktiv** building standard focuses on tackling climate change. The set of criteria is transparent and freely accessible, and building quality is traceable and transparent.

It is not only energy efficiency which is assessed and evaluated in **klimaaktiv** buildings, but also the quality of assurance and location, the quality of construction materials and design as well as the core aspects of comfort and indoor air quality. There are **klimaaktiv** building standards for residential and non-residential buildings, for new buildings and also for renovations. There are three categories of building awards, bronze, silver and gold, for complying with a 1,000 point system which is used to assess the buildings and certify their compliance.

The building standard's four pillars

Analysis of **klimaaktiv** „residential new-build“ criteria



In 2018, about 700 **klimaaktiv** buildings were listed in the online klimaaktiv-gebaut.at database, which publishes details about every certified **klimaaktiv** property, including technical details, photos and information about the parties and companies involved. Considering the number of buildings, **klimaaktiv** is the most successful quality label for buildings in Austria.

Partner network: one of the programme's major success factors is the collaboration with motivated partners in the building sector who implement and spread the message about the **klimaaktiv** standard. About 100 partners from the building sector are already cooperating with **klimaaktiv** and an increasing number of residential property developers and manufacturers of prefabricated houses are offering **klimaaktiv** houses as part of their portfolios.

Expertise, consultation & tools: consultancy services to planners, property developers and home owners are another focal point in addition to buildings compliance certification. Key players in planning and construction are supported nationwide by **klimaaktiv** experts who use customised consulting packages. Sets of criteria, checklists and guidelines are available online.

Essential factors

- Network of consultants across the whole of Austria,
- implemented as part of several grant funding schemes such as the “Sanierungs-scheck”, the federal state’s grant funding scheme for renovations,
- freely accessible



Tools and guidelines for better and sustainable heating systems

Heating systems are a major contributor to greenhouse gas emissions in housing: in Austria, more than 1.6 million heating systems are based on fossil fuels, and about 600,000 systems are over 15 years old. As there are a lot of different types of heating systems on the market, people often do not know which ones are appropriate for their homes and needs.

Therefore **klimaaktiv** has developed a considerable number of tools to facilitate the decision-making process based on independent information. To be sustainable and energyefficient, a heating system must have the following three characteristics:

- The heating system should be based on renewable energy and be appropriate to the heating demands of the home. Here, the “**klimaaktiv** assessment matrix for heating systems” provides good guidance.
- The heating system itself should have an “A” energy rating.
- The heating system should be installed correctly. Here, the “**klimaaktiv** quality guidelines” help plumbers and clients to fine-tune the standard of installation. Checklists for almost every heating system available help keep the focus on the most important points.

For existing heating systems, people can consult the “**klimaaktiv** heating check”, a tool for plumbers, energy consultants and chimney sweeps which helps them identify weak points in the whole system (boilers and heat distribution) and provides suggestions for improvements. Renovations such as the use of hydraulic compensation or better regulation may lead to energy savings of up to 30 percent. There are even more tools available such as a calculator for establishing the cost of a new heating system or the “machvier” tool for forecasting the operating costs of a heat pump.

klimaaktiv has not only developed these guidelines and tools but also offers further training for professional tradesmen and distributors.

Essential factors

- Used across Austria by a network of energy consulting agencies,
- implemented in **klimaaktiv** training courses
- freely accessible

klimaaktiv assessment matrix for heating systems

Main systems for space heating and domestic hot water preparation	THN: Thermal heat need (useful heat per m ² per year) at the climate conditions of the site of the building					
	A++ ≤ 10	A+ ≤ 15	A ≤ 25	B ≤ 50	C ≤ 100	D ≥ 100
Compact unit with warm air heating	●					Air heating only is not possible (due to human thermal comfort needs)
Compact unit with warm air heating and water-based system	●	●	●	●	●	Insufficient heat supply capability
Ground-source heat pump with geothermal collector	●	●	●	●	●	●
Groundwater and ground source heat pumps with geothermal heat exchanger	●	●	●	●	●	●
Air source heat pump and water-based system	●	●	●	●	●	●
Central pellet heating system with buffer hot water storage	●	●	●	●	●	●
Central heating firewood gasification system with hot water buffer storage	●	●	●	●	●	●
Biomass micro/district heating systems	●	●	●	●	●	●
Firewood/pellets ovens or tiled stove all-over home heating system with hot water buffer storage	●	●	●	●	●	Insufficient heat supply capability
Stoves or tiled stove all-over home heating system without water-based heat distribution	●	●	●	●	●	Insufficient heat supply capability
Electric direct heating with solar system	●	●	●	●	●	●

For heat pump-based systems, a maximum heat distribution temperature of 35 degrees Celsius is recommended. It is always advised to combine the heating system it with a comfort indoor ventilation and a solar-based system (for domestic hot water preparation and/or space heat or electricity supply). The solar-related technology choice (solar thermal or photovoltaics) must be made on a case-by-case basis!

Recommendations: (criteria are CO₂-emissions, investment, system comfort)

● highly recommended ● recommended ● less advisable ● not advisable



Quality management for biomass district heating systems

The future of the supply of heating is in renewables. Wood as a regional energy source can make a key contribution to increasing cost-effectiveness and thus secure the energy supply of municipalities and communities for the long term.

In the early 1990s, it was common practice in Austrian municipalities to heat with oil because of low oil prices. Ten years later, quite a lot had changed in this regard; heating with fossil fuels became increasingly unattractive and alternatives were being demanded. At this time, many rural municipalities were already relying on heating supplies from biomass district heating plants.

However, any benefits from using carbon-neutral fuels are put into perspective if deficiencies in design and implementation, as well as in the operation of the plant lead to low levels of overall plant efficiency and increased heating prices. **klimaaktiv** “qm heizwerke” (heating plant quality management) was therefore set up in 2006 as an Austria-wide quality management programme to improve the technical quality and efficiency of biomass heating plants and district heating networks. This objective is achieved by associated quality control which supports the design, construction and operation of the plant. Quality advisers who are specially trained by **klimaaktiv**’s “qm heizwerke” team, support the plant operators during the whole design and construction process and ensure that the quality standards of **klimaaktiv** are complied with.

Application of the quality management programme is obligatory for biomass district heating projects that receive investment funding from Austria's environmental support scheme. In practice, quality management takes place via a central database that charts the whole quality process.

Quality management process

Each district heating project needs assessment which identifies all data associated with future heating consumers. This data forms the basis for the subsequent planning process and is of utmost importance. Experienced planners as well as the municipality should therefore be involved in the assessment so as to ensure that the future development of the area being supplied is considered in addition to the current situation. Moreover, municipal and public buildings (e.g. schools) are often the most important heating consumers. The aim is to define a technically, economically and environmentally feasible area of supply and to prepare a detailed technical and financial feasibility study. Thus, with little financial expense, the project can be steered in the right direction and a decision can be made as to whether or not the project is feasible. This process forms the basis for the subsequent design and construction process (tendering and detailed design, construction, commissioning, monitoring and optimisation) which should also be led by experienced engineers.

klimaaktiv also defines a series of minimum quality requirements relating to standards of execution and key figures. These ensure that the quality of technical execution and the efficiency of the installation are high. This in turn guarantees that the installation has a long operating life with low operating, maintenance and fuel costs. Furthermore, the quality management programme also contributes to ascertaining that emissions remain low in all operating conditions. During the first phase of operation in particular, comprehensive monitoring and targeted optimisation of the plant are necessary to achieve optimal operation.

klimaaktiv supports this by specifying minimum requirements for biomass heating plant measurement equipment and data logging, and through the assistance provided by the quality advisers when this monitoring is carried out for the first time.

Improvement in energy efficiency

The efficiency of new and also existing biomass heating plants and district heating networks has improved significantly since quality management became obligatory. This is, for example, demonstrated by the reduction in network heat losses of up to 30 percent which occurred after the introduction of the quality management programme.

If biomass district heating plants are constructed and operated based on a coherent overall concept and in compliance with fundamental efficiency criteria, they can be operated successfully financially and environmentally, contribute significantly to a climate-friendly and sustainable energy supply and increase regional value creation. Advice and further information can be obtained from the klimaaktiv qm heizwerke team.

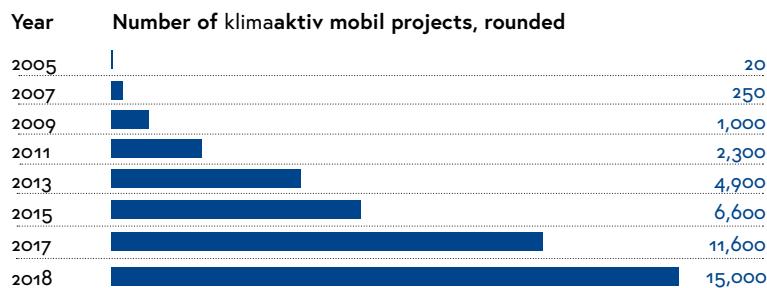


klimaaktiv mobil – promoting clean mobility

By 2050, greenhouse gases are to be reduced by at least 80 percent. klimaaktiv mobil provides a pertinent offering for more climate-friendly mobility across the whole of Austria and support for implementing traffic-related environmentally friendly projects.

More than 15,000 projects have been initiated by businesses, towns, municipalities, tourism regions and schools since the launch of the initiative, saving 450,000 tons of CO₂ emissions per year. This is an important contribution to Austria's climate protection obligations. Financial support for mobility projects amounting to a total of approx. EUR 122.4 million have triggered an environment-related investment volume of EUR 816 million which created or secured over 7,000 "green jobs".

Number of klimaaktiv mobil projects (2005–2018) aggregate figures



Source: Federal Ministry for Sustainability and Tourism 2018

A role model for Europe

klimaaktiv mobil is Austria's active contribution to international programmes like the Transport, Health and Environment Pan-European Programme (THE PEP) of UNECE (United Nations Economic Commission for Europe) and WHO (World Health Organization) and the European Platform on Mobility Management (EPOMM).

- **THE PEP Partnership on EcoDriving:** Guidelines on EcoDriving are being drafted based on Austria's experience.
- **THE PEP Partnership on Cycling:** 24 countries are working on the first pan-European Master Plan for Cycling Promotion. The Partnership aims to strengthen and extend the existing network of cycling officers, to share best practices and to develop guidelines and tools.
- **EPOMM – European Platform on Mobility Management:** Austria, represented by klimaaktiv mobil, is currently the presiding country. EPOMM is a network of European countries that are engaged in promoting mobility management. The work of EPOMM is centred on the preparation of strategies and guidelines, the exchange of experience and innovations in mobility management.

klimaaktiv mobil, which has twice been honoured with the European Public Sector Award (EPSA), is established as a European best-practice example due to its comprehensive programme approach, the target-group-oriented portfolio and the focus on partnerships.

The five pillars of klimaaktiv mobil

show the range of services available to all target groups:

CONSULTING PROGRAMMES
Free expert support in developing and implementing climate-friendly mobility measures and in submitting funding applications.

FINANCIAL SUPPORT PROGRAMMES
Funding for companies, municipalities and associations for fleet conversions, electromobility, cycling and mobility management.

AWARENESS-RAISING AND INFORMATION CAMPAIGNS
Information about the benefits of climate-friendly mobility: cycling, public transport, eco-driving training and alternative vehicles and drives.

TRAINING AND PROFESSIONAL DEVELOPMENT
Professional development and certification opportunities: youth mobility coaches, klimaaktiv mobil driving school, bicycle mechanic training and much more.

PARTNERSHIPS AND AWARDS
Companies, municipalities and associations committed to reducing CO₂ emissions are awarded klimaaktiv mobil Project Partner status by the Austrian Federal Ministry for Sustainability and Tourism.



Saving energy at home

Private households account for a large proportion of energy consumption. Responsible use of efficient appliances can save about 30 percent of electricity costs.

When buying new household appliances, consumers should not just make decisions about the investment cost; they should also consider running costs over the appliance's whole operating life. Especially for the latter, they can save a lot of money by choosing more energy-efficient appliances. klimaaktiv's online platform topprodukte.at was developed as a decisionmaking tool for private individuals and professional buyers to equip them with the knowledge needed to select the most energy-efficient appliances. The site lists over 3,000 products which are categorised under lighting, office, household, heating/hot water/air conditioning, mobility and TV/mobile phone.

Products are selected on the basis of manufacturers' specifications, which in turn are based on European regulations and standards, such as, for example, the EU energy label, the Energy Star programme, the Austrian Ecolabel and test reports from the accredited testing bodies. Depending on the product category, further environmental and quality criteria, such as, e.g., noise, water consumption or durability are also considered in the assessment in addition to energy consumption and energy efficiency. The product selection process is neutral, i.e. independent from manufacturers.

topprodukte.at product lists and adviser

If, for example, a consumer wants to purchase a new fridge, he or she can select the “fridge” category in the “household” section on [topprodukte.at](#), decide between built-in or stand-alone appliances and obtain a list of products as a result. Ranked from left to right, this list shows the most energy-efficient fridges available in the Austrian market, together with detailed information (manufacturer, model number, capacity, energy efficiency class, noise emissions, etc.). Armed with this information, consumers can then search for these specific appliances in the market. In addition, there is an online adviser for each product category which provides information on energy labels and efficiency ratings, tips for their correct use, definitions of terms and technical advice. [topprodukte.at](#) is also cooperating successfully with Austrian retailers. The MediaMarkt and Expert electrical retail chains offer appliances which correspond to the topprodukte criteria. The “topprodukt.Gold” (gold) and “topprodukt.Silber” (silver) designations provide a good guide to consumers.

Operating cost considerations

The [topprodukte.at](#) energy cost calculator is another useful tool. It assists in the calculation of electricity and cost savings that can be achieved over an appliance’s whole operating life when using energy-efficient topprodukte products. For this purpose, the electricity costs of existing appliances or planned new acquisitions are set against comparable appliances which correspond to the topprodukte criteria.

For professionals

The topprodukte platform is also very useful to corporate and public sector buyers. [b2b.topprodukte.at](#) lists the most efficient commercial appliances such as commercial fridges and freezers, specialist lighting, monitors, printers and hot water tanks.



Municipalities as pioneers of energy transition

The e5 programme encourages Austrian municipalities to act in a sustainable manner at all levels: in dealing with energy, consumption, mobility and the economy.

Many municipalities want to make their energy supply substantially independent from fossil energy in terms of heat, electricity and mobility while at the same time retaining value-adding activities, income and jobs in the region. As part of klimaaktiv, e5 provides consultancy and certification services to towns and municipalities that are committed to energy transition and climate protection. A network of highly qualified e5 advisors and a standardised rating scheme across Europe make it easier for the e5 municipalities to define measures in six central core areas of operation and also to allow their progress to be rated by independent experts.

“e” stands for energy

The e5 programme was developed by Energieinstitut Vorarlberg during the 1990s based on the Swiss “Energiestadt” (energy town) model. In 2004, the federal states which were already participating, i.e. Salzburg, Tirol and Vorarlberg, in partnership with klimaaktiv, formed a national e5 office to develop and disseminate the programme across Austria. 20 percent of Austrians now live in e5 municipalities and regions, and seven out of nine Austrian federal states are participating in the programme.

The “e” in e5 stands for energy. The higher the implementation level for energy and climate protection measures in a municipality or town, the greater is the number of “e” awarded – much like stars in the restaurant industry.

The awarding follows a standardised audit and certification process so that there is an objective measure available for the work in the municipalities across Austria. Yearly accounting by e5 demonstrates regularly what the municipality has achieved in terms of energy and climate protection. The more measures have been implemented from the e5 set of measures, the better the rating. The municipality is rated as a minimum every three years by an independent commission.

The six areas which municipalities are required to address in the e5 programme are:

1. Municipal development and spatial planning strategy
2. Municipal buildings and facilities
3. Supply & disposal: energy, water, waste water, waste
4. Mobility
5. Internal organisation
6. Raising awareness, motivation, communication and cooperation

To participate in e5, the municipality signs a basic agreement with the agency delivering the e5 programme in the respective federal state. In this agreement, the municipality commits itself to the principles and rules of the programme. In return, it receives technical and organisational support and advice from the respective agency delivering the e5 programme. Subsequently an e5 team is set up which is responsible for implementing the programme in the municipality. This team works independently from political parties and consists of the municipality's administrative members, committed citizens, experts, business representatives, environmentalists, etc. In the first step, the e5 advisor checks by referring to a set of measures which opportunities for improved energy use are already being implemented in the municipality. The findings from this analysis and the resulting profile of strengths and weaknesses form the basis for the e5 team's further work.

Europe-wide success story

Austrian communities taking part in the e5 programme for energy-conscious municipalities are automatically part of the “European Energy Award” programme – the European e5 counterpart, which evolved in 2004 from the Austrian e5 and Swiss “Energiestadt” (energy town) programmes. If more than half of all possible measures to increase energy efficiency, supply renewable energy and for climate protection have been implemented, the municipality is awarded the “European Energy Award”. Where a municipality actually manages to implement more than 75 percent of all potential energy and climate-related measures, it is awarded the “European Energy Award Gold”. In 2018 as many as 28 Austrian municipalities out of a total 136 European municipalities already held the gold European Energy Award – Austria is therefore among the front-runners in Europe. The target at present is for half of all Austrians to be living in e5 municipalities and regions by 2025.



Austrian Climate Protection Network

klimaaktiv was set up to facilitate cooperation. Its most valuable asset is its extensive network of partner institutions.

With this approach, **klimaaktiv** has had a significant, noticeable impact on raising awareness and on market trends, and has achieved one of its core goals: companies have now discovered climate protection as a success factor and are willing to cooperate with **klimaaktiv** on a broad range of issues. The initiative has developed into a national competence network that provides advice on all matters pertaining to energy and the environment. **klimaaktiv** is also closely involved in other national and municipality programmes, strengthening and enhancing their effectiveness.

Competence network

Rapid technological developments and changes in market conditions demand well-trained professional tradesmen. Change happens so quickly that basic training in the energy and building sector can no longer be relied upon to cover a whole professional lifetime. Highly qualified experts are key to being successful in transforming the market and encouraging the adoption of climate-friendly technologies.

klimaaktiv fills the gap in the range of training on offer and incorporates the latest expertise into its training courses. It also develops new courses together with leading further education institutions.

All professionals (installers, architects, planners, etc.) who complete **klimaaktiv**'s advanced training course in accordance with specific quality criteria may call themselves "klimaaktiv competence partners" and use a **klimaaktiv** logo. They are listed on a **klimaaktiv** online map where they can be easily located by customers.

Support network

klimaaktiv cooperates with different types of organisations and initiatives, federal state public institutions, regions and municipalities, companies, associations and private individuals. The type of collaboration depends on the partner's individual potential and the activities they are involved in. Companies and organisations qualify as **klimaaktiv** partners by engaging in exceptional activities in one or more of the following three areas:

1. Enhancing climate protection expertise

Knowledge-sharing among highly competent partners helps to create optimum quality standards. **klimaaktiv** quality criteria and guidelines provide guidance for consumers. These standards, as well as the currently available expertise in energy efficiency and renewable energy sources, are continually being developed through collaboration with leading technology and service companies. As experts in their respective fields, these partners are actively involved in this process; they help to ensure that the standards are in line with market requirements and that they are as easy as possible to apply.

2. Highlighting climate protection

By incorporating **klimaaktiv** standards into their business activities, **klimaaktiv** partners ensure that energy-efficient products and processes become established in the market. From **klimaaktiv** buildings to the planning of heating systems, the use of renewable energy sources to mobility management – the fact that partners are applying **klimaaktiv** standards guarantees optimum energy efficiency, provides a sign post for customers and changes the market in the long term. By using the **klimaaktiv** partner logo, these partners act as promoters of the climate protection initiative, thereby making a major contribution to spreading the message about the range of what **klimaaktiv** has to offer as well as its standards.

3. Creating examples of best practise

By completing exceptional climate protection projects, **klimaaktiv** partners function as inspirational role models for other companies and organisations. The implementation of measures which are subject to quality assurance demonstrates the possibilities for and the potential of climate protection and motivates others to follow suit.

Implementation network

klimaaktiv has prominence where climate protection measures are being implemented: in the area of mobility, there are thousands of businesses, schools and associations that have introduced specific projects (such as e.g. mobility management), converted their vehicle fleet or implemented e-mobility projects. Equally, many building contractors are now announcing that their buildings comply with the klimaaktiv standard. The e5 programme is assisting municipalities with integrating energy transition into their municipal policy. The performance of biomass heating plants is being improved with the help of klimaaktiv. Project partners demonstrate this with the klimaaktiv logo. The effort to protect the climate therefore gets the necessary attention, reaches the Austrian public and in turn creates involvement and commitment.

klimaaktiv pakt2020

klimaaktiv pakt2020 is Austria's climate pact for large enterprises, which was facilitated by the then Austrian Ministry of Agriculture, Forestry, Environment and Water Management. The participating companies voluntarily agreed to meet Austrian climate protection targets by 2020. The pact brought the most diverse sectors together and is pursuing the goal of setting new standards for in-house climate protection. The following companies qualified to take part: Bank Austria, BUWOG Group, Canon Austria, Caritas Salzburg, Danone, Greiner Packaging Austria, hali büromöbel, Hoval, McDonald's Austria, Rudolf Ölz Meisterbäcker GmbH & Co KG, REWE International AG and Vöslauer Mineralwasser AG.

Partner of the pact



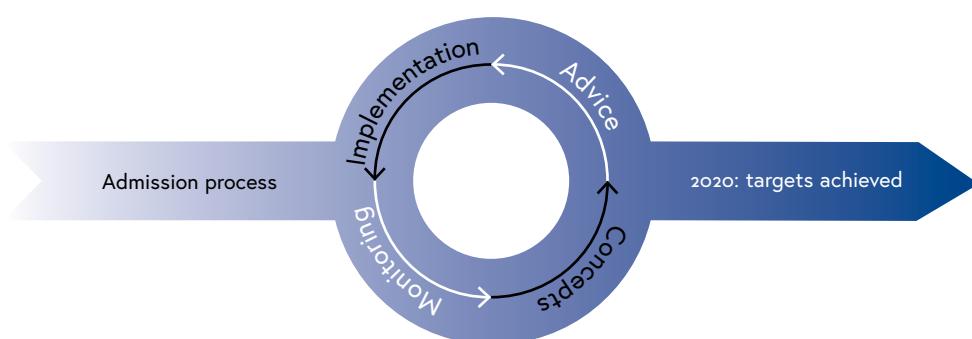
To be accepted into the pact, the companies had to present a committed and plausible plan of the measures to be implemented by 2020. All in-house areas relevant to climate protection – buildings, mobility, energy efficiency and the use of resources – were taken into account in this plan. The businesses committed themselves to reach the set targets for reducing greenhouse gases, improving energy efficiency and increasing the use of renewable energy sources by 2020.

On acceptance into the pact, the firms became subject to an annually recurring process which calculates progress towards achieving the target. A yearly reporting process encourages the firms to continually adjust and develop their planned measures. The **klimaaktiv** pakt2020 partners require a detailed energy book-keeping system to comply with their monitoring obligations – more than half of the companies have introduced a certified energy management system under ISO 50001. The Austrian Energy Agency and the Environment Agency Austria examine the progress made by the partners as part of the annual monitoring process and **klimaaktiv** pakt2020 audits so as to document and advance the companies' implementation of the planned measures as best possible. The companies are also supported by selected consulting services in the planning and implementation of measures.

This overall concept and the long-term commitment are what make this pact unique, ensuring that the climate protection measures that were set in place are also having an actual measurable effect and that a sustainable contribution is being made to achieving national climate protection targets. The CO₂ reduction target for 2020 for **klimaaktiv**'s pact partners is 1.39 million tons.

The **klimaaktiv** factors for successful cooperation

- **Image:** **klimaaktiv** is an attractive brand with a positive image.
- **Strong knowledge network:** partners get additional value from being part of the nationwide network, from exchanging experiences and finding new project partners.
- **Expertise:** training courses covering the latest energy efficiency expertise give **klimaaktiv** partners the edge in terms of knowledge when it comes to implementation. Lectures and training courses are also an attractive offering for customer networks and employees.
- **Publicity:** the environment minister presents partners with awards for their projects.



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