

REDIS VIENNA

THE INDUSTRIAL ZONE LIESING

General information

Vienna Implementation Lab

Wednesday 15th to Friday 17th December 2010





REDIS CONFERENCE "Restructuring Districts into Science Quarters"

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VIENNA

Vienna is the capital of Austria, and is also one of the nine states of Austria. It is Austria's primary city with a population of about 1.7 million (2.3 million within the metropolitan area), and by far the largest city in Austria as well as its cultural, economic, and political centre. It is the 10th largest city by population in the European Union and was listed by Mercer Human Resource Consulting as having the 1st highest quality of living. Vienna is host to many major international organizations such as the United Nations and OPEC. It lies in the very east of Austria and is close to the Czech Republic, Slovakia and Hungary. In 2005 an Economist Intelligence Unit study of 127 world cities ranked it first equal with Vancouver for the quality of life. Vienna is divided into 23 districts. Liesing is the 23^{rd} .

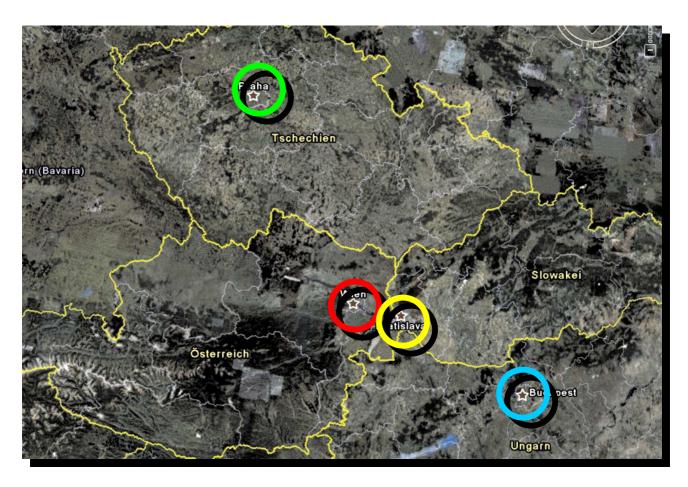
City	414.90 km ²
Land	395.51 km ²
Water	19.39 km²
Population City	1.681.469
Population Metro	2,268,656



Despite the fact that Vienna is a central European city it has to be mentioned that it is nearby three other capitals: Prague/Czech Republic, Bratislava/ Slovakia and Budapest/Hungary.

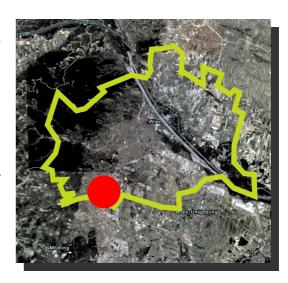






The Industrial Zone Liesing

The REDIS – target area is an industrial zone in the Southern part of the city, which does not have an outspoken image or specialization. It is one of the few remaining areas in Vienna where substantial industrial activity is located. It contains a wide variety of businesses; most of them are industrial or logistics firms, and many are not that knowledge intensive.







In general, the Southern part of Vienna is in full development. Traditionally, it is a very popular residential area, because the city center can be easily reached (by public transport), the highways are nearby, and the airport is also close.



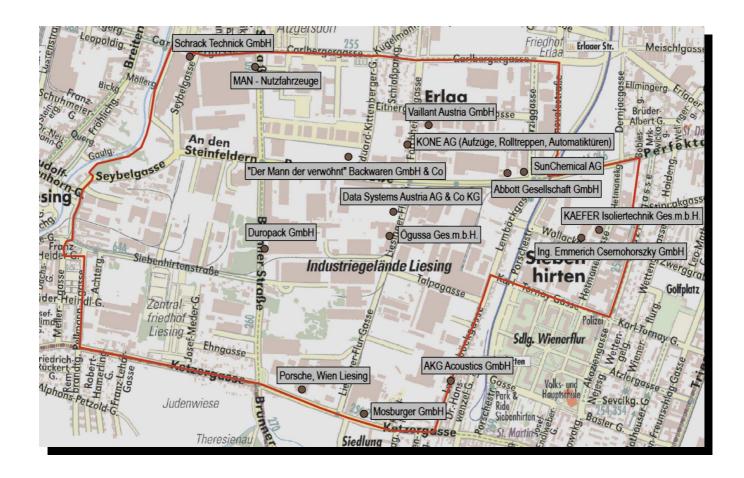


<u>Data</u>

Size: ca. 190 hectares Employees: ca. 7.000





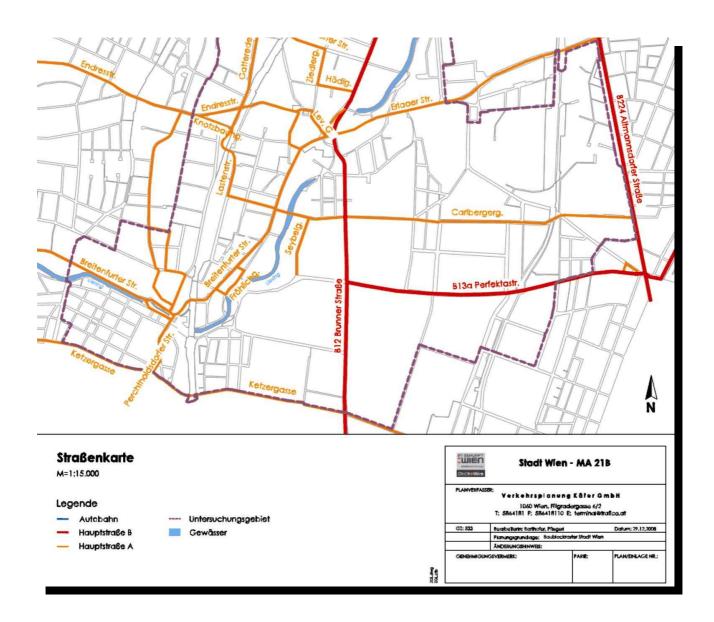


<u>Enterprises</u>: ca. 500 registered companies inter alia MAN Trucks, a Bakery, packing companies, IT, Insulation, escalators and elevators, chemical industry, Porsche and Bentley car dealers.

Map above shows companies over 100 employees.





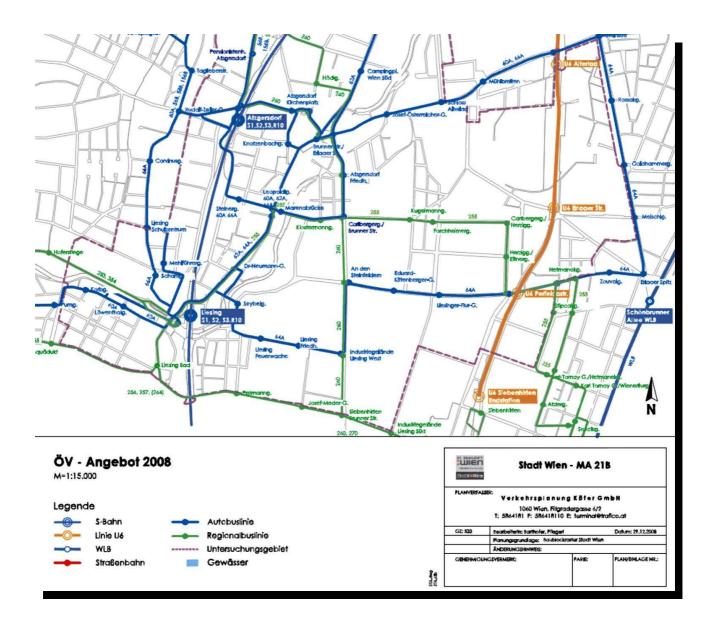


Main Roads in that area

The area is very well connected to the main roads coming from the south and the west of the country.







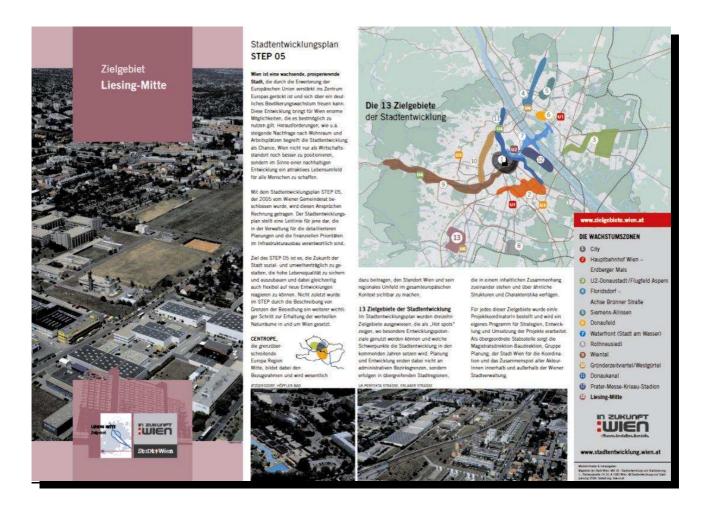
Public transport

The public transport is good on the edges with the Metro Line U6 in the East and the Interurban train, the S-Bahn in the West.





The 13 urban planning target areas of Vienna



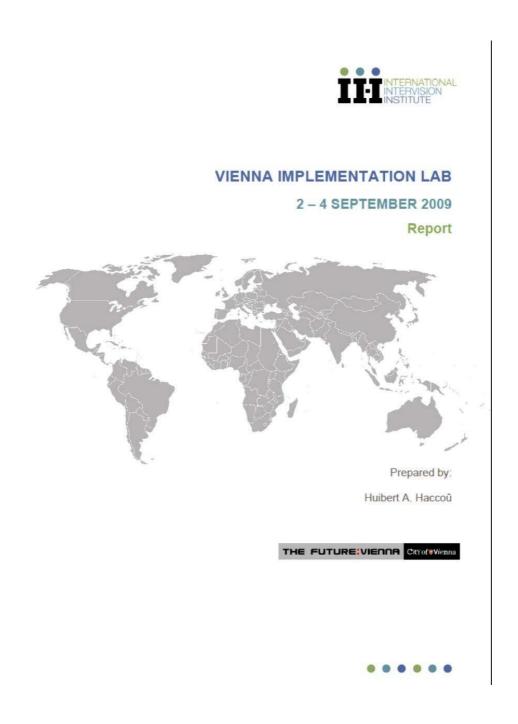
The target area Liesing Central is a major development region in the South of Vienna. It consists of three core areas with different challenges. The area of the old village centre of Atzgersdorf and the adjacent quarters with mixed use, the gardening and nursing area of In der Wiesen and the so called industrial zone – Industriegebiet Liesing.

During an international workshop, an implementation Lab in September 2009 answers according to the challenges in urban development for the areas Atzgersdorf and In der Wiesen were looked for.





The fruitful outcome of the IL in 2009 is the base for further development in that area and has an impact on the development of the industrial zone. (The report of the IL will be handed to the participants during the workshop).







Willem van Winden's baseline study (2008)

1. Introduction

Vienna is the capital of Austria, and counts some 1.76m inhabitants. It has a great tradition as intellectual centre, and given its assets, is well positioned to benefit from the evolving trend towards a knowledge base economy. The city has already successfully transformed some areas into science quarters of different kinds.

Most developments have taken (and still are taking) place in the North of the city. But recently, the Southern fringe of the city (the Liesing district) has come in the picture. This part has always been attractive as residential area, it is wealthy, well accessible, and it has a number of amenities. Restructuring measures are being taken to create new residential and mixed areas there, and to upgrade the infrastructure to deal with increasing traffic pressure.

The area also contains a large industrial zone. A remarkable recent event was the sudden and unexpected announcement of Novartis, one of the largest firms there, to close down its facility. In the area, since the 1970s Novartis has conducted research and development in the field of pharmaceutics and biotechnology. The closure of the facility will free up an area of some 11 ha, but at the time of writing, uncertainties prevail. It is unclear who will buy the area and hence what the future of the area will be.

Nevertheless, Novartis' announcement has ignited a debate on the future of the area and the connection with its surroundings. The city of Vienna considers the REDIS exchange programme as a catalyst to develop ideas and concepts with a local support group (consisting of key stakeholders), and to learn from other cities. This chapter describes the state-of-the-art in the area, put in a more general context of Vienna's economic and scientific profile, and the Liesing area in which the Novartis plot is situated.

This chapter first describes the social-economic and political-administrative context in which the area will be developed (section 2). Next, it provides more details on the area: its location, development stage, and possible future directions. The ideas were generated during interviews with key persons involved in economic policy, science policy and planning in Vienna. Finally, we provide some major issues relevant for Vienna in the REDIS exchange.

2. Socio-economic context

In this section, we sketch the context in which the area in Vienna is being developed. For this, we analyse the key 'foundations' of the knowledge based urban economy, as identified by van Winden et. al (2004): the urban economic base, the knowledge base, quality of life, and accessibility. These foundations set the margin for the transition of a city





towards a knowledge-based economy. But first we briefly sketch the political and administrative context.

Political/administrative context

Austria is a federal state, with regions (Länder) that have substantial autonomy. Vienna is the capital, but also it is a federal state, and a city. Therefore, the city has direct influence on science, education and planning policies.

Higher education policy is in the hands of the federal government (unlike in Germany). But recently, there have been substantial reforms in the university sector. Most importantly, universities have obtained a more independent status, and have become more 'market oriented' in the sense that they make now stronger efforts to attract students and obtain research contracts (from firms, government and national and EU science funds). Also, they have more freedom to develop their own locations. This opens new windows for urban planning, especially as universities are increasingly recognized as catalysts for area based developments. The City of Vienna co-operates with universities in developing/finding good locations for them, with mixed results: relations are not always smooth, and universities are primarily interested in meeting their own real estate needs rather than general urban planning objectives.

The city supports innovation and technology in various ways, through the Vienna Business Agency (that promotes the development of new firms and helps start-ups) and the ZIT (center for Innovation and Technology). Both institutions develop real estate projects and buildings to accommodate spearhead clusters.

The federal structure of Austria creates strong competition between regions in almost every respect. Regions try to attract investments, companies, people, develop shopping malls etc. without much alignment to neighboring regions. This is especially a problem in Vienna that is surrounded by the region of Lower Austria. Meanwhile, for citizens and firms, regional borders do hardly play a role. Functionally there is a lot of interaction and interrelation between Vienna and Lower Austria (commuting patterns, consumption patterns, business relations, etc.).

Economic base

The economy of Vienna is strong and growing. Unemployment is very low, and the city has shortage of skilled workers. Traditionally, the city's economic function has been dominated by administrative services and headquarters functions, stemming from Vienna's role as capital of a vast empire. The city never had a very strong industrial sector, although pockets of industry can be found in the city. Tourism has developed as a main economic sector.

Vienna still is a major service city. It has reinforced this role since the opening up of Central and Eastern European countries. Many Vienna-based firms have greatly benefited, and Austria has emerged as one of the leading investors in the new EU





member states. Moreover, many foreign firms have chosen Vienna as a basis from which to serve the new markets.

Vienna has strong competences in knowledge based industries, due to its strong knowledge base (described later).

The city has defined a number of spearhead sectors in which it believes to have special competences and opportunities: Life Sciences, IT, automotive, and media. Recent additions to the list are 'urban technologies' (environmental technology, energy, traffic management and mobility solutions).

Two main institutions deal with economic policy: one is the WWFF, the economic promotion agency of the city. It promotes networking, develops real estate for small firms ('Mingo buildings, see www.mingo.at, and provides subsidies for all kind of co-operations and projects. The second is the ZIT, the Centre for Innovation and Technology. This company, active since the year 2000, is a 100% subsidiary of the WWFF, focusing on science and knowledge business. It subsidizes research co-operations between firms and research institutes, and develops science-related real estate, for instance a laboratory for spin-off firms that have left the university. Moreover, the ZIT helps small firms to set up and conduct R&D activity, in order to become more innovative. It also provides all kinds of services.

Knowledge base

Vienna has a longstanding tradition as leading intellectual center and can boast several Nobel prize winners and big names in science (Sigmund Freud, Josef Schumpeter, Ludwig Wittgenstein, to name just a few). In its glory days, Vienna was undisputedly the intellectual capital of the world. Though its global prominence has decreased over the last century, the city still has a lot to offer. More than 18,000 scientists work in the city (2002), and in terms of scientific publications, the city ranks 5th in Europe after London, Paris, Oxford, Cambridge and Stockholm. The city is a major center for scientific congresses, with 512 congresses in 2005. The economic effects are considerable.

R&D expenditures (public and private) are high, exceeding the 3% Lisbon target. 40% of R&D expenditures are done by the public sector (i.e. publicly sponsored research institutes including universities), which implies that the business share of R&D expenditures is quite high.

Science is supported and promoted through the WWTF, the Vienna Science and Technology Fund, that has an annual budget of around 9m Euro. This fund subsidizes university-business co-operations and research networks (Van Oers, 2006).

In 2006 and 2007, the city developed a comprehensive strategy for regional technology development and innovation (RTDI). In the strategy building process, four themes were identified, that were elaborated under the lead of four main stakeholders. The four themes were:





- Research, technology and innovation in firms (led by ZIT)
- Spearheads in Science (led by the Science Agency)
- Science and Society
- Science and Planning (led by planning department MA 18)

The fourth group discussed the development of (future) locations and 'hotspots' for the knowledge economy. We'll come back to this later in the section on the Novartis Area. Each group convened for 4 days, gathering 20 experts to design and discuss a strategy. The results were drawn together in the RTDI strategy, which serves as a guideline for policy (although no funds are attached and there is no implementation plan).

The educational level of the population of Vienna: 10,4 % of the population has tertiary education. Moreover, the city counts 123.000 (2006) students.

Accessibility

Vienna is well connected to other cities in Austria and Europe. Internal congestion bottlenecks exist but they are not particularly severe (compared to similar sized cities) and they are being addressed through new investment in infrastructure. The accessibility by public transport is very good, within the region and within the city limits. It is worth mentioning that public transport usage in Vienna is quite high.

The city has gained a special position as gateway to Central and Eastern Europe; highway extensions are realized to the East, and Vienna Airport has developed as a major hub to Eastern European destinations. To facilitate the fast growth, a second terminal is being constructed and it will be opened in the 2nd halve of 2008. As accessibility is a key condition for development of science and knowledge based activity, Vienna has a strong starting position in this respect.

Quality of Life

Vienna has many features that make it a very attractive city for a variety of groups. As longstanding center of culture, the city has everything to offer in this respect. Moreover, the cities' built environment is very attractive (especially the center), there are many green zones as well. Housing is in short supply but new developments are planned. The city, being the capital and main base for foreign firms and institutes, offers international schools and many other international facilities. This makes it an attractive place for workers from abroad and reinforces the cities' potential as knowledge city.

3. The NOVARTIS-location (and beyond..)

At the southern part of Vienna (near the border of the neighboring province of Lower Austria) a large industrial area is located. An important plot in this area (11 ha large) belongs to Novartis, a large pharmaceutical company. Since the 1970s, Novartis has conducted research on this location. Also, five smaller biotech companies are located at the site. They are closely linked to Novartis, either because they rent office space from the company, or because they use Novartis' advanced laboratories and facilities.





In 2007, the top management of Novartis (located Basel/ Switzerland) announced that the site would be closed. 350 people lost their job, though many found a new job soon. Novartis would stop its activities at that location and was prepared to sell the plot to the best bidder, but it did not disclose any details on the quality of the buildings and the eventual pollution of the soil. The BIG (the Federal Real Estate Agency) made an offer, but it was rejected by Novartis for being too low.

Since then, much has remained unclear. It is not known when Novartis will exactly close down, and the communication between the company and Vienna city officials is not optimal. Novartis has a spokesperson, but this person does not have much information nor a strong mandate. Because of the employment consequences, the local agency for employees (WAFF) was the most important local agency that dealt with Novartis.

For Vienna, a first priority is to find a solution for the five small companies located at the site. In 2010, there is room for them in the Vienna Bio Centre (a biotechnology hotspot in Vienna), but during the period in between, a solution must be found (they depend specific lab facilities).

On the longer run, the question will be what to do with the large area. One option considered is to transform it into a high-quality area with knowledge intensive or science-base activity.

The location of the area and its environment

The Novartis area is located at the southern fringe of Vienna, in the Liesing district. It is part of an industrial zone, which does not have an outspoken image or specialization. It is one of the few remaining areas in Vienna where substantial industrial activity is located. It contains a wide variety of businesses; most of them are industrial or logistics firms, and many are not that knowledge intensive. One remarkable company in the area is M.A.N, a large truck maker. This firm has a big plot where it assembles heavy trucks, and also conducts development activity.

For the possible future of the area, it is important to understand its wider spatial context. In general, the Southern part of Vienna is in full development. Traditionally, it is a very popular residential area, because the city center can be easily reached (by public transport), the highways are nearby, and the airport is also close. Traditionally, the North of Vienna has been less popular (being close to the iron curtain, a 'dead end', but this is now changing).

In recent years, substantial transformations have taken place in Liesing and the adjacent areas, and this process is still in full swing. Keywords are upgrading and deindustrialisation. One remarkable development is the transformation of a cable factory plot in the nearby district of Meidling into a mixed urban neighborhood. Right to the North of the Novartis area, a greenfield will be developed as a well-landscaped residential area. To the Northeast of Novartis, large-scale developments are planned to create residential areas there. At the north and northwest of the plot, there are residential areas. This area





contains old built structures (including an old village center, Atzgersdorf, that will be restored and strengthened in the future), and there are also several areas for recreation, leisure and shopping nearby.

Picture 1 gives an aerial view of the area.





The Liesing district is well serviced by public transport: the U6 underground crosses the East part of area (north-south), and leads to the city center; to the west of the area there is an S-Bahn. The development of the area will require substantial improvements in the traffic situation, however. The central parts of the district (including the Novartis area) are not that well served by public transport yet, but solutions are being developed to link it to S-bahn and U-bahn systems via bus connections or tramways. Moreover the traffic situation is problematic: incoming traffic from the South already causes congestion during rush hours (the district is a main entrance point of Vienna from two major highways, A2 and A 22), and the problem will get worse when the area is being more developed and dense. Therefore all kind of traffic measure are designed to smoothen the flow of cars.

In principle, the Novartis plot is situated in a favorable location in several respects: accessibility is good (especially by car) and will be improved; to the North, it borders to a popular area that is in full development; moreover, there are many functions to be found in the vicinity: housing, shopping, leisure etc. These are important conditions for any location that is to be transformed into a knowledge or science quarter, in whatever form. Moreover, given the potential of this part of the city, if the Novartis area would not be available, for whatever reason, it still makes sense to think about the development of a science or knowledge quarter in this part of Vienna at an alternative location.





It is important to find a unique 'niche' for the area with regard to other science and knowledge quarters that are being developed in the city. Investors, politicians and other stakeholders will only be interested when there is a unique and convincing concept or idea for the knowledge quarter.

Other knowledge locations in Vienna

Vienna is a large city, and there are several locations and areas that qualify as 'science quarters'. Vienna's flagship is probably the Vienna Bio Centre, located in the 3rd district. In that area, more than 1,400 scientists work on biotechnology and medical technology. It is located favorably at a 15m drive from the city center, close to underground stations, and close to the airport. The Bio Centre clearly contributes to Vienna's image as science city. Moreover, the life sciences sector strongly supported by the city, through its economic development policy and science and technology strategy. A second life science location is the Muthgasse location, where important life science related research institutes of the university are located.

Another hotspot is Siemens City (a 120,000 m2 development site), in the Northeasten part of Vienna. Siemens is developing its main Austrian base there, with state-of-the-art facilities, and the Austrian Research Centre is also located there.

A media quarter is emerging in Vienna as well. It started with the development of one building (by the ZIT, the Centre for Innovation and technology), and developed organically since then. A second, larger building is opened, and the Technical University has started programmes there.

In the Northeast of Vienna, and old airfield (Aspern) is being redeveloped as science hub. A masterplan has been developed, containing a mix of housing, academic institutions and top-level corporate research. It will focus on the automotive sector: GM has an establishment nearby, and there are good connections to nearby Bratislava, which has developed a very strong automotive cluster in recent years. A final example is the development of the Höchstädtplatz in the 20th district. Some decades ago, the city bought the land from a dairy producer, in a then very unattractive part of the city. The area has been completely transformed and rebranded 'Habitat 20'. It has become a popular and lively area with a technical school, a technical center, residential areas, and a park.





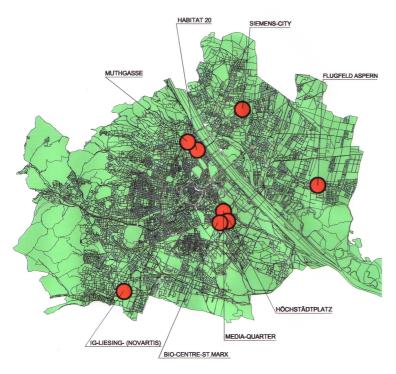


Figure 1. Knowledge 'hotspots' in Vienna

Furthermore, the university establishments are key elements in the spatial set-up of Vienna's knowledge infrastructure. Currently, university establishments are spread over the city, with concentrations at the southern fringe of the inner city. But since universities have gained more independence, they look more actively for new locations on which they can grow. The School of Economics for instance moved to the Prater area, and also the Technical University considers to relocate some of the institutes with a higher contingent of labs from its inner city location because it sees little expansion opportunities.

In the city's recently published science and technology strategy, a number of 'hotspots' are identified (among which the ones described above). The Novartis location is not included in this list (mainly because it is unsure what will happen to the site). More remarkably, the strategy identifies no single site for the Southern part of Vienna at all, and this could be an additional reason for developing a science quarter in this rapidly developing and attractive part of the city. It should be noted that the strategy is an open document, and it does not block new initiatives in any way. Furthermore, the increased independence of universities and faculties (and their increasing market orientation) opens opportunities for possible relocation to the Liesing area.

Another observation is that each economic 'spearhead sector' (as defined by the department of Economics, the ZIT and the Vienna Business Agency) has its own 'hotspot', except the sector of 'Urban Technologies' (green technology, traffic management, energy technologies).





Possible future development options

There are no elaborate ideas yet on what to do with the Novartis area, partly due to uncertainties that surround the area's future. But during the interviews for the REDIS baseline study, some ideas emerged. Starting point is that NOVARTIS should be seen in a wider context of 'upgrading' the district in which it is situated. The district is in full development, land prices go up rapidly, and connectivity is excellent. In this light, it makes sense to define the bottom line that new economic activities in this area should be knowledge intensive, of high quality, matching the future quality of the area, and linking to the area's qualities.

Three ideas were generated:

- 1. Develop a competence center for the industry. Austria (and also Vienna) has a lack of qualified labour. At the Novartis site, one may consider to create something like a Competence Centre for the Industry, in close co-operation with industrial firms (many of which are located at the adjacent business park). Such a new center could be set up together with several polytechnics ('Fachhochschulen') from Vienna, perhaps in co-operation with lower-level skills and training institutes. The institute could develop strategic relations with the surrounding firms (for internships), and it would contribute to Vienna's ambition to keep industrial activity in the city. Moreover, it could develop as a center for applied research for industrial firms and help them to become more innovative.
- 2. Develop a hotspot for environmental ('urban') technologies. This field is promising, and Vienna has strong competences here which can compete on a global level. Austria is ahead in green policies and there are many showcases. Competences are spread among a variety of actors (universities, firms, institutes) but there is no overview of what the city has to offer. There are two isolated buildings that exemplify Vienna's strength and ambition in this field: One is the Energy Base building (a showcase office with the latest energy saving technology), the other one is the Tech Base. But Vienna does not have a real physical hotspot yet for this type of technology development. The Novartis Area would have opportunities here: It is well-located, is has a mixed environment, and links could be made with surrounding manufacturing firms that also work on 'greening' their production processes. Moreover, the Liesing area is in full development, and it could become a showcase of new green forms of urban planning and transport planning. Locating something like a 'green urban technology centre' in the middle of such an area would give it extra weight and relevance. It won't be easy to get the process started. Many actors would have to be involved, for instance units of the technical university, government agencies (ministries of Science & Education, Environment, the ÖGUT network (an NGO network of Austrian agencies that are involved in energy efficiency), local firms, and maybe more. Moreover, the project would require a clear concept, a catchy name, in combination with a flexible development perspective to cater for change (grasp new opportunities) and enable organic growth.





3. Create a center for automotive research, focusing on truck development. Here, cooperation with nearby M.A.N. could start things off. This is a world-leading firm in truck development and has a production and assembly plant located at the other side of the road. In its Vienna location, MAN produces heavy trucks and special vehicles (for the army, among other things), and also it conducts development. Creating a competence center nearby could help to strengthen the link between university research and manufacturing. Involvement of research groups of the TU would be a precondition. It would also match the ambition of the city to keep manufacturing activity in the city, and make it more knowledge intensive. Evidently, this option depends on many uncertainties: M.A.N.'s ambitions and strategies, the technical university, and of course the decisions of Novartis what to with the area. Additional research would be needed to reveal MAN's ambitions, but also the relevant competences in Vienna's knowledge base. Anyhow, the problematic issue in this option could be the dependency on one focus.

4. Key issues for the REDIS collaboration

- How to start off the development of a science quarter (starting with a 'grand vision' or rather develop organically, starting small)
- How to convince university establishments to relocate
- How to position and brand the area vis-à-vis other science quarters in Vienna
- How to deal with development questions in cases of large uncertainly (i.e. regarding the decisions of NOVARTIS)
- How to develop a knowledge quarter concept that could eventually be realized on alternative location





The Base Line Study Aftermath

After the baseline study due to intensive talks between the Vienna Chamber of Commerce, the Vienna Business Agency and the Urban Planning Department 21B it turned out that creating a mono-thematic (science/knowledge) cluster would be the wrong approach for the area. A lot of companies which do not fit in one of the existing or planned clusters are looking for space to establish and it is only a question of time that there will be a lack of space for them. The result would be an economic drift from Vienna to the surrounding areas or even worse to other countries.

According to the results of the Implementation Lab held in September 2009 the idea of focusing on ecology also in enterprise zones came up, which means that the industrial zone Liesing can be an area for nearly every kind of business but should be a show case for sustainable development of such areas. An eco-holistic enterprise zone, a living laboratory for such a development, an address for eco-economy!





Actors (momentarily) Platform, Urban local support group ULSP

Chamber of Commerce
Vienna Business Agency
Chamber of Labour
Developers
Marketing company/ Initiative group
Eco-business plan
(Institute for sports science)

Image change

An important issue is to change the image of the industrial zone or better to create an image. This could be done by several actions like interim use in a broad sense.













Eco-holistic enterprise zone

An eco-holistic enterprise zone is characterized by an overall sustainable approach. The Liesing industrial area shall be an "address" in the future for all who want to know how eco-economy works.

Running an enterprise: Is the operation procedure ecologically based? What can be improved, if an enterprise is already establish in that area? What is to do, if a business wants to settle?

Building a company building: How to deal with the building physics to create a structure with less ecological footprint? What kind of energy source are used? What can be done to improve existing buildings in that sense?

Public transport: What kind of transport system is appropriate? How can different kind of transpiration systems, tram, e-bike, bike etc. be implemented? How is a mobility management be organized?

Public space: How can public space in an enterprise zone be attractive? What has to be done to create 'rewarding walks'? Which kind of additional functions can be introduced to the urban open space (urban farming, recreation and leisure and ple

PROPOSED ACTIONS













The Vienna Chamber of Commerce, the Vienna Business Agency and the Urban Planning Department 21B which is responsible for the Southern part of Vienna want to invest approx. 1.7 million Euros to establish this eco-economy zone. It is planned to apply for EU-funding for 50% of this sum.

Following working packages are planned:

Quarter management

- Deploying a quarter manager
- Networking within the relevant stakeholders
- Permanent public relations
- Communication platform
- Periodic information letter (journal)
- Periodic meetings
- Periodic quarter parties
- Awards for exemplary economic activity

Creating a brand

- Developing a positive image
- Creating a brand
- Involving the entrepreneurs and employees (maybe idea competition)
- Cultural interim use





Encouraging eco-economy

- Ecological and resource saving economic activity (as important part of the brand)
- Research what and where to improve
- · Getting the companies involved
- Contact with the science institutions and universities
- Scientific attendance by universities
- Awards for inventions and progress in eco-economy

Enhancing functions

- Improving the urban attractiveness
- · Developing a urban structural concept
- Developing a concept for public space, public transport, pedestrian and bike path network
- Creating a mobility management
- Using existing railway tracks for material transport
- Optimising individual traffic

Reviving the real estate market

- Better marketing of real estates
- Survey of possible demands, changes etc. according to the eco-economy theme
- Corporate marketing
- Real estate offers on internet platforms
- Less restricted zoning plans





Gender mainstreaming

- Focus on equal treatment of employees in all relevant domains
- Managing a human work environment
- Awards for excellent gender mainstreaming efforts





PROBLEM STATEMENT

Despite there is broad vision of this area a couple of problems are existent. They can be split up into two categories

Process related and general organisational problems

- How to organise an eco-holistic enterprise zone as 'living laboratory'?
- How to create a science and technology quarter for sustainable development of enterprise zones, focussing on economic parameters?
- How can universities be involved in that process and what can be the benefit for both sides?
- How to create a "product", a distinctive address?
- How to attract 'green industries'?

Urban planning related problems

- How to create a liveable enterprise zone from the urban planning point of view?
- What elements are necessary for such a liveable working area?
- What additional functions (except residential use) can be introduced?
- How can public space including all transportation issues (pedestrian, bike, public transport, cars) be organised in such an area?
- How should the area be linked to the adjacent urban environment?

And a third but very important problem: How to act, when there is a lack of money (e.g. there is no EU re-funding possible?





