

# **A Sustainable Future for Austria**

## **Green Paper for Austria's Strategy on Sustainable Development**

Vienna, June 2001

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## Foreword

*“In 2010, we will live in a bigger and more varied Europe where everybody will be heard and be able to participate in and contribute to developments — hopefully in a more peaceful and richer world in which there will be less war and less poverty, but more democracy and prosperity, in a world in which more and more people will actively participate instead of live in fear, persecution and poverty, in a clean and sound environment that is not reserved to a few, privileged rich people, but is open to as many people as possible.”*

*Federal Chancellor Dr. Wolfgang Schüssel,  
Speech on the State of Austria, 15 May 2001*

The present Green Paper on “A Sustainable Future for Austria” is an important step towards the concrete specification of the political commitment to sustainable development included in the current government programme. It describes the most important fields of activities for sustainable development in Austria, identifies the required activities and points out the opportunities resulting therefrom. It was prepared by a group of experts coming from ministries, the social partners and selected scientists mandated by the Austrian Federal Government and will be presented for the first time at the Gothenburg European Council. On this basis, the more detailed “Strategy for a Sustainable Austria” will be drawn up in co-operation with the relevant ministries and with the involvement of opinion leaders, NGOs and Austrian citizens by the end of 2001. It will contain the fundamental principles for the sustainable development of Austria in the 21<sup>st</sup> century.

# **Sustainable Austria**

## **Vision for the country we appreciate**

Sustainable development means to meet “the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report). Therefore, sustainable development is a new objective of environmental, economic, employment and social policies under a long-term perspective. It extends far beyond the borders of one country and the term of one government, and is based on responsibility in a global context and for future generations. Intact environment, economic prosperity and social cohesion are pursued as integral objectives of successful global, international, national and regional policy and constitute the prerequisite of the long-term quality of life for all.

Austria has committed to this concept: at the UN Conference on Environment and Development held in Rio de Janeiro in 1992, by signing the Treaty of Amsterdam, within the framework of the UN CSD (Commission for Sustainable Development) process and now also at the Gothenburg European Council in June 2001 and in the preparatory work for the Rio+10 World Summit to take place in Johannesburg in 2002.

Sustainable development is a social process and cannot be achieved by standards and technological changes alone. It also requires a radical change in the values, objectives and foundations that affect human activities as well as, resulting therefrom, a fundamental change of society’s attitudes towards the challenges of the future. The present Green Paper is also oriented to the basic principles of sustainable development:

- Integrative consideration of ecological, economic and social issues
- Safeguarding the ecological basis of living
- Ensuring social and international equity
- Maintaining economic welfare in the long term
- Participation of stakeholders in decision-making and formative steps
- Winning the people’s hearts for a long term perspective
- Motivating for more environmental-friendly behaviour
- Dynamic openness of the concept for new findings and requirements
- Building the capacity for achieving integral and networked solutions to problems
- Ensuring subsidiarity and dynamic adaptation in implementation
- Process orientation for initiating and promoting social learning
- Co-ordinating policies in the allocation of resources
- Implementing the precautionary principle
- Maintaining the diversity of nature, society, culture and economy
- Preserving and creating scope for action for future generations

Sustainable development is a co-operative concept. Therefore, all the relevant actors have to be actively involved in the dialogue, planning, decision-making, implementation and monitoring (stakeholder participation). Transparency, a co-

operative approach and an increased readiness of policy makers and administrative officials to engage in a dialogue is to turn “people affected” into “people involved” so that they take responsibility for their decisions, behaviour and formative steps. Thus, participation at all levels and appropriate scope for action are basic principles of sustainable development and shall be taken into account in the further development of the present Green Paper.

Sustainable development is only possible in a global perspective. This means that the economic actors, citizens, consumers and policy-makers have to be aware of their responsibility for the global impact of their decisions and act accordingly. The richest countries of the world, however, also have to be aware of their responsibility for the development of poorer countries. An international balancing is necessary to prevent that poorer countries are forced to over-exploit natural resources.

Sustainable development, therefore, is a response to the global challenges requiring rapid change in the economy, society and policy-making:

The already emerging global warming effect and the dramatic loss of biodiversity endanger the heritage of future generations and restrict their development options. Half the non-renewable resources and energy sources known today have already been consumed. According to expert estimates of WWF and IUCN, around 100 animal and plant species are irretrievably lost per day.

Individualisation, globalisation and mobility demands endanger social cohesion, but also create opportunities for individual development. Security and social peace can only be guaranteed by economic prosperity, democratic decisions and an intact environment.

The application of new technologies (e.g. Internet, bio-technologies, micro-electronics and in medicine) creates new scope for action, but also new challenges for society (risks, liability and ethical issues, information and technological knowledge, etc.).

The ever faster technology competition of a global and highly dynamic economy creates new opportunities for Austrian enterprises as new market niches are opened up by the integrated satisfaction of needs and functional innovation.

In recent decades, Austria has seen itself as a pioneer in the environmental field and has achieved several outstanding successes. Now, Austria also wishes to meet its responsibility with regard to sustainable development as one of the richest nations world-wide and to become one of the leading countries. The opportunities offered by technical and social innovations are to be utilised in a proactive fashion and higher quality of life is to be achieved in the long term. In this process, the specific situation of Austria has to be taken into account:

Being an Alpine country, Austria is characterised by small-scale structures, valuable natural and cultivated landscape, ecologically oriented agriculture and forestry with small-scale farms and excellent water resources that are to be preserved in the long term.

Being a small country with a high import rate for raw materials and energy, the decoupling of economic growth and resource consumption and the increased

utilisation of renewable resources and energies offers the opportunity of ensuring or improving value creation and employment in Austria.

Austria's federalist tradition demands a strong emphasis on sustainable development at a regional and local level and consideration of small business structures.

For Austria as a tourist country, the conservation of intact nature and attractive cultivated landscape is a key issue.

For a country bordering on future member states of the EU, the enlargement of the European Union offers new opportunities. It has to be seen as a continental and, given its international impact, as a global sustainability project.

As a transit country, Austria suffers from trans-Alpine road traffic as well as from the effects of increasing transport volumes of neighbouring countries in Eastern Europe. Only an integrated transport policy will be able to reduce the impact on the local population, energy consumption and resulting CO<sub>2</sub> emissions.

For Austria, being an economically successful country, sustainable development will result in qualitative growth and more innovative solutions for meeting needs.

For Austria, being a prospering country with a high standard of living, high life expectancy and social peace, sustainable development safeguards existing achievements and ensures their further development.

The specific economic structure of Austria requires a sound mix of large, medium-scale and small enterprises, production and services as well as foreign trade orientation and self-sufficiency with a view to a sustainable economy in order to maintain its high standard of living.

The Strategy for a Sustainable Austria is to integrate existing activities into a framework concept, improve the horizontal and vertical co-ordination of individual policies and initiate the developments required for the years ahead. In this context, three challenges are of key importance:

1. Quality of life in Austria: responsibility for today and tomorrow: The objective is to ensure social cohesion and the quality of life, while consumption patterns change.
2. Austria's economic performance : success by innovation and networking: The objective is to maintain Austria an attractive business location and to strengthen the competitiveness of its enterprises by means of active research, technology and innovation policies that result in new product and production patterns and in a de-coupling of economic growth and resource consumption. This requires, in particular, the promotion of the utilisation of renewable raw materials and energy sources and the achievement of an absolute reduction of resource consumption in the long term.
3. Austria's regions: protection of diversity and quality: The objective is to conserve natural and cultivated landscape, to implement the principle of short distances, to strengthen regional cohesion and identity and to create an infrastructure allowing for sustainable life styles.

New forms of co-operation among decision-makers and institutional innovations are to raise the problem-solving capacity of society and to ensure the efficient implementation of the strategy. The overall steering of the most important fields of

activities will define the direction and speed of overall development and, at the same time, open up institutional scope for regions, cities, sectors, enterprises and the population. Sustainable development cannot be prescribed nor achieved with market instruments alone. New regulations are to be applied primarily in fields in which market instruments are insufficient or do not work. Accompanying monitoring, benchmarking and the regular, independent evaluation of the implementation steps will allow for a learning process of society.

# **Quality of life in Austria**

## **Responsibility for today and tomorrow**

(health — social protection — life styles)

Austria is one of the richest countries world-wide. The household incomes and the material wealth of the Austrian population have steadily increased in the past decades. The elementary needs of most people are met, the social security system offers protection in professional life under labour law, substitute income for persons working or retired under social insurance, universal benefits in situations related to elevated costs and minimum incomes in the form of social assistance if one's own income, the earnings of persons with support obligations and other social benefits are insufficient. Social partnership and a basic consensus of society have resulted in a long period of social peace. Sustainable development means that these achievements are to be safeguarded and improved, welfare is to be distributed equitably both at the national and international level, and responsibility is taken for the global effects of one's own life style. In this context, it is essential not only to respond to the most important social trends, but also to shape them actively. Therefore, sustainability policy is more than environmental policy since it integrates economic and social aspects. As a result, the social dimension of the Strategy for a Sustainable Austria aims at achieving the following objectives:

1. A decent life and equal opportunities for all
2. Intergenerational and international equity
3. Participation of all stakeholders in shaping decision-making processes
4. More prosperity with less resource and energy consumption

### **1. A decent life and equal opportunities for all**

Material welfare and social security are the basis for sustainable social equity. Key issues in this respect are the fair distribution of income, assets and work, comprehensive, efficient and equitable social protection systems, the safeguarding of the inter-generation compact as well as active labour market policy aiming at the creation of jobs.

Physical and mental health of the entire population is indispensable for a decent life. Here, an important aspect is the maintenance of the high quality health care systems open to and financed by all. Two-class health care has to be prevented. Other important measures are the strengthening of care and social services, a harmonised national quality assurance system for the health care sector as well as a national plan on health promotion and prevention. The social integration of disadvantaged and excluded groups is to ensure equal access to resources, rights, goods and services for all. This is based on combating the discrimination of disadvantaged groups in parallel to concrete measures and programmes (e.g. education and training, general reform of the education system, in particular with regard to the lack of employees in the field of information and communication technologies, with regard to legal advice and counsel, easily accessible services in the different fields, debtor counselling) in co-operation with NGOs. The (mandatory) respect of gender equality in all spheres of life and all policy areas has to be raised further (gender mainstreaming).

In the shaping of the working environment, it is important to strengthen the compatibility of gainful work and social relations, the safeguarding of employment conditions under social and labour law, while enhancing their flexibility, social aspects at the workplace, campaigns against mobbing as well as gender equality. In this context, the working environment, in particular the quality of workplaces in a comprehensive sense, health and safety at work and the impact of new technologies as well as improvements in work organisation are of central importance.

The free choice among different life styles is an important part of self-determination and also ensures diversity in social terms. This requires the social safeguarding and societal acceptance of different family and partnership models. Under the condition of material welfare, the social value of non-gainful work (social commitment, help among neighbours) may be attributed increasing importance.

## **2. Intergenerational and international equity**

Generation equity requires the safeguarding of the standard of living for all, also for future generations. In this context, important policy areas are, for example, the socially equitable reform of pension systems, new ways of funding old-age schemes as well as high-quality health and care services and the expansion of care facilities and social services (support for care-giving family members). Employment policy has to aim at raising the employment rate of older workers above the EU average (e.g. by continued promotion of training for older employees and increasing the share of part-time retirement).

In spite of many efforts and measures taken in the past, gender equality has not been achieved as yet. Examples for problems to be tackled are the compatibility of family and work, equal pay for equal work and the old-age schemes for women. Improvements can be achieved, for instance, by gender mainstreaming, increased integration of women in decision-making processes and better compatibility of family and work (improved child care facilities, in particular with regard to opening hours, incentives for companies to take family policy measures).

Global equity calls for a balance among countries consuming a high volume of resources and those consuming little resources. This balancing can only be successful if the industrialised countries adopt a less resource-intensive prosperity model and if the justified needs of poorer countries to catch up are taken into account. Austria considers the increase of development co-operation funds and the conditionality of funding decisions on the principles of sustainability to be a way of meeting its international responsibility.

## **3. Participation of all stakeholders in shaping decision-making processes**

Political participation requires the existence of participation and self-organisation processes (e.g. Agenda 21 and mediation processes) that permit and promote the wide participation of all social groups and strata. A strong regional and local orientation can facilitate the integration of, and concrete participation opportunities

for, broad sections and diverse groups of a society. Local Agenda 21 projects can be a starting point, but have not been able to achieve the desired participation of all social groups so far. In order to establish a policy style characterised by participation and self-responsibility, structures as decentralised as possible, free access to information for all population groups and institutional support for participatory decisions have to be ensured and co-ordination and dialogue structures have to be created.

#### **4. More prosperity with less resource and energy consumption**

Material wealth and consumption have gained a central place in our society: as a consequence of the desire for a higher quality of life, as an indicator of individual success, as a status symbol, as the “door opener” to certain social processes and groups as well as the required adaptation to the existing infrastructure. The prevailing orientation to material prosperity results in consumption patterns causing a dramatic rise in land use, resource and energy consumption. A strategy for a Sustainable Austria also has to address life styles and consumption patterns as well as policy objectives and infrastructure.

The focus is not on responding to social trends but rather on actively changing the life styles and consumption patterns towards a more sustainable society:

- Fostering a change in values towards a less resource- and energy-intensive life style and changing existing consumption patterns through education, awareness raising and the dissemination of information

- Supporting the spreading of sustainable products and services in the most important needs areas and creating the required social and economic framework

Abandoning the current societal identification of consumption of goods with well-being is at the heart of the change in values aimed at. Elements contributing to a sustainable life style are the quality of social and regional relations, “living well” instead of “owning much”, sharing and using instead of owning, quality and longevity of products, utilisation of services as a status symbol, time affluence, lifelong learning, tolerance, solidarity and the taking of responsibility for the impact and indirect effects of one’s own consumption patterns. In this context, it is to be noted that these opportunities are not equally open to different social groups. This is to be borne in mind in the practical definition of the strategy.

Consumption patterns are influenced by the economic environment and learnt within the social context. Therefore, education, awareness raising and information are central starting points for changing consumption patterns. For this purpose, a social dialogue on sustainable consumption patterns and production methods is to be initiated in order to raise the awareness of all stakeholders. Therefore, holistic thinking, nature-related knowledge, social and emotional intelligence are challenges of education policy. Product labelling and other suitable information mechanisms are to make resource and energy consumption (both with regard to the production and utilisation of goods) a central criterion of the consumers’ buying decision. The identification of appropriate behaviour options and their consequences is to provide feedback to the consumers, clearly showing them their responsibility as actors within

the context of sustainable development and translating the awareness already existing in many cases into concrete actions.

The further spreading of sustainable products and services is to be promoted in particular in the following areas of needs by extending existing model projects and support programmes and by creating incentives:

Food/nutrition: The implementation of the Austrian Agro-environment Programme (ÖPUL), which included financial incentives for abandoning mineral fertilisers and pesticides, semi-natural land use, crop rotation and set-asides and took into account the multiple functions of agriculture, contributed to the development towards sustainability in Austria's agriculture. Direct marketing and the successful positioning of brands opened up attractive customer segments for food produced in organic farming. Austria has the highest percentage of organic farmers (10 %) in the EU. Given current crises, the Strategy for a Sustainable Austria will include important objectives relating to agriculture: guaranteed safety and healthiness of food, all aspects of animal welfare, full labelling and quality assurance for food, doing without genetically modified organisms in food. The existing support system should be examined for its sustainability both at a national and EU level and, if necessary, be adjusted accordingly. Increased nutrition awareness not only is to change the consumers' behaviour, but also should improve the population's health and the regional dimension of nutrition. If priority is given to regional and seasonal food, transport needs will decrease. A higher demand for products produced and traded in a fair way is also in line with the international responsibility of Austria vis-à-vis the developing countries.

Housing: Housing is one of the basic human needs, but our demands have continually risen in the past decades. Within the framework of the "Nachhaltig Wirtschaften" programme (Austrian Programme on Technologies for Sustainable Development), the action line "House of the Future" promotes innovative building concepts, initiates pilot projects and supports the development of sustainable construction technologies and materials up to their market maturity. The most important objectives of the Strategy for a Sustainable Austria are: to prevent further soil sealing (e.g. by compact low buildings and urbanity), to reduce the resource and energy needs of buildings (e.g. thermal insulation, rehabilitation of old buildings) and to reduce mobility needs by mixed utilisation forms (housing, work, recreation) and meet them by public transport. Special needs of various age and social groups are to be given particular consideration (arrangements suitable for children, old and handicapped people) and attention has to be paid to the diversity and flexibility of the residential environment. However, the affordability of sustainable housing for low-income households is to be taken into account.

Tourism and leisure activities: Austria is a tourism country whose position in international competition is defined by culture, character and beautiful scenery. Several years ago, a nation-wide, harmonised quality label for hotels and restaurants has already been created: the Austrian Eco-Label for Tourism Enterprises. Moreover, some regions have established attractive service packages of sustainable tourism, which integrated also the regional economy and landscape care into an overall concept. Environmental quality, health, wellness and regional individuality are to be given more emphasis as features of vacations in Austria by means of intensified PR and the initiation of co-operation among tourism enterprises, tour operators, regional tourism associations and the local population.

Tourism planning is to give priority to the long-term conservation of cultural and natural capital and to the integrative design of recreation and activity offerings that are attractive in ecological, economic and cultural terms rather than to short-term profit orientation. In order to achieve sustainable tourism that mainly focuses on the development and application of management systems for intensively utilised tourist destinations taking into account the basic pillars of ecology, economy and socio-cultural factors, a system is to be established for measuring sustainability in tourism and for annual reporting.

Consumer goods: The Austrian Eco-Label and other labels established by NGOs and companies have already opened up attractive market niches in the past years. By keeping quality labels few in number, but clearly defined, their credibility is to be ensured. The integral assessment of the “ecological footprints” of consumer products is to be made possible by improved information on the environmental impact of previous production phases. Thereby, the way from eco-niches to mass markets is to be opened up for appropriate products, paying attention to the special role of retail trade.

A major challenge is the integration of existing, small-scale initiatives into an overall concept of sustainable life styles. Focal programmes will be needed to develop the scientific foundations and to draw up action programmes for specific target groups taking also into account impeding factors, such as lack of information, acceptance and time or price barriers.

## Examples of innovative approaches

The “**Family and Work**” audit is a well developed instrument motivating and supporting enterprises to take family-friendly measures and to profit from them. By means of a comprehensive set of criteria, it assists companies in testing their family friendliness, in assessing the results of measures taken and in further developing their family friendliness. The criteria cover flexible working hours and qualified part-time work, training programmes on family-friendly leadership for managers, family-oriented training, support for people re-entering professional life, paternity leave at a company level, in-house kindergartens or other support for care tasks. The impact of family-friendly measures is manifold: improved motivation, higher performance and commitment at work, less stress, a reduction in costly employee fluctuation, lower leave rates as well as maintenance and improvement of the enterprise’s image with the public, customers and clients. During the pilot phase, the family audit was supported by the government.

In 1995, the judicial debt settlement procedure (“**private bankruptcy proceedings**”) was introduced in Austria. It offers all debtors the opportunity to become free from debt again under clearly defined conditions within a foreseeable period of time (seven years, as a rule). This is to allow indebted citizens to break the cycle of interests and costs and to make a fresh start. Persons are eligible for this procedure if they have employment, are able to cover the basic costs of living (rent, energy, subsistence) and are capable of paying at least a small part of their overall debts to the creditors. Moreover, the entire procedure has to be accompanied by a debtor counselling organisation complying with certain standards and recognised by the Ministry of Justice. Experiences of the past years have shown that also persons with lower incomes and socially disadvantaged people were able to participate in this programme with success. This new procedure prevents social exclusion and permanent poverty for numerous private debtors.

The **Austrian Eco-Label for Tourism Enterprises** is awarded to hotels and restaurants for their commitment in the fields of environmentally friendly management and social responsibility. It is a nation-wide quality label and stands for quality and environmental awareness in Austria’s tourism and recreation industry. Since 1996, it has been awarded to around 150 companies with more than 10,000 beds. To be eligible for the label, enterprises have to meet a number of criteria ranging from procurement to waste prevention, from water consumption to energy management and from

architecture and construction to the prevention of traffic and noise. Independent experts inspect all the companies awarded the label and guarantee that the label only goes to companies taking their ecological responsibility seriously.

Within the framework of the **cluster initiative “Austria - Wellness Destination of Europe”**, the development of Austrian wellness tourism is promoted in co-operation with experts and decision-makers of the tourism industry, including initiatives at a *Länder* regional level. Thereby, health tourism is to be linked with all relevant fields of science, such as medicine, psychology, nutrition science, and recognised as a part of the health system with a substantial benefit in the long term. While maintaining regional autonomy, the common strategy serves to build a customised profile with sustained originality for the individual regions.

The **Austrian Agro-environment Programme (ÖPUL)** decisively contributed to the development of Austrian agriculture towards sustainability: more than 90% of agricultural land are farmed under the condition that the existing landscape elements be preserved, on more than 550,000 ha farmers only use input material permitted for organic farming, 3,700 farms keep around 17,000 livestock of endangered species in order to preserve their genetic resources. High Alpine meadows and meadows on steep mountain areas are conserved by mowing and seasonal grazing. By means of stabilisation measures under crop rotation plans, 68,000 establishments contribute to preventing erosion and nutrient elution.

# **Austria's economic performance**

## **Success by innovation and networking**

(Resource management — climate protection — recycling)

The consumption of raw materials and energy enormously increased world-wide in the past one hundred years. If all humankind shared Austria's standard of living, we would need three planets already today. The waste and emissions resulting from our present consumption patterns as well as the continuous consumption of non-renewable resources and energy sources are impossible in a Sustainable Austria. Climate change, accelerated by greenhouse gases, requires rapid and decisive steps in order to prevent irreversible changes.

In order to achieve the de-coupling of prosperity and resource consumption in the forthcoming decades, we need a dramatic increase in resource efficiency, the closing of material cycles as well as a very extensive utilisation of renewable resources and energies. If this is taken into account in the design of production processes, products, services and infrastructure, we have the opportunity of raising value creation and employment in Austria, utilising regional location advantages and achieving export successes with eco-efficient technologies (the supply of excellent environmental technology available in Austria is presented at [www.umwelttechnik.at](http://www.umwelttechnik.at)). By means of more intelligent, less resource-intensive products optimised for utilisation, new jobs can be created. Thus, resource efficiency will give Austria and its enterprises a competitive edge.

Austria is well positioned for benefiting from these opportunities: The early rejection of nuclear energy has spared us the costs of this large-scale technology and the related risks and social conflicts. Today, 24% of Austria's energy demand is already covered by renewable energy sources, which constitutes an excellent basis for sustainable energy policy in international comparisons. In a multitude of model projects, technologies have been developed that reduce resource consumption and thereby help enterprises to save costs. Outstanding examples are the PREPARE projects, the ECOPROFIT programme from the city of Graz that has been particularly successful at an international level, numerous EcoDesign examples, the closing of material cycles by regional recycling networks and the highest percentage of companies with environmental management systems all over Europe. The "Nachhaltig Wirtschaften" programme is designed to provide a further impetus for the development and Austrian-wide utilisation of sustainable technologies.

The best available technologies on the market achieve an increase in resource efficiency by the factor three to four. However, their utilisation alone does not ensure a sustainable economy since the savings achieved are compensated by the overall growth of economic processes. Under the Kyoto Protocol, Austria committed to a 13% reduction of CO<sub>2</sub> emissions. In recent years, several sectors such as industry succeeded in achieving a partial de-coupling of economic growth and resource consumption. Rapid and determined steps, however, are required to spread this trend also to other further sectors and to reduce raw material and energy consumption also in absolute terms. To this effect, competition and market forces have to be used as soon as prices reflect the true costs and scarcities. Thus,

measures sensible in macro-economic terms will also become commercially successful.

In order to permit the rapid dissemination of these eco-efficient technologies, we need an integrated sustainability policy. The environmental policy of the past decades resulted in pollutant reductions, the ban of dangerous substances, and higher air and water quality. Up to now, however, its signals have not been apt to reduce overall resource consumption and lead to a large-scale shift to renewable resources. Therefore, the Strategy for a Sustainable Austria will focus on changing the framework both in Austria and at an international level. Based on efficient administrative structures, consistent signals of technological, environmental and fiscal policies as well as prices reflecting the true costs of resources and energy sources, market forces are to be used for a structural change towards a sustainable economy and costs are to be internalised. Thereby, the forces are used that have led to innovation, technical progress and prosperity in the past decades. In this context, suitable instruments are the taxation of non-renewable resources and energies, emission trading and the consideration of resource efficiency in public procurement. The application of these instruments has to pay attention to the earmarking of funds (e.g. promotion of environmental investment, reduction of wage-related costs) and, in particular, to distributive aspects in order to achieve ecological, economic and social objectives at the same time. A sustainability policy, however, also has to take steps in the field of awareness raising in order to ensure the acceptance of the required structural change and the visibility of new opportunities offered by changed consumption patterns, infrastructure offered, production and working environment. Subsidy schemes, which frequently also induce adverse effects on the environment, have to be reviewed for their orientation to sustainable development.

As in every re-structuring, there will not only be “winners” during the transition to sustainable development. Therefore, the transition is to be designed taking into consideration social and economic compatibility. Conflicts resulting therefrom will have to be solved, with the state being responsible for the moderation of this process. Long-term, continuous and reliable development lines with appropriate adjustment periods will ensure planning safety for the economy, individuals and cities. Based on a transparent, reliable and long-term sustainability policy, the parties affected can adjust to structural change and actively utilise new opportunities. Special impacts on certain economic sectors or social groups should be cushioned by offsetting and support measures. Austria’s structural change towards a sustainable economy is to follow three long-term development lines:

1. A shift as extensive as possible to renewable resources and energies
2. Co-operative approaches to meet needs and demands
3. More intelligent use of resources and energy

## 1. A shift as extensive as possible to renewable resources and energies

The utilisation of renewable resources requires the design and development of tailored products and product lines with regard to technology and applications. To this effect, co-operation among suppliers and users serving as models are needed in a regional context. Likewise, new quality profiles and technologies have to be developed to use the specific structural properties of renewable resources in production and product development. Renewable resources can be used for a great variety of purposes – as energy sources, construction material and for the production of basic materials in industry.

With a share of 46% wooded territory, wood production is of special important. Austrian forestry legislation stipulates that forests have to be treated in such a way that the productivity of soil is maintained and all the functions of forests (utilisation, protection, welfare and recreation) are secured in the long term. As only around two thirds of the annual wood growth are utilised, there are substantial further utilisation potentials. In a quantitative and qualitative sense, sustainable forestry guarantees that this raw material base is not depleted. The utilisation of raw materials that are renewed in a CO<sub>2</sub>-neutral way helps to reduce the consumption of fossil fuels and other non-renewable raw materials and thereby considerably contributes to climate protection. In agriculture, there are further potentials for expanding the production of renewable resources as well.

National, regional and corporate resource and information management is to create the basis for optimising the overall system and for closing material cycles. This is to provide better information on the “ecological footprint” of imported products, raw materials and energy sources and prevent that problems are exported to other countries.

Technology and innovation policy is to create the basis for the large-scale, intelligent utilisation of renewable resources of optimised quality, in particular as energy sources and raw materials, under the motto “prevention is better than rehabilitation”. Innovative products are to be quickly developed to market maturity.

In energy policy, the two most important main strategies are increased energy efficiency and the promotion of renewable energy sources. As a result, attractive framework conditions are to be established for eco-energies (e.g. investment promotion, improved market conditions) so that the demand can be covered by regional renewable energy sources to an increasing extent also in the future. The growth of energy demand is to be slowed down.

## 2. Co-operative approaches to meet needs and demands

The optimisation of individual production processes usually only result in low increases in resource efficiency. Co-operative approaches offer a clearly higher potential and therefore have to be initiated and promoted:

While the focus has been on technological innovations so far, integrated system solutions and social innovation offer more room for sustainable solutions. Therefore, an increase in overall innovation dynamism is the primary objective of co-operative approaches in research and development.

Regional co-operation among enterprises gives rise to recycling networks in which the wastes of one company are input as raw materials into another company. The proactive management of these inter-company material flows (“industrial ecology”) permits reductions of up to 90% as compared with non-networked practices.

By means of co-operation of enterprises along the value creation chain as well as among trade and producers, attention can be paid to the recyclability of products already when they are designed, research co-operation can be initiated and the overall product benefits can be assessed in an integral way.

Small and medium-scale enterprises co-operating in clusters can combine the advantages of high flexibility, a regional basis, a wide range of products and services and a strong position on the market in order to achieve a breakthrough for eco-efficient technologies.

Co-operation among consumers and producers allow for the optimisation of product utilisation and integrated system solutions without a decrease in the manufacturers’ revenues. Such projects can be oriented to social needs and problems, e.g. housing and settlement structures, work, mobility or energy supply.

A co-operative attitude of administration and the increased utilisation of modern technologies, can prevent frictional loss at the interface of economy and administration, contributes to the implementation of the motto “motivation instead of punishment” and to the abandonment of typical “command and control” policies through auto-inspection and continuous improvements of corporate procedures based on environmental management systems (e.g. EMAS).

On the capital markets, investors increasingly take into account ethical and ecological criteria when buying shares, in addition to the height of profits. The around 20 ecological and ethic funds available in the German-speaking area, have achieved above-average returns so far. As a result, such funds should be given special consideration in future investments of pension funds. This requires benchmarking systems also taking into account the dynamic principle of sustainability.

### 3. More intelligent use of resources and energy

Clear priority is given to avoiding resource and energy consumption (e.g. by thermal insulation, waste prevention, reduced material consumption, recycling) in order to reduce overall resource consumption as far as technically feasible and economically sensible. Non-renewable resources are to be used efficiently by means of cascaded raw material use, co-generation and energy recovery from waste.

The increased integration of production and services contributes to the implementation of a sustainable economy. The service sector offers the opportunity of supplying new technologies in an integral utilisation concept with well trained personnel rather than individual products.

More responsible entrepreneurship is to lead to a higher innovative performance based on incentive schemes. Suitable tools would be taxation-related control instruments, such as investment compensation, support or grants and market mechanisms (e.g. transparent, clear voluntary agreements). The introduction of new concepts within the framework of integrated product policy and eco-efficiency can result in rationalisation investments and the reduction of specific energy and raw material consumption. Thus, environmental and business objectives can be reconciled in an integrated operation concept and lead to win-win situations.

Resource efficiency is to be made a key criterion of research policy, thereby permitting the strategic positioning of Austria in this field in the European Research Area.

An energy efficiency programme is to bring about the de-coupling of production growth and energy consumption also in the trade sector.

In the field of transport, a rapid reversal of trends is necessary because we have to work against a 36% growth in CO<sub>2</sub> emissions. This requires a comprehensive package of measures (e.g. efficiency increases in engine technologies and transport systems, re-orientation of land-use planning, awareness raising).

In the building sector, the aim is to achieve further, continuous efficiency increases based on rising requirements in construction codes and housing promotion, and innovative financing schemes (e.g. contracting) and the rehabilitation of old buildings is to be further encouraged. Here, the public sector has to act as a model.

The sustainable utilisation of the valuable water resources is of central concern to Austria. 99% of Austria's population is supplied with groundwater and spring water. The protection of water resources and their conservation for future generations means for Austria that the objective of groundwater with drinking water quality needs to be further pursued. Austria is the "water treasury" of Europe: only 3% of all water resources are utilised. The precautionary principle and ecological compatibility are central conditions and an unshakeable framework for the economic utilisation of extra resources in line with the needs of the Austrian population, agriculture and forestry, economy and, in particular, the needs of future generations.

Action programmes will promote progress along the development lines identified, initiate co-operation and networks among the economy, science and consumers/users and develop technical and social innovations into marketable products. In the integration of sustainability, the staff's knowledge and awareness ("capacity building") plays a decisive role for all companies, in particular for medium-scale and small enterprises. Future-oriented products can only be manufactured by means of new production technologies on the basis of more research and development – supported also by the employees of the companies. Therefore, research policy will continue to be a focus of Austrian policy and, hence, the research rate is to be raised to 2.5% of GDP by the year 2005. It is the task of policy-makers to create the required framework conditions and information base for sustainable development, to actively shape Austria's structural change towards a sustainable economy and to act as a co-operation partner of all stakeholders involved in this process. Furthermore, the economy and consumers are called upon to play an active role by taking decisions on investment, behaviour and consumption that are compatible with sustainable development.

For the economy, this means that production, trade and service enterprises meet their responsibility as structural policy actors in the design of their market supply and produce resource-efficient products and services at competitive prices, promote integrated system solutions by means of networks, foster the application of best available technologies and orientate their in-house research and development to the objective of sustainable development. Sustainability reporting contributes to providing their customers and partners with sufficient information. Thus, sustainable development pursues an innovation strategy to safeguard the existence of companies, sectors and locations.

For the consumers, this means that they meet their responsibility as demanders and product users, make quality, lower consumption, regional identity, social acceptability, repair friendliness and possible upgrades their central criteria for buying decisions and utilisation patterns, assess needs for their sustainability and — if basic needs are met — aim at less resource- and energy-intensive life styles. Therefore, sustainable development means a higher quality of life at a lower resource consumption.

Resource efficiency as a strategy of economic policy should strengthen Austria's position in a more sustainable Europe, permit Austrian companies to export know-how and secure domestic value creation and employment. The objective is to be among the leading countries in the field of resource efficiency and the shift to renewable resources. By means of material-flow accounting, the rise in resource efficiency in Austria can be assessed and compared with other countries on an ongoing basis.

## Examples of innovative approaches

The Federal Ministry of Transport, Innovation and Technology launched the 5-year “**Nachhaltig Wirtschaften**” programme (Austrian Programme on Technologies for Sustainable Development, at:sd) in 1999. It comprises several key actions (House of the Future, Factory of the Future) and has supported projects with a total of € 10 million so far in order to strengthen Austria’s competence in the fields of research and technological development on sustainability and to contribute to the dissemination of the concept of “sustainable development” and the take-up and market diffusion of RTD results. The key action “House of the Future” aims at the development and market dissemination of components, elements and construction modes for residential and office buildings that significantly raise energy efficiency over today’s standard, use a higher share of renewable energy sources and raw materials, as well as result in comparable costs as conventional buildings while offering better amenities. The key action “Factory of the Future” focuses on innovative, benefit-oriented developments that will be of relevance for future production facilities and includes aspects of clean production, product design, utilisation of information technologies and renewable resources. By means of determined waste and emission prevention, clear improvements in the field of production, innovations towards ecological products and inter-company networking, a big step is to be made towards the vision of “zero waste companies”.

The **ECOPROFIT Programme** developed in Graz has successfully spread: in more than 50 cities and regions in ten countries, around 1,000 enterprises have participated in the ECOPROFIT workshops, performed energy and material-flow analyses and implemented a great variety of highly profitable environmental measures on a voluntary basis. Due to the active participation of administration and science, new networks have been initiated and positive image effects have been achieved for the companies. The Viennese EcoBusinessPlan has integrated the concept into a comprehensive programme that includes additional key areas in tourism, climate protection, higher energy efficiency and the establishment of environmental management systems. In-project evaluation has confirmed the effectiveness and efficiency of these consulting and information programmes and has proven that voluntary environmental protection quickly pays for enterprises. This export of Austrian know-how has become an attractive starting point for environmental management, in particular for medium-scale and small enterprises, world-wide.

The **Austrian Climate Alliance** addresses *Länder*, cities and towns in order to motivate them to take proactive climate protection measures. The members agree to reduce greenhouse gas emissions by 50% by 2010, to reject the utilisation of tropical timber and to support indigenous partners in Amazonia in their efforts to maintain their way of life and to preserve the rain forest. For this purpose, the Austrian Climate Alliance supports and advises them in the preparation of municipal energy concepts, the increased utilisation of renewable energy sources, traffic reduction measures, public awareness campaigns and procurement. The Austrian Climate Alliance offers nation-wide competitions, information material, and the exchange of information and experiences. Special consulting schemes were developed for enterprises and schools. Up to now, almost 400 Austrian cities and towns covering more than 50% of Austria’s population have joined the Climate Alliance.

To raise energy efficiency in federal government buildings, the federal government adopted the **Programme on Contracting for Government Buildings** in 2001. In the initial phase, the attractive opportunities offered by contracting are to be used for around 500 government buildings in order to save energy worth approximately €7 million per year (from which the government will fully benefit upon the end of the contract term) and priority is to be given to potential supply with bio-mass.

**Material-flow analysis** is a tool for assessing the material flow of various socio-economic systems (national economies, regions, cities, etc.) and constitutes a central element of ecological accounting in the form of a satellite account of national accounts. In this field, Austria is one of the pioneers world-wide, both with regard to the design and the implementation in official statistics. Time series on material input in the Austrian economy have been calculated for the period 1960-1997 and material balances have been drawn up for the years 1996 and 1997. The Austrian material flow is presented for major flows such as water, air, mineral materials, bio-mass, and fossil fuels. The results show how much material is consumed in certain economic activities. This instrument can provide important information in particular for the key environmental concern of resource efficiency. Thus, the data supplied can be used to derive informative indicators for the resource efficiency of a society and the success of measures taken and the further need for action can be made visible.

# Austria's living space

## Conservation of diversity and quality

(Regional cohesion and identity — mobility — infrastructure)

Austria has numerous unique natural and cultivated landscapes. They not only provide space for living, working, recreation activities and provide for regional identification, but also are an economic factor (e.g. agriculture and forestry, tourism and leisure industry, mining). As a result, various utilisation interests compete on narrow space and may lead to conflicts, which clearly show the natural limits to land use (pressures on soil and waters, loss of biodiversity). The ever increasing mobility needs due to the rising share of road traffic also result in pressures on the population and ecosystems. Sensitive areas (e.g. high Alpine regions, nature and water protection areas) require special measures in order to preserve natural resources and unique ecosystems.

In total, an average of 25 ha land are irreversibly sealed by construction activities and the extension of traffic infrastructure each day – this trend has to be stopped. Therefore, the third key element of the strategy for a Sustainable Austria is the management of the limited spatial resources. In this field of action, the primary objective is the maintenance of diversity and of the natural foundation of landscape and ecosystems as well as the cultural and economic diversity of land use relying thereon. This aims at considerably reducing anthropogenic material flows and environmental impacts, the promotion of options for living and development as well as the optimisation of links between biodiversity and quality of life. Priority is given to two strategic fields of action:

1. Land use, infrastructure and regional cohesion and identity
2. Mobility and transport

### **1. Land use, infrastructure and regional cohesion and identity**

In addition to balancing interests with regard to utilisation conflicts and to the economic development of the regions, aspects of nature protection have already been taken into account in spatial and land-use planning in the past. For example, 3% of the Austrian territory are strictly protected as national parks and approximately one quarter of Austria is covered by various categories of protection areas. In the past decades, green space, landscape and urban planning have tried to prevent an uncontrolled expansion of cities. Urban renewal, the promotion of services of proximity, nearby recreation areas and cultural activities maintained the attractiveness of urban areas and countered the international trend of derelict city centres in Austria. In rural areas, targeted promotion programmes attempted to reduce the rural exodus and to support the development of disadvantaged regions. Thus, the rural population amounts to 56% in Austria, while the EU average is only 20%. Nevertheless, there is unabashed demand for suburban single-family houses whose land needs and traffic impact is difficult to reconcile with the objectives of sustainable development. Due to improved transport infrastructure, distances travelled daily increase continuously so that bigger ranges are achieved instead of time savings, and both traffic loads and commuting problems further increase. The continued trend of urban sprawl not only leads to the fragmentation of ecosystems,

but also results in additional infrastructure costs exceeding ATS 200 billion within the next 10 years. A more sustainable use of space resources, improved co-ordination of space-related policies as well as an increase in participatory elements are key issues of the strategy for a Sustainable Austria.

From an Austrian perspective, regional cohesion and identity as well as subsidiarity are core principles of the EU that are fully in line with the objectives of sustainable development. Variety and a stronger regional focus of economy and society can counter the negative impact of globalisation.

The aim of regional and economic policy is to achieve a regionally balanced relation between city and countryside which comprises functionally autonomous and economically stable rural areas and vital, but not sprawling cities. In line with the development model of “decentralised concentration”, small-scale dense areas are to be established with regard to settlement, economy and infrastructure and arranged in such a way that a system of regional centres is created. This objective is to be reached by means of promotion schemes for disadvantaged regions, active employment policy and education centres (e.g. *Fachhochschulen*) oriented to special regional needs. Attractive local supply and a stronger regional identification is to reduce migration from disadvantaged areas.

Regional marketing, recycling networks and the formation of clusters are to strengthen the regional economic links of companies, create jobs and close cycles of raw materials, wastes, products and purchasing power. Thereby, proximity will also become a competition factor at a company level, creating a stronger regional basis as a counterweight to the anonymous influences of the world market and, at the same time, leading to a reduction of traffic volumes. By means of manifold networks of integrated regional functions, the small-scale, decentralised supply of goods and services is to be ensured “from the region, for the region”.

The growth of permanently sealed land is to be reduced to two hectares per day by 2010 in concertation with the needs of Austrian companies in international competition of business locations by reducing surplus building land, freezing building land reserves, achieving an active zoning and building land policy of the public sector, promoting building rehabilitation, encouraging land-saving building modes and land recycling. Densification is to allow for a higher intensity and efficiency of land use and to guarantee the optimum exploitation of utilisation potentials in the existing built-up areas. This, in turn, constitutes the basis for the economically sound development of public transport.

Centrally defined objectives and high autonomy in implementation are to ensure the overall control of sustainable development, while allowing for regionally specific adaptation. For this purpose, overlapping responsibilities in the fields of spatial development and nature protection have to be adjusted, sectoral perspectives need to be combined in an integrative approach and functional units have to be created (e.g. by combining tourism regions). To counter further urban sprawl, local land-use plans should become more conditional on regional spatial planning and regional framework plans should be made binding. Quantitative objectives for future population figures, housing and settlement area needs and medium- to long-term financial plans have to be taken into account in land use planning and co-ordinated with regional plans.

In the planning and design of local and regional infrastructure, the resulting consumption patterns have to be taken into consideration: small-scale networking,

shared utilisation of consumer goods, multiple utilisation (housing, work, recreation), special needs of children, handicapped and older citizens, short-distance transport and services of proximity should be the focus of future urban and landscape planning. In this context, the strategic environmental impact assessment plays a major role.

Attention is to be paid to the multifunctionality of agriculture also in the future. In particular in Alpine regions, agriculture performs important activities of landscape care that are not covered by product prices. Agricultural policy should focus on the maintenance and increase of positive environmental effects (conservation and creation of landscape elements, maintenance of ecologically valuable land, etc.) and the further reduction of the adverse environmental impact of agricultural activities (use of pesticides and mineral fertilisers, nutrient elution, soil erosion), on the promotion of organic farming and other environmentally friendly methods, the further development of the ecological assessment of agricultural support schemes as well as the continued agricultural utilisation of marginal yield areas.

Public participation in decisions on spatial resources is a prerequisite of social acceptance of decisions taken and, as a result, is also important for democracy. Therefore, measures to raise the citizens' awareness are to be taken, Agenda 21 processes are to be promoted and disseminated with regard to their approach, and moderation and mediation procedures are to be developed and extended for cases of conflict. Local Agenda 21 is to be further disseminated based on its consideration in the allocation of funds in revenue sharing. The representation of infrastructure, utilisation patterns and products in the form of "ecological footprints" is to serve awareness raising for investment and consumption decisions.

## **2. Mobility and transport**

Due to its central location in Europe, Austria has always been a gateway between different cultures and economic areas. The opening of the Eastern European economic area creates new opportunities for Europe's economy and political integration. However, it also gives rise to new traffic flows affecting Austria to a particular extent. Due to ever increasing transport needs, traffic becomes a key factor in creating the basis for sustainable development.

In order to achieve the objectives of combating climate change, emissions have to be significantly reduced in the field of transport. While CO<sub>2</sub> emissions and economic growth have already been de-coupled in industry, the CO<sub>2</sub> emissions of transport have increased by around 36% from 1985 to 1995. Emission reductions of individual vehicles achieved by optimised engine and drive technology have been more than compensated by the growth of overall traffic volumes.

The social and health care costs caused by transport are enormous: traffic accidents result in more than one thousand deaths and around 50,000 persons injured each year. With around 2,400 persons, the number of premature deaths due to traffic-related air pollution is more than twice as high. Moreover, traffic is the main source of noise, directly affecting around one quarter of Austria's population.

Therefore, the strategy for a Sustainable Austria aims at limiting mobility needs and optimising their satisfaction:

The spatial integration of housing, work and recreation is to reduce intrinsic mobility demands and to create small-scale structures. In this context, spatial planning is to be used also for the long-term control of mobility needs. Land-use and transport plans as well as the expansion of settlements are to take into account easy access on foot, by bicycle and public transport. Several model projects on car-free settlements have already been implemented. These are to be extended and further disseminated. An attractive residential environment is to be created in order to counter an increase in recreation-related mobility.

Based on a more attractive public transport infrastructure, incentives are to be created for improving the modal split of passenger and freight transport. Many cities already have high-grade public transport systems and made first attempts at parking space management. In rural areas, however, the dependence on cars continues to be high. By optimising the interfaces between public and private transport modes (park-and-ride centres, container terminals), the increased utilisation of rail systems is to be made considerably more attractive.

Fiscal policy is to give special attention to prices reflecting the true costs of transport in order to achieve correct price signals and promote also the utilisation of renewable resources.

The increased utilisation of information and communication technologies is to reduce mobility needs. In the promotion of various forms of teleworking, special consideration is to be given to the benefits to regional economy and the environment, as well as to the social and labour-law safeguards and any social impact.

At an international level, Austria will continue to promote more fair pricing in transport (e.g. road pricing, taxation of aircraft fuel) and work towards a European transport policy ensuring regional, natural and social compatibility as well as sustainable economic development. By means of nationally and internationally co-ordinated traffic flow management, existing transport networks are to be used in an optimum way and local pressures are to be prevented in line with the objective of significantly reducing the dramatic growth rates of traffic.

In the field of transport, the objective of the strategy for a Sustainable Austria is to reduce the share of road transport in the total traffic volume and to stabilise the total traffic volume from 2010 onwards. Land use and infrastructure are to ensure general access to mobility services, reduce forced mobility as much as possible and allow for meeting mobility needs by means of the best suited transport mode.

## Examples of innovative approaches

The “**Cultivated Landscape**” research programme sees landscape as the result of individual and social actions and cultural perception. Therefore, attention is paid to multidisciplinary co-operation, in particular between natural sciences, social sciences and humanities, to the participation of stakeholders from diverse (non-scientific) fields and to the early involvement of the public into the research process. The key aim is to provide findings on environmental behaviour, on the link between the quality of life and human demands to nature, perception of nature and space, etc. In this context, research not only has the task of providing scientific findings, but also to make them available in an understandable form for planning and municipal administration. The research programme was launched by several ministries in co-operation with the *Länder* in 1995. The funds available amount to around €6 million. Today, approximately 200 scientists from more than 30 disciplines participate in it.

Austria is able to refer to a variety of innovative projects on **sustainable development at a regional and municipal level**. The pioneering role of Styria in the implementation of sustainable development is impressively evidenced by the success story of "Ökologische Landentwicklung Steiermark" (Ecological Rural Development in Styria) that has become a standard tool in Styria. Its objective is to advise and support towns in the preparation of concrete scenarios for the future and development programmes along the lines of Agenda 21. In recent years, for example, 100 Styrian towns have been actively supported by Ökologische Landentwicklung Steiermark. These also include 36 Local Agenda 21 pilot towns that received scientific-technical advice. Within the framework of the Regional Agenda 21 of the Kirchdorf/Krems district in Upper Austria, objectives have been developed for sustainable development, existing individual initiatives and projects have been networked and new topics important to the future of the district have been addressed and developed (e.g. telecommunications, renewable resources, wood innovation, regional energy supply, etc.). This resulted in a common perspective for a "model region for sustainable economy and activities" as a signpost and leadership tool for the district and in the initiation of implementation processes (brainstorming competition, future workshops, innovation workshops, best practice files). The town of Steinbach an der Steyr achieved extraordinary success in overcoming its severe structural crisis by implementing a strategy orientated to ecological, economic and social objectives. The "Steinbach model" has been documented in brochures and guides in an exemplary way and, thus, provides ideas to many other Austrian towns.

In the **model project "Soft Mobility — Car-free Tourism"**, two cities (Bad Hofgastein and Werfenweng) have drawn up and implemented integrated transport and tourism concepts. The aim was to raise environmental quality and the quality of life for local residents and tourists by reducing transport-related environmental pressures, creating environmental-friendly mobility services of a high quality and attractiveness both in the holiday resort and with regard to access to it as well as the promotion of environmental-friendly, high-quality tourism in order to enhance the profile of Austria as a holiday destination at an international level. To this effect, innovative mobility services, travel information systems and travel packages were developed and promoted. After extensive mobility analyses for residents and tourists, a comprehensive traffic reduction strategy was implemented in the two towns: banning of vehicles with combustion engines in important core, spa and recreation areas, optimisation of public transport and the introduction of new services (night vehicles, optimised city bus, advantageous offers for tourists travelling without car), pedestrian- and bicycle-friendly design of town centres, establishment of car parks, traffic control and information systems (mobility centre), protective measures along main traffic routes and the creation of rental services. At present, 28 electric scooters, 12 electric and five electric cars are in use and integrated into a car sharing and rental system in the two towns. In Werfenweng, the first Austrian solar charging station for electric vehicles was opened.

The programme "**move – Mobility and Transport Technologies**", launched by the Federal Ministry of Transport, Innovation and Technology, promotes the development and implementation of innovative and ecological logistics projects, supports the development of innovative, feasible implementation plans for environmental-friendly mobility services in urban passenger transport and offers an action platform that provides impulses to, and serves as a contact point for, projects in the field of information and communication products and services meeting the needs of public transport.

The two-year model project "**Corporate Mobility Management**", carried out by the Environmental Ministry, served to develop packages of measures and instruments for more environmental-friendly transport management and rationalisation and to apply it at five sites. Accompanying mobility groups were set up, mobility analyses were performed in co-operation with external consultants, surveys were conducted to study barriers to reduced car dependence as well as demands and requirements to be met by alternatives to private passenger cars, mobility plans were drawn up and measures were implemented with scientific advice. With a view to the model role of public administration, the Environmental Ministry itself participated in this pilot project. The results were summarised in a guide for companies.

The **NachhaltigkeitsTATENbank** (Sustainability Database) of the Austrian Environmental Ministry contains information on more than 100 additional exemplary projects on sustainable development. It shows how actions to the benefit of the environment, economy and people are implemented in integral overall concepts and presents local, municipal, regional, national and cross-border cases from Austria. Thus, it serves for networking existing initiatives and provides ideas for committed groups and persons. Scientific analyses were performed to identify success factors and barriers to the transfer of project ideas and to examine the requirements for the efficient dissemination of innovative project concepts.

# The next steps

## From the Green Paper to the Strategy for a Sustainable Austria

The present Green Paper contains the basic development lines, focal areas and key issues for an Austrian strategy towards sustainable development. It now requires further specification. Thus, the consensus achieved by the experts and institutions involved in the preparation of the Green Paper is the starting point of a national dialogue, initiated by the federal government, on a new model for the quality of life, location quality and environmental quality in Austria:

the project "A Sustainable Future for Austria".

The objective is to ensure the participation of all stakeholder groups in the development of the strategy and to develop the discourse among policy makers, administration and interest groups into a public dialogue. As a result, as many actors as possible (policy makers, economic decision makers, consumers, scientists, NGOs, opinion leaders, etc.) are to be informed about the objectives and concerns of the present Green Paper and get involved in shaping this process by the end of 2001. In this context, it is important to highlight the added value of a sustainability strategy, being a package of co-ordinated objectives, as compared with the previous practice of only setting sectoral objectives. The general public is to be involved in this process by means of active communication in order to make the concept of sustainable development understandable to all. This process should not be limited to the actors at a federal level. Cities and towns, regional and local organisations are called upon to contribute to this future-oriented project. This process will result in the Austrian Strategy for Sustainable Development that

- will contain clear and long-term objectives for a Sustainable Austria in order to ensure the coherent orientation of sectoral policies,
- will define efficient instruments and measures for implementing the Strategy,
- will include institutional innovations for controlling and shaping this process,
- will take into account the role of education, communication and information as essential requirements of successful implementation.

The Austrian sustainability strategy will take into account the corresponding activities at the European level. It will be finalised and politically agreed upon by early 2002. The adoption of the Strategy by the federal government will mark the start of implementation. Existing policies, plans and programmes are to be examined for their compatibility with the substance and objectives of the Strategy and further developed accordingly. In the implementation process, the individual regional authorities and institutions will be responsible for defining an appropriate number of concrete, possibly quantified targets co-ordinated with a view to sustainable development, for establishing timetables and suitable instruments as well as for taking measures supporting the achievement of the targets. When the targets and implementation measures are defined, monitoring and evaluation already have to be taken into account.

For the efficient implementation of the Strategy for a Sustainable Austria, the following requirements have to be met:

New forms of co-operation among decision makers: The Strategy for a Sustainable Austria also is to serve the co-ordination and further development of existing initiatives. Therefore, networking among the ministries, *Länder* and social partners has to be intensified. Only if the functionally structured areas co-operate and communicate well, joint work without any reservations can be ensured. This requires promoters who call for and monitor progress and make the Strategy acceptable in politics and society.

Indicators, monitoring and evaluation: The continuous improvement of implementation is to be ensured by regular evaluation of progress, success factors and weaknesses. Here, the objective is to initiate organised learning processes and to ensure consistency and transparency through implementation. In order to evaluate implementation, a suitable monitoring system and a limited set of informative sustainability indicators have to be developed that are linked to existing indicators as far as possible. Reporting will take the form of an annual report on the implementation of the Austrian sustainability strategy to be prepared by the federal government.

Process quality: Special attention is to be given to implementation processes that become “self-running” and are to initiate continuous developments. This will raise the acceptance for the change required. The deliberate establishment of feedback loops and the participation of the stakeholders will increase social learning capacities.

Public awareness campaigns and communication: Broad communication and public awareness campaigns oriented to specific target groups are to ensure the awareness, information and participation of wide quarters of the population. An information campaign is planned. Only if the Austrian population is familiar with the objectives of sustainable development, shares its values and basic orientation and has appropriate options for action, the implementation of this strategy will be successful.

Sustainable development is the response to the global challenge of controlling social, economic and ecological processes in a responsible way and to ensure a high quality of life for the people in the long term. This task has to be performed both at global level and within the European context as well as at a national and local level. Austria is committed to being a driving force in this process.