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REGIONAL DEVELOPMENT OF EASTERN AUSTRIAN COUNTRIES

- Field Study of Spatial Planning Students -

April, 2004

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PREFACE

At the moment Europe is in the midst of a profound debate about our vision of the future. Jeremy Rifkin, has written a book about Europe and the new 'European dream', which has become "a giant freewheeling experimental laboratory for rethinking the human condition and reconfiguring human institutions in the global era." This European dream is very ambitious and we can see a new set of values emerging which are focused on sustainable development, enjoy a good quality of life in the here and now, universal human rights and the rights of nature over property rights and most of all to create a sustainable world of peace in the near or not too distant future. A new generation of Europeans carries these ideas with it. The Institute of Spatial Planning at the Faculty of Geography of the University of Belgrade was organizing a field study for the students of the fifth grade, about endogenous regional development in 2004 and 2005 to Austria. The Centre for Environmental Studies and Nature Conservation at the University of Natural Resources and Applied Life Sciences in Vienna was preparing a series of working meetings with representatives of regional and local government of the provinces of Vienna, Lower Austria and the Burgenland, institutions responsible for regional spatial and urban planning and agencies involved with the regional development.

In the context of one key objective of our university '**BOKU goes EAST**', we are trying to intensify international cooperation and promoting a higher degree of territorial integration with the countries in the Danube region and South Eastern space of Europe. A new institution the 'Academia Danubiana' was established, which is fostering a scientific and educational network within various disciplines and paradigms in planning and natural sciences. The aim of this association is about the working out of visionary research concepts, supporting new didactical models for seminars and excursions, and to promote mutual learning within a dialogue between the political administrative system and the universities.

The main **goal** of this study tour was, to make the acquaintance of economic, social and ecological projects, mainly in former problematic border regions in the Retzer Land in the Weinviertel of Lower Austria and the region of Fertö-Neusiedlersee along the Hungarian border. Thereby we could show different approaches and solutions about extraordinary innovative political concepts, which increases life quality and local working conditions in harmony with natural conditions.

The key **objective** of responsible land use concepts and regional development projects is the preservation of the cultural, natural and economic diversity and the multi-functionality of soil, the landscape and its ecosystems. In Austria we can refer to a wide range of innovative projects for sustainable development and integrated land utilization at the regional and communal level. Within the scope of the Regional Agenda 21 pilot communities we could visit a few innovative examples with a multitude of dedicated activities. You can also find a representative of good practice-samples in the "Nachhaltigkeits-TATENbank" (www.municipia.at/taten)

The Steinbach Way" presents an example of Best Practice for one of the most successful implementations of the 'Local Agenda 21' in Austria. The community has been exceptionally creative in overcoming a major social and structural crisis by implementing its ecologically and socially oriented concept. Today Steinbach is a place of prosperity and wealth, where encouraged citizens are continuously participating for the responsibility of their community.

In **Obermarkersdorf** next to the Czech border, in the 80's the village renewal strategy was regeneration, just to repair and making a renewal of the living tissue. They were starting already 20 years ago to establish a project with renewable energy systems, a village renewal program and

tourism project with new concepts for wine marketing. The village of Obermarkersdorf was awarded with the European Environmental price in 1998 www.deo.at .

By the extension of the European Union, regions in previous peripheral locations now move more in the centre of Europe. Therefore, trans-national co-operation becomes a key question for the future. The "Trans-national Impulse Centres" (GIZ'es) in **Retz** are a showpiece project of European border regions and are concerned to overcome the borders frequently still existing in the heads of some people. <http://www.gizretz.at/>

Our second main effort was to get acquainted with one of the fastest growing regions in Central Europe. As it is mentioned in the OECD Territorial Reviews Vienna-Bratislava (Paris 2003) there is a big challenge to design regional development strategies and to strive the potential to build a 'learning region'. Dr. Kurt Puchinger who is elaborating in his company 'Regional Consulting', local planning and regional projects was explaining the mutual **regional development strategy** for the region Vienna – Bratislava – Győr, called JORDES+. This is a document, which is describing the procedure for the regional corporation at all levels of the region and finding advantages for further development. <http://www.regcon.co.at/>

On the local level we were visiting **Neusiedl am See**. This is a small town in the 'green middle' of three countries, Austria-Hungary-Slovakia, with a fast and high increase of population, as well as therewith going expansion of commune territory and increase of traffic capacity. One of the objectives of the masterplan is the development and sanitation of the lake-area. The junction offers the increase of continuity and connections between the lake and the national park, and the commune Neusiedl am See, which provides an optimal stability between an intact ecosystem and the settlement area. <http://www.neusiedlamsee.at/>

Within a Socrates Erasmus Intensive program "**IP Soil**", we could demonstrate, how graduate students and Ph.D. students from seven Danube countries (DE, AT, HU, SK, YU, BG, SI) and also representatives of science and political administration are working in Neusiedl am See within the next two years on a project called "Responsible use of soil, land use and regional development". The aims of this educational and research project are to co-operate in the development of measures against uncontrolled sealing and damage of soil and land. For realizing the expected goals, a process will be initiated as an innovative beginning, which the students can transfer in their region as a result of the IP. Because learning, 'how to shape' the future character of their community or environment is an important task. In cooperation with the JORDES+ project, the local community as a 'learning region' will be characterized by a shared vision for perspectives of the future and creating new qualities of team learning for developing concepts of responsible land use. The results of the first phase of this project were already presented within our first publication and can be seen and downloaded on our website: www.academia-danubiana.net

We believe that the offered programme of intensive working meetings enables an excellent insight into innovative regional development practices of the provinces of Lower Austria, Burgenland and Vienna, the cross-border cooperation aspects included and therefore might present valuable information to the students and researchers for the completion of commenced activities at the referred scientific projects. We were enjoying very much the deep interest about endogenous regional development problems from the students of Belgrade and hope very much for continuing this kind of learning in the future. Furthermore, we would like to intensify the already initiated institutional cooperation and open new perspectives for contingent mutual projects in the domain of spatial planning and regional development and support the outlooks to improve the integration of Serbia and Southeast Europe into the European Union.

Introductory remarks

It was lucky moment to meet Prof. Werner Kvarda from BOKU in Vienna, and make good, friendly connection with him. It was not so difficult having in mind our common loves: nature, music and students. Now, after the practical teaching and visiting Lower Austria, City of Vienna and Burgenland in April 2004, I am sure that our connection will be even stronger. When I say “we” I think all of us, two professors, five assistants and above all, 19 students from the Faculty of Geography- Department for Spatial Planning at the Belgrade University. Prof. Kvarda and me spent two or three days discussing the program for the group of students from Belgrade, but Prof. Kvarda was the one who elaborated it and who practically organized everything, contacting several mayors in Austria, a bunch of experts and students and even hotel owners in Pulkau and Neusiedl am See. Thanking him for this, on our side we organized a group of 19 students with 5 assistants and also divided their practical scope in five major topics of interest: (a) planning and spatial development practice in Austria, (b) regional development and cross-border issues, (c) tourism and rural development, (d) cultural heritage and architecture, (e) nature, protection and management.

The practical work was great opportunity for students from Belgrade to catch the basic ideas and their implementation within less developed parts of Austria and to complete it also with a short visit and lecture at the Faculty of Geography- Department of Spatial Planning at the Vienna University, thank to Prof. Heinz Fassmann and his colleagues there.

The crucial impression is wonderful hospitality of people, experts and officials all around the 8-day tour in Austria. It helped our students to better understand the meaning of integrating and better developing Europe based on knowledge, positive behaviour and hard work to make the new environment, where spatial planning could have an important role and meaning, for young people especially.

VIVAT ACADEMIA! VIVAT IUVENTUTEM!

Prof. Dr. Borislav Stojkov

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1. AUSTRIA BASIC INFORMATION:

Area: 83.858km²

Population: 8.150.836

Population density: 97

Land boundaries: total: 2.562km

Border countries: Czech Republic 362 km, Germany 784 km, Hungary 366 km, Italy 430 km, Liechtenstein 35 km, Slovakia 91 km, Slovenia 330 km, Switzerland 164 km

Coastline: 0 km (landlocked)



Climate: temperate; continental, cloudy; cold winters with frequent rain in lowlands and snow in mountains; cool summers with occasional showers

Terrain: in the west and south mostly mountains (Alps); along the eastern and northern margins mostly flat or gently sloping

Elevation extremes:

lowest point: Neusiedler See 115 m

highest point: Grossglockner 3,798 m

Natural resources: iron ore, oil, timber, magnetite, coal, lignite, copper, hydropower

Land use:

arable land: 17%

permanent crops: 1%

permanent pastures: 23%

forests and woodland: 39%

Other: 20% (1996 est.)

Irrigated land: 40km² (1993 est.)

Environment - current issues: some forest degradation caused by air and soil pollution; soil pollution results from the use of agricultural chemicals; air pollution results from emissions by coal- and oil-fired power stations and industrial plants and from trucks transiting Austria between northern and southern Europe

Geography - note: landlocked; strategic location at the crossroads of central Europe with many easily traversable Alpine passes and valleys; major river is the Danube; population is concentrated on eastern lowlands because of steep slopes, poor soils, and low temperatures elsewhere.

2. Agents, levels and instruments of spatial planning in Austria

Austria is a federal country partitioned into nine federal provinces ('Bundesland'), which are in turn split into provincial districts ('Bezirk'), which again consist of municipalities ('Gemeinde'). Austria has a distinct federalist structure in the fields of regional policy and spatial planning. In concrete terms: power is shared between the three tiers of government: federal government, provincial government and local authorities.



Administrative division of Austria into provinces

Federal government may issue sectoral regulations for spatial planning in areas that come within the responsibility of the national government according to Austria's constitution, but it does not have the constitutional legitimacy necessary for sovereign spatial planning on the national level. ÖROK - Österreichische Raumordnungskonferenz / The Austrian Spatial Planning Conference (ASPC) is the only spatial planning institution at the national level. The ASPC was founded in 1971 due to the fact that there was no authority for national spatial planning and its co-ordination. It is under the chairmanship of the Federal Chancellor. The members of federal and provincial governments and the confederations of towns and municipalities all work together in the ASPC and the economic and social partners are consulted on a regular basis. The ASPC is thus an advisory body for all tiers of government, which can make recommendations to its members. However, it cannot issue any decrees or guidelines. The ASPC also co-ordinates the drawing up of the 'Austrian Spatial Planning Concept' (ASP)¹, which takes place every ten years. In the ASP, aims and principles for national spatial planning and regional economic development are laid down. These aims and principles are also merely

¹ The last ASP 2001 was published in September 2002.

recommendations and are not mandatory. Based on this concept, embedded in projects there are ongoing studies and research on spatial development policy in Austria which are issued in a special [publication series](#). A few of ÖROK's products are periodical reports on the spatially relevant activities of the federation, provinces and municipalities ("[Report on Spatial Planning](#)") [ÖROK recommendations](#), and [ÖROK Atlas](#) on spatial development in Austria

To comply with ÖROK's tasks there are a Commission of Deputies as well as several committees and working groups set up at administrative level. They are formed by Senior Officials of territorial authorities and Social and Economic Partners.

The nine Austrian provinces (Burgenland, Carinthia, Lower Austria, Upper Austria, Salzburg, Styria, Tyrol, Vorarlberg and Vienna) have a very strong position within this system. This is because only the provinces can pass legislation for spatial planning laws. Thus, in Austria there are nine different spatial planning acts (Table 1).

Table 1: Spatial planning acts of the Austrian provinces

| | |
|-------------------------------------|-------------------------------------|
| Bürgerländisches Raumplanungsgesetz | Spatial planning act of Burgenland |
| Kärntner Raumordnungsgesetz | Carinthian spatial planning act |
| NÖ Raumordnungsgesetz | Lower Austrian spatial planning act |
| OÖ Raumordnungsgesetz | Upper Austrian spatial planning act |
| Salzburger Raumordnungsgesetz | Spatial planning act of Salzburg |
| Steiermärkisches Raumordnungsgesetz | Styrian spatial planning act |
| Tiroler Raumordnungsgesetz | Tyrolean spatial planning act |
| Raumplanungsgesetz (Vorarlberg) | Spatial planning act Vorarlberg |
| Bauordnung für Wien | Viennese building code ² |

Source: 9th Brief Report on Spatial Planning

The provinces are also in overall charge of the fields of regional planning and regional economic development. It should be emphasized that in Austria the word "region" is used to denote "areas" of a province with a common cultural and economic identity. These Austrian regions are not represented by any administrative bodies and do not have a common administration. In terms of the EU's concept of "national - regional - local", the Austrian "regional" corresponds best to the European "local."

Likewise, local authorities are in a relatively strong position with regard to their development policy. The constitution grants them the right to oversee local spatial planning independently (within the framework of the province's spatial planning laws and under the provincial government's control). In addition, as independent economic bodies, they can act freely. As a result of this they have considerable freedom for a self-defined policy with regard to their spatial and economic development.

² Vienna's Act is called different, because it is both province and municipality

Table 2: Agents, levels and instruments of spatial planning in Austria

| Agents | Levels and <i>instruments</i> of spatial planning | | | |
|--|---|---|--------|--------------|
| | Republic | Federal state | Region | Municipality |
| National Council | Legislation on all matters falling into federal competence according to the Federal Constitution (e. g. forestry, water engineering, national roads). | | | |
| Federal Government | Execution of spatial planning measures concerning matters of federal competence. | | | |
| State government municipalities, "Sozialpartner" | Austrian Conference on Regional Planning (ÖROK): Co-ordination of spatial planning measures at all planning levels ÖROK has only advisory functions. | | | |
| State parliaments | | <i>Laws on spatial planning</i> | | |
| State governments | | State planning, regional planning for superordinate planning regions, supervisory authority for subordinate planning levels. <i>State Development Programme</i> <i>Sectoral development plans</i> | | |
| Regional spatial planning assoc. | | <i>Regional development plans</i> | | |
| Municipal councils | | <i>Local planning</i> <i>REK, FWP and BPL</i> | | |

Agents, levels and instruments of spatial planning in Austria
with special reference of the Federal State of Styria

Generally speaking, the Austrian system of spatial planning is characterized by a strict hierarchy of binding laws and decrees. The Spatial Planning Acts define all the provisions, procedures and instruments that have to be employed at all three planning

levels. The instruments of spatial planning are the *provincial spatial planning programme* and the *regional spatial planning programme* (every Austrian province is subdivided in regions/districts, e.g. there are 16 regions in Styria, its capital Graz has a special constitution as a municipality). Beside the spatial planning programme for the province and their regions it is mandatory to set up or revise sectoral development programmes (e.g. for waste management, forestry, air quality) for the province and for the regions.

There is no legally binding national co-ordination in the field of regional assistance in Austria. Instead, there are a variety of actors on the national, provincial and local authority levels. The ASPC and the Department for Spatial Planning and Regional Policy in the Federal Chancellery have a certain amount of coordinating authority to promote integrated and sustained development. Aid programmes for innovative regional economic development are run by different federal ministries as well as by specialist departments of provincial governments. In many cases these assistance programmes are geared towards specific sectors (trade, tourism, agriculture, infrastructure, and so on). They only form the basis for integrated regional economic development when taken together as a whole.

On the provincial level, regional economic development is supported by economic development agencies owned by the provinces. These institutions are not officially part of the provincial administration. They are primarily responsible for developing innovation in companies.

On the regional level, 'regional managements' help to put the goal of innovative economic development into practice. These 'regional managements' act in the provinces - that is, on site - as experts for integrated regional development and are contact points for local authorities, companies and project co-ordinators. Their tasks range from strategy development and advice on funding programmes, guidance on development and execution of key regional projects to the coordination of the EU Structural Funds programmes.

The main task of Regional spatial planning associations is to resolve the problems on the supralocal level. These institutions are under the authority of the municipalities which the region consists of thanks to the principle of subsidiarity. It is their goal to contribute to the solution of supralocal problems. Above all, they are obliged to set up regional development programmes.

At the local level we find the most significant planning instruments. The municipalities (local authorities) are responsible for the three local spatial planning concepts: Here are to name the local development plan, the zoning plan (both for the whole municipality) and the building regulation plan (for a special site and/or project). The spatial development scheme serves as a strategic instrument. It defines the intended development of population and economy, goals for open space and recreation, settlement development, the functional development of building land, traffic development, the organization of the built infrastructure and the infrastructure relating to social, health, culture and economy sectors. According to law, the elaboration of the spatial development scheme also demands public participation and co-operation which is controlled by the supervising authorities. The spatial development scheme serves as basis for the subsequent drawing up of the land-use plan and building regulation plan. The concrete zoning of sites marked

in the land-use plan and the building regulation plan have to be in accordance with the goals put down in the spatial development scheme.

These facts should clearly demonstrate that the municipalities have an extraordinary position because it is at the local and municipal level where the basic decisions on spatial planning such as the zoning of the specific sites take place. The essential agents at this level are the municipal councils consisting of the elected local politicians. They are advised by private-enterprise spatial planners - mostly civil engineers. Here at the local level we find the most significant planning instruments.

In consequence of this special sphere of competence and the high degree of autonomy at the municipal level, most decisions relevant for the particular land-use are within the discretion of the municipal council. The municipal administration and the mayor represent the building and planning authorities of first instance. Looking at this situation from the positive side, we may concede that spatial planning takes place at the lowest level of public administration and thus close to the citizens involved. The other side of the coin, however, shows that the mayor and the municipal council are elected by exactly these citizens (and want to be re-elected, of course). That is why this closeness may also involve implications that frequently produce quite negative effects on the planning process.

The following table presents the different spatial planning instruments in Austria and - as an example for a province - in Styria.

Table 3: Different spatial planning instruments in Styria

| Administrative area | Corresponding spatial planning instruments |
|---|---|
| Republic of Austria (federal level, 9 provinces) | Austrian Spatial Planning Concept |
| | Sectoral regulations from the ministries |
| Province of Styria (right of legislation & execution) | Provincial spatial planning programme |
| | Sectoral development programmes |
| Region/District in Styria (there are 16 regions excl. Graz) | Regional spatial planning programme |
| | Sectoral development programmes |
| Municipality (Community or City) Local Level (there are 543 municipalities within Styria plus the capital Graz) | Local development plan |
| | Local sectoral development programmes |
| | Zoning plan |
| | Building (regulation) plan(s) |

In Styria there exist 543 municipalities plus its capital Graz, that means, every municipality is obliged to set up the plans mentioned. Analogue to the supralocal level it is possible to set up sectoral development programmes for every municipality like a

transport or an energy plan. All plans are valid only for a specific time period and have to be revised regularly, e.g. every five years in case of the zoning plan.

Please note, that the basis for the permission of building projects is according to the Styrian Building Code and not according to the Styrian Spatial Planning Act.

Procedures according to the Styrian Spatial Planning Act

In the following two procedures according to the Styrian Spatial Planning Act will be briefly described, one concerning the supralocal and the other concerning the local level.

Procedure for setting up a Regional Spatial Planning Programme

Step one: Decision of the provincial government to set up/to revise a Regional Spatial Planning Programme (RSPP)

Step two: Federal authorities, regional authorities and communal authorities as well as interest lobbies (e.g. Chamber of Commerce, Chamber of Labour) publish their planning interests

Step three: Spatial planning authority of the provincial government prepares a draft of the RSPP in co-operation with the region/regional authorities concerned

Step four: Federal authorities, regional authorities and communal authorities as well as interest lobbies can comment on the draft

Step five: Spatial planning authority of the provincial government revises the draft of the RSPP in co-operation with the region/regional authorities considering all comments

Step six: Submission of the revised RSPP to the Spatial Planning Committee, opportunity for amendments and/or recommendations

Step seven: Final Decision of the provincial government, adoption of the RSPP

Step eight: Public announcement of the RSPP

Procedure for setting up a Zoning Plan

Step one: Decision of the City Council/Municipality Council to set up/revise a zoning plan

Step two: Everybody/any institution can publish his/her/its planning interests within four months

Step three: Elaboration of the Local Development Plan; parallel participation of the public

Step four: Adoption and announcement of the Local Development Plan

Step five: Drafting the zoning plan

Step six: Opportunity to comment on the draft within a period of eight weeks, the draft is accessible for everyone

Step seven: Taking into account all comments, revising the draft of the zoning plan, informing all actors

Step eight: Decision of the City Council concerning the final zoning plan, information, how comments have been considered

Step nine: Submission to the provincial government, it has to review and to examine the zoning plan, afterwards it will adopt/approve (then announcement is following) or refuse the zoning plan (then back to step 5)

The public participation process is valuable, because opinions from administrative units outside the competent authority and opinions from outside the administrative level (e.g. interest lobbies, NGOs, citizens) enrich the planning process. The involvement of the environmental authority is valuable to incorporate the environmental and ecological interests into the planning process. The implementation of environmental demands into spatial planning reaches back into the Seventies of the last century, when spatial planning became an important topic in Austria. A new degree of environmental consciousness led to Spatial Planning Acts, considering environmental protection and ecological concerns to a considerable and certain extent. Also, as a member of the EU, The "Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment" (OJ, 2001) has to be transposed into the legislation of Austria before 21 July 2004 through laws, regulations and administrative provisions necessary to comply with it.

Who are the agents in the spatial planning process?

Basically speaking, all those people who may exercise some influence on land-use and location decisions participate in this process...or all the subjects (individuals) who are in the position either to decide on location and land-use or who influence such decisions. The system of spatial planning may then be regarded as a subset of "geography-making". It comprises those decisions that are made on the grounds of legal provisions and within the framework of authoritative responsibilities. These decisions aim at the control and steering of processes of everyday regionalization.

3. Spatial planning institutions and subjects

POLITICS: Federal state, political parties, municipalities.

PRIVATE SERVICES: Lawyers, civil engineers, spatial planners, consultants, institutes.

PUBLIC SERVICES: Municipal managers, municipal employees, district governors and officials, spatial planners, managers of spatial planning associations.

REPRESENTATIVES OF INTERESTS: Employers & trade unions Chambers, Organizations of professional groups.

LANDOWNERS: Private owners, farmers, enterprises, companies, joint-stock companies Builders, projectants, Church, etc.

”GROUPS AND PERSONS AFFECTED“: Citizen’s initiatives, NGOs, neighbors.

MASS MEDIA: Journalists, Editors.

The agents most affected are those natural or legal persons who possess rights of ownership or of utilization of land. Above all, those owners are most relevant who want to utilize their land economically as production factor and who intend to realize specific projects which demand specific zoning of building land.

Similar direct impacts on vital interests may be observed on people who are affected in a narrower sense: neighbors, citizens’ initiatives, NGOs. Due to their neighborhood to the project locations they generally anticipate disadvantages either for themselves or for their clients which may arise from the realization of utilization interests. That’s why they might fight these projects.

Official and semi-official interest groups that actually have nothing to do with the planning system strongly join in. The association of industries and trade unions, representatives of employers and employees, chambers and other trade organizations: All these groups articulate their “yeses“ and “noes“ for specific projects. They frequently try to exercise heavy influence on the planning process and demand specific variances of solution. Only too often they are not concerned about issues on location but rather about a specific kind of project.

All three groups mentioned so far ask for professional assistance of private-sector services provided by lawyers specialized in law on spatial planning, building and land-use, by civil engineers and architects, or by private and university experts all of them earning their money with such clients. They then act as legal advisers of these interest groups and have to represent their clients’ interests.

Public administration, too, has a services sector of its own. There are a great number of people involved: Just think of the managers and employees of the municipalities, sectoral government officials, who work as senior or as official planners, district governors and officials of other authorities who are responsible for the procedures of project approval and last not least the managers of the regional planning associations. All these persons concerned fulfill specific duties which - theoretically speaking - should be carried out impartially and should guarantee the execution of legal regulations and provisions in

planning procedures without siding. These agents, who also function as control authorities, should ensure certainty of the law in the field of spatial planning. (We know a very cynical definition of this term: Certainty of the law is when the powerful may be certain to get their right in any case. As an example will demonstrate later on, this definition is only too true). Looking at it more closely, the sphere of "policy" may be divided into most disparate and controversial fields that are characterized by highly diverse interests and that influence each other. The policies pursued by the municipalities, the political parties and by the state - they all may arrive at diametrically opposite views and goals on issues of spatial planning. Finally we must not forget a body of agents, who should actually be mere observers and reporters, yet exercise considerable influence on planning processes: I'm referring to the mass media.

Summing up, all these groups are involved in processes of spatial planning because of specific intentions. We must be aware, however, that there exist numerous mutual interrelations and interactions between these groups. Each of them tries to influence and use the other one for its own purposes.

Primary goals and interests of the agents in spatial planning process

All the groups participating in the spatial planning process have their own goals and interests and none of them is primarily interested in spatial planning. To put it very plainly, private-sector spatial planners basically intend to get the job, follow their profession and earn money. The planners employed as civil servants are primarily occupied with guaranteeing the proper execution of administration and do so by executing the relevant laws and regulations - and make careers into the bargain. The really dynamic actors, who start the process and keep it going, are the land-owners or persons authorized to dispose of the land on the other hand and the politicians on the other hand. The land-owners and pursuers of projects are basically interested in utilizing their resources and in making profits and yield. They consider spatial planning as public control which represents nothing else but one of the opposing forces that aim at hampering the realization of their intentions. The politicians' basic motivation may be seen in keeping and increasing their power. As regards our political system, they need success in elections to achieve these aims. They want to plan, to change the world according to their intentions. Everyday regionalizing, of course, fits into this pattern - it is not the aim, but the means to an end. It is also a source of acquiring money for the budget of the municipality. Interest groups perform lobbying in order to pursue their members' or clients' specific interests. They try to influence the course of the planning process if specific regionalization or location decisions are contrary to the group interests.

In the case of those people who are immediately affected by location decisions, their basic motivation to act lies in justified or unjustified fears of negative effects on the quality of life at their residential and working locations. Only in rare cases do they intervene actively in planning processes in order to demand changes of existing systems of resources. The mass media participate in the process because they want to rise the circulation, to gain economic success or because they represent specific ideological-political position.

The Ninth Spatial Planning Report

As a member of the European Union (EU) since 1995 Austria must articulate more emphatically than ever its spatial development interests at the European level. For its spatial planning policies Austria has to consider, that it is a frontier country, an Alpine country, a landlocked and a transit country. The measures corresponded of Austrian authorities have to take into account relevant influences of European spatial policies. The horizontal development co-operation with neighbour countries has to be intensified according to the enlargement of the EU, effective with 1 May 2004.

The "Ninth Spatial Planning Report" covers the period between the beginning of 1996 and the end of 1998. For the first time, the period covered by the report coincides entirely with Austria's membership to the EU. Therefore, the focus of activities in the three years reviewed was the work of implementing current EU policies. EU regional programmes are carried out jointly by the European Commission, the federal government and the provinces. The structures required for implementing and accompanying these programmes were established and the framework and applications necessary for monitoring their progress set up.

Sections of the 9th Spatial Planning Report deal with legal framework for spatial planning in Austria. They also provide an overview of current development trends in Austria based on selected data and the report on the status of spatial planning and regional policy in Austria and their development regarding the federal, province and municipal authorities as well as the social partners. Special attention has been given to the implementation, the monitoring and the evaluation of regional development achieved with EU assistance within the scope of regional target programmes and Community initiatives relating to Austria. Planning and measures with spatial impact are explained according to the classification system used in the Austrian Regional Planning Concept. Regional aspects of financial assistance to the economy, the strategic reorientation of innovation and technology policies and the diverse sets of labor market policy instruments used to cope with the growing problems on the labor market were also analyzed. The masterplan is the foundation and the first phase of Austria's federal transportation network plan. The "Transeuropean Networks" (TEN) and the "Paneuropean Corridors" are very important programmes for the planning of the future expansion of transportation routes in Austria. The creation of specialized colleges of higher education in Austria has also greatly improved the regional access to higher education.

Activities of the Provinces in the areas of spatial studies, spatial planning and regional planning were described in different sections. They also give a brief overview followed by a description of the legal framework for spatial planning at the Province level, a report on fundamental research, the status of supra-regional and local spatial planning as well as on selected topics relevant to spatial planning (for example, the regional sectoral development plans and the regional development schemes, cross-border road traffic, the urban renewal, building regulations). The implementation of EU regional policy is also dealt with in greater detail (for example, the section that refers to Vienna Province, deals in particular with the EU URBAN program). "Brief Report" is giving the information on

the activities of cities and municipalities. Important projects and developments in the Provinces capitals of Bregenz, Eisenstadt, Graz, Innsbruck, Klagenfurt, Linz, Salzburg and Sankt Pölten as well as the cities of Krems an der Donau, Villach and Wiener Neustadt. There is also a section on the forms of international and national cross-border cooperation in the area of spatial planning. A description is given of both Austria's collaboration in international and multinational organizations and bodies, as well as on cross-border cooperation agreements. These have gained significance since Austria joined the EU, because now they also include operational issues. The section also provides an overview of internal Austria cooperation agreements between the federal government and the Provinces as well as between Provinces. The last section reports on the organization and the working procedures at ÖROK and on its activities. The focus is on the implementation of EU regional policies (interim evaluation of EU programmes, EU eastward enlargement); reports on EU spatial development policies and studies on current issues of spatial planning in Austria (settlement, spatial development, forecasts, traffic). A special task was the evaluation of the Austrian Regional Planning Concept of 1991, which also contains recommendations for the next spatial planning concept to be worked out. An overview is also provided of ÖROK's events, recommendations and publications.

Within the context of European regional and spatial development policies, ÖROK plays an important role as the co-ordinating body between the internal and the European level.

EU Regional Support

In Austria, EU programmes are implemented through existing funding agencies, on a federal (ministries or external funding agencies) and on a provincial level (regional departments or external support agencies, such as, for example, provincial economic development agencies). These institutions are responsible for the EU co-financing for the aid programmes they administer. Budgets made available through the Structural Funds are co-ordinated by the corresponding department: ERDF / Federal Chancellery, ESF / Ministry of Economy and Labour, and EAGGF / Ministry of Agriculture.

In line with EU law, 'accompanying committees' were set up for the individual Structural Funds programmes and Community Initiatives. These committees are co-ordinating bodies based upon the principle of partnership. Members of these committees include representatives from national and provincial departments, the relevant departments of the European Commission, the economic and social partners, as well as members from the associations of towns and municipalities. The ASPC acts as a co-ordinating organisation for all 'accompanying committees'. The drawing up of the regional Structural Funds programmes and the programme for Community Initiatives usually takes place on provincial level. However, if only one national programme is submitted to the Commission, the provinces are always well-integrated into the design process. The 'regional managements' (of which there are about 25) have a key role in putting the Structural Funds programmes into practice. This was important for the timing of their establishment, at the start of the 1995-1999 Structural Funds period.

4. REGIONAL PLANNING IN AUSTRIA

Introduction

During the educational field trip, we have visited three eastern Austrian States: Lower Austria, Vienna and Burgenland. In this supplement we are most interested in architecture and urbanism, even though the theme of the field trip was the protection of natural potentials, regional development and the development of small local communities – Pulkau and Neusiedl am See. Apart from Vienna, the other two states are mostly rural in character and during the Cold War, they were on the outskirts, on the borders with Czechoslovakia and respectively Hungary, This is the reason for their underdevelopment in comparison with other Austrian States. They still have a weak regional identity and unused economic and tourist potential. The shift of political conditions in the neighboring counties, their transition towards a market economy and finally their integration into the European Union, changes the role of not only Vienna in an international context, but also the states of Lower Austria and Burgenland. We had the opportunity to see how regional structures and regional identity are built and advanced, how tourist concepts are created and how rural development is advanced.

Seeing that our focal point is on architecture and urban planning, we are going to shortly describe the tribulations of urban regions, their strategic orientation and relevant policies on space in Austria.

Urban Regions

Urban regions are initiators of development of the Austrian economy. Links to international transport routes represent important factors in locating cities, together with other location factors like qualified labor force and the quality of life. The constant influx of population to suburban areas together with the needs of space of the business sector, increase the pressure of settling in the suburban areas. On the other side, the means of utilizing areas, which are zoned as construction lots are used depending on the offer of the same and the price of real estate. In urban regions, this sometimes leads to problems in space development.

The incoming and out coming migrations of various social groups together with the relocation of various sectors of activity transformed the functions in certain parts of the city.

The expansion of urban regions and increasing spatial separation of individual functions together with increased demands of standard, produce higher pressure on transport. Demands of higher mobility are met with individual transport. This, in turn, creates pressure on the environment.

Strategic Orientation

The goals of polycentric development as defined in European perspectives of spatial development are applied in Austria. Taking into consideration the specific Austrian

circumstances, meaning that all the important urban regions should develop without threatening the position of Vienna as an international center.

Spatial development within urban regions depends on the model of concentrated decentralization, which relates to the core of the city and suburban belts. The public sector should be an active support in obtaining land. The supply of city space for the business sector calls for harmonization with public transport and development of location factors.

Urban regions should be defined as priority for public transport. The planning of settlements should be coordinated with the existing and planned infrastructure and vice versa. Green and open spaces should be preserved, especially in the center of the city, in order to maintain a quality of life in urban regions.

The Implementation of the Policy of Spatial Relevance

In order to make and preserve the core of the city attractive, the elements of urban renewal (renewal of apartments and apartment buildings, environment, infrastructure...), must be consecutively applied and developed in coordination with just formed changes. To ensure coordinated populating of suburbia, active application of spatial planning is needed. It is very important for a region to ensure the defining of boundaries of settlements, conservation of green and recreational spaces and restraining further settling with a wide variety of procedures. This means effective management of space, control over public expenditures, development and improvement of transport and effective and democratic administrative procedures which would all together ensure a certain quality of housing and possibility of recreation for the whole urban region. For these procedures to be efficient as a whole, partnerships and cooperative relations within and in between municipalities of the urban region, as well as on the state and national level, are needed.

Development strategy for Austria until the year 2010.

One of the most important principle of “Austrian strategy of sustainable development”, is the demand for increased eco-efficiency (increase in economical success and at the same time reduction in consumption of raw materials and energy) and promotion of renewable energy resources, among which the use of solar and biomass power sources (wastes from agricultural production and forestry) are most insisted on. Austria is one of the leading countries in Europe regarding the use of renewable sources of energy and, according with the strategy of European union to increase the share of renewable energy source from 6% to 12% in total energy supply , the goal is the increase of this share from 70% to 78% by the year 2010.

Further Austrian economy strategy is planning higher degree of “Cleaner production” use and economy less resource-intensive. It is expected that less resource based production and energy production, orientation on regional and local renewable raw materials and energy sources will enhance the competitiveness of Austria and reduce it’s dependence on imports. For example, it is suggested that waste from one company can be used as a

raw material by another company, thermal treatment plants for residual waste should be promoted etc.

In Austria the level of economic prosperity and environmental consciousness has enabled them to invest in well-being of the whole community and look beyond subjective and individual profits and goals.

This kind of decision making, priorities set in this manner and investment politics from the part of the Austrian government, as the center of social power and finance, represents an exemplar of dependable leadership which takes responsibility for it's citizens, citizens of every nation now and in the future.

Defining the Region (parallels and differences in regionalization of Austria & SCG)

Region as a conception, which is in our country administratively formulated as a county (okrug), in Austrian administrative system has very different way defining it, with much more complex, but at the same time flexible and scientific basis found.



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Regional plans are defining the land for construction, the land where construction is forbidden, traffic space, and special areas. Local governments are organizing local planning of land use according to the regional planning. Region as an administrative unit, is not so strictly determine as it is case with counties (okruzi) in our country, which have borders a strict area, which cannot be changed easily. They are artificial regions, with very strict administrative formulation and nonfunctional in spate.

Regionalization, which was conducted in Serbia during the mid '90 by making administrative regions (okruzi), did not give expected results. Instead of faster and better regional development counties (okruzi) was breaking already established regional connections and matrix, which was functioning independent of any bureaucratic and administrative organization.

For the example, we can use Severnobačanski County (okrug), which was not formed on the basis of detail economic and other scientific studies of cooperation of municipalities forming it. It was formed of six municipalities, three of them are in Bačka (Kanjiža, Senta, Ada), and another three are in Banat (Novi Kneževac, Čoka, Kikinda). Between Banat and Bačka, we have natural border river Tisa. The three municipalities in Bačka have always been oriented and gravitated to the nearest and the biggest regional center, city of Subotica, but Novi Kneževac and Čoka was oriented to Subotica and Kikinda.

Undeveloped, most of the time border and periphery regions, have not showed any degree of economical development if we compare them with macro regional centers. The quality of life remain at the same level and instead of development they showed retrograde process of development, decreasing life standard which is more obvious than in regions which are closer to macro regional centre, migration of population capable to work and very obvious depopulation trend.



Austrian region is formulated and regulated on completely other basis, as it was the case in our country. Spatially, their regions are much smaller, lots of time they have cross border character. They are based on market economy, cultural cooperation, ecological dimension, and interpersonal connections, which are integrating, him in one (Rec-Znojmo, Neusiedler See-Seewinkel...). That is why their regions are having functionalism, mutual strategies (if it is a cross border region) and realistic regional growth and development.

Parallels connected to regional development and regionalization based upon these principals can be found at the beginnings of cross border cooperation in our state on example of Banat's triangle that is a sub region of Euro region DKMT. Banat triangle represents region Szegedin-Kikinda-Timisoara that once established in one state, and a spatial-physical structure is still seen on example of communication links and infrastructure, which speaks for itself. That entire space was once, some hundred years

ago in one state Austro-Hungarian monarchy, which was with its own patterns predisposed development of certain regional centers with their own net of towns and other settlements in a very clear spatial structure. That's how Timisoara was representing regional centre for whole this spate, which would represent very reasonable spatial analogy even nowadays if we wipe the borders and look at the nearness of Kikinda and Szeged and also complementarity's of functions which are they conducting in spate.



On example of Retz-Znojmo and regional cooperation, which conducted there between this Austrian and Czech town, we can see analogy of potential cross border regional development of one part of our country, on what you will get a detail explanation later on in the work. These two cities was once one in same state, than later one during the communism and „iron fence” was literary isolated, not just between themselves, than also by their states. They find themselves in a big economic crisis since the II World War, until the day of opening the borders and today’s complete liberalization of the market where all old connections can be rebuild again.

Analyzing the Austrian example of equal regional development and cross border cooperation, we can see that their example we can conduct in certain parts of our country, which are functionally and morphologically identical spate.

Differences are big, in the way of organizing the space and accessibility of funds. Austria as a member of European Union can get a great deal of funds from structural funds of EU, which allows the state to conduct great deal of projects connected to regional development.

Until EU does not allow accessibility to this structural, funds to undeveloped countries, like ours, Europe will steal represent one big non-harmonized conglomerate of developed and undeveloped regions with constant tendencies that disparities should not disappear.

Regions of Austria

Republic of Austria, member of EU, located in central Europe is one of Danubian states. Main part of country is covered with mountains, witch, from west to east are transforming into lowland. Austria is one of most developed and richest European countries (with GDP above 207 billion Euros, and with NP per capita more than 20000 Euros). In GDP structure, agriculture brings 25%, industry 26% and services about 69%. Austria covers 83 871 km² with more than 8 million people. It is federal State consisting from 9 countries (table 1.)

Table 1. Land use structure in Austria:

| Land use¹⁾ 2003, % | | | | | | |
|--------------------------------------|-------------------------|------------------|-------------|-------------|----------------|---------------------|
| Federal state | Area in km ² | Agricultural use | Forest | Alps | Inshore waters | Other ²⁾ |
| Burgenland | 3 966 | 50.9 | 30.2 | - | 7.2 | 11.7 |
| Carinthia | 9 536 | 20.0 | 52.9 | 15.8 | 1.8 | 9.5 |
| Lower Austria | 19 178 | 50.0 | 39.3 | 0.2 | 1.3 | 9.2 |
| Upper Austria | 11 982 | 48.1 | 38.8 | 0.4 | 2.2 | 10.5 |
| Salzburg | 7 154 | 16.4 | 39.7 | 25.6 | 1.4 | 16.9 |
| Styria | 16 392 | 24.8 | 57.1 | 6.6 | 0.9 | 10.6 |
| Tyrol | 12 648 | 9.8 | 36.8 | 26.9 | 0.9 | 25.6 |
| Vorarlberg | 2 601 | 17.6 | 33.9 | 26.6 | 2.5 | 19.4 |
| Vienna | 415 | 17.0 | 16.5 | - | 4.6 | 61.9 |
| Austria | 83 871 | 31.4 | 43.2 | 10.3 | 1.7 | 13.4 |

1) Land use per usage type according to Kataster of the Federal Office for Metrology and Surveying. - 2) Built-up areas, gardens, vineyards and other areas.

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Administrative-territorial division

Network of territorial units of Austria, beside 9 countries, also consists from 99 political districts, 145 judicial districts, 2359 municipalities and 17364 localities. (table 2.)

Table 2. Administrative division in Austria

| Administrative divisions 2004 | | | | |
|--------------------------------------|---------------------|--------------------|----------------|---------------|
| Federal state | Political districts | Judicial districts | Municipalities | Localities |
| Burgenland | 9 | 7 | 171 | 327 |
| Carinthia | 10 | 11 | 132 | 2 825 |
| Lower Austria | 25 | 32 | 573 | 3 907 |
| Upper Austria | 18 | 32 | 445 | 6 631 |
| Salzburg | 6 | 11 | 119 | 742 |
| Styria | 17 | 21 | 543 | 2 083 |
| Tyrol | 9 | 13 | 279 | 673 |
| Vorarlberg | 4 | 6 | 96 | 153 |
| Vienna | 1 | 12 | 1 | 23 |
| Austria | 99 | 145 | 2 359 | 17 364 |

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Urbanization

Table 3. shows distributions of Austrian population in urban areas, metropolitan area of Vienna City and in rural areas. About 66% of population lives in urban areas, (from witch 27% in Vienna). Although the main tendencies in population growth are negative, positive growth is characteristic of Vienna region as in rural areas too.

Table 3. Urban regions in Austria:

| Main facts about urban regions in Austria | | | | |
|--|------------------|------------------|---------------|------------|
| | Population | | Increase in % | |
| | 1991 | 2001 | 1981-1991 | 1991-2001 |
| Urban areas | 5 128 422 | 5 285 263 | 3.7 | 3.1 |
| Central areas | 4 006 581 | 4 062 649 | 2.3 | 1.4 |
| Outer zones | 1 121 841 | 1 222 614 | 9.1 | 9.0 |
| Of the above: urban area of the Vienna metropolis | | | | |
| | 2 102 488 | 2 165 357 | 2.6 | 3.0 |
| Central area | 1 794 622 | 1 825 287 | 1.6 | 1.7 |
| Outer zone | 307 866 | 340 070 | 9.5 | 10.5 |
| Regions of Austria outside the urban areas | | | | |
| | 2 667 364 | 2 747 663 | 2.1 | 3.0 |
| Austria | 7 795 786 | 8 032 926 | 3.2 | 3.0 |

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Table 4. shows structure of Austrian towns by size (population):

| The 30 largest municipalities in Austria ¹⁾ | | | |
|--|-----------|---------------------------------|--------|
| Vienna (Vienna) | 1 550 123 | Wolfsberg (Carinthia) | 25 301 |
| Graz (Styria) | 226 244 | Klosterneuburg (LA) | 24 797 |
| Linz (UA) | 183 504 | Baden (LA) | 24 502 |
| Salzburg (Salzburg) | 142 662 | Krems an der Donau (LA) | 23 713 |
| Innsbruck (Tyrol) | 113 392 | Traun (UA) | 23 470 |
| Klagenfurt (Carinthia) | 90 141 | Amstetten (LA) | 22 595 |
| Villach (Carinthia) | 57 497 | Kapfenberg (Styria) | 22 234 |
| Wels (UA) | 56 478 | Leonding (UA) | 22 203 |
| Sankt Pölten (LA) | 49 121 | Mödling (LA) | 20 405 |
| Dornbirn (Vorarlberg) | 42 301 | Lustenau (Vorarlberg) | 19 709 |
| Steyr (UA) | 39 340 | Hallein (Salzburg) | 18 399 |
| Wiener Neustadt (LA) | 37 627 | Braunau am Inn (UA) | 16 337 |
| Feldkirch (Vorarlberg) | 28 607 | Spittal an der Drau (Carinthia) | 16 045 |
| Bregenz (Vorarlberg) | 26 752 | Traiskirchen (LA) | 15 669 |
| Leoben (Styria) | 25 804 | Kufstein (Tyrol) | 15 358 |

1) Placed according to the number of principle places of residence (National census 15.5.2001).

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Regional disparities

Table 5. shows the differences in height, growth and share in GDP by federal states. Main part in GDP belongs to Vienna more than 27%, and lowest part in GDP, and although economic development, is in Burgenland. After Vienna follows Lower Austria, and Upper Austria

Table 5. Importance of federal states in forming Austrian GDP- regional disparities:

| Regional GDP 2000, nominal | | | | |
|----------------------------|---------------------------------|---------------------------------|--|---------------------------------|
| Land | Regional GDP 2000 in € millions | Nominal GDP Growth in 2000 in % | Average annual GDP Growth 1996-2000 in % | Share in Austrian GDP 2000 in % |
| Burgenland | 4,550 | +2.9 | +3.6 | 2.2 |
| Lower Austria | 33,340 | +4.8 | +4.9 | 16.1 |
| Vienna | 56,410 | +6.1 | +3.2 | 27.2 |
| Carinthia | 12,070 | +3.3 | +3.3 | 5.8 |
| Styria | 25,750 | +4.0 | +3.6 | 12.4 |
| Upper Austria | 33,720 | +5.4 | +3.9 | 16.3 |
| Salzburg | 15,110 | +6.0 | +3.7 | 7.3 |
| Tyrol | 16,880 | +3.7 | +3.5 | 8.2 |
| Vorarlberg | 9,210 | +5.1 | +3.8 | 4.5 |
| Austria | 207,040 | +5.0 | +3.7 | 100.0 |

Main issues of Austrian regionalization

- Regionalization in Austria is based on bottom-up principles, from local and regional to national,
- Federal states are territorially defined, but regions are economically and functional build (similar to problem and planned region),
- Regions are formed from municipalities associated around common and diversified services (e.g. Retzland-wine manufacturing, national park, cycling corridors, cultural and historical heritage),
- State, and also EU, are forcing the municipalities to organized themselves, mainly by financial measures,
- Agency for regional development is responsible for region and its location on market.

Natural resources and regionalization in Austria

Austria's development is more depends on tourism than ever. Beside Alpine and winter tourism, in lower part of State, Natural parks, sustainable agriculture and cultural and historic heritage are new aspect of tourism offer.

After 1990, every country must forming at least one National park. Especially are interesting cross border areas as base for cooperation in forming of transnational regions. (favored by EU)



Cross-border cooperation

The area of the Cross-border Cooperation activities comprises of municipalities from Langgäu to Grossharas on the Austrian side and municipalities Stalky to Dyjakovice on

the Check side. This region has been divided to several subregions. Each subregion has specific features that are relevant for cooperation.

The Pulkau Valley and Check municipalities are arid areas with negative water ratio. The goal in this region is to achieve cooperation based on existing initiatives in improvement of production, processing and putting on the market of the agricultural products.



The Retz-Znojmo region development is based on travel and tourism potentials that are rather well utilized. Business activities in this region are encouraged by bringing together cross-border tourism project and by creating a network of recreational and holiday facilities. That was accomplished with eight cycling routes, four of them are trans-border ones. Each path has a particular theme, such as: Wine Route, Cheese Route, Old Castles' Route etc.

Thaya Valley/Podyi National Park is an example of cross-border cooperation in ecologically valuable areas in order to maintain rational and sustainable utilization of the regional natural wealth.



Such goals of regional development are carried out within the framework of stimulating projects, which encourage and support programmes in progress in particular region. In order to improve the functioning of the region, it is necessary to diminish insecurity and mistrust of people by implementing a cross-border contact network and to increase their self-confidence in, until recently, rather underestimated region and its population, which conveys to the Czech side in particular.

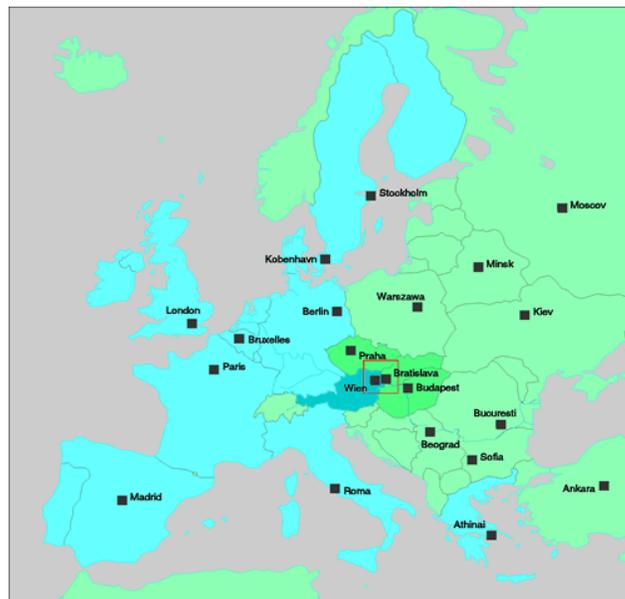
The important step in implementing cross-border cooperation with all its elements is to establish an institution that would represent a meeting point of enterprises, companies and associations that are interested in expanding their cross-border activities. In the Retz-Znojmo Region, it has been accomplished by launching EUREGIO Agency (Service office) at *Weinviertel Management*. The Agency provides various information and services regarding the region.

EUREGIO Agency provides the following:

- Information
- Contacts
- Project Consulting
- Translation and interpretation services

The regional Cross-border Development should get constantly promoted with intensive targeting of a large number of the small scale projects with implementation time limit of 2 to 5 years. In order to initiate and implement each and every project that has improvement of cross-border cooperation as its goal, such project would have to receive support from the State Administration. This was the case with Regional Cooperation Retz-Znojmo Project that was supported by the Niederösterreich (Lower Austria) State Administration. It was the first substantial attempt of cross-border cooperation that evolved in successful planning method, a method that is worth while imitating in other EU border regions.

Vienna – Bratislava region



The distance of the capital of Austria, once the capital of the Austro – Hungarian empire, from the capital of Slovakia is 65 kilometers. Cooperation between these two cities goes back to the time of the Austrian empire and the Hungarian kingdom. In the years after the World War II, the cooperation was interrupted, because this area represented the Iron curtain that separated Eastern from Western Europe, socialism from capitalism.

The development processes of these two countries, seen in the intensity and nature of industrialization, urbanization and deagrarisation, reflected the way these processes took place in capitalist and socialist countries.

The beginnings of suburbanization as one of the phases of urbanization, which is characterized by the decongestion of the central city core, that is the migration of the citizens from the center to the outskirts, at the same time the concentration of business facilities in the central zone, were evident in Vienna immediately after World War II, their peak being reached in the 1960's and 1970's. In the last two decades of the twentieth century a very slight increase took place in the Vienna population, which is the consequence of intense migration of people from the former Yugoslav republics and Turkey. This occurrence has not been officially confirmed.

The following facts reflect the exceptional role of Vienna in Austria:

- It contributes with 30 % of GDP
- It employs 26 % of the countries population
- 22 % of its employees daily migrate from the suburbs and surrounding towns thanks to the excellent infrastructure
- GDP of Vienna Region is 46% higher than the Austrian average and 63% higher than the EU average. Austria in total exceeds the EU GDP per capita by 12%. (See table no. 7)

While this intense suburbanization was going on in Vienna, the centre of Bratislava characterized a high concentration of the population and absolute centralization. The whole of Eastern Europe was swept by an immigration wave, due to the impossibility of employment in the residential town.

The process of suburbanization in Bratislava only began in the last decade of the twentieth century, when the fall of the Berlin wall opened up former socialist regimes to the cooperation with the western countries. The fall of the iron curtain initiated a more intense economic development of the Eastern part of Austria and the Vienna Region.

One of the problems of economic development in Vienna was the transfer of work intensive to capital intensive industrial branches. The increase in the number of employees in highly developed industries could not compensate the decrease of employees in less developed industries (work oriented). This resulted in an increase in unemployment, which decreased only in the 1990's (see table no. 6).

Table 6.

| | Unemployment rate | |
|---------|-------------------|-------|
| | 1996. | 2001. |
| Vienna | 5.9 | 4.9 |
| Austria | 4.5 | 3.4 |
| EU | 10.6 | 7.6 |

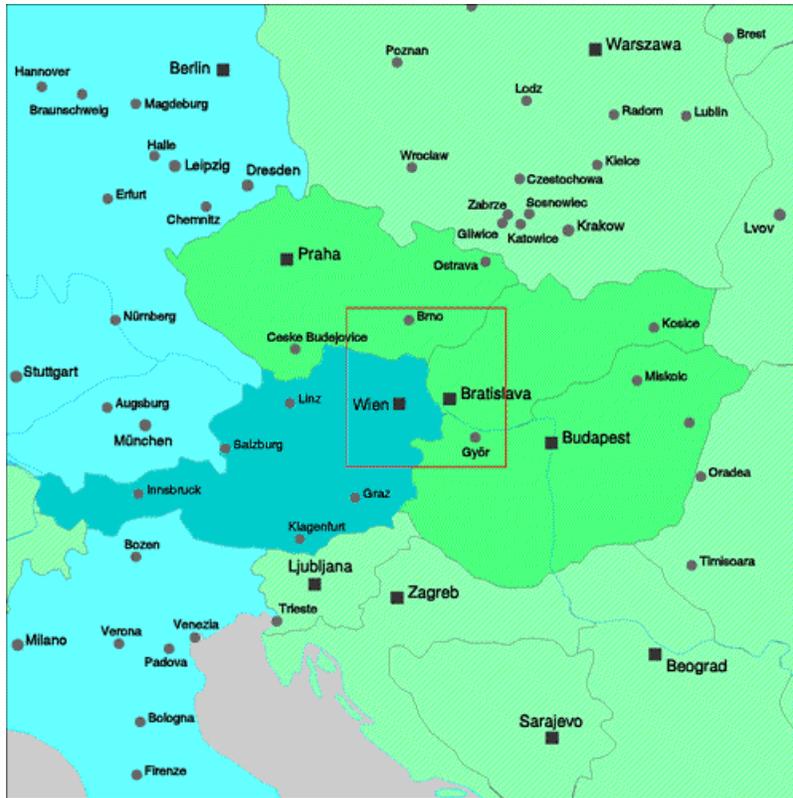
When Slovakia became a EU member state, on the 1st May 2004 more favorable conditions were created for cooperation between the two countries and their capitals in particular. The consequence of a recent centralization of Slovakia is the 104% larger GDP per capita in Bratislava in relation to Slovakia. In correlation to the EU, Bratislava has a 1 % lower GDP, whilst Slovakia as the whole has a 51% lower GDP compared to the EU average (see table no. 7).

Table 7.

| | |
|----------------------------|--|
| | GDP at PPP/inh. 1998 Index EU = 100 |
| Austria | 112 |
| Vienna | 163 |
| Slovakia | 49 |
| Bratislava | 99 |
| Vienna Region Core | 117 |
| Bratislava country core | 74 |
| Vienna – Bratislava region | 106 |
| | GDP at PPP/inh. 1998 Index Austria = 100 |
| Vienna | 146 |
| | GDP at PPP/inh. 1998 Index Slovakia = 100 |
| Bratislava | 204 |
| | |

This table shows the differences in the level of economic development of the two countries, i.e. the differences in development of the parts of two observed regions.

The **Vienna – Bratislava region** consists of the Vienna Region (Burgenland, Lower Austria and city of Vienna) and the Slovak Regions (mainly Bratislava and Trnava). Geographically, it is in the central part of Europe, where the Alps and Carpathian mountains meet, in the Great Hungarian Plain (Pannonia) and on the river Danube.



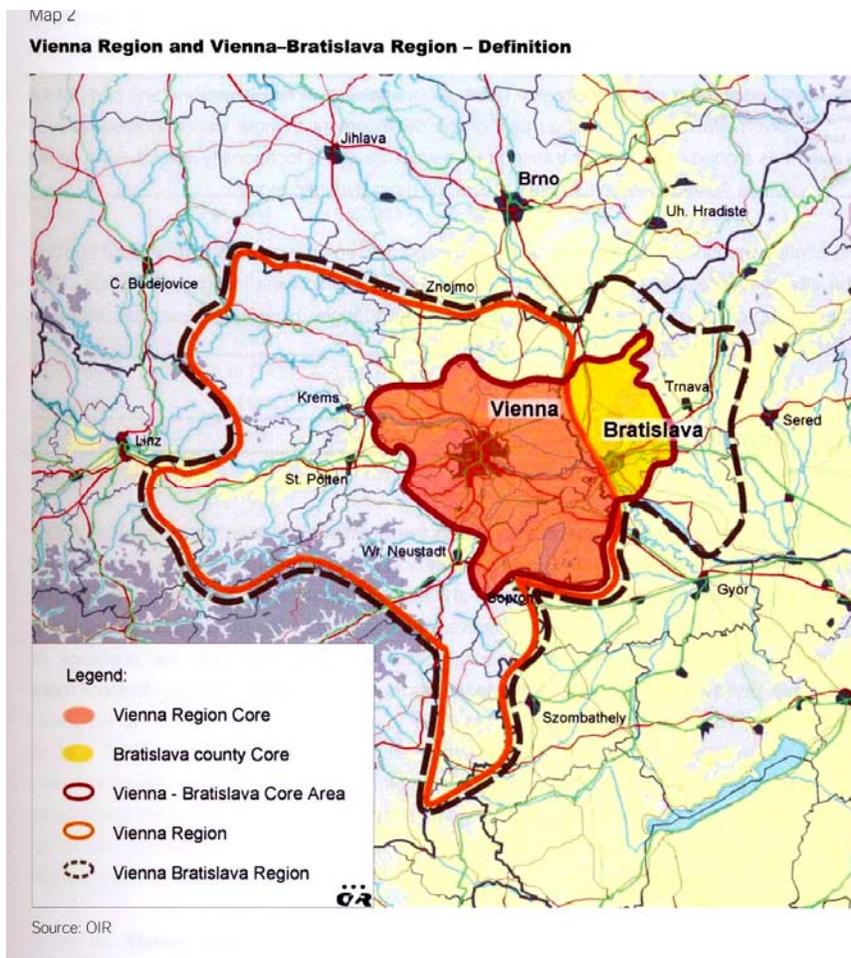
The census in 2001 shows that this region had a population of 3.5 million, with regards to the fact that the Vienna Region covers 10% of the countries territory, and 1/3 of the countries population. The Bratislava region takes up 14% of the countries territory, its population being a quarter of the countries'.

Table 8.

| | Area in km ² | Population 2001 |
|-------------------------------|-------------------------|-----------------|
| Vienna – Bratislava region | 29 754 | 4 533 514 |
| Vienna – Bratislava core area | 8 458 | 2 857 789 |
| Vienna | 415 | 1 562 123 |
| Bratislava | 367 | 428 672 |
| Austria | 83 858 | 8 032 557 |
| Slovakia | 49 003 | 5 379 455 |

The criteria used for defining the boundaries of the Vienna Region Core and the Bratislava Core Region is the continuity of the town covered land. Where there is up to 200m of uncovered land, the boundary starts.

The criteria for defining the boundary of the Vienna – Bratislava Core region as a whole is a minimum of 30% of daily migrants.



The northern part of the Vienna – Bratislava region is predominantly agricultural. The Cross-border cooperation in this area is rather poor. The former orientation of Austria to the West, and the orientation of the former Czechoslovakia to the east resulted in an absence of infrastructure in this area, mainly transport.

The southern part of the same region is characterised by a dynamic infrastructure, which was one of the prerogatives for cross-border cooperation.

Table no. 9

| | Employment by sectors | | |
|-------------------------|-----------------------|------|------|
| | I | II | III |
| Vienna Region Core | 0.8 | 23.8 | 73.1 |
| Bratislava Country Core | 4.2 | 28.0 | 67.8 |
| Austria | 0,8 | 28,7 | 68,1 |
| Slovakia | 6,3 | 34,0 | 59,7 |

The differences in development of the Austrian and Slovakian side of the region are represented by the differences in monthly salaries respectively. (shown in the following table).

Table 10.

| | Average monthly salary per head in EUR, 1999 |
|----------|---|
| Austria | 1 432 |
| Slovakia | 284 |
| Vienna | 1 589 |

The process of integration of the Vienna – Bratislava region is supported by Slovakia in the following examples:

- the diversification of economy with progressive structural changes which affect the tertiary sector – services
- education investments
- investments in the area of science research
- taking advantage of the location potentials

Final consideration

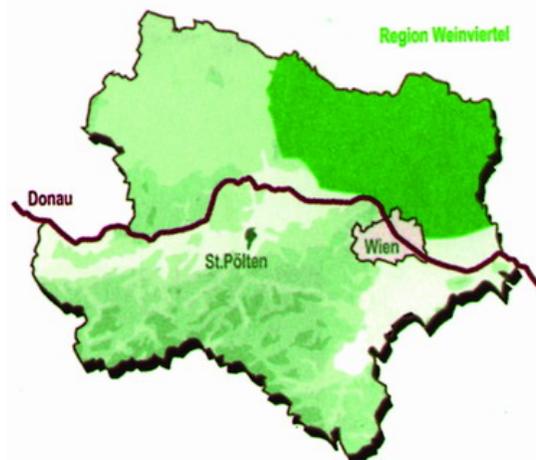
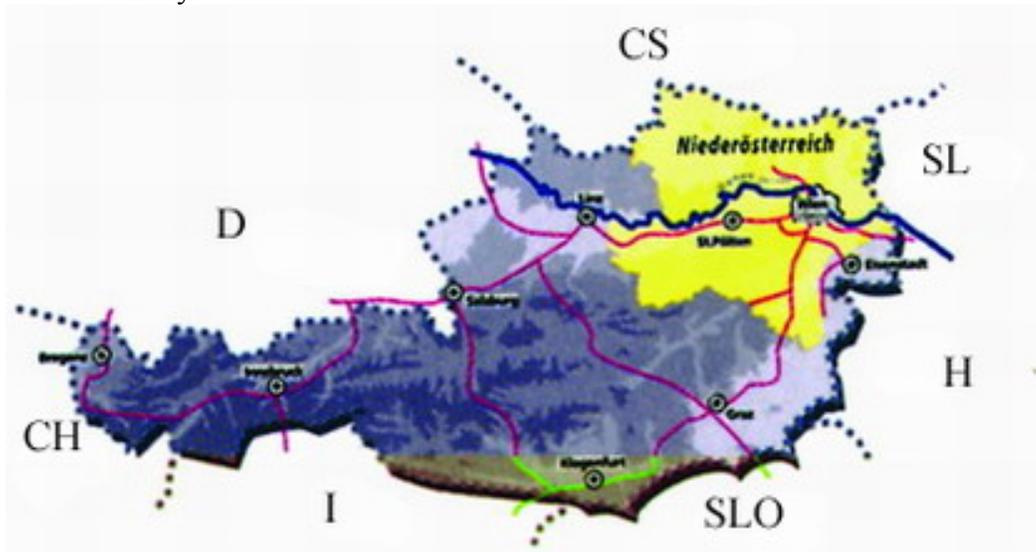
It is impossible to have regional planning without defining regions. Unfortunately, that is situation in our country. Regionalization of Serbia is the first thing that has to be done in the aim of organization and quality of making plans and, finally, their implementation (which is our biggest problem). Using modified and adapted Austria's methods and instruments, we could get our planning system much better.

Regionalization of Austria is based on a bottom-up principle (from local and regional to national). Regions inside of country are formed by a market's principle and functional principle. Government, and what is more important EU, urge association of communes, with financial resources mostly. Also, existence of Agency for regional development, which takes care about regional organization and it's image on market, is very important. EU, like Austria's government, more and more has its development based on tourism, especially on cross-border regions. By activating potential cross-border areas in our country, we will make it possible to compete for financial funds for that purpose, which will help development of our border areas. Existence of undeveloped border areas, in our country, and their depopulation, make this possibility very interesting for us. These cross-border regions have fantastic tourist potential and that goes to our contribution. Activation of our tourist economy can bring back prosperity and people to these areas.

Everything we considered in this work represent efforts to solve problems in regional planning of Serbia, which we can surpass easier using European experience (Austria's, in our case). That all can contribute to revitalization and prosperity of regions in our country.

5. LOCAL SUSTAINABLE DEVELOPMENT AND RENEWAL OF VILLAGES IN AUSTRIA

The United Nations Conference on Environment and Development (UNCED) in 1992 (Rio Earth Summit) was a landmark event to secure economic, social and environmental well-being for present and future generations. The Agenda 21 and the Rio principles still remain as valid as they were in 1992. However, the global context has changed. Globalization, the revolution in information and communication technologies are some of the features of the world today which need to be taken into account in strengthening their implementation worldwide. As sustainable development has to be implemented on the local level as well, Austria has developed a huge number of activities in this regard. Today, most of the Austrian villages are places of prosperity and wealth, where encouraged citizens are continuously participating in the sustainable development of their community.



Map of Austria with Lower Austria

The first step in giving development a plan of action is recognizing of strengths and weaknesses. The most of rural areas have similar strengths and weaknesses:

Strengths:

- **intact natural surroundings**
- **outstanding drinking water quality**-because of the health surrounding, there is no need for any large activities on keeping quality of drinking water.
- **naturally-kept farms**-people in village have habit to take care of their farms without negative influence on natural surrounding.
- **many citizens with potential talents and abilities**-however many of citizens are not qualified, they are trying all the time to keep their environment clean and healthy.
- **readiness for cooperation**-both citizens and companies are dedicated to cooperation and helping each other.
- **clear goals for the future**-this is ,maybe, the most important strength. When you have clear goal it's easier to develop strategy, and to start working on it.
- **reach cultural inheritance**-culture and identity always have a great impact on people of any community, so it should be saved by everybody.

Weaknesses:

- **impending loss of farms and cultural landscapes**
- **poorly utilized or deserted buildings in the middle of town**-most of the buildings do not have appropriate keeping, so sometimes they do not look as nice as it should.
- **need for improved infrastructure**-local communities have good regional infrastructure, but local is very poor. So they should invest in building of infrastructure and superstructure.
- **loss of local providers** (baker, butcher, etc.)
- **insufficient knowledge of the cultural wealth of town**-younger citizens do not have sense of belonging to the community, because they don't have enough knowledge of all the things their community have to offer, to them or to potential visitors.
- **few people with qualified training**-this situation happens because of finances and loss of time and interest of the citizens.

Local authorities usually put accent on participation of the citizens. When citizens are included only after decisions have been made, this can lead to conflicts or frustration. True inclusion of the citizens aims at two areas:

1. Convincing people to be actively involved in projects
2. Participation of those implied in decision-making from the first step of the search for answers, by informing them soon enough and creating possibilities for them to express their opinions

Pulkau and Obermarkersdorf



Pulkau

In most of the villages including Pulkau and Obermarkersdorf, all activities in sustainable development and renewal reflect the four equally indispensable pillars

:

1. Village community and quality of life
2. Culture and identity
3. Local economy
4. Environment and nature

Before our wider aspect of situation in these two villages it's important to mention similarities and differences between Austrian and Serbian villages. Organization of the villages in Vojvodina and in lower Austria is almost the same. But, there are much more differences. First hygiene, most of the Vojvodina villages do not have solved problem of canalization and drainage of waste water. Also we have impression that people in Austria are more dedicated to develop and renewal of their village. Villages in Austria and Serbia have one common problem. Youth of both countries in villages, leave rapidly their home and are going to the big cities. To avoid this problem in Austria, they use a lot of time and finances, so they can keep young people in local communities. This is very important, because they are usually highly educated and they can use their own knowledge in village renewal.

Village community and quality of life

In this topic, the center of development is about persons. Authorities try to develop a new atmosphere of political interaction, by involving all those concerned. They want to activate creative strengths and recognize achievements, so they can improve security and comfort within the local structure. In the last few years local authorities and citizens did a great job in betterment their quality of life. They started with reconstruction of buildings, also with construction of local infrastructure and with different contents for fun and relaxing.



Culture and identity

The most important thing in preserving culture and identity is a connection between past and future, between old and new. This goal can be achieved by recognizing preserving the heritage of one's own roots and by strengthening the sense of belonging and fostering the established traditions. But it's important for communities to stay open for new impulses and knowledge about other countries. Every community has its own roots, but it's important to cooperate with other communities, on cultural, educational and other plans. They should change the ideas and experiences.



Pulkau

Local economy

Rise of local economy is the main goal of village renewal. Local government has to support smaller forms of commercial partnership, so local jobs and future-

oriented companies can be established. Those companies should use raw materials and use energy very carefully. In Obermarkersdorf we saw a great example of carefully and controlled usage of energy in their ecological power plant. The whole village gets heating from this power plant. The Region, which includes Pulkau and Obermarkersdorf is a wine region. Great areas around the villages are used for wine production. They produce both, white and red wine.



Environment and nature

Insufficiently controlled development and renewal can cause serious damages on local environment and nature. To avoid that society should be preserving the small naturally cultivated landscape, by using free areas of land with great care. Also they have to protect natural water cycle, and they must actively participate in global climate protection.

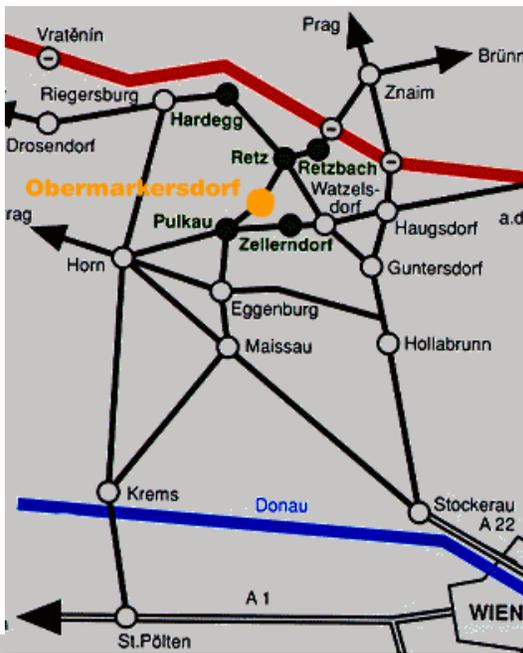


Obermarkersdorf

The town is for the first time mentioned in historical archives in 1171 a.d. as Markersdorf. It is situated in the north part of Lower Austria, in the border region with

Czech Republic. Because of the proximity of the border, that once divided two confronted blocks of countries: The Warsaw Pact and NATO countries, since the end of the World War II until the fall of “Iron Curtain” this region was undeveloped, with increasing depopulation. Today, as the central European countries enter European Union, this region is cooperating with other neighboring regions in Austria, Slovakia and Czech Republic.

In Austria today, there is a big difference with respect to the degree of binding legal force of the framework plans of the federal provinces of Vienna, Burgenland and Lower Austria. Lower Austria provides legally binding, sector related planning structures as well as regional spatial planning programs. There are intensive attempts to harmonize legal frame conditions in some sectors.



In the past decades local authorities in the settlements of these regions did not wait for help of the state or external initiatives when it comes to development programs. Instead they have shown local initiatives in starting the research of their potentials and defining the strategy of regional development. They saw their chance in regional cooperation and development of common potentials like wine production, tourism and bicyclism considering their advantage in national parks, preserved landscapes and natural environment, rich cultural heritage and traditional festivals like “The Pumpkin Festival” which attracts 50.000 tourists every year to this region. Each one of these towns and villages add to development and attraction of this region with their own specific contribution.



Village Obermarkersdorf

Local development initiatives

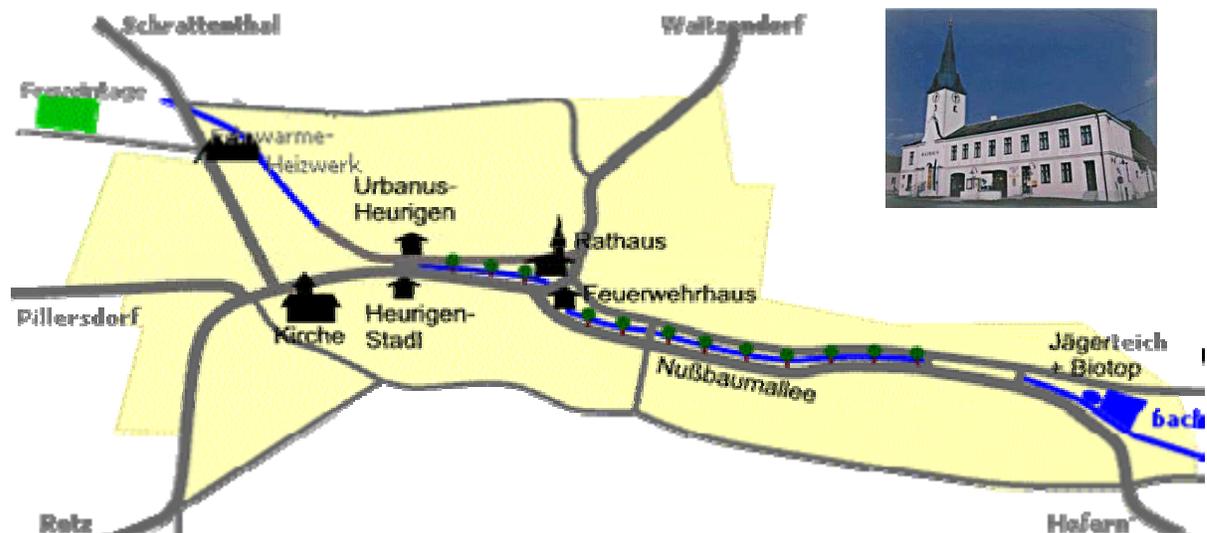
Obermarkersdorf is a community of about 1.300 residents, but since most of employed work in Vienna and come back for the weekend, during workdays the town has only 1000 citizens. This migration during the week caused by lack of open vacancies is the most serious problem of Obermarkersdorf. Therefore they worked on activating their human resources, starting small enterprises, opening cultural and social care facilities, opening tourist capacities, restaurants and wine cellars which must fulfill certain quality standards and diversity in offer. In order to stop their citizens from leaving and instead attracting new ones, local community, with hired architects and specialists, engaged in reconstruction and rebuilding of the old town center, infrastructure and houses.

Local authorities of Obermarkersdorf, in cooperation with citizens and experts, finished dozens of projects during the '90.-s that have helped them winning the European Prize for Rural Renewal, given by the European Association for Rural Development and Village Renewal (ARGE). This prize is awarded every two years to communities that successfully solve their economic, ecological, social, and cultural issues.



Local authorities of Obermarkersdorf have achieved higher quality of life, through involving citizens, authorities and specialists, in all stages of project defining. Suggestions and opinions of citizens are taken in consideration in decision making process which implies community consensus regarding projects. In the process of defining projects legal aspects frame-work, immediate and long-term consequences and goals, costs and financial plan, methods and deadlines of their implementation are established. Agencies and people responsible for implementation are named and funding is provided from various European funds, development programs and from bank credits.

This local community has implemented a series of plans and among them plans regarding housing development (through defining building regulations), ecology (through accepting higher level plans regarding the building of environmental infrastructure and protection of natural water cycle, tree-planting projects and landscape preservation), tourism (expansion of hiking and biking paths and vine yards).



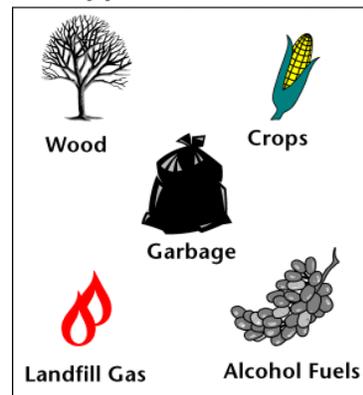
Local projects based on sustainable development principles

Local government of Obermarkersdorf has put in motion one of the first projects of installing a small combined heating plant. This pilot-project was credited by European Union and even today causes visitors and excursions to come to Obermarkersdorf.



Obermarkersdorf is one of the examples of implementation “Local Agenda 21” from the year 1992. Even though Austria had very

Types of Biomass



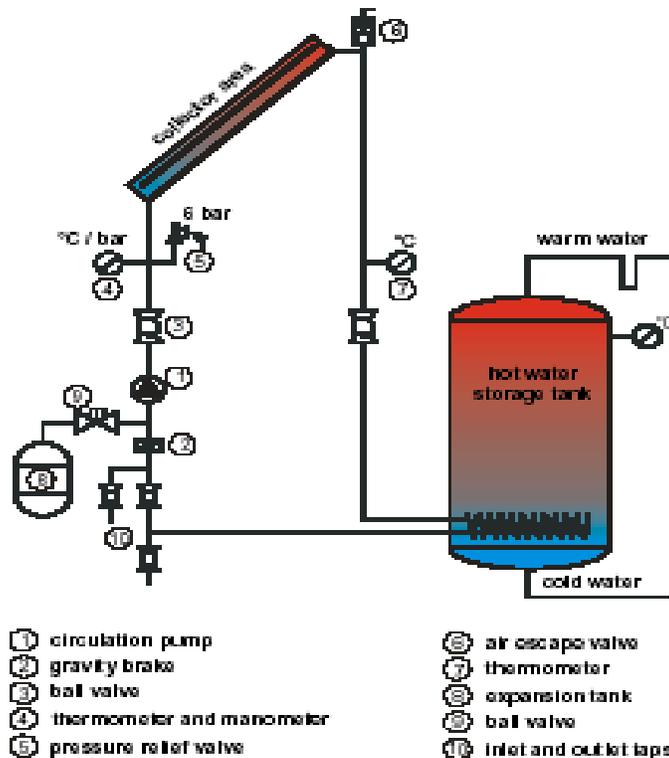
responsible environmental policy over the last decades principles from Rio de Janeiro’s “Agenda 21” like “think globally- act locally” could not be implemented until processes like globalization, information and communication revolution took place. By adopting this program from The World Summit for Environment and Development Austria has been committed to implementation of principles of sustainable development and in the solution of it’s development problems like over-

consumption of material resources, energy and space and increase in pollution and hazardous substances. Sustainable development is accepted as a new concept of responsible direction of economical, social development which takes into account environment and does not jeopardize future generation’s development.

In 1995 Obermarkersdorf has already built a heating system combined with a solar and biomass heating plant. They are one of the first places in Austria that built heating system that absorbs heat and energy from solar panels, and in case of cloudy and cold weather,



from burning of wood-chips and wood waste. This wood is acquired at low cost (compared to usual organic fuels) from wood processing industries and even citizens themselves collect branches, straws and wood. This fuel is stored in a hangar, burnt in logwood boiler in cold and winter months which secures functioning of heating system during the whole year. Smoke and residues produced by biomass-fired plant are “cleaned” or “washed” using new technologies and only component released in atmosphere is vapor while hazardous substances from smoke are separated.



In this heating network water is being heated by solar energy to the temperature of about 80 C and is stored in tank and hot water boiler. Then it is being distributed by a large network of pipelines to various community facilities and to about 70 houses, which have voluntarily applied to be involved in this heating project. This system apart from solar panels and thermal solar collectors, boiler room biomass fuel storage facility

includes complex control system. Only a couple of employees are needed to secure proper functioning of the whole system.



Citizens and facilities which use this network have their own control system that enables them to separately regulate temperature or to shut it down when they are absent or are traveling. This system has been so efficient that hot water after distribution comes back to boilers with only 10 degrees difference. This system allows storing of solar energy for residential heating in winter.



Thermal solar collectors



Hot water boiler

Projects of solar / biomass heating systems around Austria

| | start of operations | boiler capacity [kW] | length of district heating network [m] | energy storage capacity [m ³] | panel area [m ²] |
|----------------------------|---------------------|----------------------|--|---|------------------------------|
| Deutsch Tschantschendorf | 1994 | 600 | 2.500 | 34 | 325 |
| Bildein | 1995 | 1.000 | 2.960 | 38 | 450 |
| Obermarkersdorf | 1995 | 750 | 3.400 | 68 | 567 |
| Unterrabnitz | 1995 | 650 | 3.800 | 58 | 477 |
| Gnas | 1996 | 1.640 | 2.200 | 40 | 441 |
| Urbersdorf | 1996 | 450 | 1.650 | 60 | 350 |
| Bad Mitterndorf | 1997 | 4.000 | 3.500 | 140 | 1.120 |
| Eibiswald | 1997 | 2.000 | 3.200 | 105 | 1.250 |
| Lindgraben | 1997 | 350 | 1.300 | 37 | 350 |
| Poysbrunn | 1997 | 1.000 | 3.140 | 85 | 870 |
| Nikitsch | 1997 | 2.250 | 6.900 | 60 | 780 |
| Kroatisch Minihof | 1997 | 700 | 3.100 | 60 | 740 |
| Soboth | 1998 | 300 | - | 10 | 200 |
| Schwanberg | 1998 | 500 | - | 50 | 470 |
| Stadl/Mur | 1998 | - | - | 60 | 490 |
| Judendorf/Strassengel | 1999 | 100 | - | - | 100 |
| Gleisdorf (Sundays) | 1999 | 40 | 60 | 14 | 230 |

Table 1: Combined biomass/solar energy district heating systems in Austria(1999)
Source: Energieverwertungsagentur

This project has accomplished reduction of costs and pollution, and was so eco-efficient (ecologically and economically) that more than 260 towns decided to invest in this system. Even though, the pilot-project started in 1995. This concept was so advanced and ahead of its time that basic principles of this system can be recognized in the newest

strategy defined in 2002, and they are in accord with modern Austrian demands for reduction of CO₂ emission and other greenhouse gases by the year 2010 by 50%.

6. TOURISM OF LOWER AUSTRIA AND BURGENLAND

The greatest touristic center in Austria is of course capital city, the city of Vienna. The city of Vienna contains great number of historical sites and museums that attracts great number of tourists from all over the world. Just to mentioned castles like Schönbrunn and Belvedere, which are very important part of tourism in Vienna region. Not to forget the big “wheel” which is constructed from old arm pipes.

A very important touristic location in Austria are the **national parks**. In Austria there are 5 national parks. From all national parks, maybe most interesting is national park **Lobau**. Lobau is a extremely rare example of a national park, that inclines with one part the urban tissue of the city. In this case its the city of Vienna. National park Lobau offers many commodities and touristic services. Some of them are: bicycle paths, bathing and grill zones, museums, ship tour that goes down from the city center to Lobau, etc. The Upper Lobau is accessible for tourists since 1926, but only from April to November by daylight. Number of visitors in the national park Lobau, for season 1998/1999 estimated for about 600,000 people.

Very important national park, if we talk about tourism, is Thayatal. **Thayatal** is cross-border national park that is located on border between Austria and Check Republic. This national park is great example for Serbia. Serbia could use this model for national park of Djerdap. This national park is between Serbia and Romania. In this national park there is a web of paths that goes through Austrian and Check territory. This paths are fantastic for “active” tourists. Near the national park Thayatal is located the city of Retz. Retz offers great number of restaurants and resting places which influence the tourism in the region. Also, Retz region is well known as old wine region which also attract many tourists. Retz is famous for its manifestations like wine fair or pumpkin fair. Those manifestations are crucial touristic attraction. Also in this region is located holy stones, which attract great number of tourists by its “magical power”.

The other cross-border national park is **Neusiedler See** which is located on border between Austria and Hungary. National park Neusiedler See offers great number of touristic programs. Very interesting is that tourists could see national park by riding a horse. This region is also well known wine region. In the city of Neusiedl there is great shop of wines. There you can find very interesting variety of quality and number of wines. It is famous for its quality. On the lake, tourists could try some sport activities like surfing, boat rides, beach volley, bicycle paths, golf terrains, etc. Near this region is an old Serbian graveyard. Today there is no more graves but there is one church. That church is not Orthodox as expected, but Catholic.

In Austria there are many customs. Some of them are not for describing but they are interesting. We in Serbia should use this for attracting and animating more tourists from all over the world. We have many different customs and we should use it.

7. ARCHITECTURE OF CITY OF WIEN, LOWER AUSTRIA AND BURGENLAND

The Chronological Account of the Field Trip

The first day was dedicated to a short sightseeing trip by bus of Vienna, to obtain a basic idea of the spatial structure of this medieval metropolitan. We saw some of the key objects, like the oldest part of Vienna (first pictures – pictures of the Royal Palace page 42 and 44, The Nature Museum and The Museum of History of Art, The Museum Quart).

A Walk through Vienna

On the way to our next destination we once more passed through Vienna and had the opportunity to see some more interesting landmarks.

The focus of the field trip was not on architecture, but we used the last day to experience the urban culture of the city and get acknowledged with the principles of urban region development, which we described in the introduction.

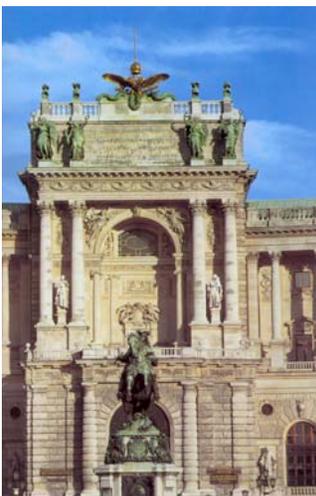


Contemporary architectural setting



Traditional urban entity

This is just a short presentation of the landmarks we saw, seeing that our theme was only one of the five with which we dealt on the field trip. That makes our theme selective and reflects our personal preferences.



Hofburg (Royal Palace)

It has 18 wings, 54 staircases, 19 courtyards and 2600 rooms and was the residence of the Austrian Tsar from 1804 to 1918 (before then, it was the residence of Roman, than German Kings, 1439 – 1804). In the palace, only one royal family

resided, this was a tradition and because of this Hofburg has various harmonically placed elements.

Amalienburg

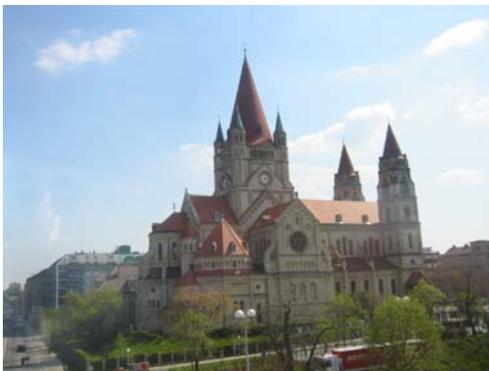


The name of this palace dates from the beginning of the nineteenth century when the widow of Emperor Joseph, Wilhemina Amalia resided here. Sometime later Empress Elizabeth lived here. The construction started in 1575 during the rule of Emperor Rudolph II. A clock and the device, which shows the Moon phases is found on one of the wings.

Messepalast (The Palace Fair)

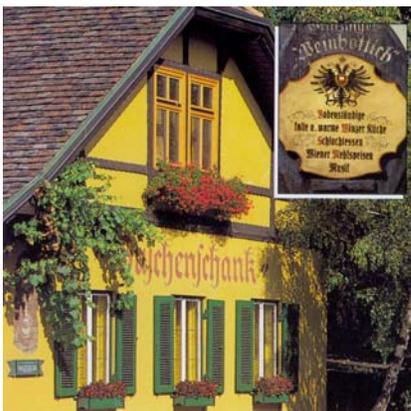
This building was built by Joh. B. and his son Jos. E. Fischer von Erlach in 1723 and was used as a horse sty for 600 horses. From 1921 onwards is used for international and other fairs.

The Church of Franz Joseph



The church was built between 1898 and 1913 on the occasion of 50 years of rule of Franz Joseph. It was built out of brick, and constructed from a model of the Achener Pfalzkapelle, which was dedicated to Empress Elizabeth.

Grinzing



This ancient village became a part of Vienna in 1892, together with other villages like Heiligenstadt, Stammersdorf, Strebersdorf, Sievering, Neustift am Walde and Nussdorf, and represents a typical example of a place where good wine is produced. It was established in the sixteenth century. This is where a one year old 'Heurigen' wine is served and sold. Every house that had a blueberry leaf hung on the entrance, it meant, that in this household wine can be bought.

Graben (Trench)

Around 1200, while Vienna expanded, an old ditch, which the Roman legionaries used remained uncovered. In time the trench was turned into a square, which remains to this day under the name Graben- meaning trench. In the beginning the square was used as a marketplace, later for bigger city happenings. Even today, buildings in Neoclassical and Baroque style dominate the square.



Peterskirche (Peter's Church)

According to accounts, Charlemagne found St. Peter's church. Making a stop in 792 to defend from the Avars, he raised the church on a holy stone of a Roman building from the fourth century. The marble relief made by Rudolf Weyer in 1906, on the external wall of the church, depicts the events which are not recorded by historians. It was painted by known artists on the inside and finished in the Baroque style.

Votivkirche

This church was built between 1856 and 1879 by Heinrich Ferstel according to a model of French Gothic Cathedrals. It's made up of three parts and two towers which are 99 meters high. In the chapel where christenings are held lies the grave of Count Nikolas Salm, who defended Vienna from the Turks in 1529. The chapel is a masterpiece of L Herring, from the year 1533.



Stadtpark (City Park)

The park was planned, between 1862 and 1863 during the construction of the Ringstrasse. In 1906, Friedrich Ohmann was assigned to design an entrance to the park, which was built next to a tram station. Together with Hackofer he created a pavilion not far from a brook, which flows through the park. The statue of Franz Schubert is located in the park and is a donation of the Viennese Male choir (Maennergesang-Verein). The second statue is of Johann Strauss the younger "the king of the waltz" made out of bronze.



Hundertwasserhaus – incinerator

Friedensreich H. a famous painter and professor, motivated by complete asymmetry, styled this building in 1985. It was also a realization of his ecological ambitions.



Hundertwasser Building

Central Viennese streetscape



Central Viennese streetscape



Royal Palace



Natural Science Museum

Museum Quart- due to its importance and size, it is one of the largest cultural projects in the history of Austria. The MUQA was built in the '90ies, the project of Laurids and Manfred Ortner was declared as the best solution. In the quart are: The Museum of Contemporary Art, Leopold Museum and the Art Gallery.



The Museum of Contemporary Art



Leopold Museum



The next stop was dedicated to a successful example of collective housing, the so-called Karl-Marx-Hof.

Karl Marx Court- the complex represents the beginning of the modernistic period in Austria and is one of the most successful examples of social housing. The building was erected around 1928 – 1930, and covers a block with a length of 1 km. Today this complex is reconstructed and renovated.

Karl Marx Court

By the recommendation of Professor Kvarda, the next stop was the Holy City - Heiligenstadt, known for two houses in which Ludwig van Beethoven lived and worked. This area represents an interesting historical environment very close to the well known village of Grinzing.



Heiligenstadt - Pfarrplatz



Heiligenstadt- detail - Pfarrplatz

Afterwards, we ascended to the Leopold's hill (Leopoldsberg) from which you can see the whole panorama of Vienna.



Panoramic View of Vienna

The next destination was in the heart of Lower

Pulkau served as a starting interesting destinations in **Obermarkersdorf**, a small thousand inhabitants, which on the revitalization of



Pulkau, a small and old place Austria.

point for the sightseeing of this region. The first was village with about one based its development concept traditional village architecture.

Typical street in Pulkau



The rural architecture of Obermarkersdorf

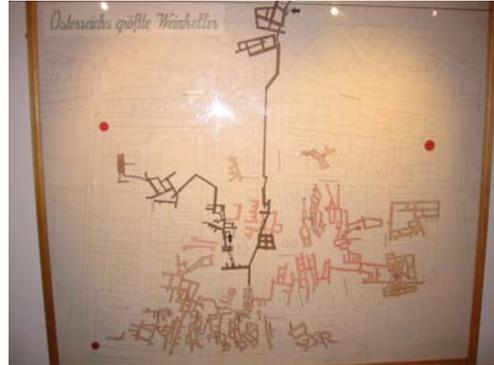
The Town Retz

Another interesting destination nearby is the vicinity of Pulkau in the region of Retz, the so-called Retzerland with the town of Retz, which was in many aspects worth the visit. The town Retz, in an architectural sense belongs to the most interesting stops on our field trip. It was established seven hundred years ago, although some settlements just near the town date a while back from then. As it is often the case, they were on the crossroads of important medieval routes, which connected Krems, Znojmo, Iglau and Brno. The primary activity in Retz was the manufacture and trade of wines. This is the reason, why

beneath the city a developed network of wine cellars can be found, but they are out of use today. The total length of these underground passages was never measured, but it is assumed that they reach a length of 25 kilometers. The whole town lies on an ocean sediment from the early tertiary, which is so compressed that the wine cellars were dug out in the sand and formed without additional construction or support.

Underground Wine Cellars

The most interesting architectural object in the town is the central square, which is considered to be one of the nicest and largest market places in Austria. Buildings built in different styles, thus forming a unique urban setting, surround the square. The following objects are dominant from a historical perspective; they are significant beyond the boundaries of the region.



The Town Hall (Rathaus): The earliest records of the early Gothic Chapel date from 1367, and it is assumed that during its construction, a wine cellar was dug out (most probably a crypt) which was later joined to the vast network of underground cellars. In the 1560's, the citizens of Retz purchase the Chapel dedicated to Maria, mother of God, which even after the reformation remains Catholic, but most of the structure was reconstructed from the inside and it was turned into a City Hall which has a spacious hall on the first floor which serves for meetings. On the south side, a tower with a massive staircase for the new attics is built. Even today it stands out in the square.



Verderber House: This building is an example of the Austrian art of city building. It is composed of three elements, two buildings connected by a middle tract built as early as the fourteenth century and which served as one of the three city gates of Retz. As you can see on the photograph, the two buildings, which are connected to the middle tract and which were built later in a Venetian Renaissance Style, are somewhat different, especially THE wreaths.



Sgraffito House: This building differs from the others on the square, because it's painted in an Italian Sgraffito technique, from which the house got its name. The painting randomly portrays events from the Old Testament and Greek Mythology which shows that the owners were

protestant in belief. The house with its illustrations is a renaissance composition whose motives and meanings are not exactly clear for today’s viewer, but in the time when the house was painted the message portrayed was clear.

Thaya Valley National Park

After Retz, on our way to the Thaya Valley National Park we came upon a newly built object, which is the administrative center of the Park and also a museum. This building, like many others we have seen on the way, is built out of wood, a revived building material, without which contemporary architecture could not be imagined. Wood is not used alone, but it is combined with concrete, steel and glass enabling a modern constructive architectural expression. That is how wood



becomes a high-tech construction material, which technically and architecturally came from tradition, with a firm base in the future. A prize was established for the best architectural achievements made of wood, from the state of Lower Austria. The Management Center of the Thaya Valley National Park received this prestigious award in 2003 in the category “Public Communal Structure”. The author of the project is the architect Ernst Maurer.

The Center of the Thaya Valley National Park and Nature Museum



Entrance



Detail of the Façade

In the vicinity, next smallest town in 85 kilometers away border with the also one of the is famous for its Maximilian of the town.



to the Thaya river is the Austria – Hardegg. It is from Vienna and on the Czech Republic. It is oldest towns. This town castle. In the past, Mexico shortly ruled View to Hardegg

Neusiedl am See

Neusiedl am See is not very interesting in an architectural sense. It is a town built on the main road, which leads to a tourist spot for Citizens from Vienna and surrounding regions. Nevertheless we saw two building, which we thought were interesting and are good representatives of modern architecture.

The first is the Hotelier and Tourist Management School, an activity which has a long tradition in Austria and is promoted in Burgenland. This building is an adaptation and superstructure of an existing building.



The school



The Atrium

The second building is the Yacht Center which is located on the shores of the lake, which is another representative example of Wood buildings.



The Yacht Center



Detail of the Façade

8. NATURE OF LOWER AUSTRIA AND BURGENLAND

This part of the Austrian diary is the result of the small student group, who were dealing with nature and its values. Students participating were Jasna Tomašević, Milica Radojević, Sanela Gajic Tijana Manojlović and a postgraduate student Marija Nevenić, spatial planner. The general idea of this group was to give a short overview about nature protection and conservation, latest ecological projects, environmental technologies in Austria and some more. The group was directed by the key objectives of the Austrian Strategy for a Sustainable Development.

According to the Strategy some common goals (such as intact environment, economic prosperity and social solidarity) are necessary in order to guarantee quality of life for all humans in the long term. Like other European countries Austria too aims to implement the principle from Rio de Janeiro³ "think globally-act locally". Therefore, one of the key objectives for a sustainable development in Austria is the nationwide **protection of species and living spaces of natural and cultural landscapes**. In order to achieve this, the Strategy has enacted the following:

- research programmes must be developed further and implemented in cooperation with the relevant users of space.
- By the year 2004, all the Natura 2000 nominations technically required in accordance with Fauna-Flora-Habitat Directive and the Bird Protection Directive must be implemented .
- appropriate management plans must be drawn up and implemented by 2006.
- regionally differentiated biodiversity guidelines and regional management concepts must be developed and implemented nationwide by the year 2010.
- the biodiversity of autochthon species must not decrease any further.
- diversity as well as the functionality and development capacity of natural living spaces must be secured.
- technical foundations must be prepared in order to provide a sufficient and representative protection for biological diversity. This will be carried out by continuing the biotope mapping according to harmonized criteria and by developing a national system for biodiversity monitoring.
- preparation and updating of 'Red Lists' with endangered species and endangered habitats. The genetic resources of cultivated plants, domestic animals, and wild animals and plants must be preserved and natural habitats and species also need to be protected outside the protection zones.
- the import and dissemination of non-indigenous species that endanger the ecosystems, habitats or species must be controlled or prevented wherever possible. This requires the implementation, evaluation and further development of the National Strategy for Biodiversity. Necessary objective is the active participation by Austria in the process for a pan-European biodiversity strategy.

³ Sustainable development Conference

Also, strategy finds necessary the preservation and protection of richly structured cultivated landscape and biological diversity. To achieve this, a harmonised nature conservation and biodiversity policy is necessary that comprises federal and provincial competences, national and nature parks as well as the UNESCO protection zones, that takes nature and landscape conservation adequately into account in all sectoral policies and relevant legal materials and that pursues participative approaches.

Austria's cultivated landscape has resulted from extensive management. However, this can only be secured if the income of the farmers is sufficient for an economic existence and the environmental services thereby provided are compensated adequately.

As for the sustainable forestry, long term improvement in the socio-cultural capacity of forests is to be achieved by optimizing the forests' functions as a protection from natural hazards, improving the instruments for balancing the various interests in the forests, and expansion of job opportunities in the rural areas. Improving the ecological quality of the forests serves to preserve and enlarge the biological diversity in the forests, and to protect and improve their health and vitality.

Also very important is **the quantitative and qualitative protection of soil, water and air**. To protect the environmental media, according to the Strategy:

- both basic scientific and problem solving-oriented research and a nationwide system of environmental quality targets are necessary.
- the threat to sensitive animal and plant species and their habitats must receive special attention.
- a reduced input of substances and compounds with high risk must be replaced by those with lower risk assessments
- substances with higher risk must be replaced by those with lower risk.

During our 7 days excursion we visited Leopoldsberg- park of park of biosphere, Danube island, village Obermarkersdorf, Thayatal National Park, Neusiedler See - Seewinkel, Austria's vineyards, Neusiedl windmills and much more. Especially interesting were renewable sources of energy like biomass heating plants and solar heating we've seen in Obermarkersdorf. Some of these projects and places we visited are presented in this diary.

Leopoldsberg

Leopoldsberg is a mountain in the 19. Viennese district, with the height of 425 meters and originally called the bald mountain (mons calvus). It's a mountain in the Viennese forest, and both Vienna and Danube lie directly at ones' feet.

Leopoldsberg has been settled since the earliest times, since the second century b.c. Proof of settlement is found in ceramic finds and in pit huts and houses which served the Celts as accommodations. In the further and closer environment coins could be discovered. However, traces of this early settlement are hardly to be found today as the mountain was

changed into a fortress during the First World War. During the Roman time the Leopoldsberg was not settled. It was discovered in 1935, when extensive excavations took place.



Leopoldsberg

A castle was built on the Leopoldsberg in the 13th century but was unfortunately blown up in 1529 with the approach of the Ottoman Empire. Emperor Leopold I donated a new church around the year of 1679 and since that time it is called Leopoldsberg. It was damaged in 1683 but reconstructed in the period from 1718 till 1730 by A.Beguzzi. The church was again damaged by the events of the Second World War and was restored in 1945.



View on the Danube from Leopoldsberg

It is even called the Acropolis of Vienna. It is a **park of biosphere**, a specially protected region which is a part of the Viennese forest where they have succeeded to develop both agriculture and wine-growing.

Leopoldsberg is a part of the Viennese forest which is wooded northeast slope of the Alps. It is a local recreational area for Vienna. The northeast part of the Viennese forest extends over the western municipality district of Vienna. It is on the border of the Atlantic climate zone and Continental-Panonian climate zone. On the eastern parts of the Viennese forest are vineyards, in the north oak and Hainbuche, and in the south spruce, fir and larch. In the Viennese forest among other things are protected areas like Lainzer

Tiergarten and nature park. Today the Viennese forest is a landscape protection area, but endangered nevertheless by pollution and presence of the highways. According to the Green Belt Concept as a priority item of the Agenda 21, "particularly sensitive or structurally important parts of the natural landscape must be protected against extreme exploitation to avoid their degradation. If necessary, they should be replenished to create spatial links and "green wedges". "The concept 'Green Belt Vienna 95' was adopted by the Vienna City Council in November 1995.

Danube Island

Vienna often suffered from floods and high water, which inspired a number of plans to drain the river. The main goals were to provide protection from floods, create a navigable waterway, move the main stream and therefore ship traffic closer to the city, and ensure the flow of traffic by constructing bridges which would withstand the strain of floods.



Danube island

Out of many proposals, the city decided on the "Flood Control on the Danube, Vienna" project, which proposed the following measures: constructing a flood bypass canal-the "New Danube"-within the flood plain area along the left-bank dike; using the material excavated from the New Danube to create a flood-free island-the "Danube Island"-between the new waterway and the existing river bed; and directing water through the New Danube during high-water periods only. Outside the high-water periods, i.e., most of the year, the water in the New Danube is kept constant by weirs 1 and 2, resulting in a calm, lake-like surface. Together with the Danube Island, this increases the waterway's suitability for recreational activities. The decision to implement the "Flood Control on the Danube, Vienna" project was made by the City of Vienna in 1957. Legal authorization

was issued in 1970, and construction began in 1972. This project was (New Danube and Danube Island) finished in 1988. Tested for real it saved Vienna in 2002 from being as drastically flooded as many other Austrian cities.

Vienna's improved flood protection system was designed for a variety of uses and intended to increase the recreational value of an urban area. No other inland city of comparable size can boast of such extensive lengths of river banks along a huge body of water which is suitable for swimming. The Danube Island and the New Danube can now offer the public a total of approximately 390 ha of grassy areas and approximately 270 ha of water surface. Also its excellent accessibility by public transport (two Underground lines, 'Schnellbahn' - commuter train and bus lines) entails a reduction of weekend and recreation traffic and thus contributes essentially for supporting the traffic system.

The idea behind the Danube Island was to provide easily accessible facilities for both sports and leisure activities. In addition to bathing areas with flat beaches, the island can boast of an extensive network of paths for strollers, joggers, bike-riders and roller-skaters; grills and picnic areas; meadows; playing fields with markings; hard courts for tennis; separate courts for beach volleyball; and much more.

A trunk duct for the waste water from Vienna's northern districts was constructed along the left bank of the New Danube. The sewage is first directed under the New Danube to a pumping station located on Danube Island across from Steinspornbrücke, and then piped under the Danube to the main treatment plant.

The Danube Island Festival, held in the area between the Floridsdorfer Brücke and the Reichsbrücke, has become an institution in the past decade and is now Europe's largest outdoor event. In 1991, Vienna was chosen to hold the world rowing and canoe championships. The straight 2.5 km section of the New Danube, downstream from Steinspornbrücke, was specially adapted for this purpose.

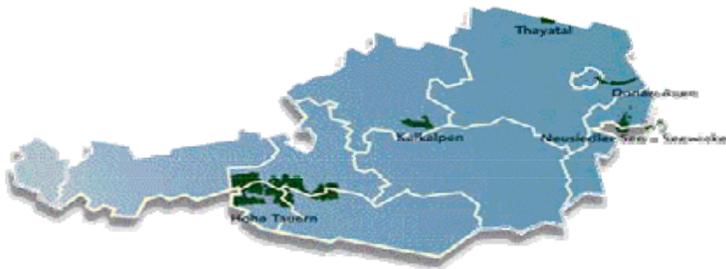
So the Danube Island is today known to most visitors of Vienna as a recreational mecca with countless bars, restaurants and nightclubs, a wealth of sport opportunities from rollerblading to canoeing and a beach that looks and feels so Caribbean that it's been nicknamed the "Copa Cagrana".

National Parks

National parks play a special role in the nature conservation policy of Austria. They are not only of importance for Austria, but are also of international relevance. Up to now, five of the ecologically most valuable regions of outstanding scenic beauty have been designated national parks. Listed by the date of their establishment, these are the national parks:

- Hohe Tauern (1992),
- Neusiedler See-Seewinkel (1993, jointly with Hungary),
- Donau-Auen (1996),
- Upper Austrian Kalkalpen (1997),
- Thayatal (1999, jointly with the Czech Republic).
- Gesäuse (2002)

A national park under discussion is in the Lech Valley (Tyrol).



National parks in Austria

The IUCN (International Union for Conservation of Nature and Natural Resources)- in its role as a world-wide umbrella organization for all countries and internationally active conservation societies- has defined six categories of protected areas. Category II lays down the criteria for national parks, defining a national park as *a protected area that is managed mainly for ecosystem protection and for recreational use*. International recognition according to the criteria of IUCN—The World Conservation Union for the category II "national park" has already been given to the national parks of Neusiedler See-Seewinkel, Donau-Auen, Upper Austrian Kalkalpen, Thayatal and the Carinthian part of the Hohe Tauern National Park. The area covered by the Austrian national parks totals around 2,200 km², i.e. approximately 3% of the national territory.

What is a National Park?

According to international criteria, a National Park serves:

- to maintain the ecological intactness of ecosystems for future generations
- to exclude forms of utilization and stress which would affect the objectives of a National Park to provide research, educational and recreational opportunities in a way that is in accordance with the environment and culture.

Saving nature for the people

The main task of the national park is to safeguard the natural processes of nature. However, in the conservation areas, people should be allowed to make use of the land for educational and leisure purposes. People who live in the region, holiday-makers or people on day trips: all of them are asked to treat nature`s creatures with consideration in return

for what has now become a rare natural experience. Guiding visitors and encouraging them to behave properly can help here - conservation achieved by locking people out, is a national park is an instrument used world-wide for the long-term preservation of unique natural areas and, with them, the animal and plant habitats they support. It is, however, not the only instrument of conservation policy, nor is in every case the best. The designation of land conservation areas or science reserves proves in many cases to be more easily achievable or better for species preservation.

Accordingly, a national park is a natural area of land and/or sea designed to:

- A** protect the ecological integrity of one or more ecosystems for present and future generations;
- B** exclude exploitation or occupation inimical to purposes of designation of the area and;
- C** provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

National Park Neusiedler See- Seewinkel (Burgenland)

Location

In Austria, a country of mountains and forests, Seewinkel gives the impression of an exotic landscape. This unequalled natural zone on an easternmost fringe of the Alps is the western part of the Small Hungarian Plain and encompasses a mosaic of the habitats: the lake with an average depth of 1.5 metres, a vast belt reed, countless salt marshes that evaporate periodically, also called “Lacken”, wetlands and remnants of the former “Hutweiden” (pastureland for grazing animals). The Hansag, once an extensive fen and alder swamp forest area, nowadays covers wet meadows.

National Park Neusiedler See- Seewinkel crosses the border to Hungary and is the only steppe national park in Central Europe. The area of the national park in both countries covers around 300 sq km with more than 100 sq km inside of Austria.



The Neusiedler See (Lake Neusiedl) area is a unique ecosystem within Austria. Because of its location, it is a border zone in a classical sense- from the historical perspective; it forms the border between different political spheres and influence. But the lake is also a biogeographical boundary area, in which plant and animal species from Alpine, Pannonian, Asian, Mediterranean and Nordic climatic zones can be found. Without a diversity of habitats, this wide range of species would of course not be possible: here we find, side by side, a mosaic of extensive and heterogeneous wetlands, pasturage, meadowlands, dry grasslands, sand steppes and saline tracts.

Formation of the lake bed began only about 13000 years ago: in several phases, depressions and basins were formed, first in the Hansag area. Water inflow precipitation accumulated for the first time into a lake, which successively dried out filled with rain water. Five different terrains can be found here:

- To the West, the Leitha Range – up to 440 m high (30 km extension)
- To the North lies the 200 km sq km gravel field of the Parndorf Plateau, about 40m above the lake basin
- To the Southeast, for the most part Hungarian territory, the Hansag area occupies some 460 sq km
- To the East between Parndorf Plateau and the main Regulation Channel, the Seewinkel Plain extends to cover approximately 450 sq km
- At the lowest point of the Small Hungarian Plain is the Neusiedler See, in a basin without outlet, at about 113m above sea level, and with a surface area of about 320 sqkm.

The planned birth of a national park

Already in 1939 draft legislation for Neusiedler See national park- prepared by the governor of Niederdonau- the southern part of the lake was declared a national park with surrounding area. In 1940, at the Nature Conservancy Day conference in Schladming, the Neusiedler See national park project was again on the agenda- this time also including the area on western shore.

During the following years, several brochures featuring Austria's only contrast landscape provided the necessary widespread impact needed to build awareness, as did the intensification of natural history guided tours through the OBN. The Biological Station established in 1954 was viewed as the scientific foundation for a future steppe national park. At the 1953 UIPN (Union International pour la Protection de la Nature) conference in Salzburg, the much striven-for creation of a national park on the Neusiedler See was recognized as very important.

The 1954 Austrian Nature Conservancy day was held in Eisenstadt and had as its primary topic the "Steppe National Park." The intensely disputed project for a bridge over the lake led in 1971 to renewed consideration of the long-term effects of a national park on tourism.

In 1978, the OBN put on the 26th Austrian Nature Conservancy Day in Mattersburg with the motto “Neusiedler See National Park – a Model of International Co-operation.” The so-called Mattersburg Manifesto represented a reaction to the then increasing pressure on the land housing development, agriculture and tourism, but also for the first time it documented the necessity of a bi-national planning for a national park. The creation of a national park was not only the vision of a few idealists, as a survey of vacationers in the Seewinkel area during the summer of 1979 showed: 92% of those surveyed responded that nature was a primary reason for their visit. In 1988, the Burgenland state government charged a working committee with concrete preparations for the creation of a national park. The governments of Austria and Hungary expressed their wish for a supra-national park. The outcome was a passage of the national park law in 1992.

The Neusiedler See National Austria’s protected areas not but also regarding the on which it was established Austrian State nor to any property owners. The who live in the villages of the discontinued their use of the annual indemnity. Parts of area belong to the Esterhazy Foundation, while the larger saline pulls and meadowland areas are owned by local land administration associations.



Park is a special case among only as regards its ecosystem, ownership of its land: the land in 1993 belongs neither to the Land, but rather to some 1200 majority are part-time farmers Seewinkel area, who have land in exchange for an the Park in the southern lake

As an international instrument for the preservation of a valuable ecosystem, as well as for the development of educational and recreational uses compatible with the natural environment, a national park must fulfill several criteria. Because the supra-national Neusiedler See – Seewinkel National Park was already in compliance with most of the criterias at the time of its establishment, the Park was, in 1994, the first in Austria to be recognized internationally with the relevant listing under Category I of the IUCN (International Union for the Conservation of Nature).

The goals of protection cannot be realized by discontinuance of detrimental human use alone: in contrast to pure nature conservancy, land management is utilized in a national park to maintain or improve the quality of the biotope. The type and extend of these activities are established in the management plan, which is based on extensive, area-specific research projects.

This national park is one of the major recreation zones in the region. The federal government supported both planning and funding this project. Through the involvement of the Ministry of Environmental, Youth and Family affairs, full observance of IUCN criteria was ensured as well.

On the basis of the Regional Planning Law as amended by the Provincial Law dated 19th of July 1994, the provincial government of Burgenland has adopted an ordinance on a provincial development programme to replace earlier partial development programmes.

The provincial development programmes classifies key settlements in three groups, i.e. industrial and commercial locations, tourism locations and locations suitable for tourism development. Moreover, the program contains further planning elements, such as large-scale protected landscapes and traffic routes, as basic features for the planning and design of spatial structures. The spatial development programmes and land zoning plans local authorities must confirm to the principles and objectives of regional development and local spatial planning. Municipalities and groups of municipalities were singled out to serve as locations for these predefined functions. The land zoning plans for Burgenland, too, must be revised and modified on the basis of local development concepts. However, the objectives, principles and other spatial planning requirements are defined in more detail in Burgenland than e.g. in the supra- local spatial planning programmes in Lower Austria.

The Vienna UNECE Declaration on Transport and Environment (1997.) has declared “sensitive areas” to be a responsibility of sustainable transport development. In these areas, special attention should be paid to the preservation of and compliance with acceptable limits for transport-related health and environmental impacts. Austria is a lead country for implementation the Declaration.

The region around lake Neusiedler See was selected for a pilot study. This pilot project is a significant contribution towards implementation of the UNECE Vienna Declaration, which was signed by the Austrian and Hungarian Environment Ministers in 2001. The following key projects are planned, among others:

- Innovative public transport
- Cross-border mobility centre
- Soft mobility for soft tourism

The pilot project should have an exemplary nature and be a model for how transport problems can be solved in sensitive areas and future opportunities for environmentally sustainable development of transport can be opened up for exploited in general and within the region itself.

The National Park organisation

After creation of the National Park once the relevant state law came into force, the National Park personnel was hired as of 1st May and 1st July 1993. The articles of organisation provide for three departments:

- Administration and Finance
- Area management
- External Affairs

The fielding research projects is contracted out to private third parties, while the visitor programme is carried out predominantly by freelance associates.

The yearly operating budget is founded mostly through the approximately Euro 4,37 million which come in equal contributions from the Republic Austria and the Land of

Burgenland. More than half of this amount is used for a loss of income compensation payments to the more than 1,000 property owners affected.

The decision-making body of the National Park organization is the board of directors, consisting of seven members and substitute members. The chairman and his deputy are members of the Burgenland state government.

The National Park Commission with representatives from federal and state levels review the activities of the National Park Organization as they relate to established objectives. Additional committees are:

- The Scientific Council, whose members decide on-among other things- the selection of research projects to be commissioned
- The Austrian- Hungarian National Park Commission, which coordinated the most important actions taken in the area of land management, research and public relations for both parts of the National Park.
- The National Park Forum, which is made up of representatives of regional interest groups and institutions.

On biodiversity



The richness of species in the Neusiedler See region is determined in part by its location in a transitional zone, in part by its wide variety of habitats. Within the National Park, a mosaic of different habitats have been placed under protection; in addition to the open water of the Neusiedler See (southern part), they are:

- The reed belt and the large reed-covered islands as well as open water within the reed-covered area;
- The silted-in area of the lake, with its variably wet meadowlands and saline soil tracts;
- The more than 20-kilometer-long sand dike along the eastern shore between Weiden and Austrian-Hungarian border;
- The meadowlands, created through use for traditional haymaking;
- The remaining pastureland (Hutweiden), among Austria's most precious cultivated areas, and;
- The unique shallow pools which vary in salinity and frequently dry out completely.





A variety of animal and plant species, unique in Austria, find a suitable habitat in national park. Due to the long vegetation period both southern and eastern types of steppes can be found.

Birds are magically attracted to the rich mixture of different habitats. Avocets, Eurasian curlews, yellow wagtails, short-eared owls, Montagu's harriers, great bustards and white storks are just a few of the many species able to be watched in the national park. About half of the around 300 kinds of represented birds breed within the area. In the course of European-African bird migration more than 150 different kinds of birds rest in the national park. Every autumn thousands of geese gather in the salt marshes and lake before resuming their flight to the south.

Even Seewinkel's world of small species is striking. The favourable climate along with the salt levels of water and soil determine a wide variety of insects. Typical for the steppe fauna is the Russian tarantula. Even the mammal fauna is richly represented with more than 40 species such as e.g. ground squirrels, polecats and hamsters.

Sensitive or structurally important parts of the natural landscape must be protected against extreme exploitation to avoid their degradation. The region around the lake Neusiedler See is one of the most important landscape regions in Europe. The ecological and cultural values, and the instable utilization and ecosystem make this region a sensitive area with exceptional opportunities for sustainable lifestyle and management- in the midst of a dynamic economic area and against the backdrop of increasing east-west and north-south traffic.

Thayatal National Park



The **Thayatal** was created over millions of years in the history of the Earth, and it is the smallest national park in Austria (it covers an area of 1330 ha). Human interference remained



episodic and barely modified the landscape. Nature found a refuge in this hardly accessible, for decades almost unreachable valley at the border – the transfrontier National Park **Thayatal**/Podyji.

The Thaya River broke into the geological formations of the Waldviertel 150 meters deep. Along the river, a tight net of the various habitats can be found: meadows, forests, dry grassland and rocks provide a habitat for numerous animals and plants. Its particular position on a distinctive climatic border between the dry and hot



Pannonian and the wet Atlantic climate is a reason why such a wide diversity of plants and animals is found in such a small area of Austria's almost 3000 plant species-around 1300 occur here. The black stork (*Ciconia nigra*) dwells here, the white-tailed eagle (*Haliaeetus albicilla*) has its winter quarters. More than nine hundred varieties of butterflies have been counted. The green lacerta (*Lacerta viridis*), highly endangered, is as much at home here as the burning bush (*Dictamnus albus*), variegated iris (*Iris variegata*) or the purple Siberian melic (*Melica altissima*). The whiskered bat (*Myotis mystacinus*) is just one of the many kinds of bats inhabiting the National Park **Thayatal**.

On the steep slopes that could hardly be forested natural forests remained preserved. Hornbeam (*Carpinus betulus*) and oak (*Quercus* sp.) dominate the woodland. Only in dry rocky areas Scotch pines (*Pinus sylvestris*) can grow. When snow outlines the rocks and frost coats the branches, the birds make use of the food on offer in the ice-free Thaya. The traces in the snow reveal the presence of wildlife.



The area of the national park is also fascinating because of the castles and ruins, and the stories which are woven around it. In the heart of the national park there is the mighty Hardegg castle and Kaya ruin. On the border between the Waldviertel and the Weinviertel, numerous hiking paths lead to the prettiest spots and vantage points of the national park. Around the national park, the transfrontier biking route “Retzer Land – Znaimer Land” leads through cozy villages and



picturesque wine-cellar lanes to enchanted castles and grand manor - houses. The new national park building gives its visitors insights on the geological history of the **Thayatal**, and it is a starting point for hikes.

The establishment of the national parks is a central focus of the Austrian environmental policy and they represent all of the country's most important types of landscapes. The wide diversity of animals and plants deserves to be protected well!



The Danube Flood Plain National Park in Austria

The Danube Wetlands National Park (key project) is a cross-provincial project based on one of the first studies by PGO, the Landscape Plan for the Danube Wetlands, and is operated jointly by Vienna, Lower Austria and the Federal Republic. The natural outlook of this unique river landscape extending from Vienna to Bratislava is to be preserved for coming generations.

The Danube flood plain national park in Austria is a green ribbon between the conurbations of Vienna and Bratislava, protects the largest natural riparian wetlands in Central Europe, which are still to a high degree ecologically intact, is vitally influenced by the practically free-flowing stretch of the River Danube, which in this area still has the characteristic phenomena of an alpine stream, represents a complexity of ecosystems with an enormous diversity of habitats, plant and animal species, offers home and refuge to many endangered plants and animals, deeply impresses visitors with the particular beauty of its landscape, provides a natural overflow for floods, guarantees high-quality drinking-water, acts as filter and climate regulator for the whole region and serves as a recreation area for people living in the surrounding region.

Total area at present: 9,300 hectares owned by the Austrian Federal Forests, the Republic of Austria (Directorate of Inland Waterways), the Municipality of Vienna, and the Municipality of Hainburg. About 60% of this areas are forests, approximately 25% are covered by water.

Future aims: it is planned to extend the park to 11,500 hectares by adding privately owned areas and areas owned by municipalities as well as agrarian cooperatives.

The River Danube forms part of the National Park over a distance of about 36 km. Its waters flood the riverine land and thereby determine the natural rhythm of the riparian wetlands. The ecosystem is very dynamic. The highs and lows of water levels (which can vary by as much as 7 meters) show the extreme range of conditions to which the riparian wetlands are subjected.

These varying conditions lead to a diversity of habitats.

Major habitats are the River Danube canals and former tributaries of the Danube, all sorts of marshy pools and sloughs gravel banks on islands and riverbanks flat banks with

siltation and wetlands steep riverbanks riverine forests (wet and moist wetlands) as well as forests on steep slopes meadows and well drained, dry ground where the vegetation reminds one of savannahs.

Obviously this great range of habitats is the basis for an outstanding diversity of species. There is evidence of more than 700 species of vascular plants, more than 30 mammal and 100 breeding bird species, 8 reptile and 13 amphibian species and more than 50 different species of fish, an abundance of terrestrial and aquatic invertebrates In 1997 the Danube National Park Donau-Auen, established in 1996, was internationally recognized by the IUCN (International Union for Conservation of Nature), as a category II reserve, which is a sign of particularly high quality and only granted to areas meriting special protection.

Regulation of the River Danube (end of the 19th century) resulted in:

- correction and permanent regulation of the main stream
- increased flow velocity led to reinforced erosion of the bed of the Danube and, thus, a lowering of the groundwater level
- cutting off the river from the riparian wetlands favoured the siltation of the wetlands
- natural river banks were destroyed by dikes
- quicker runoff of the water
- improved conditions for navigation

The flood prevention dike has had the following effects:

- protection of the Marchfeld area from recurrent flood disasters
- parts of the wetlands were cut off from the Danube and its floods

The building of hydro-electric power stations upstream has

- affected the natural runoff of the river Danube
- stopped the process of sediment transportation which has led to acceleration of the erosion of the riverbed

Intensive forestry in the past

- converted large areas of natural riverine forests into unnatural monocultures and stands of the same age
- introduced and supported non-native and exotic tree species
- resulted in the construction of a dense forest road system

If the power station had been built:

- hundreds of hectares of riverine forest would have been irretrievably lost;

- the Danube would have been dammed up. This means that the last free flowing stretch of river in a basin, in the alpine-like stretch of the Danube, would have been destroyed;
- the river banks would have been replaced by dikes; islands and gravel banks would have been destroyed;
- the wetlands would have been cut off from flooding, which would have stopped the characteristic dynamics of a flowing river;
- the natural dynamics of the ground water would have been altered, which would have affected the quality of the ground water.

Successful passive resistance against the projected hydro-electric power station (by occupation of the wetlands near Hainburg - Stopfenreuther Au - by about 6,000 people camping there in December 1984):

- It was decided not to build the hydro-electric power station for the time being.
- From 1985: development of alternatives for the hydro-electric power station at Hainburg by the Ecology Commission (maintaining the free-flowing stretch of the Danube and National Park or new options for a power station).
- 1986-1989: scientific research for a future National Park by the National-parkplanung Donau-Auen; at the same time, discussion of new possibilities regarding a power station at the highest political level.
- 1989: 411 hectares of the riparian wetlands near Regelsbrunn were purchased as a result of the WWF initiative "Ransom of Nature".
- 1990: agreement regarding the establishment of a National Park signed by the Republic of Austria and the Provinces of Lower Austria and Vienna.
- 1991-1995: planning phase of the National Park by the "Betriebsgesellschaft Marchfeldkanal".

The most important conclusions are:

- The Danube riparian wetlands in and east of Vienna need to be protected by a National Park.
- A riparian wetlands National Park is incompatible with a hydro-electric power station.

Finally, the formulation of political objectives led to the conclusion of an agreement regarding establishment and maintenance of a National Park Donau-Auen between the Republic of Austria and the Provinces of Lower Austria and Vienna on 27th October 1996. Other laws concerning the National Park Donau-Auen are:

- The Lower Austrian Law on National Parks and the Order on the National Park Donau-Auen based on it.
- The Viennese Law on National Parks and the Viennese Order on the National Park Donau-Auen based on it.

Organization of the National Park Donau-Auen

The National Park Donau-Auen is administered by the National Park Company, a non-profit organization funded by the Republic of Austria and the Provinces of Lower Austria and Vienna as partners. The Managing Director of this organization is the Director of the National Park. The National Park Forest Administration Eckartsau of the Austrian Federal Forests and the National Park Forest Administration Lobau of the Forestry Office of Vienna are sub-divisions of the National Park Administration and, as such, are responsible for the implementation of management measures regarding areas owned by the Austrian Federal Forests and the City of Vienna. The Director of the National Park and the heads of the two forest administrations jointly form the Executive Committee.

The National Park council for Vienna may address recommendations to the National Park Administration. The National Park council for Lower Austria protects regional interests. Apart from the opportunity to make recommendations to the National Park Administration, the National Park council for Lower Austria also has the right of approval with respect to the annual plans of the National Park Administration. In some of the municipalities around the National Park, local councils have been established. In cases of particular local importance, they may address recommendations to the National Park Administration and to the National Park council for Lower Austria.

Austria's Vineyards

Austria's vineyards are situated to the east of the country, north and south of Vienna and Graz well away from the alpine slopes and ski resorts. The climate is continental with warm, dry summers and freezing cold winters. The aspects of the vineyards vary from the plains surrounding the Danube to the steep slopes of Styria.



Vineyard

The wine regime is extremely strict and controls exacting. It is comparable to the German system in that quality levels are graded on the sugar content of the grapes. However, yields are much lower and unlike Germany, most Austrian still wine is fermented dry. It is predominantly a white wine producer (80%) cultivating the indigenous Gruner Veltliner followed by Muller-Thurgau, Pinot Blanc and Welschriesling, the latter being responsible for the great sweet wines for which Austria is justifiably famous.

Vineyard holdings are by tradition small, in many cases as little as 1 hectare and, as with Germany, much vine cultivation is operated on a part-time basis. Austria pioneered the vine training system known as 'Lenz Moser', named after the inventor and very much in use today. It involves training the vines in a canopy system, high off the ground, increasing the density of the leaf surface and reducing the cost of production. It also allows for mechanical harvesting.

The wine growing areas are all in the east of Austria, around the capital Vienna, covering a total area of nearly 58 200 hectares. There are 4 wine regions - Lower Austria (Niederosterreich) is the largest, covering 33 648 hectares, or 58% of the total; Burgenland encompasses 20 986 hectares, or 36%; Styria (Steiermark) 2 844 hectares, or 5%; and Vienna 704 hectares, or 1% (Vienna is the only capital in the world that has commercial vineyards within its city limits).

Austria produces an average of 2.5m hectoliters of wine a year, placing it 17th in the world production league table.

The white Gruner Veltliner-Austria's most typical and well-known varietal - is the most popular grape variety cultivated, accounting for 36% of total plantings. Of the reds, Blauer Zweigelt - an Austrian crossing of St.Laurent and Blaufrankisch is the most widely planted, with 6% of the total. Most of the wines made in Austria are single varietals, although there is a fashion particularly amongst the reds to blend grape varieties, sometimes producing a cuvee of indigenous and "classic" types (such as Cabernet Sauvignon / Blauer Zweigelt).

Austria's dessert wines are particularly acclaimed throughout the world, especially those from around the Lake Neusiedl in the Burgenland where the growing conditions are perfect for the production of sweet, botrytised wines.

A percentage of the wine is not bottled, being consumed on-premise in Austria's acclaimed "heurigen". A heurigen is a sort of "wine inn", where the wine on offer has been produced on the property (as is the food). It is usually served straight from the vat, in large flasks or jugs. "G-Spritzer", the name given in Austria to the combination of white wine and soda, is one of the most popular drinks consumed in a heurigen.

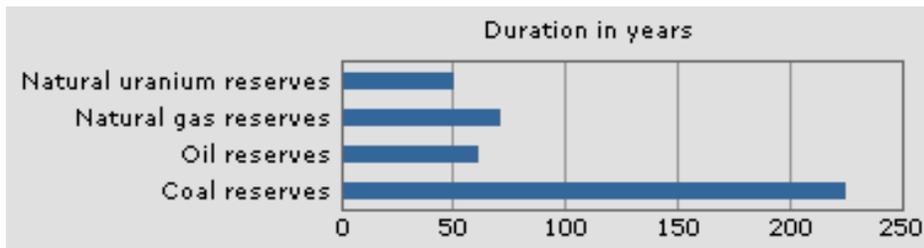
Outside of its domestic field, Germany is far and away the most important market for Austrian wines, taking 73% of total exports. But Austria's wine regions cover an area of half the size of Bordeaux, so there are not vast quantities of wine to be sold. Therefore the aim of the Austrian wine industry can not be to sell large volumes of wine everywhere but instead to have representation in selected countries world-wide.

Wind Power



Wind power as a sustainable energy source

Wind is a sustainable energy source which will always be available just like solar energy, water power or biomass. Compared to oil and natural gas, it does not pose a threat to people or the environment. The worldwide supply of fuel, gas and uranium will be depleted in a few decades. Expansion in utilisation of renewable energy sources is the only logical way humanity will be able to progress in the future.



If the massive consumption of these natural resources is not limited, the youth of today will live to experience shortage of fuel and gas. The burning of these natural resources already is affecting the Earth's ecosystem and these negative effects will continue to increase. As a result of this conclusions and principles of Sustainable development, after it had been initiated by the UN in 1994, the worldwide climate convention became effective and 175 countries had ratified it.

The goal is to stabilize the greenhouse effect and reduce gas emissions to a level where they would not be dangerous to the world's climate system. In 1997 the Kyoto Protocol was passed, in witch it was decided that the industrial countries must reduce their gas emissions in the period 2008.-2012.to level 5% less than the level in 1990.

The European Commission published the "White Book" for Energy Production in 1997. It stated that by the year 2010. The share of renewable resources in the total energy use of the EU should double from 6% to 12%. Guideline of European Union, passed in 2001, guarantees realization of these goals:

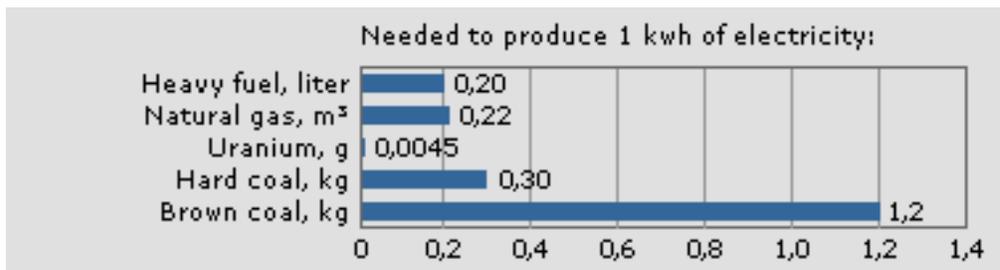
Electricity consumption produced by renewable energy should increase from 14% (in 1997.) to 22% in 2010. The member states are allowed to set individual goals. Austrian goal is an increase in electricity produced by renewal energy source from 70% to 78%, hydroelectric power and the incineration of garbage are included here.



Wind power technology

Wind power plant technology is available, safe and continuously improving, costs have fallen substantially and public opinion is absolutely positive towards renewable energy sources.

1.5 MW wind turbine produces between three and five million kilowatt hours per year according to the conditions on location of wind-turbine complex. This is enough energy for 1,000 to 2,000 four-person households. In other words, the surface of a rotor of a 500 kW turbine amounts to 1,275 m² and only 4 m² of rotor surface would be enough to supply a four person household with electricity for one year.



1,000 homes need approximately 3.500.000 kWh per year.

A kilowatt-hour of energy produced from fossil fuels means an emission of:

| | |
|-----------------|----------|
| Carbon dioxide | 970.00 g |
| Sulphur dioxide | 1.48 g |
| Nitrogen oxide | 0.73 g |
| Dust | 0.04 g |

A wind park with 6 MW installed capacity will reduce approximately the following emissions yearly:

| | |
|-------------------|---------------|
| Carbon dioxide | 13,600,000 kg |
| Sulphur dioxide | 20,720 kg |
| Nitrogen oxide | 10,220 kg |
| Carbon monoxide | 8,550 kg |
| Dust | 560 kg |
| Or nuclear wastes | 72 kg |

The use of wind power reduces the necessity for importing foreign electricity and strengthens the regional economy. Also power can be produced from wind energy without releasing any pollutants into the air, water and soil.



One of the leading principles in Sustainable development is eco-efficiency (efficiency at the same time of economy and ecology) which presents increase in economical success with reduction in consumption of raw materials and energy, and promotion of renewable energy resources.

Economic characteristics

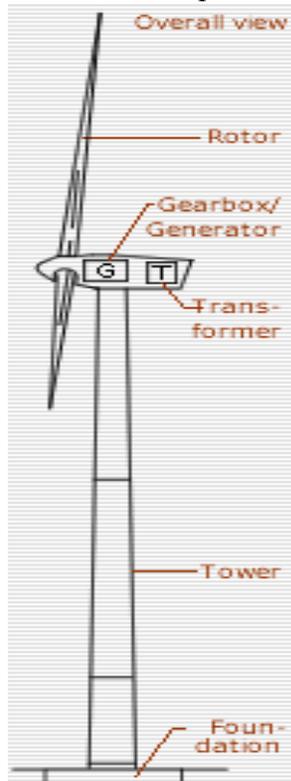
Wind power has developed to become the most inexpensive renewable energy source. When a wind park is carefully planned, its' costs are 50% lower than they would have been in 1990-1995.

The yearly power production of a turbine is significantly increasing. A few years ago the 500 kW turbine was a sensation and today the 1.5 - 2 MW turbines are standard. A prototype of a turbine with 4.5 MW that is able to produce electricity for 3,000 households went into operation in 2002.

According to the costs for infrastructure, one kW of installed capacity costs between 880 € and 1,385 €.



The energy produced by the wind depends on wind speed (increases with the cube of the average wind speed). This is the reason that the economics of a wind park depend strongly on the wind conditions at the site, but also on the local infrastructure (access roads for transportation and maintenance, cables, transformer stations, etc.).



Since wind does not blow at the same speed at the same time, there are fluctuations in the electricity production. However, the modern generators are becoming more and more flexible and are able to smooth out these fluctuations in order to produce a more even supply of electricity. Still no single power plant can guarantee the supply of electricity, so many power plants are networked in order to ensure the reliable delivery of power. As for financing of these projects funds are raised from capital resources of the companies resources, funding from Austrian government agencies and from long term bank credits. In Austria we can see some good examples of participation of citizens in funding these kinds of projects. Investments costs are: Wind turbines and accessories, electrical cables and grid connection, road infrastructures, legal rights and contract payments, public relations, lawyer, planning and supervision of construction. Operational yearly costs are: machine parts, maintenance and repairs, personnel costs, property leases and insurance, administration, bookkeeping and other services. Considering these costs, there is a question of rentability: life span of wind turbines amounts to 25 years and after the capital is paid back (maybe in 10 years) profits be expected. But benefits from these projects are multiple: unlimited access to clean, renewable

energy source without pollution, lowering the use of fossil fuels, creation of new jobs and attraction of tourists.

Over 70.000 people worked worldwide in the wind power industry in 2003. In Europe over 45.000 jobs in 1.000 companies have been created.



The installation of one MW capacity that produces electricity from wind creates 15 to 19 jobs. In Germany 2.5% of power consumption is covered by wind produced energy and 35.000 jobs in the wind power industry exist. Comparing the number of vacancies opened in this new branch of industry with the old industries in energy production:

from coal which has 20% share of the market, there are only 80.000 jobs created in this industry. In comparison to nuclear power, which covers 31% of Germany's electricity consumption and employs 40.000 workers, wind power has created 10 times as many jobs.

In Austria in 2003, 2.300 employments in this industry existed; this number is still increasing (in 2001 it was only 600.).

Ecologic characteristics



The landscape is constantly being changed by man. Wind mills have been a part of European cultivated landscape for centuries. Protection of natural environment and the landscape, involvement of the public and the regional government in the project guarantee the wide acceptance of wind-turbine complexes.

A wind turbine is only a temporary structure in the landscape (and can be dismantled in one day) comparing to the

cutting down of whole forest areas or the mining of coal which can destroy the landscape irrevocably.

Wind parks are always carefully planned. Most of the property owners in which the parks are built are farmers and, by leasing their land, they have an additional source of income. The price paid for property leases is more than they would normally be earning by farming the property. A wind turbine needs an area of up to 500 m and the rest of the property can still be farmed without any problem.

The times when badly planned wind parks disturbed the public due to noise are a thing of the past because of improved technology. The noise from a wind turbine with height of 78 m, at a wind speed of 12-14 m/s and at a distance of 320 m amounts to only 41 dB. As

a comparison a normal conversation is 50 dB. The noise emissions were cut down by half in just three years.

There are many scientific studies about the effects of wind turbines on birds and game. They show that game gets used to the wind turbines. The problem of birds flying into the rotor blades doesn't seem as serious as expected .

They cannot be built near settlements because during the winter-time they produce ice which falls of and can pose a danger to people.



Implementations in the world

From the worldwide installed capacity of 40.000 MW, 67% (28.700 MW) are situated in Europe, 22% in North America and 11% in the rest of the World. Altogether they could cover 19 million average European households.

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|--------|------|------|------|------|------|------|------|------|------|
| USA | 1591 | 1582 | 1611 | 2141 | 2465 | 2495 | | 4685 | 6374 |
| India | 576 | 820 | 940 | 1022 | 1062 | 1138 | 1507 | 1702 | 2110 |
| China | 44 | 79 | 146 | 200 | 261 | 316 | 400 | 468 | 568 |
| Canada | 21 | 22 | 26 | 83 | 125 | 137 | | 236 | 317 |
| Japan | | | 18 | 40 | 68 | 135 | 274 | 414 | 686 |

Implementations in Europe

In Europe ,Germany with over 14.600 MW installed capacity is the country with the most wind power in Europe and Spain (6.200) and Denmark (3.100) follow. These countries lead in exploitation of wind power because their governments ensured a minimum tax for renewable energy. These renewable energy forms are not able to compete on the market with conventional energy sources when distributed, due to the high cost of their production so most of them are in need of financial support and subventions from the government. The public surveys show that a majority of Austrians would be prepared to pay higher tariffs for clean electric energy.

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|--------------------|------|------|------|------|------|------|------|-------|-------|
| Germany | 1132 | 1545 | 2080 | 2874 | 4443 | 6113 | 8754 | 11994 | 14609 |
| Spain | 133 | 249 | 512 | 834 | 1225 | 2235 | 3337 | 4825 | 6202 |
| Denmark | 637 | 857 | 1116 | 1450 | 1761 | 2300 | 2417 | 2889 | 3110 |
| Italy | 33 | 71 | 100 | 180 | 283 | 427 | 697 | 788 | 904 |
| Netherlands | 249 | 299 | 325 | 363 | 411 | 446 | 493 | 693 | 912 |

| | | | | | | | | | |
|--------------------|------|------|------|------|------|-------|-------|-------|-------|
| UK | 200 | 270 | 320 | 334 | 353 | 406 | 474 | 552 | 649 |
| Sweden | 69 | 105 | 117 | 150 | 215 | 231 | 290 | 345 | 399 |
| Greece | 28 | 29 | 29 | 39 | 82 | 189 | 272 | 297 | 375 |
| Ireland | 7 | 11 | 51 | 63 | 73 | 118 | 125 | 137 | 186 |
| Portugal | 9 | 20 | 38 | 60 | 60 | 100 | 125 | 195 | 299 |
| Austria | | 3 | 20 | 30 | 42 | 77 | 95 | 140 | 415 |
| France | 3 | 10 | 10 | 19 | 22 | 66 | 78 | 148 | 239 |
| Finland | 6 | 8 | 12 | 17 | 38 | 38 | 39 | 43 | 51 |
| Rest Europe | | 29 | 31 | 51 | 68 | 76 | 124 | 210 | 266 |
| Total sum | 2506 | 3506 | 4761 | 6464 | 9076 | 12822 | 17320 | 23308 | 28706 |

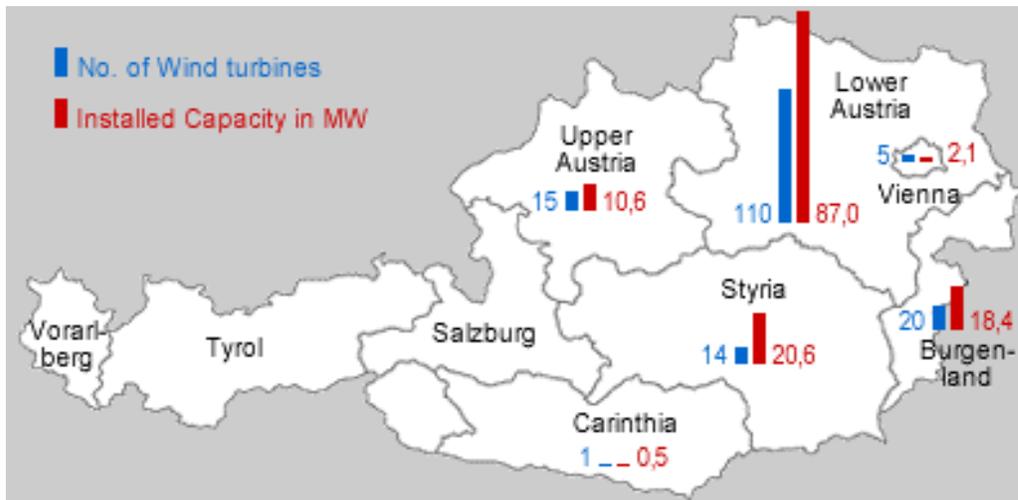
Following the EWEA (European Wind Energy Association) the growth of wind power in Europe in the year 2003 is 5.411 MW , 23% of energy produced only by wind.

Implementation in Austria

Although Austria is thought to be an ecologically conscious country, in the use of wind power it is far behind countries as Germany, Spain and Netherlands.

70% of Austria's electricity is produced by renewal resources but hydroelectric power plants make most of it, with consequential changing and destroying of the landscape.

Wind power would be the ideal complement to water power since 2/3 of it is available in the winter months when water power is at a minimum.



| Region of Austria in 2002. | Number of wind turbines | Installed capacity (MW) |
|----------------------------|-------------------------|--------------------------|
| Upper | 15 | 10.6 |
| Lower | 110 | 87 |
| Vienna | 5 | 2.1 |
| Styria | 14 | 20.6 |
| Carinthia | 1 | 0.5 |
| Burgenland | 20 | 18.4 |

With effectiveness of the "eco-electricity" law the Austrian strategy of energy production is defined. The aim is to raise the percent of renewable energy (energy from wind, solar, geothermal, hydro-power, wave and tide,

biomass, biofuel) to amount to 78% of Austrian electricity consumption by 2010. The law requires 4% of all the country's electricity to come from appropriate renewable energy sources (not including hydro power) by 1 January 2008.



In Austria the areas particularly favorable to the erection of wind power plants are the agriculturally used elevations on the foothills of the Alps, in the northern parts of Burgenland, in parts of Southern Lower Austria, in adjoining regions in Styria and also in Mühlviertel, Waldviertel, and Weinviertel. Even the frequently blowing

wind in Austria's capital Vienna can be used for energy generation too. Further promising locations are encountered in the alpine area.

Around 1/3 of the electricity in Burgenland is produced by the turbines of wind power plants. Today there are 90 of them in Burgenland and 19 in Neusiedl with power of 1,5 megawatts. Construction of the one turbine cost 2 million €.



Experience gained abroad and the know-ledge obtained in Austria in the course of building of biomass/solar district heating plants have shown that the result of such novelties very much depends on their social acceptance. The Austrian model in building of these projects was developed in co-operation with participating citizens – the so-called *Betreibergemeinschaften* (joint operators). The first two such models were realised in 1995 and 1996, when altogether 400 persons participated legally and financially in the construction of a wind power plant at Michelbach (Lower Austria) and Eberschwang (Upper Austria). The first larger wind turbine erected in Michelbach in 1995 was named "Citizen Wind Turbine" because it was owned by over 100 private shareholders. As partners these persons also get their own shares of the profits obtained from compensation paid for power feeding.

From these experiences in Austria we can learn that partnership between government, local authorities and its citizens is beneficial to all. Allowing people to participate in actions they consider righteous, feel satisfied in their involvement in resolve critical

issues in their local communities, involving state and local government, with common goal of raising quality of life and local unity, insuring economic growth and development. From the moment we entered Austria, going by high way towards Vienna, we were impressed by the view: so many windmills, turbines stretched along the high way. In that moment symbolized consciousness of Austria for well-being of all their citizens and readiness to turn ideals into reality. Realization of this idea of producing energy without polluting environment so unusual in developing countries was here.

Conclusion

Now that we have put in order all our impressions we have brought back from this excursion, beside the marvelous welcome and hospitality that we have received from our hosts, we cannot get over the incredible organization on the part of the Austrians. We have seen how the sensitive natural areas are protected with the greatest care, without disturbing the local population and their activities. Our country has a significant potential, but unfortunately is low on funding that is needed to organize and manage the usage of such natural areas in the right way, to resemble what we have seen in Obermarkersdorf, Neusiedl and so on. To make such places a reality we need help from the European funding. All what we have seen in Austria can be used as a model in organising local communities in our country.

For us, though, the greatest surprise was finding out how planning in Austria really functions. In our country, especially on the local level, you can still feel the consequences of the centralistic way of thinking, governing and managing those potentials. Many possibilities and resources are still unused. The conclusion is that even the citizens, unlike the Austrians, don't have the feeling like they can influence the management or change anything. The political culture of today is developing, but the consciousness that the best initiatives for the local development come from the citizens themselves, who live in those communities, and know the potential and richness of the natural areas best, is not yet ripe. The citizens have both the ideas and abilities, but there is no mechanism that would allow for these local initiatives to be recommended or articulated, hardly to be accepted and get financial help. That link, which is missing, could be the organization of the government itself, citizen associations, as to keep in mind that the citizens can do it and deserve it.