

HUMAN SETTLEMENT COUNTRY PROFILE

AUSTRIA

Decision-Making

Programmes and Projects

- A. Providing Adequate Shelter for All
- B. Improving Human Settlement Management
- C. Promoting Sustainable Land-Use Planning and Management
- D. Promoting the Integrated Provision of Environmental Infrastructure: water, sanitation, drainage and solid waste management
- E. Promoting Sustainable Energy and Transport Systems in Human Settlements
- F. Promoting Human Settlement Planning and Management in Disaster-Prone Areas
- G. Promoting Sustainable Construction Activities
- H. Promoting Human Resource Development and Capacity-Building for Human Settlement Development

Status

Capacity-Building, Education, Training and Awareness-Raising

Information

Research and Technologies

Financing

Cooperation

Decision-making: The federal authorities are responsible for the legislation and execution of land-protection in the context of forest-, water-, air pollution control-, waste-management-, decontamination of contaminated sites- and mountain-law as well as in the context of trade and industrial regulations. Concerning land-protection in the context of e.g. the agricultural settlements-law and the plant-protection-law the federal authorities set the basic legislation and the regions are responsible for executive laws. The regions are fully responsible for the central instruments of land-management as spatial management-laws, nature-conservation-laws and laws concerning housing development-aid.

Land-management by surface-dedication- and -development-plans lies in the hand of the nine regions (federal provinces) and the municipalities (local level). Austria is a Federal State with 9 autonomous provinces (“Laender”) and more than 2000 municipalities. The provincial governments are responsible for legislation and enforcement in areas such as spatial planning acts including the respective building regulations, nature conservation acts and acts on residential construction subsidies, while the authorities at the community level are in charge of drawing up and adopting land-use plans and development plans. Due to the fact that there is no uniform law for biological land-protection and land management the competent authorities are federal as well as regional. The Austrian conference for spatial planning was established to coordinate federal and regional interests.

On the one hand, this practice and the understanding for the decentralization of authorities associated with it, offers a favorable setting for accepting the independence of local authorities as well as bottom-up strategies of popular participation. On the other hand, national programmes become more difficult, e.g. the centralised (Austria-wide) evaluation of progress made regarding sustainable human settlement development, specially Habitat Agenda and Local Agenda 21 processes. In order to fulfill tasks more efficiently, municipalities may group together and form, specific purpose associations of municipalities“. The regions may give to these associations the same powers as to the municipalities. Some 500 such associations exist to provide water deal with sewerage or waste.

In 1994, the Federal Act on Environmental Impact Assessment and Citizens' Involvement (UVP Act) entered into force. Since 1992, amendments have been added to the Regional Planning Acts, the Environmental Protection Acts and the Construction Codes of the Laender. Environmental impact assessments are usually used for projects, but not for programmes and policies. The Clean-Up of Contaminated Sites Act, in existence since 1989, forms the legal basis for the surveying, financing and implementation of securing and remediation of contaminated sites in Austria.

Energy: In the field of energy, the Federal Constitution allocates responsibilities either at the federal level (e.g. energy taxation, energy statistics, energy metering, energy supply emergency regulations, prohibition of nuclear power) or to both federal level and the level of the states (e.g. electricity, gas, district heating, energy conservation, subsidies). The Federal Ministry of Economic Affairs and Labor (BMWA) is the main body responsible for energy matters on the federal level. Other ministries involved in energy policy matters include: Agriculture and Forestry, Environment and Water Management; Transport, Innovation and Technology; and Finance. Energy policy – as all other policies – is formulated and implemented in close co-operation with the social partner organizations, i.e. organizations representing important groups of society (employers, employees, agriculture and others), and in dialogue with NGOs and the public. On the level of states the responsible bodies for energy matters are units of the authorities of State Governments. Energy related aspects are negotiated in respective committees or working groups and legal acts (e.g. a draft of a law) are submitted to parliament for further treatment, or other cases (e.g. a political basis document as the Energy Report) have to be adopted by the council of ministers. In order to ensure a nation-wide coherent strategy an agreement between the Federal State and the states under Article 15a of the Federal Constitution was concluded which obliges the states to adopt stringent energy efficiency legislation. Since 1995, when this agreement entered into force, all states have adopted legal regulations, which, inter alia, include provisions on k-values for buildings and efficiency

standards for room heating and hot water supply. In the transport sector apart from the taxation of fuels, vehicle taxation is used as a powerful tool to stimulate energy efficiency improvements. The EU internal market in Austria has been fully implemented at 1 October 2001 for electricity and at 1 October 2002 for natural gas. Due to the adaptation of the new Austrian Electricity Law in 2000 and to the Eco-Electricity Act 2002, targets for electricity from renewable sources have been extended and strengthened.

Environmental aspects of land have increasingly been enforced by: behavior-controlling regulations: requirements for waste-disposal (especially concerning dangerous wastes), speed-limits for cars (emission-reduction). And also plant-related regulations: regulations concerning installation and operation of locally fixed sources of soil-contamination (emission-limitation), etc. Various measures such as energy efficiency, district heating, and traffic reduction measures come under the responsibility of the federal "Länder" and municipalities.

Transportation: Principally, the Federal Ministry for Transport, Innovation and Technology is the federal decision making body for transportation and infrastructure related issues in Austria. However, other government bodies or institutions are also involved to some extent, in the decision making process where appropriate. It is important to bear in mind that in Austria, as a general principle, decisions are taken at the appropriate level (e.g. national, regional or local). Since Austria joined the European Union in the year 1995, all emissions standards have been brought in line with the European standards. Furthermore, Austria has established a comprehensive incentive based framework to reduce the environmental impact of transport by limiting unnecessary travel.

Air-quality: The Federal Ministries of: Agriculture, Forestry, Environment and Water Management; Transportation, Innovation and Technology; and Economic Affairs and Labor are responsible for atmosphere-related activities. Legislation to protect the atmosphere has been reviewed and revised in part in the light of Agenda 21. Product regulations have been set with respect to sulphur content of fuels, heavy metals, several persistent organic pollutants and ozone depleting substances. The Ambient Air Quality Law prescribes air quality standards and alert thresholds, the Ozone Law alert thresholds for ozone as well as reduction targets for the ozone precursor substances.

Programs and Projects: Governmental activities in the field of energy, transport and industry concentrate on the development of safe technologies, R&D, development of new and renewable energy systems, public awareness- raising including product labeling, EIA and life-cycle analysis and environmental audits as well as introduction of economic instruments.

Numerous projects launched by the Federal Ministry of Agriculture, Forestry, Environment and Water Management are in order to avoid waste and reduce waste as well to purify water and air. There are cooperations with the Ministry for Transport, Innovation and Technology and the Ministry for Economic Affairs and Labour in the areas. In addition the Ministry collaborates with these two ministries in the areas: soft mobility and reduction of traffic with special consideration of best possible access to public transport, energy saving and use of alternative renewable energies as well as in the development of ecologic-biologic building materials and building styles.

The Government promotes policies and programmes in the area of energy efficiency, environmentally sound and efficient transportation, industrial pollution control, sound land-use practices and management of toxic and other hazardous waste. A national climate strategy to meet the Kyoto target was coordinated on expert level and adopted by the Council of Ministers at 18 June 2002.

Several action programmes have been launched to raise public awareness concerning ground level ozone and climate change. Target groups were schools (information material for teachers, school competitions), decision makers at community level (regular exchange of information, community competitions for best

solutions) and the general public (brochures, radio and TV spots). The campaigns aimed at scrutinizing day-to-day behavior and switching to more environmentally sustainable products, modes of transport etc. Modern media as CD-ROMs shall give an incentive to deal with the problem and give playful access to detailed underlying information.

A. Providing Adequate Shelter for All: No information available.

B. Improving Human Settlement Management: The approaches to the development of holistic concepts, strategies and action plans for future-oriented urban development in Austria based on the following programmes: “Austrian Spatial Development Perspective” – “ÖRK 2001” spelling out the national concept for the special development in the next decade; “National Environmental Plan” – “NUP” - spelling out environment-related standards with regard to traffic over and above the objectives set out above; “National Environment and Health Plan” - “NEHAP” spelling out environment and health – related standards with regard to a future-oriented holistic settlement policy; and the “Austrian Strategy for Sustainable Development” introducing measures for the promotion of sustainable development according to annual work programs.

The smaller and small communities in Austria, which have a long tradition of self-government, started developing and implementing socio-economic and eco-logically networked projects and bottom-up strategies of municipal policy and planning, at a stage when they were not even familiar with concepts like "sustainable development".

The regional governments play an important role in recent efforts to stimulate sustainable settlement development, inter alia, by intensive promotion of information and training programmes as well as measures to ensure a joint and wide dissemination of the UN-Agendas “Habitat” and “Local Agenda 21.

Numerous activities taken by the Ministry of Agriculture, Forestry, Environment and Water Management are inter alia: International co-ordination of ecologically oriented projects and programs for special and settlement development and for soft mobility in tourism with EU-promotion EFRE Art 10 and INTERREG A and C; the “Sustainable Cities and Municipalities” campaign to accelerate the signing of the “Aalborg Charta;” and, commission and supervision of directive studies such as “Sustainable spatial development” and “Regionalized spatial development for Austria,” with special consideration of the HABITAT II and Local Agenda 21 objectives.

In this context, the commitment of the City of Vienna in implementing the Habitat Agenda is of particular relevance. Based on an agreement between the municipality and United Nations Centre for Human Settlement (Habitat), Vienna is not only the hub for exchanging information on urban environmental technologies and Good Practices of sustainable urban development, but also for regional Best Practices in Central and Eastern Europe.

As part of WHO's Healthy Cities Project, the Austrian Healthy Cities Network was established in 1992, and a coordination office for this network was set up in Vienna in 1993. The project is intended to create healthier living conditions in Austrian towns, develop new approaches to health promotion and exchange information at all levels.

C. Promoting Sustainable Land-Use Planning and Management: A land-political approach for better self precaution by public stock-piling of land by the municipalities is of increasing importance in the light of a lack in building land especially in municipalities close to urban centers and tourist-municipalities. This approach offers broader flexibility and the possibility of punctual intervention. Successful efforts of municipalities on the land-market require exact market-knowledge and entrepreneurial acting on the market. The importance of professionalism has led to a number of different ways of semi-autonomous organization.

D. Promoting the Integrated Provision of Environmental Infrastructure: water, sanitation, drainage, and solid-waste management: See under Freshwater and Sanitation profiles.

E. Promoting Sustainable Energy and Transport Systems in Human Settlements: Austria has established strategies for the promotion of rational use of energy (improvements in energy efficiency) and promotion of renewable sources of energy. Due to the Eco-Electricity Act 2002, targets for electricity from renewable sources have been extended and strengthened. The target quotas of electricity from so called "new renewable" sources (N-RES, i.e. wind, biomass, biogas, solar, geothermal energy) as a proportion of power supply to the end-users from the public grid are about 2% by 1 January 2004, about 3% by 1 January 2006 and at least 4% by 1 January 2008. Further the share of electricity output accounted for by small hydro-power plants with maximum electric capacities of up to 10 MW should be raised to 9% by 2008.

To make the targets economically attainable, guaranteed feed-in tariffs for "green" electricity have been fixed on federal level. The relevant ordinance entered into force on 1.1.2003 and guarantees the producers feed-in tariffs for a time span of 13 a. The feed-in-tariffs are financed by an extra grid-charge and at market prices for green-electricity, higher than the usual market price. The green-electricity-law admits to differentiate this charge depending on the grid level. Thus industrial consumers in principle could be charged less than private consumers.

The Austrian Energy Action Programme (1993) contains a total of 97 measures, which cover all areas of final energy consumption (room heating and hot water preparation, process heat, mobility and lighting and data processing) as well as all kinds of energy sources. Most of these measures strictly envisage energy efficiency goals.

One chapter of the "Energy Report 2003", which will be adopted by the Council of Ministers in spring of 2004, contains comprehensive strategies and measures destined for all relevant sectors. These measures have been aligned with the measures contained in the "Austrian Climate Strategy".

Transport: The "Austrian Federal Transport Infrastructure Plan (Bundesverkehrswegeplan)" has been drafted by the Federal Ministry of Transport, Innovation and Technology. A core-part of the "Federal Transport Infrastructure Plan" is the "Master Plan for Transport Infrastructure", which was published in 1998. Based on calculations, the Master Plan states requirements as to how the railway and road network should evolve up to the year 2015. The Federal Transport Infrastructure Plan and the Master Plan should be regarded as the practical implementation of the 1991 "Austrian Overall Transport Concept (GVK-Ö)". The principal transport objectives of the Concept include: avoiding unnecessary traffic (better loading factors, IT-based logistics, short every-day trips;), switching traffic to ecologically friendly forms of transport; opening up regions to which access has previously been poor; involving the affected population, in order to secure public acceptance of transport policy.

There is a project enhancing national rail and waterway systems. Pilot Project "Sanfte Mobilitätspartnerschaft – Betriebliches Mobilitätsmanagement": In the framework of this project in which five enterprises participated, traffic was analyzed and measures for traffic reduction respectively a shift to environmentally friendly traffic modes were elaborated. The very positive results of the pilot project show great potential for the reduction of the environmental impact at the same time offering also economic advantages for the enterprises and advantages for their employees. A reduction between 3% and 30% of related CO₂ emissions could be noted. Another very successful project is the project "Grossveranstaltungen - umweltgerecht ohne Stau" which aims to find environmentally friendly and safe traffic solutions for mega-events such as the Nordic Ski World Championship 1999 in Austria. A central aspect of TAKE ÖV, which is part of the MOVE-Programm, is the development of customer-tailored

telematic applications as a predominant key to increase the attractiveness of public transport. A close cooperation between technology and system providers, public transport services and customers triggers innovation and development.

There are cooperations with the Ministry for Transport, Innovation and Technology and the Ministry for Economic Affairs and Labour in the areas soft mobility and reduction of traffic with special consideration of best possible access to public transport, energy saving and use of alternative renewable energies as well as on the development of ecologic-biologic building materials and building styles, as well as in “transport demand management” dealing with the promotion of mobility plans that help institutions and business to reduce car traffic, for example land-use planning etc;

In Austria a number of measures have been taken for the social inclusiveness of the transportation system: In order to ensure the integration of handicapped people in the transport system, e.g. the federal railway company ÖBB (in co-operation with the Ministry for Transport and consultants - some of them are blind) developed a guidance system for blind people.

The Federal Ministry of Transport, Innovation and Technology (BMVIT) promotes the development and market penetration of customer-oriented and ecologically sound mobility technologies as well as new services combining public and individual transport. For that reason strategic partnerships preferably with the private sector have become an essential element. Mobility Management, which is a new concept to promote sustainable transport, is primarily a demand-orientated approach that involves new partnerships (e.g. between enterprises, authorities, transport companies and customers) and a set of tools. The tools of mobility management are based on information, communication, organization, and coordination and require intensive promotion. Mobility management is not only restricted to urban/local transport but is also successfully applied for regional and interregional transport.

A perfect example for applied mobility management is the pilot project “Car Free Tourism” initiated by the Ministry of Agriculture, Forestry, Environment and Water Management in cooperation with the Ministries of Transport, Innovation and Technology and for Economic Affairs and Labour. The project promotes innovative and alternative traffic concepts for traveling to and around the well-known Austrian holiday resorts Bad Hofgastein and Werfenweng and by this demonstrates that holidays without an own car does not limit mobility at the holiday destination. One aim among others is to keep vehicles with internal combustion engines off the city centers and to provide new impulses to the use of innovative transport technologies, such as electric cars or scooters. Results have shown that within the last 3 years for instance the rate of guests who arrived in Werfenweng by train increased from 9 % to 25 %. This means a reduction of 1.2 Mio car-kilometers and a reduction of 375 tons of green house gases compared to the trend in Federal Province of Salzburg.

F. Promoting Human Settlement Planning and Management in Disaster-Prone Areas: Hazard zones plans are prepared by the Torrent and Avalanche Control service (TACS).

G. Promoting Sustainable Construction Industry Activities: No information available.

H. Promoting Human Resource Development and Capacity-Building for Human Settlement Development: The competition “Visionary Dreams, Action Spaces in the 21st Century” initiated to support programmes and projects for smaller and small settlement areas has proven highly successful in motivating communities to develop innovative approaches and ensure strategic implementation in the spirit of the Habitat Agenda and LA 21.

Examples to illustrate the activities on regional level specially related to the implementation of Habitat- and La 21 processes are: in Styria a comprehensive programme to support the implementation of the

Habitat Agenda and LA 21 in rural areas (with the participation of the Ministry of Agriculture, Forestry, Environment and Water Management); and, in Upper Austria a coordination centre Agenda 21 was set up; the federal government of Carinthia adopted the implementation of a Regional Agenda 21 covering the entire federal province. Activities specially related to the implementation of EU-subsidized regional and settlement development are: the training of regional managers for EU-promoted regional development, carried out by the commission of the Chancellery; and, the training of regional managers and other promoters of regional development in environmental questions (affairs) a pilot project of the Ministry of Agriculture, Forestry, Environment and Water.

Public private partnerships with universities and small sized industry: The Austrian

Universities have played an important role by stimulating Austria-wide awareness-raising processes and developing sustainable municipal policy concepts fit for the future as envisaged in the Habitat Agenda and LA 21. Public/private partnerships of Universities, small sized industries and communities have proved to be successful launching projects to improve and develop environmentally sound technologies for the enterprises involved.

Advisory services and public participation - A model for integrated environmental and public health advisory services at the local level are the advisory centre for environmental medicine operated by the Institute for Environmental Medicine in Vienna.

Energy auditing services and agencies at the level of the Länder offer advice all over Austria in the fields of energy and environment to private organizations (housing companies, building societies, consultants, architects, suppliers, etc.).

Status: Austria recognizes that it is one of the world's richest countries and, remembering the misery brought about by past world wars, it accepts its responsibility in regard to hunger and poverty. However, anxiety is also growing about increasing impoverishment at the domestic level, especially affecting socially underprivileged groups. Some social security benefits require certain minimum periods of employment under the social insurance scheme, which is difficult to obtain for some groups of persons, e.g. mothers with many children, women in agriculture and handicapped persons. The poverty rate in 1998 was 11.1% of the total population, of which 58 % were women.

The experience gained from activities in Austria summarised in the publication "Implementing the Habitat Process in Austria" prepared for Istanbul + 5 in New York 2001 highlights key areas where intensified efforts will be required in the future, e.g.: stronger focus on networked approaches to regional and settlements development; Increased public participation and an efficient cooperation of local authorities with the citizens to ensure the basis of joint actions; stronger support of smaller and small communities in which the know-how for implementing Habitat Agenda and LA 21 processes has to be provided from out-side due to inadequate human and financial resources; and, increased involvement in developing technologies for a future oriented, sustainable settlements development. This task has been tackled in Austria with a view to the international level.

By January 1, 1998, 133 suspected contaminated sites had been registered as proven contaminated sites in the inventory, 43 proven contaminated sites are being secured or remedied and 11 proven contaminated sites had been registered in the inventory as "secured" or "remedied".

In 2002, bio-energy accounts for 11.1%, ambient heat (i.e. solar energy, heat pumps, geothermal energy) for 0.8% and hydro power for 11.3% of the primary energy supply of Austria. By 2008 4% of electricity in the grid has to be produced from "new renewable" sources (i.e. wind, biomass, biogas, solar, geothermal energy). In 2002, this share amounted to approximately 1,2%.

Energy related activities cause 89 per cent of CO₂ emissions (transport contributes less than one third and space heating one fifth of total CO₂ emissions, energy industry about one fifth), 97 per cent of NO_x emissions (more than half of total NO_x emissions by transport, about 1/5 by space heating), 89 per cent of SO₂ emissions (less than one third of total emissions by space heating) and about 45 per cent of anthrop. NMVOC emissions. (Sector assignment according to IPCC inventory reporting format.) Requiring the most immediate attention is the transport sector (with a share of 15%) followed by the residential sector (with a share of 26%) in the NMVOC emissions.

Information: Examples for the most important guides and information media on national level are as follows: A comprehensive database to document national programmes and projects devoted to a sustainable regional and settlements development and organised in the framework of activities to implement the "National Environment Plan"; A "Guide to the Implementation of the Habitat Agenda and the Local Agenda 21 in Austria" providing information concerning the goals, concepts and strategies of the Habitat Agenda and the Local Agenda 21 to promoters of regional and settlements development at the municipal level: civil servants, politicians, representatives of NGOs, interested citizens; and the "Austrian Strategy for Sustainable Development" offering information on goals, focus and measures in relation to national sustainable development. In October 2003 the "Joint Declaration on Local Agenda 21 in Austria" as well as the "Implementation of the Common Action Plan on Local Agenda 21" were adopted accordingly by the Conference of the Environmental Spokespersons of the Federal Provinces. Parts of this Action Plan were the "1. Austrian LA21-Summit" in October 2003, an innovation prize, development of a newsletter, training of LA21 Process Assistants, as well as co-ordination of sustainability-relevant training options between the Federal Provinces, Quality Assurance (self evaluation and indicators). In order to support the transfer of know-how, at www.nachhaltigkeit.at an interactive section for LA 21 was established. More than one hundred representative good-practice examples can be found at the "Nachhaltigkeitsdatenbank (www.municipia.at, English version).

A "Good Practice Manual" that offers a compilation of model projects implemented in the past or in the process of being realized has been developed in order to illustrate solutions in specific problem areas. This Manual has been designed to provide additional guidance for the practical implementation of the LA 21 process in Austria; and, a follow-up documentation of the Habitat Agenda and LA 21 processes recording the experience gained in implementing the ideas competition on pilot projects on sustainable settlements development organised by the Ministry of Agriculture, Forestry, Environment and Water Management in accordance with the provisions of the Habitat Agenda and the Local Agenda 21. This publication offers a selection of those elements, which are considered to be of international interest.

Monitoring and Evaluation: Major initiatives have been undertaken, in particular, by the provincial capitals and the Association of Cities and Towns to develop previously unavailable communication channels among the organisational units of local authorities, among different local authorities, and between local authorities and all other bodies promoting sustainable urban development (chambers, social partners, interest groups, institutes, NGOs, active citizens). The "environment data catalogue" to be kept since January 1, 1995, under the Environment Information Act, by the Federal Ministry of Agriculture, Forestry, Environment and Water Management was paralleled on the local level by the development of comprehensive information systems. More recently, the flow of information among local authorities and administrative units at the provincial and federal levels has been supported by a newly developed service provided by the Association of Cities and Towns under the name "Local authorities on the Internet". By undertaking this initiative, the Austrian Association of Cities and Towns has been one of the first associations in Europe to present information relevant to local authorities in summarised form on the Internet.

For the digital capture of these soil data a GIS– based soil information system was installed. A three years programme to convert geometric and attribute data to a digital form has already been started.

Energy related information is disseminated either manually or electronically in form of booklets, brochures (studies) etc. by responsible federal ministries, provincial governments, agencies, private organizations and academic institutions. Information, which is available to the public, is mostly free of charge. In reaction to the White Paper referring to renewable sources of energy, the Federal Ministries of Economic Affairs and Labor and of Agriculture, Forestry, Environment and Water Management commissioned a study “Strategies for further promoting renewable energy in Austria with special respect to the EU-White Paper on renewable sources of energy and the Campaign for Take-off”, which was finalized in July 2001. The Austrian Federal Government publishes Energy Reports containing reviews of energy supply and energy policy including strategies and measures. As mentioned earlier in the text, the “Energy Report 2003” will be adopted by the Council of Ministers in spring of 2004.

Emission inventory data and up-to-date air quality data are presented on the web site of the Austrian Federal Environment Agency (<http://www.umweltbundesamt.at>). General information about air quality and climate change is published periodically (e. g. Report on ground level ozone, national communications to the UNFCCC) and is available in printed form as well as on the web (<http://www.lebensministerium.at>). Reports on special topics regarding air quality are published by the Federal Environment Agency. Information on climate change is compiled/distributed by the Austrian Council on Climate Change (<http://www.accc.gv.at>) and the climate change node of the Austrian Network Environmental Research (<http://nuf.boku.ac.at/cc.htm>).

A systematic mapping of soil under agricultural use is carried out in Austria since 1958. Up to now, almost 98% of the area to be mapped is already surveyed in the field. Soil survey is done from both a pedagogical and an agricultural point of view. It also considers geological, geomorphologic and climatically conditions. Out of 220 districts, 150 districts have been published as soil maps 1: 25 000 and further 50 districts as manuscript maps 1: 25 000; 15 districts remain for editorial work and 5 for field survey. For the digital capture of these soil data a GIS – based soil information system was installed. A three years programme to convert geometric and attribute data to a digital form has already been started. Further on, available soil information is completed by a large set of data referring to distinct sampling points. Most of these points are arranged in grids of different densities, covering almost all the country.

Research and Technologies: Technological capacity in integrated planning and management of land resources has been strengthened. Further measures to strengthen education and training in this field are being planned.

In the framework of five-year research programs for environmentally sound transport (vehicle technology, integrated logistics concepts, improvement of public transport) and for sustainable economy (e.g. sustainable buildings, renewable raw materials, regional-scale economy) support for development and pilot-projects is granted.

The Federal Ministry for Transport, Innovation and Technology has come up with a comprehensive R&D strategy which comprises following elements: Guidelines to an intelligent mobility: Creating and implementing together with Europe an intelligent transport system: Research and technology policy supports the development of innovative transport solutions for the whole of Europe. The strategic orientation of the BMVIT's research and technology policy is targeted to support Austria's companies in an ever-increasing global competition; Developing intelligent transport technologies in Austria: Innovative technologies make intelligent transport solutions possible and support innovation processes within the local enterprises; Intelligent transport systems with and for the people: The application of new technologies assures a higher quality of life and competitiveness; and, securing mobility together: Establishment of network and communication platforms renders information exchange between the main players in the entire innovation system. It stimulates cooperation between science, economy, politics and customers.

“Move” which stands for mobility and transport technologies is a technology stimulation program running for several years and designed and financed by the BMVIT. It supports the development of an efficient and innovative transport system, which is key for securing the mobility needs of the individuals as well as of the economy. A central aspect of TAKE ÖV, which is part of the MOVE-Programm, is the development of customer-tailored telematic applications as a predominant key to increase the attractiveness of public transport. A close cooperation between technology and system providers, public transport services and customers triggers innovation and development.

Transport and its impact on human beings and the environment is considered to be one of the biggest challenges of today. Research and development in the field of new propulsion systems (e.g. fuel cell), and innovative vehicle design have the potential to reduce emissions of transport considerable. Computer based simulation programmes for engine and vehicle design, new light materials and intelligently designed system components for cutting vehicle weight are regarded as the most promising technology areas. In the field of noise which affects around 20 percent of the Union's population, this program is based on results of the former „low noise road/train“ abatement program of the Ministry. Basic research in the field of sustainable mobility is primarily aimed at understanding the socio-economic principles of a customer-oriented sustainable transport system. Furthermore this focal area supports the Ministry for Transport, Innovation and Technology to keep abreast of the most recent developments in the field of science and basic research. In that context the areas of future transport needs, mobility management and innovative mobility systems are considered of utmost importance. Besides the technological and organizational aspects of an innovative transport system emphasis is put on needs assessment and customer involvement. Since transport is a derived demand the influence of economic, social, ecological and technological aspects on future transport requirements as well as mobility patterns will be analyzed thoroughly. The outcome should serve as a sound bases for designing a customer-oriented mobility system without jeopardizing health, safety and environment.

Financing: Public funding, partly coupled to energy efficiency and related parameters, is granted also for the construction of residential housing.

The Ministry of Agriculture, Forestry, Environment and Water Management co-finances environmentally sound projects for EU-subsidized regional and settlement development with pre-eminent reference to the settlement areas like EU Objective 1, EU Objective 2 and URBAN.

On the transportation side, several fiscal reforms were conducted aiming at making individual motorized transport more environmentally sustainable. Outstanding in this context is the introduction of a motor toll sticker obligatory for all vehicles using Austria's highway system as well as an electronic ecopoint system for transit traffic.

Austria has introduced energy and emission-related taxes including a mineral oil tax, a car registration tax and a motor vehicle tax as well as an energy tax on natural gas and electricity which was introduced in 1996; the tax level for electricity was increased in 2000. Taxation on energy products exists for electricity, natural gas, petrol, diesel and fuel oil (part of the revenues earmarked for environmental and energy-saving measures and funding of public transport). In the beginning of 2004, a taxation on hard coal (0.05 €/kg) was introduced. The recent tax rates on natural gas are 0.0436 €/m³ and on electricity 0.0150 €/kWh. Due to economic reasons, both taxes apply to enterprises that produce corporeal goods only to the extent of 0.35% of value added.

The motor vehicle tax increases with engine power, surcharge for cars without catalytic converter. The fuel consumption levy applies to newly registered passenger cars and depends on the standard fuel consumption of the vehicle. A general road use duty exists for heavy-duty truck. In June 2000 the tax rate

of the annual vehicle tax on vehicles up to 3.5 ton total weight was increased by more than 50%. With the beginning of 2001 the annual vehicle tax on vehicles above 3.5 ton total weight (trucks, lorries, etc.) was increased by approx. 50% in the average too. This increase is limited until the introduction of user fees for trucks and lorries on Austrian highways and then will be reduced to the old level again. In June 1996 the calculation of the fuel consumption tax was changed from the ECE-based method to the EU-harmonized motor vehicle environment group method. This has led to an average increase of the resulting measured fuel consumption and therefore to an increase of the tax rate. Concurrently, the ceiling rate of the tax was raised from 14% to 16%. The deposition and export of waste materials are taxed. Tax rates depend on the type of waste. From 1997 onwards, tax rates have been gradually yet significantly increased and will continue to be stepped up until 2001. A further increment to the tax rate is imposed if the waste depot does not comply with a higher level of technical standards.

Cooperation: Within the limited scope of action at the federal government level, the Ministry of Agriculture, Forestry, Environment and Water Management has supported the Habitat Agenda and LA 21 processes on EU- and international level with numerous activities of international meetings (congresses, workshops) to related subjects like: “Encouraging local initiatives towards sustainable consumption patterns” a joint activity with ECE, “International conference on environmental aspects of the health of traffic” a joint activity with WHO, International days for sustainable Urban Transport joint activity with OECD Conference on „Environmental Balance of Transport ending with the drafting of a “Ministerial Charta” and a “Data Handbook for Environmental Balance of Transport in Austria” etc. The international involvement in developing technologies for sustainable settlement development has increased, especially by the agreement of the City of Vienna and Habitat-Nairobi mentioned above.

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