INSTITUT FÜR ÖKOLOGISCHE WIRTSCHAFTSFORSCHUNG

SUSTAINABLE HOMESERVICES

Country Report for Austria

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0.1 Project outline

Background

The basic idea behind the Sustainable Homeservices project is the notion that environmental and social burden can be reduced by replacing products with services that fulfil the same needs of the consumer. Previous studies indicate that consumers must be able to use such services as easily or conveniently as the products they own themselves. Therefore the services should be offered to consumers at their homes.

Arising from this idea is the definition of a Sustainable Homeservice as a service that is offered to residents at their home, directly or via an intermediary organisation. This service contributes positively to sustainable development in its three dimensions: environment, social, and economic.

Goals

The main goal of the project is to stimulate the introduction of sustainable Homeservices in Europe. Competition in the housing market is increasing. For involved organisations there are various ways to meet this competitive challenge. One of them is providing Homeservices to residents. So the principal target groups of the project are the residents, the intermediaries, such as the housings organisations, and the service providers.

Not every product can be replaced by a homeservice. Residents' demands and organisational and economical aspects of the suppliers and intermediaries need to be taken into account. Opportunities for Homeservices have been analysed by the project in six European countries: Austria, Finland, Germany, the Netherlands, Portugal and Spain. Per country, a major city and a town have been analysed and evaluated to enlarge the national survey.

Approach

In the project we search for market niches in which the right conditions for Homeservices exist. The search is conducted in the following service areas:

- *Consulting & Information*
- *Care & Supervision*
- *Leisure Time Activities*
- *Repairs*
- *Mobility & Delivery*
- *Safety & Security*
- *Supply & Disposal*

The present situation with respect to services is described in the 12 municipalities in the six countries. Next, the services have been evaluated using criteria of sustainability. Thereby three questions can be answered according to the three dimensions of sustainability:

- **E**nvironment - In what ways can services potentially contribute to a reduction of materials and energy use in the housing sector?
- **S**ocial - How can services potentially increase the wellbeing of residents and households?
- **E**conomic - How can these services be organised so that they are economically feasible both for the providers and users, as well as the society at large?

Further questions have originated from the initial situation:

- Which services are provided to the residents either by housing organisations or by external services providers?
- Are these sustainable services or do they just have social or environmental benefits?
- Which obstacles exist for the service to be provided?
- How should the basic framework for the supply be arranged?
- With which incentives can housing organisations be stimulated to provide services either by themselves or in co-operation with external service providers?

By answering these questions we aim to fulfil the following goals:

- Finding the status quo of environmentally or socially friendly services that can be provided by housing organisations or other service providers;
- Analysis of the promoting and hindering factors in supplying a service from the view of architects and building organisations as well as analysing various pilot projects;
- Analysis of employment effects and the social impact of the proposed services;
- Comparison on the national level (finding differences between small towns and big cities);
- Comparison of the six contributing countries;
- Finding the national good practice examples that can be applied in other countries;
- Creating policy recommendations and further promoting conditions on the European level;
- Creating a European Service Catalogue.

Results

The results of the study will be disseminated in three ways:

- The web site with the outcomes of the project (www.sustainable-Homeservices.com);
- A European Homeservice Catalogue of good-practice sustainable service examples on the web site;
- Workshops with residents, providers, and intermediaries in six countries.

0.2 Project partners

Six European countries are involved in this study: Austria, Germany, Netherlands, Spain, Finland, and Portugal.

The leading partner is:

- IÖW, Institute for Environmental Management and Economics, Vienna, Austria, www.ioew.at

The project partners are:

- IZT Institute for Future Studies and Technology Assessment, Berlin, Germany, www.izt.de
- IVAM, Environmental Research Institute of the University of Amsterdam, Amsterdam, Netherlands, www.ivam.nl
- Prospektiker, European Institute for Future Studies and Strategic Planning, Zarautz, Spain, www.prospektiker.es
- HSE, Helsinki School of Economics, Department of Management and Organisation, Helsinki, Finland, www.hkkk.fi
- INETI/Cendes, Centre for entrepreneurial sustainable development, Lisbon, Portugal, www.ineti.pt

0.3 The Austrian country report

This report includes the findings and results of research, interviews, and assessments conducted in Vienna, the capitol or Austria, and in Litschau, a small town in Lower Austria. Chapter 1 analyses the housing situation, which is the framework that Homeservices are provided. Chapter 2 analyses the resource consumption, social atmosphere, and mobility of these cities. Chapter 3 defines and explains several concepts of this project such as the different types of services, Homeservices, and sustainability. Chapter 4 goes into detail on the surveyed Homeservices. This chapter describes the seven service areas the universe of about 250 services is categorised into, and analyses those that exist in Vienna and Litschau. Chapter 5 presents the relevant actors in providing the Homeservices. Chapter 6 analyses the sustainability effects of the surveyed Homeservices. Chapter 7 provides information on the actors' perspective on the matter. Finally, chapter 8 proposes opportunities and the future development of Homeservices.

0.4 City description

To find out how the housing situation as well as local infrastructure and social life influence the service mentality of the residents and the supply by housing organisations as well as external service providers two rather different towns, Vienna and Litschau, were chosen. Table 1 gives an overview of the most significant indicators to describe both municipalities.

Apart from the number of inhabitants as well as from the built area Litschau and Vienna differ a lot concerning the property and building structure. Also there is a significant difference in the number of jobs in the three sectors agriculture, industry and service. While Vienna and the surrounding region is an exception in Austria, Litschau is a good example for a small town, far off the melting pots of the capitals. However both towns have in common, that they take part in local agenda 21 activities and give emphasis to environmental issues.

	Indicator:	**Austria**	**Lower Austria**	**Vienna**	**Litschau**
A1	Area (square km); *(2002) CIA World Factbook*	83,858		414.95	81.05
A2	Percentage of green space in comparison to the total city area; *(2002) Statistik Austria*			49%	63%
A3	Proportion of jobs in of agriculture, industry and services sector (%) ; *(2001) Statistik Austria*	4% 29% 67%		0.3% 18.8% 80.9%	37.0% 16.6% 46.4%
A4	Population *(2001/2001) Statistik Austria*	8,092.000		1,550,123	2,524
A5	Population growth; *(1991-2000) Statistik Austria*	+ 3%	+ 4.88%	+ 0.7%	- 15.8
A6	Property structure: percentages of property (owner occupied), rented dwellings, and other; *(2000) Statistik Austria*	56% 41% 3% (2000)	77% 21% 2% (2000)	17.3% 79.2% 3.5% (2000)	90% 10%
A7	Building structure: Multi dwelling buildings, 1 or 2 dwelling buildings, miscellaneous *(2000) Statistik Austria*	52% multi 48% 1&2	29% multi 71% 1&2	94 % multi 6% 1 & 2	10% / 90% estimate
A8	Rate of vacancy *(2002) MA 66*			6%	
A9	Unemployment rate; *(2002) AMS*	6.1% (4.8% international rate)		7.6%	12.9%
A10	Proportion of single households; *(2001) Statistik Austria*	32%	26%	44.5%	38%

Tab. 1: Indicator for city description

0.3.1. The city of Vienna

Vienna is situated in the north-eastern part of Austria. It is at the same time capital of Austria and a federal state. Vienna has a total area of 415 km^2, of which nearly 50% is green space. This is however not equally spread, but rather a "green belt" (which actually is more like a half moon), of the Viennese woods and vineyards, which was declared a non-construction area in the late 19^{th} century. The population is slightly growing and ageing. Of the 2.2 million inhabitants in the whole Vienna region, about 20% is older than 60 years.

In former days, today's city centre of Vienna was surrounded by a city wall. When this wall was taken down at the end of the 19th century, the Ringstraße was designed. In the area surrounding the city wall there were small villages separated by the Linienwall, an artificial wall of earth and stone to protect the city from even smaller settlements outside. This circle of villages became today's inner districts, and the Linienwall was replaced by the "Gürtel" (a wide road surrounding the inner districts) and the small settlements became the outer districts. On the northern banks of the Danube there also were small settlements. Today, all these villages and settlements form the city of Vienna.

Within the Ring and between the Ring and the Gürtel, the majority of buildings are from the 19th century or even older. In this area most of the buildings belong to private owners. There are also many "Gemeindebauten" (owned by the municipality in the traditional working class areas). These are buildings from the 1920s-70s. Since then however, there is primarily renovation and maintenance of old buildings. Outside the Gürtel the situation varies a lot. In some areas there are mainly one-family houses with gardens. These are owned by the residents, have a very high property value, and are in very rich neighbourhoods. Some districts have very old and rundown buildings that house mainly foreigners. Finally there are relatively new districts in the north, south, and south-east of Vienna, which is where the flat land allowed city development to take place. For 30 years there has been massive construction primarily from non-profit housing organisations.

In the housing market of Vienna one can distinguish three main actor groups.

The first is the municipality, which owns the so called "Gemeindebauten", large buildings and settlements dating from the twenties up till nowadays, where they provide rather small dwellings at rather low prices. If the residents cannot afford the rent, they can receive a financial support by the municipality. Until 2000, these dwellings were only available for Austrians.

The second actor group are non-profit and commercial housing organisations that build and provide dwellings for rent or for ownership mostly in the outer districts (Stadterneuerungsgebiete) of Vienna. As the attitude of the city government has changed, emphasis is no longer on creating new districts, but to find empty space within the city for new buildings.

The third group can only be outlined vaguely; this is the vast number of private people owning the old building stock in Vienna, which is mostly located in the centre and in the inner districts of the city. Normally there are always several people owning one building, a fact that often does not ease decision making and therefore, any kind of changes or improvements in those types of buildings are rather difficult. The third group is comprised not only of owners who inherited their house, but also by condominium owners, who live in buildings transformed from rental to owning. This development was favoured by law in the 1970s through the 1990s. Several people owning dwellings in a building by legal obligation form an association of ownership that is responsible for managing the house. Most commonly, this task is outsourced to a facility manager (Hausverwalter).

The city government likes to present Vienna as the "Umweltmusterstadt" (good practice example for environmental management) and indeed there is a lot of emphasis on environmental issues. Most activities focus on waste reduction, sewage treatment, and CO_2 reduction by providing good public transport and improving public and private heating systems and insulation. Information is provided to the citizens about environmental aspects in their households, and special trainings, lectures and even excursions are not only available to teachers and scholars, but to the whole population. By that way, people are made aware of environmental issues. The green party received 15% of the votes in the last elections. Vienna also takes part in local agenda 21 activities.

0.3.2. The city of Litschau

Litschau is situated in the northern part of Austria, a region called "Waldviertel", in the federal state of Lower Austria, close to the Czech border (about 5 km). It is a rather small town with only 2,500 inhabitants, including six little villages which are also part of the community and are situated within a distance of about four kilometres to Litschau. There has been a

significant loss of population in the town throughout the last ten years. At the same time a lot of people from Vienna made second home residences in Litschau, mostly in small houses or dwellings. The town is therefore crowded, there is just more fluctuation of the residents.

Throughout the centuries and even nowadays there has been a noble family living in its fortress and free farmers, most of them rather poor, but at least with a small part of forest or fields of their own. Traditionally they earned their income from forestry, agriculture (potatoes and rye) and from fishery (ponds). Typical handicrafts were glass production, mining of granite stones (granite quarries - for bridge and road construction as well as for tombstones) and finally making textiles (they planted hemp and flax, did all the weaving and also produced all kind of clothes, particularly for working). The weaving was done in the farmhouse, especially during winter, when there was nothing to do in the forests or on the fields. At the beginning of the 20th century, small textile factories gave work especially for women. But most of those companies disappeared by the fifties and sixties, when making textile was not profitable anymore in Europe. After World War II, Litschau was bordering the iron curtain, which meant that in the economic sense there was a dead end road and only poor economic and cultural development and exchange with the Czech neighbours. Since the early 1990s, things have changed and the whole region has tried to focus on “soft eco” tourism.

Most people in Litschau live in one-family buildings. Only in the centre of the town and near to the lake, there are some multi-dwelling buildings. Approximately one third of them are old buildings built before World War II. The rest has been built in the last 20 years, some particularly for elderly people, and others to offer second home residences to Viennese people. Most houses are owner occupied. Houses are either very old, dating from before 1919 (33%), or rather new, dating from after 1961 (45%). Sons normally inherit the parents’ (farm) house so they stay in the town, whereas women either by marriage change where they live or move to Vienna for work. This situation may change in the next 10 to 15 years, as there are a few more opportunities to stay in Litschau, partially due to tourism.

There is only one proper hotel. Tourists usually stay in apartments or go for “holidays on the farm”. That means that they demand good local infrastructure for daily life. Nevertheless the public transport is very badly developed. The nearest train station is about 25km away. Intervals for local and regional buses are very poor, and they just work according to the school schedules, and take a long time to travel short distances.

Litschau, like the whole district, suffers from high unemployment. This is due to the disappearance of the local textile industry, which gave work especially to women. But, this situation might change, as the region has been rediscovered as a former centre of traditional handicrafts and younger people try to find some niches where they can make a living. They resuscitate worn-out industry plants and offer traditionally made products (furniture, clothing, glass etc.). Of course, this attracts only wealthy clients, but eventually their supply might reach a greater public. Nevertheless, poorly educated, particularly elderly people, have only little chance to find a job.

Some years ago, Litschau participated in the local agenda 21 programme. Within this, the secondary school was completely renovated, including all kinds of measures to make the building more energy efficient, including improvements in the heating system, installing new windows etc. In and around Litschau, there are a significant number of organic farmers that sell their products at the market every Saturday. This market is so successful that they even had to lengthen the operating hours. Improvements also have been made in the waste water treatment, including the construction of an organic sewage treatment plant for the small villages around Litschau.

1 The Structure of the Housing Situation

Table 2 gives an overview on important indicators to describe the housing structure in Austria. The figures are further explained in Chapter 1.1.

	Indicator:	Austria	Lower Austria	Vienna	Litschau
B1	Number of inhabitants / Population (2000) *Statistik Austria*	8,110,200	1,542,400	1,608,700	2,524
B2	Density of inhabitants *(2000) Statistik Austria*	96.7/km^2		3,877/km^2	31/km^2
B3	Number of households 2001, 1991, % change, *Statistik Austria*	3,320,300 3,013,006 +10.2%	596,900 554,286 +7.7%	805,200 746,760 +7.8%	1117 1185 -5.7%
B4	Distribution of household (1 person, 2 person, 3 or more person households.) *(2001) Statistik Austria* *Litschau Census 2001 Statistik Austria*	31.6% 29.8% 38.6%	26.2% 32% 41.8%	44.5% 30.3% 25.2%	37.5% 28.8% 33.6%
B5	Average household size (number of residents living in the household) *(2001) Statistik Austria*	2.4	2.5	2.0	2.3
B6	Population growth *(1991-2000)* Increase in number of households *(1991-2000) Statistik Austria*	Population +3% Households +10.2%	Population +4.88% Households +7.7%	Population + 0.7% Households +7.8%	Population –15,8% Households – 5 %
B7	Total dwelling units *Statistik Austria*	3,393,271 (1991)	648,741 (1991)	853,091 (1991) 928,479 (2001)	1,525
B8	Property structure (owner-occupied, rented dwellings, other) *(2000) Statistik Austria*	56% 41% 3%	77% 21% 2%	17.3% 79.2% 3.5%	90% 10%
B9	Dwelling units per 1,000 inhabitants *Statistik Austria*	465 (1991)	440 (1991)	577 (2001)	604 (2002)
B10	Average flat size in square meters *(2001) Statistik Austria*	91.3	103.3	70.5	
B11	Building structure: Multi-dwelling buildings /1or 2 family houses *(2000) Statistik Austria*	52% multi 48% 1&2	29% multi 71% 1&2	94 % multi 6% 1 & 2	10% / 90% estimate
B12	Vacancy (number of vacant dwellings/ total number of dwellings) *(2002) MA66*			6%	

Tab. 2: Indicator for the description of the national housing situation

1.1 The housing situation of Vienna and Litschau

The housing situation related to inhabitants, households and residential units.

The most recent census of Austria, in 2000, showed the total population of Austria to be 8,110,200. Lower Austria, Austria's second largest of nine federal states, has 1,542,400 inhabitants, while Vienna has 1,608,700 inhabitants. Litschau, a very small town, has 2,524 inhabitants. Vienna, being a metropolis has the highest density in Austria, with 3,877 people per square kilometre. Austria has 96.7, and Litschau is the least densely inhabited of the survey areas with 31 inhabitants per square kilometre.

The largest increase in households from 1991 to 2001 was in all of Austria, with 10.2%, up from 3,013,000 to 3,320,300. Lower Austria's increase was 7.7%, Vienna gained 7.8% and Litschau lost 5.7%. Comparing these figures with the slower growth in population (+3%, +4.88%, +0.7%, -15.8% respectively) indicates a significant increase in single households.

The largest amount of single households is in Vienna with 44.5% of total households. Only 25.2% of the households have 3 or more people. In rural Lower Austria the figures are pretty much opposite with 41.8% of the households having 3 or more people, and only 26.2% being single households. Litschau's distribution is more equal, with 37.5% single households, and 33.6% of households having 3 or more people. For entire Austria, the largest group is the 3 or more people per household with 38.6% and 31.6% single households.

In 1991, Austria had 3,393,271 dwellings, of which 56% were owner occupied, 41% were rented dwellings, and 3% other. Of the 648,741 dwellings in Lower Austria, even more were owner occupied, at 77%, while 21% are rented, and 2% other. In general, Lower Austria is a good estimate for missing figures for Litschau.

Vienna's figures are again reversed. Of the 928,479 dwellings only 17.3% were owner occupied, while 79.2% were rented and 3.5% other. Although there are no concrete numbers for Litschau one can estimate that at least 90% of all homes are owner occupied regardless whether it is a house or a dwelling.

The average flat sizes are smallest in Vienna, with 70.5 square metres, where space is scarce, and the largest in rural Lower Austria with 103.3 square metres. The average flat size for Austrian dwellings is 91.3 square metres.

Vienna also has the most multi-storage buildings (94%) due to the space scarcity and only 6% one and two-family buildings. Lower Austria, with plenty of space, has 71% one and two-family buildings, and 29% multi-storage buildings. The best estimate we have for Litschau, a typical town with primarily individual dwellings, is 90% one and two family houses, and 10% multi-storage. Austria as a whole is pretty balanced with 52% multi and 48% one and two-family buildings.

Table 3 of the EKF (Ministry of the Environment, Finland) shows the population of age in percent for the year 1991 for the city of Vienna, which is significantly different than the rest of the country. The figures for Austria are from the CIA (Central Intelligence Agency) World Fact book of 2002.

<table>
<tr><th>Age group</th><th>Austria</th><th>Vienna</th><th>Litschau</th></tr>
<tr><td>0-14 Years</td><td>16.4%</td><td>13.9%</td><td>13,4%</td></tr>
<tr><td>15-29 Years</td><td rowspan="2">68.2%</td><td>22.6%</td><td rowspan="2">57,3 % (15 –60)</td></tr>
<tr><td>30-64 Years</td><td>45.6%</td></tr>
<tr><td>Over 65 Years</td><td>15.4%</td><td>17.8%</td><td>29,3% (over 60)</td></tr>
</table>

Tab. 3: Distribution of age in Austria

Ten years later, already more than 20% of the Viennese population is older than 60 years. Most of them live alone in large dwellings, and at least partly depend on personal care. In Litschau, even a larger proportion of the population is older than 60, two thirds being women.

The Austrian situation cannot be generalised because housing in big cities like Vienna and its surroundings differs a lot from rural settlements. In the big agglomerations, rented dwellings are dominant and account for 79% of all dwellings. On the country side, 71% of dwellings are one and two family houses.

The housing situation in Vienna is strongly related to the city development over the past 100 years. It happened in clearly distinguished waves, which are described below.

1840 to 1918: Tenements

During this period, Vienna's population grew to over 2 million with mass immigration. Constructors consisted of private people, nobles, and industrialists. The new buildings consisted of privately owned buildings with small rooms for servants and tenements with "Bassena" dwellings for factory workers. This lead to high rents: dwellings were crowded, the number of sublets grew, and the living conditions increasingly worsen.

1919 to 1934: The Red Vienna

The era of the socialist city council between 1919 and 1934 is called "The Red Vienna". In 1919 the first social democratic city government was elected; the effects of the war have to be overcome. With the beginning of 1922, Vienna became a federal state and received fiscal jurisdiction and Hugo Breitner introduced a tax reform. The progressive construction tax

enabled the first social housing program. The municipal council decided to build 25,000 dwellings in 1923. They consisted of multi-storey rental units with large courtyards. Washhouses, public baths, libraries, and kindergartens are among the common facilities. The dwellings are between 40 and 50m_ and have water, gas, and toilets as standard outfit. An example is the Karl-Marx-Hof. At the end of 1927 the housing programme was completed and had provided 30,000 dwellings. In February 1934, 61,175 dwellings in 348 buildings were completed.

1934-1945: Armament Instead of Construction

After 1934, the construction in Vienna stagnated. During World War II about 13% of the Viennese housing stock was destroyed and of the 706,047 dwellings (1939), 86,875 were uninhabitable.

Reconstruction and City Expansion

In April 1945, the first Viennese city council was formed: 6 socialists, 3 members of the people's party, and 3 members of the communist party with Theodor Körner being major. In July 1945, the signal for the beginning of reconstruction of Vienna was given. Building material, transport, and skilled labour was scarce. Reconstruction begins with "bear hands".

The Era of Reconstruction

In 1947, reconstruction became a little more successful with newly purchased brick machines, but was far from efficient. In 1950, housing demand increased; 55,248 people were looking for dwellings. An emergency programme was started to build thousands of small duplex dwellings. The average living flat size at that time was 45 m_ with 1-2 rooms. The standard outfit included a kitchenette and a wet cell with bath and toilet.

City Expansion (1960s)

Along with economic growth came an increase in construction. Reconstruction of Vienna was completed in the beginning of the sixties. New residential areas on the city outskirts increased. There was an increase in the quality of living. The average flat size of the 1960s was 65 square metres. The most important constructors were the non-profit housing co-operatives. About 9,000 dwellings were built every year. There also was a subsidy for condominiums and co-operative dwellings.

Rebound and Slowdown -Construction Boom with Mega Structures (1970s)

The beginning of the seventies saw the rediscovery of urban building. Multi-storey housing development reached its climax, and row buildings were again constructed in the inner city. Large social housing projects with better outfitted dwellings for the middle class were started. Until 1980 the average dwelling increase slowed to 3000 a year.

City Renewal (1980s)

After this phase of growth, Vienna concentrated more on renewal of the inner city. By the mid eighties, around 90,000 dwellings were renovated. The average size of new dwellings between 1981 and 1990 was 81 square metres.

Growth Pains

With the fall of the Iron Curtain, the city began to grow again. Concentric city development ceased and settlements began to flourish in the outskirts of Vienna. Green space and well connected public transportation were the points of focus for development. The last four years of the eighties saw 21,000 new dwellings being built.

Housing Experiments of the 90s

In the 1990s, several new ideas were put into practice such as the Sun City that consists of 650 dwellings and is supplied with solar energy (40% of total energy). Another project concentrated on intercultural living, and another one is called the Women's' Workshop that realises everyday necessities of women. The first half of the 1990s saw an increase in demand for living space as a result of increasing life expectancy, increasing demand for single dwellings, predicted population growth, and high rents for new buildings. As of 1994, 10,000 dwellings were subsidised per year and the waiting period for social dwellings decrease drastically. From the 1960s to present, approximately 80% of newly constructed

buildings have been subsidised by the state. 1995 saw an abrupt end in construction because of a decrease in demand.

Construction Politics 2000

Construction in 2000 was divided into new dwellings and renovation. There was a significant slowdown of new dwellings to around 5,000 a year. At the same time renovation was emphasised. Of the 920,000 dwellings in Vienna, about 10% are still classified in category D (substandard without central heating, water and toilet in the dwelling) and 5% in category C (substandard without central heating). Currently about 2,500 private dwellings and another 2,000 rental units are being renovated.

The housing situation related to the structure of buildings and properties

In 1991, according to Statistics Austria, Statistical Yearbook 2002, the total number of dwellings in Austria was 2,972,222 with a distribution of:

- 39.5% owner in own house
- 10.5% own dwelling
- 28.2% resident in rented dwellings according to rental law (MRG)
- 10.5% residents according to non-profit housing law (WGG)
- 11.3% other contracts

By the year 2000, this percentage has changed as such (Statistic Austria)

Legal Status	Austria	Vienna	Lower Austria
Owner in own house	45.97%	5.76%	**69.19%**
Owner in own dwelling	10.43%	11.53%	7.23%
Residents (MRG + WGG)	40.85%	**79.07%**	20.65%
Other	2.75%	3.64%	2.93%

Tab. 4: Housing situation in relation to ownership and rent

It is clearly visible that an aggregated percentage distribution for Austria does not really capture the whole story. In Vienna, nearly 80% of all dwellings are for rent in multi-storage buildings, while in the countryside 70% and in small towns such as Litschau nearly 90% of all dwellings are owner occupied two family buildings.

Between 1971 and 1991, the number of condominiums in Vienna tripled. The percentage of condominiums in relation to the entire dwelling stock has been 12% since 1991. The primary advantages of owning a dwelling is the securing of invested capital according to the property law and the power of disposition from the option of selling and inheriting the dwelling.

In Austria, every year about 18,000 buildings are commissioned for living, of which 900 are in Vienna. In 2001, throughout all of Austria, 45,850 were commissioned, thereof 6,000 in Vienna. For the upcoming years, the Viennese municipality limited the construction of new dwellings to 5,000 per year. The rate of new construction of residential buildings is reducing by about 15%. From 2002 to 2003 the new construction rate in Vienna is reduced by 46%.

In Austria, the average flat size of newly constructed buildings in 2001 was 101m^2, however it differs a lot according to the type of constructor:

- private person: 123 m_
- social non-profit housing organisation: 72 m_
- municipal: 66 m_
- commercial housing organisation: 79 m_

In Vienna, multi-dwelling buildings are the norm. In small towns, such as Litschau, one and two family buildings are nearly 100 percent of the housing type.

The following statistics are from Statistic Austria for the year 2000.

Building Structure	Austria	Vienna	Lower Austria
1 and 2 family building	47.81%	6.18%	70.91%
Multi-dwelling building	52.19%	93.82%	29.09%

Tab. 5: Building structure

The legal framework for the housing market for residents and owners

The rental law, **Mietrechtsgesetz (MRG, 1981**) is applicable for the residential and commercial renting of dwellings. It sets the rules for the amount of rent that may be charged and stipulates protection of dismissal for the residents. It especially applies to all old apartment buildings of cities. Houses that have recently been built by commercial housing organisations without any aid of funding may be rented according to the general public law and do not need to follow the strict regulations of the rental law.

In the first section of the MRG, rent and subletting rent are defined and fixed. There are provisions that only pertain to the landlord, for example on maintenance and renovation. Other sections only pertain to the resident, for example the scope of the right to use certain equipment and facilities, or the option of alteration and improvement. The largest part of the law, however, pertains to both the landlord and the resident, and outlines pretty much every possible interaction between the two. The first section further includes the expenses to the facility manager and the building care taker, dismissals, eviction, and also the rental law in case of death that allows the rental contract to be bequeathed.

The second section focuses primarily on the fixing of the rent, in other words, its stable value, as well as various regulations on increasing the rent, on the efficacy of limitations, and various temporary regulations.

According to the rental law, the rent has to be suitable to the equipment of the dwelling. What is “suitable” is not determined by the market, but by the court and has lead to a so-called “Mietpreisspiegel” (table of rental prices) that shows in detail the average maximum and minimum rate for dwellings with different equipment considering additional features like connection to public transportation. For the equipment of dwellings, there are four categories, A, B, C, D.

The law for owned dwellings, **Wohnungseigentumsgesetz (WEG, 2000),** regulates all aspects relating to buying and selling dwellings, the rights and duties of owners, and the management of buildings with owned dwellings, which in Austria by law results in an association of owners according to civil law. The law enables renting an owned dwelling on the basis of market prices, but also includes several aspects of the rental law.

Between the seventies and nineties, the government subsidised renovating rental dwellings into owned dwellings.

The non-profit housing law, **Wohnungsgemeinnützigkeitsgesetz (WGG)** applies for dwellings that are provided by non-profit co-operatives. The resident becomes co-owner of the co-operative. He gains the right to live in a dwelling, but does not become owner of the dwelling. If he or she moves out, the dwelling falls back to the co-operative, but it is quite common that the resident may nominate a successor.

The “Viennese law for construction subsidies”, the “law for building renovation”, and the “Lower Austrian law for dwelling subsidies” regulate improvement measures and the distribution of the subsidies.

Further laws and regulations1 are enumerated only to give an idea of how restricted the situation is.

1.2 Actors in housing

Due to the particular situation of the housing market in Austria there are neither figures nor proportions available of dwellings managed by one particular type of housing organisation. The reason for this is described below.

The actors in the housing market (Qualitative description)

There are six different actors to be described within the housing market in Austria.

- Commercial Housing Organisations
- Non-Profit Housing Organisations
- Condominium Associations
- Local Government / Municipality
- Private People
- Miscellaneous

Commercial Housing Organisations

In Vienna there are several commercial housing organisations, but it is practically impossible to find good statistical data on them. There is some data and innovative development concepts from previous projects that we refer to later. In Litschau however, so far there has been detected only one commercial housing organisation.

In recent years it has become especially popular for commercial housing organisations to provide so called “Vorsorgewohnungen”, which is a combination of a pension security and asset management. You buy a dwelling or a share in a housing fund. You can either live in the dwelling yourself, but it is actually built to be rented out by the housing organisation, and you get a yearly profit without having to organise the renting yourself. In the first years, due to the high construction costs, this model does not create profits, but tax deductible losses. So this model is attractive to people who earn a lot of money now, and want to save for their pension. The incentives that are listed for investors in the selling brochures are:

Bauordnung für Wien
Baurecht sowie Straßen- und Wegerecht (Wiener Rechtsvorschriften)
Änderung der Richtwerte nach dem Richtwertgesetz BGBl. II 72/1998
Wiener Garagengesetz
Gesetz über Kanalanlagen und Einmündungsgebühren
Erleichterungen für Kleinhäuser, Reihenhäuser und Sommerhäuser (Verordnung)
Wiener Kleingartengesetz
Wiener Aufzugsgesetz
Wiener Ölfeuerungsgesetz
Wiener Baumschutzgesetz
Wiener Naturschutzgesetz
Wärmeschutz (Verordnung)
Beschaffenheit der Gehsteige (Verordnung)
Aufgrabungen in öffentlichen Verkehrs- und Erholungsflächen (Kundmachung)
Gesetz zum Schutz gegen Baulärm
Vermeidung unnötiger Staubentwicklung (Verordnung)
Wiener Wohnbauförderungs- und Wohnhaussanierungsgesetz - WWFSG 1989
Verordnung über die angemessenen und förderbaren Gesamtbaukosten
Verordnung über die Gewährung von Eigenmittelersatzdarlehen
Sanierungsverordnung
Verordnung über die Gewährung von Wohnbeihilfen
Heizkostenabrechnungsgesetz - BGBl. Nr. 827/1992 in der geltenden Fassung
Heizkosten-Antragsverordnung - BGBl. Nr. 581/1994
Heizkosten-Stammblattverordnung - BGBl. Nr. 905/1994

- Equity (Eigenmittel): only a small initial financial investment is necessary
- Security: the ownership is individually listed in the land charge register
- Rental association (Vermietungsgemeinschaft): Risk diversification through joint letting
- Security of inflation: through indexed rental income
- Income without active work: as extra pension or immediately after end of construction
- Increased depreciation: construction costs can be depreciated over 15 years
- Right to deduct value added tax: as the rental results in qualification as a source of income
- Subsidy: by the federal state of Vienna
- Individual finance: the investor can decide the terms of finance
- Professional management of the building: by qualified experts.

Non-Profit Housing Organisations

In Austria there are 198 non-profit housing organisations, of which 64 (one third) operate in Vienna. The number of dwellings offered by social non-profit housing organisations is 712,944 for Austria, and 217,363 for Vienna. (2002, ÖSTAT) This figure is 30% of all dwellings managed by non-profit housing organisations in Austria, but by calculating the relation of total dwellings in Vienna to the dwellings managed by non-profit housing organisations they are in charge of only 23% of Viennese dwellings. Approximately every fourth Austrian lives in a dwelling constructed or managed by a non-profit housing organisation.

Non-profit housing organisations are represented most in the states of Upper Austria and Burgenland with about 70% of the housing stock. Two thirds of the dwellings managed by non-profit housing organisations are co-operative dwellings, and one third is condominiums. Most of the non-profit housing organisations are either affiliated to the socialist party or the people's party.

The role of the non-profit housing organisation has slightly changed in recent years. They are now increasingly confronted with the competition of commercial constructors. These have been increasingly included in subsidies without being limited and controlled as the non-profit organisations. This results in quite similar new construction prices between the two, but the restrictions for the commercial provider cease to exist after a definite time, which is not the case for the non-profit organisations, who have to act in accordance with the WGG (the law for non-profit housing organisation).

Among the condominiums that have been built by commercial housing organisations in recent years, about a quarter of the dwellings are smaller than 45m^2, and a half are smaller than 60m^2. This is not the case with the non-profit housing organisations, where only 15-20% of the dwellings are smaller than 60m^2. Certain dwellings that are more difficult to rent or sell, but are suitable for larger households, were primarily constructed by non-profit housing organisations. This emphasises the role of the non-profit housing organisation in providing reasonably priced larger dwellings for families with low income.

The following principles for non-profit housing organisations are anchored in the WGG for the activities of the non-profit housing organisations:

- Fees: The non-profit housing organisations must charge a fee to their clients that only covers their cost but does not contain a profit margin. This fee is not allowed to be more or less than the costs of constructing or the upkeep of the dwellings.
- Profit restriction: Proceeds are necessary for covering costs, but they are limited by the WGG.
- Equity: This is the cheapest form of financing new construction and renovation. If the equity is not used within a certain period it is taxed.
- Asset binding: Equity is bound to non-profit purposes for a certain period of time. This is ensured through the limitation of profit distribution to the owner and other restrictions.

- Personal restriction: Non-profit housing organisations must be independent from members of the construction organisations, to ensure fairness to the customer. This is especially important for the functionaries of non-profit organisations. Also the payments and benefits for the functionary and employees are limited by law.

Condominium Associations

In Austria, if someone buys a condominium / dwelling, the owner automatically participates in the association of owners of the building, which is formed in the accordance with the civil code. This owners association has several rights and duties which are defined in the law for owned dwellings. The owner of a dwelling owns the common grounds of the building according to the share of his dwelling to the total living space of the building. But many owners of dwellings are neither informed nor have enough information or interest to obtain their rights. From the seventies to the nineties, changing rented dwellings into buildings with owned condominiums was favoured by the public and law, but due to several problems with decision making in buildings with several condominiums and little communication amongst owners, this is no longer the policy.

Local Government / Municipality

In Vienna, there is only one local government housing organisation, Wiener Wohnen, which manages about 18,414 buildings with 216,300 dwellings in 2002, which is about 23% of the dwelling stock in Vienna. Wiener Wohnen not only manages these dwellings for residents but also manages office buildings, commercial areas, parking spaces, etc. Nearly every fourth dwelling in Vienna is owned by the municipality. Since January 1st, 2000, Wiener Wohnen is not a magistrate of the city anymore, but rather a business of the city. This means it does not have access to the funds of the city anymore. Hence, no tax money can be used, but they also do not have to add to the tax pot. Nothing changed in relation to the rights of the resident or the person looking for a dwelling, but with the additional competencies, the organisation can now pass quicker renovation and maintenance measures.

The municipality of Litschau owns 45 dwellings, which is approximately 3% of the entire dwelling stock.

Private Owners

Private owners are either physical people, or a legal entity. It is not simple to gather information on this incredibly heterogeneous group of owners. The majority of these owners are banks, insurance companies, or various interest groups. In Vienna, private people also have a large share of these dwellings. One of the largest residential buildings owner in Vienna is the communist party of Austria, which is not a non-profit housing organisation but rather a commercial housing provider.

Miscellaneous

The church is not considered a housing organisation. The Catholic Church owns large areas of inner city Vienna, and dwellings that are on this land are not offered publicly, but are rather rented informally. The Jewish community owns some buildings in the old housing stock in the inner districts of Vienna.

Number, size and the importance of the organisations

In Austria, there are only concrete figures for the dwellings owned by the local government and social non-profit housing organisations. Figures for commercially owned dwellings are not available as the market is too fragmented.

In Austria, 713,000 dwellings of the 3.4 million are owned by social non-profit organisations. In Vienna, of the 928,479, 216,300 are owned by the municipality and 217,363 are owned by social non-profit housing organisations. The other 60% are owned by individuals and profit-oriented housing organisations.

In Litschau, the municipality owns only 2% of the total number of dwellings.

The property structure of housing organisations and other actors (public, private, parish)

In Vienna there is only one public housing organisation "Wiener Wohnen", which, however, was privatised in 2000. Nevertheless it is closely related to the municipality. The rest of housing organisations are private organisations differing only in the economic status as being non-profit or commercial organisations. Most of the non-profit housing organisations are affiliated to one of the big parties (the socialist or the people's party) in Austria. The majority of the commercial owners are banks, insurance companies or various interest groups.

1.3. Price structures in the housing market

Table 6 shows the price structure in the Austrian housing situation. The figures are further described below the table.

	Indicator:	**Austria**	**Lower Austria**	**Vienna**	**Litschau**
C1	Average rent rate (_/m_) / average rent (_ monthly, list included charges for heating, water etc.) (*2001*)) *Statistik Austria*	_ 4.84/m^2	_ 4.28/m^2	_ 4.58/m^2	
C2	Range of rent prices per m_ (*2001*) *Statistik Austria*	3.34 – 4.62 _/m^2			
C3	Portion of rent / housing expenditure in relation to total average income exclusive operational costs *Statistik Austria*	18.6% (2000)		18.6% (2000) 17.7 % in (2002)	no figures available, but should be the same as for Vienna
C4	Portion of monthly resource related costs (for heating, water, sewage, electricity, waste disposal) in relation to the average income *Statistik Austria*	4.9% (2000)		4.9% (2000) 4.9 % in (2002)	no figures available, but should be the same as for Vienna
C5	Average price for homes (_/m_, exclusive charges and provisions) *(1998) Statistik Austria*			1715 _/m^2	
C6	Range of prices for condominiums (_/m_, exclusive charges and provisions) *(2002) www.sparkasse.at/sBausparkasse*			range: 1400-3000_ Average for inner districts 2290_/m^2 – all prices for resale. For first purchase: average is 2.453 _/m^2	
C7	Range of land prices for a single home (_/m_) *(2003) www.sparkasse.at/sBausparkasse*			230-620_	
C8	Indirect labour cost percentage - % difference between income after taxes and social security in relation to income plus all social costs and taxes, that the employer has to pay in addition	7_: 90% 10_: 111% 20_: 110% 50_: 120%			

Tab. 6: Indicator for the description of the price structure in the national housing market

The Austrian national bureau of statistics publishes an average rent per square meter of nearly _ 5 for the year 2001. However, this average figure hardly has any meaningful interpretation, as the range of rent is quite enormous depending on the type of contract, the equipment of the dwelling, and the location.

The average monthly expenditure for a dwelling in 2000 was _ 303. The range was from _ 339 for dwellings in category A, to _ 123.2 for dwellings in category D. When looking at the rent per square metre, the average in 2000 was 4.39 _/m^2, with a range of 4.64 _/m^2 for dwellings in category A to 3.34 _/m^2 for dwellings in category D. Obviously there has been a

significant price increase from 2000 to 2001, which is mostly due to increasing operating costs. There has been a significant improvement in dwelling category in Austria from 1991 to 2000.

According to Statistic Austria, the distribution of the four categories for year 2000 is as follows:

Category	Austria (2000)	Austria (1991)	Vienna	Lower Austria	Litschau (1991)
A: includes bath, toilet, and central heating	84.9%	71%	83.2%	84.8%	50%
B: bath, toilet, separate heating unit	10.4%	16,1%	5.8%	11.2%	32%
C: toilet, water facility	1.1%	3,7%	1.6%	0.9%	6%
D: only water	3.6%	9,3%	9.4%	3.1%	12%

Tab. 7: Distribution of dwelling categories (Litschau: figures dating from 1991)

The structure of prices in the housing market (rent and property)

Prices for rented dwellings

Average rent in Austria, Vienna, and Lower Austria is 4 to 5 Euros per square metre without operating costs and value added tax, with a price rise in Vienna expected to 6 Euro within the next years. Dwellings in the inner city districts (inside the Gürtel) are highly valued, but outside the Gürtel, supply actually exceeds demand. Demand is high for low rent subsidised dwellings, as the municipality of Vienna has reduced its construction activities in the last years. This is partly due to the political change from the social democrats to the conservatives in Austria.

The following figures are taken from a study based on an assessment of newspaper announcements, of the year 1998 (Amann, Bartsch 1999). In 1998, the supply for rental dwellings in buildings constructed before 1920 (Altbau), was mostly for dwellings with 50 to 75m^2, for so-called “Neubau” (buildings after 1950) the average size was 75 to 100m^2. However, Altbau is highly valued in Austria, and especially in Vienna, as the rooms have a height of 3 to 4 metres, and the walls are much thicker, therefore as well from a point of view of noise and heating, and other comfort, Altbau is much more attractive.

About 90% of all rental dwellings on the market have a standard of category A. As for these dwellings, the highest possible rent according to the guidance value system (further explained on page 22) can be charged. Normally, when a dwelling falls empty, the building owner upgrades it to category A before putting it on the market. This results in the already described situation of a lack of large dwellings for cheap prices.

In 1998, about 55% of all rental dwellings that were offered in the newspapers were charged a rent adequate to free rent, while about 45% of all rental dwellings were stuck with the guidance value rent. More than 55% of all rental dwellings are only available with time restricted contracts trying to prevent some of the sharp restrictions of the rental law. For rentals in Altbau dwellings, this share is about 40%.

The average rent in Vienna was _ 8.2 per square metre of the dwellings including operating charges and value added tax, but not electricity and heating. If the dwelling in an Altbau has to be charged according to the rental law, it amounted only to _ 7.9 per square metre.

In 2000, the rate of constructing a subsidised rental dwelling in Litschau was 221_/m^2. A further 4.72_/m^2 was calculated for monthly rent without utilities (electricity, heat, warm water).

Prices for condominiums

In 2002, the average square metre price for new dwellings in Vienna was _ 2,45, an increase of 1.8% to 2001. This level is still the same as in 1995. The price for used dwellings has been steadily falling since 1995 by a total of more than 10%. In 2002, the square metre price was _

1460. (Format 9/03: From a study conducted by the Institute for City and Regional Planning, Technical University Vienna).

Price development in recent years

In all federal states of Austria, prices rose sharply in the eighties, and were confronted with falling prices for rent as well as for owned dwellings at the end of the nineties. In the period from 1994-97, very cheap as well as very expensive dwellings lost share, and the segment of dwellings in the middle price range increased.

The study, "Mietkosten und MRG-Preisregelung" (Amman 2001) shows that in the year 2000, for the first time since 1980, costs for housing rose below the increase of general living costs. In the last 20 years, increasing prices for housing were always one of the main causes for the general increase in consumer price index (CPI), but due to the oversupply of dwellings, nowadays housing costs can actually become a stabilising factor of the CPI.

The average costs of housing in Austria remain at a level of about 20% of income, which is relatively low in an international comparison.

After 1945, prices on the housing market varied a lot due to the different laws, types of contracts, and subsidies. This segmentation is decreasing. The prices for the single separate markets (Altbau / Neubau, municipal housing, commercial or non-profit housing, and old versus new contracts) are slowly merging. Also rents with frozen contracts before 1912 are dying out. This will also have a positive effect on the very low *Mobility* of Austrian households.

The structure of income in relation to the prices of rents and property

The monthly **dwelling expenses** are regularly recorded and posted in the Micro Census published by Statistic Austria, and are defined as follows (Statistical Yearbook 2003):

- The direct rental costs: rent, sublet rent, annuities (repayment of an owned dwelling, royalty of a co-operative dwelling).
- The portion of operating charge that is defined in the MRG (e.g. water and sewage charge, lighting of the building and common areas, expenses of the management and building care taker).
- Running expenses that are not considered operating charges according to the MRG, yet depend on the use of the dwelling (e.g. use of furniture, especially for subletting, cost of central heating, warm water supply, garage costs, maintenance fees).

The **dwelling expenses** apply to people living in own dwellings or rental dwellings. The average dwelling expenses for Vienna in 2001 are _ 306 a month, and _ 292 for Lower Austria. (Statistic Austria 2003)

The Austrian Micro Census shows the monthly expenditures of the household based on the household survey 2000. 23,5% of the household income go for housing including also the expenditures for heating and electricity. This percentage is still quite low from a European perspective. As rent is state controlled and energy prices have a stronger competition due to the free market, the rise is definitely due to the increasing operating charge of buildings, which can make up to 70% of rent in some of the rent controlled dwellings. The percentage of income that goes into housing varies with the level of income. Lower earning households often spend more than this on housing. Sometimes this is so significant, that the resident is financially restricted. (Grünbacher, 2003c).

Population group	Housing expenditure in % household income
Average Austrian household	23,5%
Retirees	27,2%
Single living women	31%

Tab. 8: Housing expenditure in different population groups

The national way of determining rents and prices for property

Frozen Rent

The rate of frozen rent, which was fixed for the soldiers of the First World War, is 30 cents per square meter exclusive maintenance and renovation costs. The maximum rent for dwellings with frozen rent is 2.64 _/m^2. This rate stays constant, even when newly rented out to family members Rental dwellings are allowed to be bequeathed without an increase in rent. The protection of dismissal can only be broken if the rent has not been paid for an extended period of time. These rates are valid for dwellings initially rented before 1950 and only for dwellings that were built before 1945.

Guidance Value System (Richtwertsystem)

The so called Guidance Value System exists since 1994. Whoever rents a dwelling (in a building constructed after 1945) after 1994 that is smaller than 130m^2 and better equipped than category D, pays rent on the basis of the Guidance Value System. This is comprised of the basic value, and supplement costs, for additions such as location and furnishing and equipment. The guidance value varies largely in the various federal states, from 6.51 _/m^2 in Vorarlberg to 3.87 _/m^2 in Burgenland. The rate in Vienna is 4.24 _/m^2 since April 2002 and 4.35 _/m^2 in Lower Austria. The guidance value is a net rate; excluding maintenance costs, operating charge, and the 10% value added tax.

The supplement costs can be arranged pretty liberally. The following supplements add the following value to the basic value. If the dwelling is on a green street or close to a tram or subway station, value is again added. (Grünbacher, 2003b)

Outfit	% addition to base rent
Building in good condition	5%
Intercom / Interphone	1%
Small balcony facing the courtyard	2%
Good layout of the dwelling	3%
Dwelling on second floor	1.5%
Window in the bathroom	2%

Tab. 9: Assets and indicator that can increase the basic rent of a dwelling

Rental contracts “Hauptmietverträge” are not often given, since they are practically not cancellable, and are freely inheritable within the family and between non-wedded partners. Many new contracts are sublets, and time restricted rental relationships (less than 4 years), which have to be charged according the guidance value.

Free Rent

Not even when renting your own condominium or a dwelling in a two family building there is a truly free market.

Support for residents with low income

In Vienna, a person only receives financial aid for living when he/she has an income. This can be from self-employment, employment, or it can be an income in form of government aid. This means a social welfare recipient also can receive financial living aid. The monthly household income dictates if the aid is continued. The monthly income cap for a two people is _ 1,704. (Wohnservice Wien, 2003). Since 2002, also people living in commercially provided dwellings, not only dwellings managed non-profit housing organisations, can receive financial living aid.

In the last four years, Vienna has seen an increase of financial aid recipients for housing of 70%. In 2002, 31,676 Viennese received _ 52.5 million in financial aid and _ 69 million have been budgeted for 2003.

Support for raising property

Austrian banks offer a large variety of dwelling loans. Only a few of these are intended for purchasing a dwelling. Some loans are limited to the size of the dwelling, restricting the size of the dwelling to 150m^2. In Austria, it is common to save via a state-subsidised building loan. Nearly every Austrian has such a contract with one of the leading bank institutes. The savings are frozen for six years and a state premium is granted. After that period, if one wants to build a one or two family building, one can apply for a subsidised loan, which might have flexible credit periods or active interest management. It has also been contemplated to pass on cheap construction conditions to the leaseholder or the buyer and too cut fees like credit fees to reduce costs by 10% (Grünbacher 2003c).

Another support for raising property is tax allowances for construction (Wohnraumschaffung). These costs are only tax deductible if the owner himself pays them and only if a new one or two family building is constructed, not if one purchases a condominium. Other tax allowances are granted for long-term credits to buy a dwelling in a newly constructed building, which is constructed by a non-profit or a municipal housing organisation. Under specific circumstances, also maintenance in a dwelling can lead to a tax allowance. For all of these allowances, only 2,920 Euro a year can be deducted from the income, but an original invoice of 11,680 Euro has to be presented to the tax authorities.

Construction subsidy

In recent years, the construction subsidy was granted for about 80% of new buildings, and 20% for renovation. Also increasing are annuity grants, which quote for one third of all subsidies (Die Österreichische Wohnungswirtschaft 1998).

Most of the construction subsidies go to private people. This is due to the high amount of one and two family houses that are subsidised. The additional subsidies are for renovation, which are also mostly paid to private people, and for special projects of the increasing amount of commercial housing organisations. Only about one third of the construction subsidy goes to the non-profit housing organisations.

The construction subsidy has been the most important instrument in stimulating the housing market for more than fifty years. About 60 % of all new dwellings after 1945 have been financed with the aid of public subsidies. For multi-storage buildings this figure comes up to nearly 75%.

In an international comparison, Austria is different, not by the absolute amount of public subsidy, which is about 1.3% GNP and thereby slightly below the EU average, but by the way the subsidies are given. In Austria the focus is on directly financing specific objects, instead of indirect grants to a large number of people (subjects). (Object subsidy versus Subject subsidy). By being able to make that emphasis, quantity, quality and price for buildings and dwellings can be influenced directly. On the other hand, one of the problems with these subsidies per object and not per subject is, that only living space is subsidised, whereas common ground and rooms are not included.

Indirect Labour Cost Percentage

Regarding the structure of prices in the housing market, labour costs and indirect labour costs for taxes and social security also play an important role as they affect the prices for the Homeservices.
Based on a net income of 7, 10, 20 or 50 Euro per hour, the additional costs for taxes and social security for the employer and the employee are between 90 to 120 %.

Net income per hour (_)	**7**	**10**	**20**	**50**
Gross income (_)	10.10	16.17	35	94.96
Gross income plus cost to employer (_)	13.08	21.02	41.96	110.15
Total % in addition to net income	89.6	110.6	110	120
Assumptions: 40hours per week; 173 hours per month				

Tab. 10: Calculation of indirect labour cost percentage

1.4. Competitive structure of the housing market

Competition between housing organisations

In Vienna there is no competition between the housing organisations. For new construction building projects various housing organisations are consulted and they split up the tasks so that every one of them is involved in the project. One can easily speak of a construction cartel. The sale and rental of dwellings works solely on marketing. There is an existing demand, because people change home every 5 –7 years. Actually emphasis is given to rental, whereas it is nearly impossible to sell a dwelling. This fact influences rents, which grow at the moment. (Grünbacher, 2003a) For the market of existing buildings, there is a clear separation of target groups for the different housing organisations. Like non-profit social housing organisations targeting certain income groups with defined political background.

In Litschau, there are hardly any housing organisations, so again we see no competition.

The general economic and social situation of housing organisations

Housing organisations have so much money that many buildings are built without demand and end up staying vacant. The vacancy rate in Vienna is about 6% and the construction of new buildings has been considerably limited in the last years. From an economic point of view vacant dwellings are preferable to the housing organisations than paying taxes to the state. Another explanation for the building boom comes from the fact the federal states easily give subsidies for all kind of construction measures.

Recently, the politics of using residential building construction as a social adjustment is coming to its limits. The majority of residents of social non-profit housing organisations are middle class, and the subsidies provided can be considered subsidies to the middle class. This has a negative effect on lower class citizens, as they cannot afford the rising rents in Vienna. This is noticeable when looking at residents late rent payments and the increasing number of homelessness.

At the same time, the demand of the residents has become more complex as the discussions on subjects like energy, environmental protection, living with children, living for the elderly, and living for the handicapped show. There is also an increasing trend towards single households. Another issue is the lack of participation by the future residents of a building. Areas of participation include choice of equipment, facilities, common rooms, as well as the layout of dwellings and the building.

2 Resource Consumption, Social Atmosphere and Mobility

2.1 Resource consumption and price structures of utilities

Table 11 shows the resource consumption and price structures of utilities in Austria.

When comparing Litschau and Vienna, the similarity in water consumption of 140l/inhabitant /day is significant, whereas there is a large difference in the amount of household waste. The amount of yearly household waste per inhabitant ranges from 319 kg in Vienna to 140 kg in Litschau. This fact might be due to the way how different types of waste are collected and treated. This refers to the fact that the waste and recycling collection is not the same in all Austria, but the collection system differs from one district to another (e.g. in some districts of lower Austria the “yellow sack” might contain plastic as well as metal, whereas in Vienna plastic most often is part of the household waste).

It is typical for the smaller towns in Austria that lot of buildings are not connected to the public water net, but the water comes from an own well. There are even towns that do not have a public water net, but water supply is left to the resident of a house and the municipality does not care for it.

Concerning utility prices it turned out that the pricing is very complicated, so it is difficult to understand. The resident has no real chance to reduce the sum he pays for utilities because comparison of prices is nearly impossible.

	Indicator:	**Austria**	**Lower Austria**	**Vienna**	**Litschau**
D1	Energy consumption for heating (kWh/qm*a) *(*2000) Statistik Austria			244	
D2	Electricity consumption (kWh/inhabitant and/or qm * day) *(2001) Statistik Austria*			48.6 kWh(m^2a or 1605 kWh/inhabitant and year	
D3	Water consumption (l/inhabitant * day) *(2002) www.ebs.co.at*			130- 150	140
D4	Percentage of households connected to public water supply *(2002) MA 31*			99	54
D5	Percentage of households connected to sewage (waste water treatment) *(2002) www.ebs.co.at*			98	55
D6	Household waste in kg per capita of the population (without recycling) *(2002) MA 48*			318,8	140
D7	Electricity charges for private customers (c/kWh, without special rates, only consumption and basic charge) *(2003) www.evn.at, www.wienstrom.at*		No Basic Charge, 10.89c/kWh consumption	Basic charge 12.24 _/Year, consumption price = 13.4314 Cent/kWh (incl. 10% tax)	No Basic Charge, 10.89c/kWh consumption
D8	Water charge (_/cbm per household (consumption and basic charge) *(2003) www.wien.gv.at/finanzen/abgaben/wasser.htm*			1,30 _/cbm (incl. 10 % tax) Basic charge for water meter: _ 17,44 - 209,28 (depends on number of connected dwellings) (incl. 10 % tax)	
D9	Sewage charge (_/cbm per households only consumption and basic charge) *(2003) www.wien.gv.at/finanzen/abgaben/wasser.htm, www.gmünd.at*			1,32 _/cbm (incl. 10 % tax)	Flat rate 4 times a year _ 265 + 10% tax
D10	Waste charge (_/cbm per household, please explain common national mode of calculation, e.g. per			26.33 _/cbm	Basic charge _ 6 a year for

	garbage can size, basic charge) *(2003) MA 48, www.gmünd.at*				providing one container. And monthly _ 19.84 + 10% tax for emptying the container
D11	Portion of operating charge in relation to the rent (average operating charge per flat or household) *(2001) Statistik Austria*	37.8%	40.4%	43.8%	estimation: should be similar to the figure of Lower Austria

Tab. 11: Indicator for the description of the price structure of utilities and resource consumption

Resource consumption

The statistical yearbook 2003 shows the following distribution of dwellings in Austria by type of heating and energy carrier for 2001.

Type of heating	
Separate heating unit	22.87%
Heating by storey of building (Etagenheizung)	14.25%
Central heating	47.26%
District Heating	15.62%

Tab. 12: Distribution of type of heating in Austrian households

Type of Energy Carrier	
Wood	14.71%
Coal	2.71%
Natural gas	28.81%
Heating oil	28.35%
Electricity	7.76%
District heating and other sources	17.75%

Tab. 13: Distribution of type of energy carrier in Austrian households

However, it is necessary to have a closer look how energy sources are used in different ways for different means. While in Vienna gas is mostly used for heating, cooking, and preparing warm water, in large parts of Austria there is no gas network. On the other hand, in Litschau, wood is mostly used for heating, preparing warm water and in at least one third of the households wood is also used for cooking, so that other renewable energy sources are negligent and that situation applies also to other parts of Austria.

Energy source	Vienna	Litschau
Electricity	lighting, cooking, household appliance	lightning, mostly used for cooking, household appliance
Gas	subsidies are given to change from oil or coal heating to gas Gas is mostly used for cooking and preparing warm water about 68% of new buildings are connected to the network	no network
District heating	Only 22% of new buildings are connected to the district heating. However when there are subsidies given by the municipality of Vienna there is a connection obligation Nevertheless charges are very high, and supply throughout the whole year is not guaranteed	no network
Wood	Is used only by few eco-freaks for heating, becomes a high fashioned way of heating in those districts of Vienna where the rich people live.	main carrier for heating and preparing warm water, many households still have an oven
Other renewable resources (Solar cells)	minor importance, mostly on roof of 1 or 2 family buildings – only a hobby however with growing importance because of enlarging number of low energy and passive energy buildings	nearly no importance

Tab. 14: Qualitative comparison of resource consumption in Vienna and Litschau

Regarding water consumption, Austrians are not very careful about the amount they use for useless means. The average consumption is 140 litres per day. This is due to the fact, that there are large water resources in Austria and that water consumption is normally paid on lump sum and is relatively cheap. In Vienna, practically all households are connected to public water supply and sewage. However, this is not so in the country side, where only about 50% of all households are connected.

Price structure for resources

Energy:

Already before the energy supply market was privatised, there were nine different energy suppliers according to the federal states of Austria with different cost structures. Since about three years the market is no longer regulated, so in theory, every household is free to choose its own provider. However, as one still has to stick with the old provider for the costs of the grid network, there is little incentive to change to an additional supplier for the costs of the energy carrier itself.

It is practically impossible to compare prices for electricity as they have a base rate and depend on consumption, and are different for the several providers, which also provide extra bonuses and special features for switching to a new energy supply organisation. The figures are quoted in Table 11. For Vienna, it shows the basic rate and consumption rate for electricity of Wienstrom. For Lower Austria the prices are quoted for EVN. There is also one supplier on the market, Ökostrom, which provides electricity of renewable resources.

Water:

Water is charged per building. The rate includes a basic charge for the water meter depending on the number of dwellings connected to the meter and a consumption rate. Water supply is provided by municipalities or regional non-profit organisations by a clear regional distribution of markets. Water and sewage prices are included in the operating charge of the building and are therefore not obvious to the residents.

In the country side, about one half of the buildings are connected to the public water supply and sewage system. The rest uses ground water of their wells and have cesspools for sewage.

Waste:

The Viennese municipality has the monopoly for waste disposal. The prices are charged depending on size and number of containers. In the normal multi-storage buildings, five to ten garbage containers are picked up once a week. The estimated price assumes weekly pickup in standard sized containers (240 l) and has been recalculated into cubic meters. In Vienna, the price for disposing one cubic meter of municipal waste is _ 26.33. The disposal is charged to the owner (association) and not to the households. So awareness of the costs does not exist in large city buildings as disposal costs are included in the operating charge of the rent.

In Lower Austria, as in all other federal states, every district has its own waste management association, resulting in different prices in the districts.

In Litschau, most one family houses have a 120 litre container for waste. This container is emptied once a month for _ 19.84 plus 10% tax no matter how much waste there is inside. Plastic waste is collected in the “yellow trash bag”, of which 12 are provided free of charge. If more are required, they can be purchased from the municipality.

Payment of several charges for resources

In the end, it is always the resident who pays, not depending whether he is the owner or the resident. All charges for the common areas and in addition of some old buildings heating of dwellings go to the housing association, who levies them to the residents and dwelling owners their proportionate living space.

All heating and electricity costs of a dwelling are directly controlled and charged to the dwelling according to actual consumption. Only with district heating, there is an exception to this rule; this can be included in the operating charge of the house.

Energy for the dwelling is never included in the rent or operating charge, but always directly paid by the resident or owner. The electricity of the common building areas is included in the operating charge for the building and levied to all dwellings in a building by square meters of the dwellings, not by households.

District heating by Fernwärme Wien or gas by Wiengas can be charged by square meter in old buildings with no separate meter. However, in newer buildings, heating is directly charged to the resident by actual consumption.

In Vienna, both water consumption and waste water treatment are provided by the municipality (MA31 Wiener Wasserwerke und MA30 Wien Kanal) and charged (MA6 Rechnungsamt) on the same bill to the owner (association), who levies them to the residents and dwelling owners by square meters of dwellings, or in newer buildings by individual use.

In Litschau, sewage is charged four times a year at a flat annual rate of _ 265 plus 10% tax.

In Vienna, the municipality (MA48 Abfallwirtschaft) provides containers for garbage and waste paper for the dwellings and charges by number of containers. So, theoretically, there is a charge by consumption for a dwelling, but as the costs are again levied to all residents and dwelling owners by square meters, there is little incentive to reduce the amount of waste because the costs are generally not known, as it is the facility manager who controls the bills and orders the pickup containers. The municipality has to provide free containers for glass, metal and plastic in the neighbourhood. In big housing complexes they are put on the common areas and are charged.

Resource payment: individually or on lump sum?

The only charges that are paid individually are the gas and electricity consumption in the dwelling. Normally the resident pays a certain sum in advance (every three months), which is then set into comparison to the actually consumed amount which is recorded once a year.

The bills are so complicated that it is difficult to understand what has been charged. The consumption charge is split up into a rate for actual consumption, a rate for providing the grid network, which is always in the hand of the previously state-owned provider, and several taxes. Only few residents until now have changed their provider.

Every building that is connected to the water supply network has a water meter no matter how many dwellings it contains. This meter is read once a year. This charge is then charged according to the size of the dwellings.

There is a different situation regarding waste and recycling.

In Vienna, the municipality provides pickup containers for residual waste and recycling paper for each building. The costs are charged per number of containers that a facility manager orders. Normally the facility manager only changes the number of containers if he has had complaints by residents that there is not enough space left for the garbage. The municipality in addition provides containers for metal, plastic, and organic waste on public ground or on common ground of a building. A certain amount is paid per container. If the residents regularly have little trash, then there can be fewer containers, reducing the costs to all.

Concerning Litschau, the situation looks a little different. Like all other Austrian federal states Lower Austria is divided in a large number of districts. Each district has its own waste management and collecting system, which can be rather different from the neighbour's ones. In the district of Gmünd, where Litschau is located, glass and metal containers are provided in public areas. Only sometimes there are wastepaper containers as most often paper goes to the heating system. For organic waste, there is no need for collection because nearly every household has its own compost pile and already takes part in sustainable measures. For plastics, there is the "yellow sack". All services concerning waste management in a district are provided by the local "Abfallwirtschaftverband", which is a co-operation of the municipality and private organisations.

Competition of *Supply & Disposal* companies

Earlier there was one electricity and one natural gas provider per federal state. (Gas providers do not reach all households due to topographical characteristics of Austria.) These providers, usually state-owned, were in charge of creating and maintaining the grid networks. The markets were privatised in 2000 for electricity, and in 2002 for gas. Since then, new providers have been emerging. Private residents are not the target group for new providers, as it is difficult for the resident to understand the complicated bill and see where they can save money. It is also more difficult for the new providers, since they must pay rent to the original provider for use of its grid network. Hence, only large industrial businesses buy gas or electricity from new providers.

If no private well exists, water supply is primarily provided by public sources. There are both small and very large providers such as the "Wiener Wasserwerke". There is no competition for water supply and sewage.

In Vienna, waste disposal, including waste for recycling (Altstoff), is conducted by the municipality. In Lower Austria, there are waste disposal associations in the various districts in which private organisations often work in co-operation with the municipality. Waste disposal is also organised in regional monopolies.

It is clear that in Austria, the resource providers are either monopolies, or the organisations involved work closely together. The competition and price decreases envisioned by privatisation has not been realised and is not predicted to happen in the next few years.

The scope of action for residents or housing organisations to reduce costs of utilities

For energy, there is scope of action for residents, as it is directly measured in the dwelling. However, energy costs are still comparably low, and for many energy-saving measures like insulation, not the resident, but the facility manager or the building owner is the one to implement it. So there is a conflict of interest between the resident who has the potential saving and the facility manager and building owner, who has to do the work and provide the financing. For water and waste, only if the housing community is very small, so that there is direct contact and control, awareness and regular control of consumption can help reduce costs.

Even though the operating charges are published by the building care taker once a year, most residents do not bother to look at them. Waste separation and recycling is common, but most

residents do not go as far as to reduce the amount of waste they produce. In large residential buildings, there is no social pressure to reduce waste, as the residents are anonymous.

Initiatives to reduce resource consumption

There are several pilot projects on constructing low energy, passive energy, solar energy, and other resource efficient buildings including projects on energy contracting and use of other resources.

In both Vienna and Lower Austria there are subsidies for updating to more efficient heating systems and increasing the buildings' and dwellings' insulation.

The problem with these subsidies in big cities is that, in contrast to the country, normally the owner and the resident are two different people. The owner has no interest to stimulate these measures, as it does not increase his profit. The facility management has no interest, as it only means more work for it to get the measure implemented and monitored. The resident would have an interest, but needs to co-ordinate the whole building, to get it done. So, it only happens when there are only a few owners/residents actually living in that house.

Social atmosphere in the cities and towns

In Austria, the indicators in table 15 describe the social atmosphere and climate on a qualitative level. As Austrians are rather sedentary and tend not to leave their home town, a large part of the population has relatives living nearby. In the Vienna region this might differ, as the city attracts a lot of people, who come to work or study.

Litschau is so small that apart from individual problems, social tensions are not present. The only difficulties result from illegal immigrants passing the nearby border. However, this situation will change with the EU enlargement in May 2004.

	Indicator:	Austria	Lower Austria	Vienna	Litschau
	Social tension in neighbourhood				
E1	Begging is a problem in the neighbourhood			no	no
E2	Ethnic tensions in the neighbourhood			non	non
E3	Crimes are a problem in the neighbourhood			Less than they are in other big cities	non
	Services available in the neighbourhood				
E4	Supermarket nearby			yes	yes
E5	Day-care centre nearby			in some districts	no
E6	Public gardens / squares nearby			yes	non, there is no need
E7	Medical service centre nearby			mobile nurses, in some districts also day-care centre for elderly	mobile nurses
E8	Day-centre for the elderly nearby			yes	
	Cultural diversity				
E9	% of foreign residents EU Non-EU *(2001) Statistik Austria*			12,1 – 18,7%	1,4 – 3,0%
E10	% marriages between country's citizen and foreigner *(2001) Statistik Austria*	11,3%			

Tab. 15: Indicator for the description of the social atmosphere in Austria

Social isolation in towns and cities

Social isolation is independent from the resident's age. If the possibility exists, many elderly residents will get together to chat, meet new people, or do activities together. It is important to supply green spaces during the summer and common rooms during the winter for people to meet. In general, Austrians like their private space to stay private, and hence do not feel comfortable meeting in their own homes.

Hence, the problem of social isolation depends on the living environment. In buildings with elevators and garages, where the resident can enter and leave the house nearly unnoticed, the isolation potential increases. In single households this potential is even larger.

Buildings constructed in the 1950s have a definite lack of space for common rooms. They are often criticised to be the reason for social isolation in the building. However, historical studies show that residents can be easily satisfied, as with a flower corner in the hallway where residents can stop and chat for a while.

Social tensions in the neighbourhood

A typical problem in Vienna is the discrimination against foreigners. Viennese, especially elderly ones, are also quite unfriendly to children, which often ends in conflicts with the large foreign families. This conflict, mostly about common areas, is often an issue of discussion. Most traditional common areas do not include an area for children and teenagers, which led to the creation of youth centres in the 1970s. These were innovative public Homeservices in Vienna, as they were supplied directly at residents' dwellings.

Services available in the neighbourhood

One major outcome of the resident interviews in Vienna was the fact that those people living in the inner district of Vienna and thus profiting from a good local infrastructure were rather astonished by the idea of Homeservices. As they have all kinds of shops, service providers, handicrafts, and social and medical services within walking distance to their home, they do not even think of this concept. This attitude applies also to elderly for whom organising their daily life by themselves is an important social factor to strengthen their self-confidence.

In the outer districts of the city the situation changes. When the first of these big housing complexes was constructed in the 1960s and 1970s, they were only "sleeping towns", meaning that people came there only for the night, but professional as well as social life took place somewhere else. This was also due to the fact that necessary infrastructure was lacking. Nowadays the situation is improved so far that at least the basic needs – like shopping, children care, schooling opportunities, and sport activities - can be fulfilled. However, it is significant that residents of these areas are more interested in Homeservices so far as they can afford them financially.

Litschau offers a good mixture of different shops and services, however only a small one due to its rather small number of inhabitants. Most of the residents are more or less satisfied since two little towns within 10 to 20 km offer a good variety of services. This leads to the fact that Homeservices offered by commercial providers (pure services offer, not as a support of sale) have only little chance to survive, whereas all activities based on neighbourhood or self-help do have an important ranking in the community.

Cultural diversity

Regarding the origin of Viennese residents, the city is a rather mixed conglomeration. In comparison to the Austrian average there are a large number of non-EU residents mostly coming from the former Yugoslavian countries or from Turkey. Traditionally these people live in rather worn-out parts of the city with badly equipped dwellings. Often they have restricted budget for living, which makes it nearly impossible to use any service as long as they are not for free. On the contrary, a lot of them are used to helping each other within the families – so these informal activities are very common to them – however, they will not see it within a Homeservice concept.

In fact, depending on the origin of residents, the service mentality differs. For example one of the surveyed buildings (Hübl & Partner Attemsgasse 1220 Wien), addresses particularly wealthy clients from the (east) Asian region, staying in Vienna for professional reasons for several years. These residents are used to a certain degree of service offer, which is not common to a native Viennese resident.

Litschau is not a hotspot of migration, so cultural diversity does not play a big role. However, with the Czech Republic joining the EU next year, effort have been made and are still coming up, to make the town attractive to tourists. These activities have nearly no impact on social life in the town up to now.

2.2 Structure of mobility

Regarding *Mobility,* Vienna and Litschau are typical examples for the Austrian situation. In Vienna, there is a broad offer of different means of traffic, from urban transport by metro, bus or tram, to the short distance railroad connections and a well developed road net, which is still under construction to provide even more capacity for traffic.

On the other hand, Litschau is completely focused on car transportation. There is no railway station and public buses to the nearby towns and villages work only according to work and school schedules. Long distance transportation, for example to the capital of Lower Austria, St. Pölten, or to Vienna work only two times a day.

	Indicator	**Austria**	**Lower Austria**	**Vienna**	**Litschau**
F1	Cars per 1000 inhabitants *(2001) Statistik Austria*	510	570	400	
F2	Costs for a single tour by public transport			1,5_, reduction for children, elderly, students to 0,80_	
F3	Monthly ticket by public transport			45 _	
F4	Average costs of individual transport per km for a Golf III (gas, insurance, tax, purchase included)	0,36 _			
F5	Average distance between work home and place *(2001) Statistik Austria*	12,5km			
F6	Number of people who commute daily to work Enter city Leave city *(2001) Statistik Austria*	In: 1,403.900 Out: 1,462,900	In: 282.900 Out: 386.700	In: 188.000 Out: 44.800	In: 231 Out:553
F7	Less than 15 minutes to work from place of residence *(2001) Statistik Austria*	6%			
F8	Taxi stands near residence			in some areas	no

Tab. 16: Indicator for reduction of traffic

Mobility structures

Vienna has a well elaborated public transport system. It consists of 5 underground lines, 32 tramway lines and about 85 bus lines. There is a so called Verkehrsverbund wherein are included several transportation companies, public as well as private companies and also the Austrian railroads (only with several short distance lines working in the Vienna region). This Verkehrsverbund facilitates transport for the customer as they can use all transport means with the same ticket.

Particularly in the centre of the city and during day time (from 7.00 a.m. to 8.00 p.m.) the intervals of different transportation means are short (a tram or underground should arrive every three to five minutes, buses at least every five to eight minutes). However in the outer districts there are only few bus lines working with very poor intervals which make residents of

these areas most often drive. The city provides large parking lots at the final stops of the underground lines to make people change from car to public transport when they are going to the city centre. This is not only necessary because of traffic jams, but also due to a rather complicated parking management system in the inner districts, which allows you to park your car only for two hours if you are not a resident of the district. Also, one has to pay for this parking, which costs _ 0,80/hour on the street or more than double in a parking house.

Arising from the city structure, as there are parts where people live and other parts, sometimes far off, where they work, there is heavy morning and evening traffic. Local trains are very poorly equipped; they often do not work on time, so they are not an alternative to got to work.

However, in spring 2003 it turned out that people were willing to change their mobility behaviour if necessary. Due to a strike of public transport a lot of Viennese changed to the bicycle for short distances or used carpooling. Bikes are usually only used for sports and not for transportation.

The car is the primary mode of transportation in Litschau. Most trips are taken to go shopping in the town's centre, or to run errands to neighbouring towns and cities. Accordingly, there is often more than one car in large households. The number of cars partially depends on the costs of buying and running the car (gas prices are significantly higher on the countryside compared to Vienna.) Parking areas are not an issue, as there are plenty in Litschau.

The bicycle is used primarily for short distances on the countryside, whereas the scooter is very popular also for longer distances. Teenagers from the age of 16 can use a scooter.

There are a few bus connections to and from Litschau, as well as two connections a day to Vienna and St. Pölten, the capital of Lower Austria. The latter connections are rather unattractive and not used much as they take very long; the 160 kilometre trip from Litschau to Vienna takes four hours.

Mobility behaviour

A few mobility patterns are visible in Vienna. There are a few hard-liners that use the car for all their trips, even if only for a few hundred meters. The majority of Viennese use a mix of transportation, the subway being the primary mode of transport. The spectrum of subway users is quite diverse. Viennese use the subway to go to the theatre, as well as to sport events or to work. This is due to the reliability and speed of the public transport and the high level of safety in the city.

Only during rush hour, the spectrum of users of trams and buses has the same diversity. The primary users are students and retirees. Due to the slower transport and the fact that trams and buses are dependant on the speed of city traffic, these modes are not as popular. Another reason for their unpopularity are the rather uninviting stations. This problem has been tackled by the city of Vienna, making them more attractive.

Cars are primarily used when the user knows that there is a likelihood for finding a parking space at the destination. Employers sometime make parking lots available for their employees. Also when the user has a larger piece of luggage the car is preferably used.

The primary mode of transport in Litschau is the car. Other modes are less popular and used by specific groups. Students use buses, while teenagers and some elderly women use scooters. The bicycle is hardly used. The closest train station is 25 kilometres away, making this an unpopular mode of transport.

Cost comparison of individual versus public transport.

The cost comparison of individual versus public transport is mostly misinterpreted by the user as automobile costs such as insurance; repairs and parking costs are usually not calculated. The costs of _ 0.36 per kilometre are rather high, but various benefits for the user like commuter subsidies reduce these costs. These benefits also exist for users of public transportation.

Especially in the eastern regions, old and badly functioning trains (no heating in the winter) are used at rush hour, which causes people to switch to the car. During non-rush hour times, the intervals between the trains or buses are not frequent enough, further reducing the use of them. The financial costs of public transport are most definitely less than a car, but all these negative aspects of public transportation make the car more popular.

For the price of a two-way ticket in Vienna (_ 3), a driver could drive 8.3 kilometres. The majority of public transportation users have monthly or annual tickets, which reduces the costs dramatically.

Strategies to reduce traffic

The entire eastern region of Austria missed the past decade of strategic traffic planning, which has been marked by a large increase of traffic since the fall of the iron curtain. They did not plan an expansion of Austrian roads and rail circumventing Vienna for long-distance drivers using Austria as a passage way from north to south and east to west. Now that the traffic has become so intense in and around Vienna, various measures are taken to reduce this. These have generally been unsuccessful due to legal framework conditions; the separate states as well as the state itself have to contribute money for the construction of public roads. Furthermore, extreme mismanagement by the Austrian Rail Ways (ÖBB) has left the rail network (single track rails) and equipment (trains, train stations, etc.) in bad condition. Only a year ago a board member stated that the ÖBB has to learn that they are a service provider and must offer an attractive travel possibility. This rather late realisation has not made the situation much better.

From the perspective of the city of Vienna, especially from the green party, the use of bicycles is promoted. The bicycle path network is still in its infant stages and the bicycle is still primarily used for leisure.

There are significant advances with the bus lines that drive on natural gas, which dramatically reduces urban pollution. The city of Vienna is trying to reduce the amount of individual traffic, especially within the Gürtel, through the use of parking restrictions. This has worked only partially.

In Litschau, transportation relies primarily on individual car traffic due to long-distance trips. There are only some bus lines working in between the neighbouring towns and to the capital of Lower Austria; however buses are most often used only by school kids. It is a necessity to have a driving license as soon as allowed by law, to guarantee the mobility that is necessary for working or further education. One fact seems to be significant that most often families possess only one car that is shared between the family members, as long as sons and daughters still live at home. By that way, cars are used more efficiently than in cities, where the car is often only used on weekends and is parked most of the time.

Mobility and Housing Organisations

In Vienna, housing organisations by law have to provide one parking space per new dwelling. If one cannot construct a parking lot in the building, one has to pay the city of Vienna _ 8,500 (as the car will be parked somewhere in the streets). There is no requirement to construct parking areas for bicycles. Besides this, there are very little mobility services supplied. Where they do exist, they are outsourced to an external service provider, because it is not part of the housing organisation’s core business. Mobility is primarily seen as an issue of the resident.

However, already during planning and developing of a new building the housing organisations consider a good public transport infrastructure as this increases the value of the property. They either construct the building in an area where public transportation is already well developed or they negotiate with the operator of the public transportation to link a route to their building.

Even though some large housing organisations see themselves as service providers, they focus on cleaning and personal services, not mobility. Mobility is something so individual that they do not want to get involved. This is a result of the strange relationship Austrians have with their cars; while many products are shared in Austria, the car is seen as the “holy cow”.

3 What is a Sustainable Homeservice?

Services are increasingly offered as a solution to turning our production and consumption more sustainable. The ways in which services are expected to turn society more sustainable vary between the proponents of service thinking. Some of them see the 'service solution' from the information society perspective: as the structures of industrial production turn from manufacturing dominated to information-intensive service models, de-linking of economic growth and environmental burden occurs (Bell 1976, Jänicke et al. 1989). Some others take a "less automatic" stand point to the role of services. They do not foresee that an increasing share of services as a means of livelihood automatically reduce the environmental load. Instead they expect that in order to achieve eco-efficiency gains, service considerations must be crafted into models of production and consumption with the purposeful goal of reducing environmental impact of economic systems (Lovins, Lovins and Hawken 1999). Sustainability of services has mainly been discussed from an eco-efficiency perspective rather than from a more holistic sustainability point of view. In other words, in the sustainable service literature, the social aspect of sustainability tends to be neglected at the cost of environmental and economic argumentation.

The goal of this chapter, based on the article "*What is a sustainable homeservice*" (Halme 2003), is to put forward the idea of sustainable Homeservices, in other words services that enhance sustainability of living at home. Much of the unsustainable consumption of the affluent Western (and Japanese) consumers occurs in the context of household, i.e. living at home and moving to and from it. However, depending on the consumption cluster (e.g. nutrition, mobility, housing), households alone have only limited – larger or lesser, but still limited – possibilities on influencing their patterns of consumption. There are always other actors who count in setting the frame for consumption choices. For instance with regard to housing and construction, property owners (housing providers), local authorities and service providers influence the housing framework. Or as regards mobility, local authorities and service providers have a lot to do with the transport infrastructure, and therefore they set the limits within which households are able to decide how they fulfil their mobility needs (Spangenberg and Lorek 2002). Therefore it makes sense to seek for solutions for household sustainability with the service perspective in mind. Not only does this perspective capture the products to services aspect, but it also takes into account the other actors possibilities in influencing the households' consumption decisions.

This chapter discusses the scientific background of the Homeservice project. It seeks to evaluate which housing sector services could be sustainable, and on what conditions. The guiding questions underlying the study can be formulated as follows:

- In what ways can services potentially contribute to reduction of materials and energy use of in the housing sector, and how can they potentially increase well-being of residents/households? (relates the ecological and social dimension of sustainability)
- How can these services be organised so that they would be economically feasible both for providers and users, as well as society at large? (relates to the economic dimension of sustainability)

To provide some preliminary answers to the above questions, we will first discuss briefly about characteristics of services in general, then move on to examine eco-efficient services, and what could be sustainable Homeservices, i.e. sustainable services offered to households. We will also discuss how the provision of sustainable Homeservices could be organised.

3.1 What is a service?

What, then, are services? How do they differ from products? Traditionally it is considered that services differ from products in four main respects. First, (1) they are intangible, and (2) in many service operations, production and consumption cannot be separated. Customers are involved and participate in the production process (e.g. personal energy consultation to the resident). (3) Services are experienced differently by different customers (for instance, customers who cannot distinguish between physical goods, e.g. the TV set off the same

production line, will normally be able to distinguish between services, e.g. the different maintenance persons of the maintenance firm). Finally (4), services are perishable, i.e. they cannot be stored (Baron and Harris 2003, Zeithaml and Bitner 1996, Payne 1993).

However, the difference between products and services become less pointed if we look at product and service offerings more closely. All products include some services (e.g. delivery), and all services require the use of some tangible elements, products (e.g. premises) (Heiskanen and Jalas 2000). This can be illustrated with Shostack's classical tangibility continuum[2]. It is presented beneath with some examples adapted to homeservice context. The model classifies products and services based on the amount of tangible and intangible elements (Baron and Harris 2003, Payne 1993).

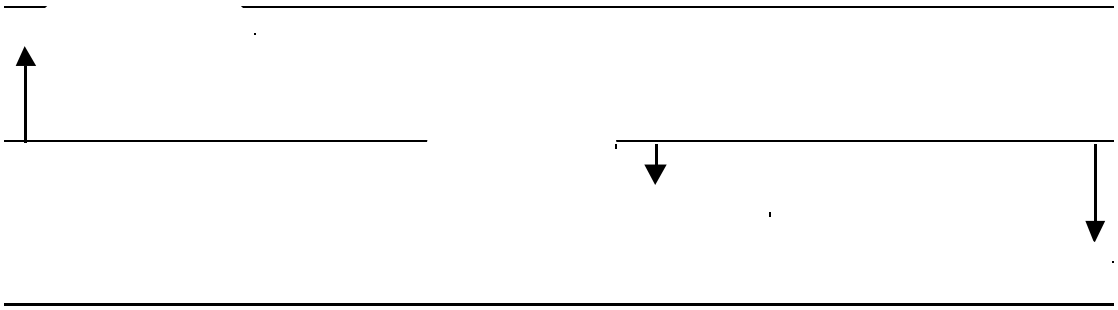

Fig. 1: Tangibility continuum adapted to the homeservice context.

The definition of services suggested by Heiskanen and Jalas (2000, p. 23) may be suitable for the purposes of this study, because it avoids the pitfall of service versus product definition. According to them, service is an added value for the customer, i.e. economic activity which replaces the customer's own labour with activities conducted by the service provider, either personally, automatically or in advance through planning and design.

3.2 What is an eco-efficient service?

The ideas for the eco-efficient service thinking come from many sources. One of its roots is the so-called *factor discussion* that urges to decrease the intake of materials into economy radically: by a factor of four (von Weizsäcker, Lovins and Lovins 1997) or by a factor of ten (Schmidt-Bleek 1998). The urged *dematerialization* and/or deduction in energy usage have been proposed to be achieved by fulfilling the needs of customers with the help of services instead of products (e.g. car-sharing service instead of a private car). Services that replace products to a larger or lesser degree, and thus reduce the material and energy needed to perform an economic activity (e.g. moving, living, cooking), are often called *eco-efficient services*, or shortly, eco-services[3].

There can be seen different types of eco-efficient services. They extend from conventional forms of renting, leasing and sharing to selling 'solutions' (e.g. integrated pest management) (Hockerts 1999). A number of typologies have been developed in order to classify the broad range of services that can be seen to involve an eco-efficiency component. Hockerts (1999), for instance, divides such services into three groups on the basis of: their connection to the existing product, the level institutional arrangements and intensity of customer interaction. In general, the classifications vary slightly based on the author's line of reasoning. The following is an integrative classification based on studies of Hockerts (1999), and Heiskanen and Jalas (2000).

[2] Sometimes called 'goods-services spectrum'. Adapted from G.L. Shostack, 'Breaking Free from Product Marketing', *Journal of Marketing*, April 1977.

[3] All services that replace products are not always necessarily more environmentally sound than a product fulfilling the same need.

(1) Product-based services are services that are related to the use of a product. The product may be sold to the customer or not. In the former alternative, the service component relates to *Repair*, maintenance, upgrading or take-back of the product. The model can be seen as an example of extended responsibility of the producer even after the point of sale. The concept is relatively close to conventional manufacturing business - for instance the common of practice giving a guarantee extends the responsibility of the seller or producer of the product. The latter alternative, renting or leasing a product to the user, goes a step further: the ownership remains with the producer. We then speak of rental, leasing, etc. services ("fleet management approach"). These kinds of services are sometimes also called use-oriented services, because only the use of product is being sold (e.g. in a car sharing concept the use of car is the offer).

(2) Result-oriented services are services within which the focus is on fulfilling customers' needs, and which are or seek to be independent of a certain product (therefore sometimes called need-oriented services). This type of services can be seen as including various forms of contracting, for instance least-cost planning in the energy sector, facility management, or waste minimisation services. Result-oriented service may be offered by the manufacturer, e.g. energy provider. It may be profitable for the provider to promote energy-saving equipment. A decrease in demand through gains in efficiency allows the energy company to increase its market share without having to build new power plants. However, these kinds of services are frequently provided by another company, e.g. energy saving company. Discovering instances of result-oriented services often calls for redefinition of the need of consumer, e.g. instead of "electricity", the need of consumer is lighting. Compared to sale of products or product-based services, the service concepts of this category are likely to require increased interaction with the customer and involve more complicated institutional arrangements.

(3) Non-material services are yet another category that should be discussed in the connection of services that can lead to lessening environmental burden in the society. These traditional services, such as medical or personal care, legal services, banking etc., do not as such directly replace products. Their potential ecological contribution realises through another kind of mechanism. From a macroeconomic perspective, the shift to services and thus growth of service intensity of the economic production contributes to ecology through the decline of traditional smokestack and extractive industries in relation to less materials-intensive and more knowledge- and labour-intensive service industry. These services, however, are not necessarily eco-efficient. Their eco-efficiency must be assessed per each individual service and its context (cf. Salzman 2000).

Another similar approach is based on the Behrendt et al (2000). It distinguishes primary and secondary services. Primary services are pure services, which means that they are not connected to a material component (the product). Secondary services do contain a product component and are product/services combinations. These secondary services can be divided in services that are *supplementary* to the product, e.g. repairing or maintenance services, and services that lead to a partial *substitution* of products by services.

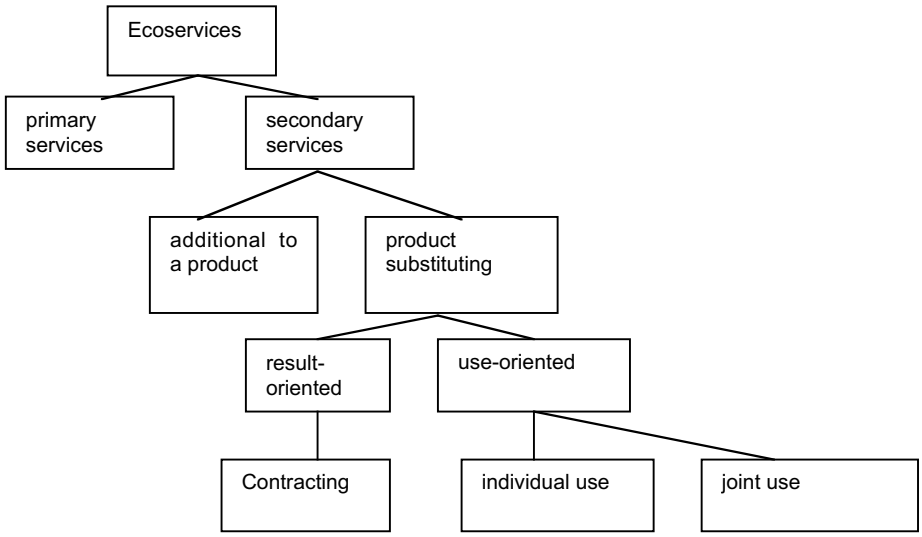

Fig. 2: Categorisation of eco-services

The substitution may be use oriented, i.e. the use of a product supplements its purchase (for example, rental services) or may be result-oriented, completely transferring the responsibility for the product to a different entity.

In the case of result-oriented services, not the product is marketed but rather the result of the product. The consumer is not interested in the use of the product by himself, but the service that goes with the use of the product, e.g. taxi rides and other forms of transport or heat supply. In the case of use-oriented services, the consumer is primarily interested in the use of the product by himself and the service that is offered with it.

In the case of result-oriented services, the responsibility for supplying the goods required for the service lies with the service supplier. Initially, a craftsman's service such as the installation of a heating system can be classified as a result-oriented service. In the traffic sector, cab services, public transport and air traffic are included in the term. Transport services are generally defined by external factors and managed by professionals (such as taxi driver, pilot). Other examples include energy services, which are aimed at a reduction of energy consumption. Instead of selling units of electricity, heat, light and cold are sold. This way, the supplier is no longer tied to the production of one product. His main task is to put the best system components together to satisfy customer specifications and ecological aspects and to find the best overall system solution. Contracting, although not very common in households, can be considered a typical result-oriented service: the contractor is committed to the energy management of a property and the contract holder is paying for these services.

Use oriented services can be divided in *individual use* and *joint use*. Leasing, renting and hire purchase are forms of individual use, whereas sharing and pooling are forms of joint use. These services produce potentially environmental benefits because they lead to a more intensive use of fewer products by several consumers.

Why would the above outlined services contribute to eco-efficiency, i.e. to reduction in materials and energy consumption? There are a number of reasons why efficiency benefits may accrue. Firstly, if the ownership of the product remains with the manufacturer, there is an incentive for producing more durable goods. This is because the income is created by the sales of the use of the product, not the one-time sale of it. Secondly, a lower stock of products is needed if consumers use the same product in sequence. The lower the stock of products, the less material is needed to produce them. In other words, more intensive use increases the probability of higher service yield before the product becomes obsolete due to outdated technological characteristics or e.g. fashion[4]. Thirdly, related to result-based services where the operator takes responsibility of product use, the service may facilitate more professional product use. To mention one more instance of contribution, the service model may contribute to choice of a product more relevant to the task. For example, in a car-sharing system, the user may choose a car that fits for transportation task at hand: a small car for one person and a family car for multiple persons. This reduces instances of overkill, i.e. choosing products that are too big or with too many accessories, just in order to be prepared for all possible contingencies[5] (Heiskanen and Jalas 2000).

3.3 What is a Homeservice?

In a recent study of eco-efficient services it was noticed that the services should be offered to consumers at their home, or near to home (Behrendt et al. 2003). There are basically two underlying reasons. First, if the distance to an eco-service is long, the efficiency gained by using the service may disappear with the transport effects. For instance, if the consumer uses a laundry instead of owning a washing machine, this will have positive effects due to less water and energy needed per load in large-scale operations and due to material reduction via fewer washing machines produced (Goedkoop et al. 1999, Heiskanen et al. 2001). However, if the consumer has to drive three kilometres back and forth to do her laundry, gasoline use

[4] For instance cars or home PCs are often changed into newer ones not due to breaking apart but for reasons that lie somewhere in the midway between outdated technology and fashion.

[5] „We need a bigger car because we sometimes take grandparents with us".

and exhausts released can overweigh the benefits gained. Second, the consumers' willingness to use services with eco-efficiency potential decreases with the difficulty of reaching the service, e.g. distance or other conditions like difficulty of finding information.

Very broadly speaking it could be said that Homeservices are services offered to a consumer in connection to living in a home and that can be expected to improve the quality of life of the consumer. However, this definition is far too general and would easily encompass nearly all services that at least remotely relate to the consumer's daily life. Therefore, for the purpose of the present study, some narrowing definitions of must be made. The first demarcation line relates to the question of sustainability. The Homeservices investigated in this study are those that have a certain *positive contribution to sustainable development in its environmental, social and economic dimension*. The criteria for these dimensions will be elaborated later in this paper.

The second demarcation line drawn in the present study relates to the supply channel of the homeservice. Again, broadly speaking many services offered (mandatory or voluntarily) by the municipality can be seen to improve quality of life and relating to living in a home. Services such as e.g. day care for children or public transport could be considered Homeservices. Counselling for housing loans by banks could be considered homeservice unless no distinctions were made. Yet it would not make sense for the present research task to study all such services – attempts to find the good practices from among such a crowd would turn out a futile effort. The scope of the study must be further narrowed down. To that end, *Homeservices* especially focused on in this study *are those services that are offered either by the housing organisation[6], through or with some assistance from it (e.g. providing space indoors or outdoors), or by an external service provider, directly to the resident*. Next we will examine these alternative ways of supplying Homeservices.

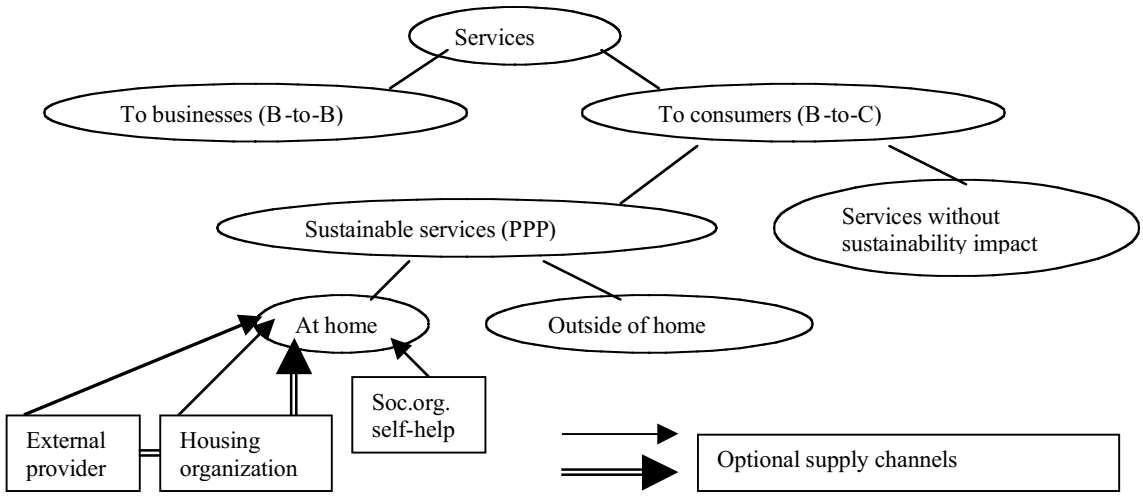

Fig. 3: Sustainable Homeservices and their supply channels.

3.4 Who supplies Homeservices? Institutional arrangements of service provision

To answer the above question, we can make use of studies on eco-efficient services. Institutional arrangements around eco-service provision are discussed for instance by Hockerts (1999) and by Heiskanen and Jalas (2000). However, they discuss such arrangements in relation to product-based services. This limits the applicability of the previous

[6] Housing organisation is e.g. a social or for-profit rental housing provider, or a condominium association.

discussion for sustainable Homeservices. In order to make use of the discussion in connection of sustainable Homeservices, we could consider that 'living in dwelling' is the point of reference. Adopting this perspective, a number of ways of service provision may be identified. In other words, the resident may get the services through a number of different kinds of arrangements. Next we will discuss these options of supply (Figure 3). Firstly, the service provider may be the housing organisation itself (e.g. a condominium association, social or for-profit rental housing provider). Secondly, a service may be offered to the resident by an external service provider (public or private organisation) either independently or via the housing organisation. In this alternative, the institutional arrangements can vary. The housing organisation may buy the service from an external service provider (e.g. outsource gardening, cleaning etc.). From the resident's perspective, the service experienced is basically similar to if it were created by the housing provider's own personnel. However, from the housing organisation's perspective, we are speaking about external procurement of a service, outsourcing. On the other hand, the external service provider may supply the service independently of the housing organisation directly to the resident.

The housing organisation may also choose to co-operate with the service provider. Co-production is one alternative. For instance, residents of the housing organisation may get a discounted price for the membership of a car-sharing, housing organisation provides parking space for shared cars, and assists in the reservation and key exchange. This arrangement is usually contract-based. A lighter institutional arrangement is needed if the housing organisation acts as an intermediary between the residents and the service provider, for instance by *recommending* a certain service provider (e.g. plumber) or by taking over a transaction on behalf of the service provider (e.g. a janitor selling tickets to public transport). In all of the above alternatives, the resident can use the service, but assumes a typical customer role in the sense that s/he does not participate in the production of the service.

There is, however, yet another service model: the resident participates in the actual creation of the service. In this case the service can be organised so that the housing organisation provides the necessary material component of a service and the residents do the work themselves. The material component can be durable and shared successively by the residents (e.g. pooling tools), or it can be one-time good (provide paint or other renovation materials). This can be called "supply on demand" option[7]. Finally, there is an option where the residents themselves create the service informally, as socially organised self-help (e.g., barter rings, in-house flea-markets, informal residents' meetings, and neighbourhood associations). In this case, the housing organisation may have a role as a space provider. The initiator may be either the housing organisation or active residents.

[7] The term "supply-on-demand" fits for renovation materials, because the resident has to request them. However, the term is less suitable for tools that are kept in a certain space in the building and can be borrowed by the residents on a continuous basis.

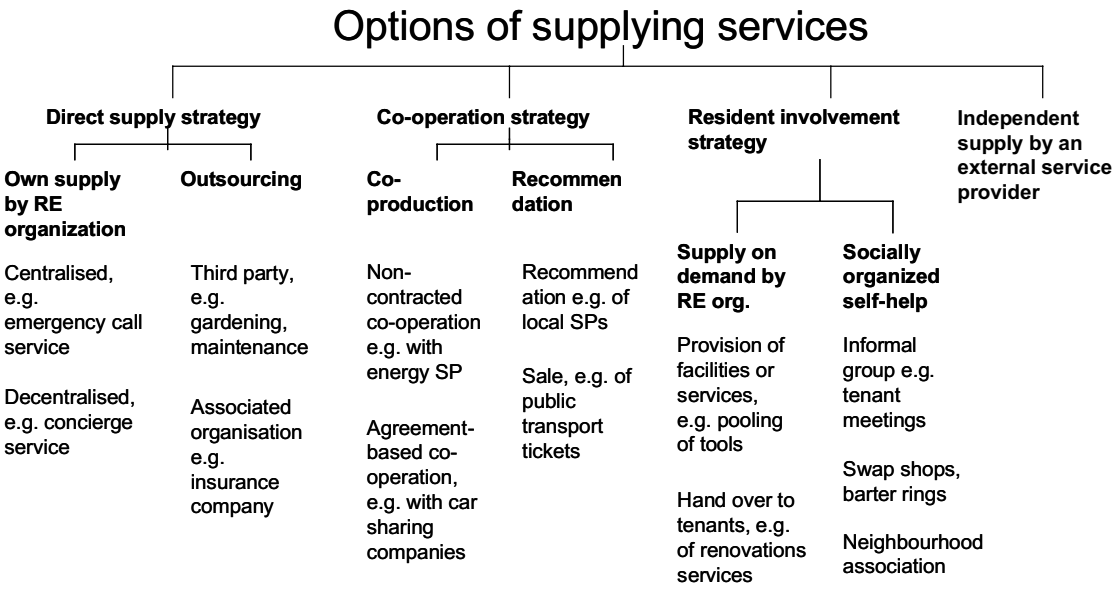

Fig. 4: Options of supply of Homeservices.

3.5 What is a sustainable service?

In recent years discussion on the so-called welfare services as well as eco-efficient services has been increasing. These discussions, however, have tended to remain separate. Occasionally, in passing, in the eco-efficient service discussion it is mentioned that certain services contributing to eco-efficiency also may have social or economic sustainability impacts (Heiskanen and Jalas 2000). Nevertheless, the concept of "sustainable service" is yet to be discovered and defined. Homeservices will try to make one of the first – rather pragmatic – steps.

One possible start point could be the question: how to judge whether a service is sustainable or not? The notion of WCED (1987) offers one possible springboard for approaching the concept of sustainable service:

> In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both the current and future potential to meet human needs and aspirations.

The notion stresses that all components: ecology, economy and societal considerations should be in harmony in for the development to qualify as sustainable. Consequently, for a service to be classified "sustainable", it should have a positive impact on each of the areas of sustainability.

3.6 What is a sustainable Homeservice?

As we are not studying all possible services, but services assisting in living more sustainable at home, we must move the discussion to the household context. If we look at sustainable services in connection to households, it is possible to identify a number of pressure points that connect to different levels of analysis. For instance, the rapid growth in the number of households taking place in many Western countries imposes a major burden on infrastructure support (space, basic utilities provision, transport links etc.) on the socio-economic system, and the environment (Turner 1998). Moreover, taking care of the ageing population of the Western countries will either require building more and more old people's homes or provision

of more sophisticated set of services in order to make it possible for the elderly to live at home by themselves. The former is often considered an economically unsustainable alternative, and is also less preferred by the elderly themselves.

Yet another pressure trend that can be highlighted in this connection is the household use of energy - for heating, domestic appliances and the car. Regarding all of these, despite the fact that resource efficiency gains derived from *technological* improvements[8] have accumulated, these gains have been offset by the steep rise in the total number of households (which is due falling average size of households) (Turner 1998). At the sectoral level (housing sector), aggregate trends in resource use are continuing to rise. This implies that problems in the housing sector cannot be solved by technological solutions only but that social innovations are also needed. Sustainable service thinking is likely to offer one source of innovation[9].

Services may offer one solution to alleviate the above and other pressures relating to environmental and socio-economic problems in the housing sector. Previous studies on sustainable households have focused upon household functions or needs. These would involve e.g. shopping, cooking, eating, clothing care, shelter[10], personal hygiene, food storage and preparation, leisure activities within the home, and transportation (Vergragt 2000, Gatersleben and Vlek 1998). Within these functions, the researchers have tried to prepare scenarios of “alternatives for more sustainable household” and study their feasibility (Vergragt 2000). In this study, we can draw on household functions. However, since we are focused on functions but on the potential of services to make “living at home” more sustainable (and are offered by or via the housing organisation), instead of functions we will approach household sustainability through a variety of housing/household service areas:

- *Counselling & Information* (on environment and energy, social aspects, financial aspects)
- *Care & Supervision* (of building, dwelling, person, and pets)
- *Leisure Time Activities* (sport, social aspects, culture and communication, food services and catering)
- *Repairs*
- *Mobility & Delivery* (vehicle rental and sharing, parking areas for other than private cars, delivery, other logistics)
- *Safety & Security* (of building, dwelling, persons)
- *Supply & Disposal* (energy and water supply, and waste disposal)

Many of these service areas lie within the consumption clusters of households that are the most environmentally relevant as identified by Spangenberg and Lorek (2002). They found that the total resource requirement of only three clusters, construction and housing, food and nutrition, and transport and mobility makes up for nearly 70 % of material extraction and energy consumption and than 90% of land use (Spangenberg and Lorek 2002).

From within these service areas, good-practice services as well as potential market niches for sustainable services will be identified.

[8] Such as more efficient domestic heating systems, smaller or less energy consuming electrical appliances, and the installation of building insulation.

[9] This is not to say that in the HOMESERVICE project we would not be interested in technological developments. On the contrary, many of the good or good practice service examples identified so far are made possible by a technological innovation component (especially ICT). However, our starting point for identifying and assessing services is the user perspective, not the technological innovation as such.

[10] I.e. heating or cooling and lighting at home.

3.7 How to assess sustainability of Homeservices?

A short explanation of the Sustainability Evaluation Methodology

In the above it was argued that a service could be considered sustainable if it has a positive impact on all three dimensions of sustainable development: ecology, economy and societal aspects. How to put this principle in practice? During recent years, indicators of sustainability have been drafted by different constituencies, e.g. Commission on Sustainable Development (CSD) (UNDSD 2002), the Human Development Index (HDI) by UNDP (UNDP 2001), and the Daly-Cobb Index of Sustainable Economic Welfare (ISEW) (Mannis 1998). However, so far no coherent indicators for household consumption or for related services have been developed (Lorek 2002). The first problem that one runs into when attempting to apply the above mentioned sustainability indicators to service level or sector level is that they are mainly suited for national-level analyses. Another concern from the perspective of this study is that many of them are at such a basic needs level that they do not make the most sense in a developed country context like Europe, but are better suited for assessing urgencies of less developed countries. For example, the CSD indicator for housing is floor area per person. A CSD-indicator for urbanisation of population is 'population of urban formal and informal settlements'.

However, these indicators can serve as one source for pointing areas within which household or housing related micro-level service sustainability indicators could be developed. Furthermore, they not only point out areas but some of them offer an aggregate indicator from which to work downwards to develop more micro-level determinants for assessing whether the focal service has a positive sustainability effect. Developing micro-level indicators for environmental sustainability is slightly easier as some work has already been done both for indicators of environmental impacts of household consumption (Lorek 2002) and for assessing eco-efficiency potential of services (e.g. Heiskanen and Jalas 2000, Hockerts 1999)[11]. From among the 14 environmental indicators of household consumption developed by Spangenberg and Lorek (2002) and Lorek (2002), at least nine can be drawn upon - not used as such – for developing criteria for assessing the environmental potential of services directed to households. These are indicators for: heating energy consumption, resource intensity, living space, organic products, food transportation, shopping and recreation transport distances, modes of transport for vocational, shopping and recreation purposes, and number of passenger cars.

The criteria for assessing sustainability of Homeservices have a particular problem. It stems from the fact that we are looking at open systems. It is not only difficult, but in many cases impossible to draw a meaningful boundary around the 'system where the service has its influence'. In an open system, the problem arises that we do not have a fixed point against which the potential impact of the service should measured. Even in a simple case, if we look at a particular building and a service offered to its residents, it may be possible to see e.g. that a common room reduces need of individual space, but it cannot be measured exactly how much space is being saved – the result would always remain to some extent hypothetical.

Therefore, our criteria for assessing the sustainability of Homeservices are bound to be 'relative criteria', indicating a move to a positive direction, e.g. "increasing employment" or "promote environmentally friendly transport", "reduce waste". No absolute value is involved. The question immediately arises: what amount of improvement counts for a criterion to be fulfilled? This is occasionally problematic especially with regard to some social and economic criteria. How to judge if a service increases social contacts? Or empowerment? Or promotes regional economy (almost any service gives some kind of an input to regional economy)? Here we are in the worst case left with only gut feeling of a group of environmental management experts as a basis for assessment.

[11] Hockerts' (1999) proposes a test of eco-efficiency of a service according the following indicators: longer-life option, lesser material and energy consumption during use, revalorisation potential and efficiency of use. Heiskanen and Jalas (2000), on the other hand, adopt a more general perspective and suggest that benefits resulting from products to services can be: lower manufacturing volume, less impact during the use phase of the product, lower stock of products, and higher rate and quality of utilization of end-of-life products.

Secondly, it was said earlier in the paper that one decision rule for a sustainable service could be that it should have a positive impact on each three areas of sustainability. However, a pre-study (IÖW 2002) indicated that this maybe too strict: a service that causes a clear environmental improvement and increases comfort of the residents, but does not have a positive economic effect would be excluded from the list of sustainable Homeservices. As a pragmatic solution it could be suggested that if a service fulfils *two of the three sustainability conditions, it could be considered sustainable*. Based on the above, we can draw the following definitions of sustainable homeservice:

General definition of sustainable homeservice: a service that relates to living at a home and contributes positively to sustainable development in its environmental, social and economic dimension.

Specific definition of homeservice in this study: (1) a service that relates to living at a home, (2) contributes positively to sustainable development in two of its three dimensions, and (3) is offered either by the housing organisation, with some assistance from the housing organisation, or by an external service provider directly to the residents.

The list of criteria for ecological, social and economic sustainability is given in table 17.

Environmental aspects	**Social Aspects**	**Economic Aspects**
1 Material Use	6 Equity	13 Employment
2 Energy Use	7 Health	14 Financial Situation of the Residents
3 Water Use	8 Safety and security	15 Regional Products and Service Use
4 Waste and Emissions	9 Comfort	16 Profitability of the Company
5 Space Use	10 Social Contacts	17 Profitability of the Region / Community
	11 Empowerment	
	12 Information and Awareness	

Tab. 17: The set of indicators for sustainable Homeservices.

Finally, social and economic criteria are occasionally overlapping. However, this is not necessarily a major concern since it reflects the situation that occasionally occurs in real life: some outcomes lie in the socio-economic sphere and should not be artificially separated.

In the Homeservice methodology of assessing sustainability of services, we will still take one step further. A five-point ordinal scale of each indicator has been developed, and the housing services identified as potentially sustainable have been rated along this scale. Table 18 depicts the rating scale with one example indicator from each sustainability dimension. As mentioned above, our indicators are relative, i.e. they indicate a move towards a positive (or negative) direction, e.g. a reduction in waste or an increase in employment. For a relative method the point of reference is an important element. For our method the point of reference is the ‘status quo’ alternative where the service would not exist (i.e. the ‘current situation’ or the ‘do nothing/base line scenario’). This would score 0 in the scale.

Durability (environmental)							
The effect of the service on the life span of related products							
		-2	-1	0	1	2	NA
Shortens the life span of related products							Lengthens the life span of related products
Promote social self-help (social)							
The effect of the service on the social self-help, barter shops and swap internet sides							
		-2	-1	0	1	2	NA
Less opportunities							More opportunities
Employment (economic)							
The effect of the service on the employment							
		-2	-1	0	1	2	NA
Less jobs/job opportunities lost							More jobs are created

2: a major positive change
1: a substantial positive change
0: the service does not make a change to status quo
-1: a substantial negative change
-2: a major negative change
NA: not available/not possible to assess

Tab. 18: A condensed example of the ordinal rating scale with one indicator from each sustainability dimension.

3.8 Summary of chapter 3

This chapter has taken some preliminary steps to outline the concept of sustainable homeservice. Two definitions are suggested, a general and specific one. In general, a sustainable service for households can be considered a service that relates to living at home and contributes positively to sustainable development in all dimensions. It can be contended that all sustainability conditions – environmental, social and economic – are difficult to fulfil simultaneously and therefore it may be useful for pragmatic reasons to accept that a sustainable service is one that satisfy two of the three conditions. For the time being there are no absolute criteria for measuring sustainability of specific services directed to households. There is some previous literature on criteria for eco-efficiency of services, i.e. on environmental sustainability. However, as regards social and economic sustainability, so far only macro-level indicators are to draw on. Consequently, the indicators for social and economic sustainability are at a preliminary level. A set of sustainability indicators is put forward that are possible to evaluate along an ordinal scale, where the point of reference is the status quo, in other words the current situation without the existence of the service.

4 The Universe of Homeservices

4.1 General description of the service areas

In this study a sustainable Homeservice is defined as

- a service that relates to living at a home,
- contributing positively to sustainable development in two of its three dimensions,(environment, economy, social), and
- is offered either by the housing organisation, with some assistance from the housing organisation, or by an external service provider directly to the residents.

A procedure was established to find as many Homeservices as possible. In a first survey, each institute gathered as many Homeservices as they could think of or find on the market. For this first step it was only necessary that the service related to living at home and was provided by a housing organisation or an external service provider. This resulted in some 250 different services. It was named universe EU. In the annex of this report the national universe for Austria (Universe Austria) attached. To structure the universe, service areas were named to describe a whole bundle of services.

It was assumed, that there might be significant differences between the different service areas concerning

- the number of services offered in different countries,
- the service providers, and
- the terms of supply.

At that stage of the study it was still a universe of Homeservices; their possible sustainability was to be evaluated later on. Analysing the sustainability of the Homeservices led to the Universe per Sustainability Dimension, which is also attached in annex 10.2. It is described and discussed in chapter 6.

4.1.1. Service providers and terms of supply

This chapter refers to the different columns of the universe. It gives an introduction of what is meant by each column in the universe Austria. Which services are provided by whom is described in chapter 5 “Who provides Homeservices”.

Homeservices can be provided either by the housing organisations (HO) themselves or by external service providers (exSP). Within the housing organisations, four different types were distinguished

- public housing organisations
- non-profit housing organisations
- commercial housing organisations
- condominium associations

The functions, aims and legal framework of these different kinds of housing organisations are described in chapter 1. If a Homeservice was provided by any of the interviewed housing organisations, it received a tick in the corresponding column.

The same structure was given to the external service provider and the variety of different suppliers was structured into

- public external service provider (e.g. municipalities)
- non-profit external service provider (private of public organisations that are partly subsidised, partly work with sponsoring or membership fees, but are not profit oriented)
- commercial external service provider

If a Homeservice was provided by any of those external service providers, it received a tick in the corresponding column. It could also happen that services were provided by housing organisations as well as by external service providers, e.g. information on financing and subsidies for owners or residents.

The columns of “terms of supply” indicated how the housing organisation provides the service. The categories are

- own supply
- outsourcing
- co-operation
- intermediary
- socially organised self help

All these categories also can be applied to external service providers, but in Austria it turned out, that their core business most often is the service provision, so they supply the service on their own.

However, for describing the housing organisation’s interest in Homeservices this classification is very helpful. Whereas own supply and outsourcing are clearly defined, co-operation and intermediary must be explained. In co-operation, there is a true working together of the housing organisation and an external service provider, while in intermediary, the housing organisation only acts as an information centre that provides e.g. telephone numbers. In that case, the housing organisation is not actively involved in the service provision.

Apart from that, it is also necessary to clearly distinguish between a pure service and a construction measure. The construction measure is a medium to facilitate the actual service, e.g. providing common areas for residents to organise get-togethers, or providing parking areas for carsharing vehicles.

4.1.2. Short overview of the service areas

The first version the universe contained about 250 services. To structure it, seven different service areas were introduced to categorise similar services.

1. *Counselling & Information*
2. *Care & Supervision*
3. *Leisure Time Activities*
4. *Repairs*
5. *Mobility & Delivery*
6. *Safety & Security*
7. *Supply & Disposal*

These service areas also aim to cover all potential fields that are related to living at home. Below are short descriptions of each service area and their subcategories.

1. Counselling & Information

The service area *Counselling & Information* addresses the following aspects:

- Environment and energy: refers to advising, *Counselling & Information* on environmentally friendly products and activities used/performed at home as well as to energy efficiency issues of homes and buildings. Examples are c*ounselling* on waste prevention and separation or *counselling* on energy use of household appliances.
- Social aspects: this category includes all types of *Counselling and Information* services that are related to promoting social equity, avoiding exclusion, etc., at home or in the neighbourhood. An example is *counselling* on living conditions for the elderly.

- Financial aspects: the financial *Counselling and Information* services include those that can be relevant for living at home, e.g. *information* on financing and subsidies for residents or *counselling* on energy subsidies.

2. Care & Supervision

The service area *Care & Supervision* deals with maintenance, cleaning, supervision, assistance and housekeeping of the building, the dwelling, of persons and of pets and plants. Examples of services included are:

- Building: condominium management, technical assistance of the building, janitor, fumigating, gardening, etc.
- Apartment: home-sitting, apartment cleaning, apartment renovation, chimney cleaning, etc.
- Person: medical care at home, child sitting, mobile laundry service, common laundry room, visiting service etc.
- Pets and plants: walking pets, pet transport, vet at home, flower storage area, etc.

3. Leisure Time Activities

The service area *Leisure Time Activities* is related to leisure activities not necessarily practised at home but provided at home or in the neighbourhood. The service areas are organised in the following categories:

- *Sports*: includes not only the facilities for practising sports, like a football field, fitness studio, swimming pool or sauna, but also supportive services such as sports equipment rental service.
- *Social aspects*: these services support all kinds of social activities, ranging from field trips to non-profit organisations of residents, *Leisure Time Activities* for children and teenagers, youth centres, support for social initiatives etc.
- *Culture and communication*: examples are the provision of a website for residents, resident's and/or the housing organisations newspapers, the organisation of residents' meetings etc.
- *Food services and catering*: includes all sorts of services related to food, which are provided at home or nearby, ranging from catering and weekly markets to cook on demand or rental service for party accessories.

4. Repairs

The service area *Repairs* includes all services concerned with *Repairs* in the dwelling or in the building, related to the infrastructure, construction and equipment. Included are supporting services such as the provision of a workshop room for *Repairs*, tools rental, preventative inspections, spring bicycle *Repair* services etc.

5. Mobility & Delivery

The service area *Mobility & Delivery* concerns the mobility of persons and goods, which are of relevance to the residents, and are organised in the following categories:

- Vehicle rental and sharing: for cars and bicycles.
- Parking areas: both inside and outside the building, include parking areas for bicycles, cars, taxis and other vehicles.
- *Delivery* of shopping, meals, medication, etc. It includes also personal running errands and messenger services.

- Other logistics, such as connection to public transportation, sale of transport tickets, apartment exchange etc.

6. Safety & Security

The services related to *Safety & Security* such as surveillance, alarm systems and emergency related services are listed in this field. This service area is organised into 3 categories:

- *Safety & Security* of the building such as surveillance, evacuation light, emergency generator, etc.
- *Safety & Security* of the dwelling e.g. video surveillance of the apartment, alarm systems for rent, key drop off service
- Personal *Safety & Security* such as emergency telephone for elderly, security guard, separate walk and bike paths

7. Supply & Disposal

In the service area *Supply & Disposal* the services concern the following areas:

- Energy supply: besides the energy (electricity, gas) supply per se, related services like energy management and accounting, energy savings, use of renewable energy, energy efficient appliances or domotics are included.
- Water *Supply*: again, services related to supply such as individual water recording and billing the use of a well or a rainwater collector and storage are in this category.
- Waste *Disposal*: services range from the provision of separate containers for recycling, building waste pipes to billing trash bag per unit used.

4.2 The existing universe in Vienna and Litschau

This chapter gives an overview of which services are provided in Vienna and Litschau. The universe was first surveyed to find out which services are provided and then it was ticked on who provides the services, a housing organisation or an external service provider and by which terms of supply. See annex 10.1., where Universe Austria includes Vienna and Litschau. The chapter again follows the service areas and their subcategories.

4.2.1. *Counselling & Information*

Environment and Energy

Information on environmental issues is most often provided by external service providers, such as the Umweltberatung. Commercial providers focus on services with regard to gardening or dwelling decoration. Concerning *information* on building infrastructure or technical aspects of the dwelling the housing organisations in Vienna as well as in Litschau provide these services, some of them mandatory.

Social aspects

Information on social aspects mostly is provided by the municipality. Particularly in Vienna the municipality offers a broad spectrum of information on social issues like partner telephone (therapeutic *counselling* for problematic relationships), social psychology emergency service (advice and help with crises and problems), social call Vienna (acute help with care at home), children and youth attorney ship (lobby for children and youth), first love ambulance (*counselling* for boys and girls) or the women's telephone (for women's questions on family, work, and health). *Information* on this service offer is advertised throughout the whole city, also in newspapers or on TV, so that in fact everyone can obtain it. In Litschau, the municipality most often offers *information* where to turn to when needing social services.

Financial matters

Information on financial matters of the building is provided by the housing organisations, such as *information* on utility costs, which is a mandatory service in Austria. Concerning subsidies or financing the purchase or the rent of a dwelling this information is provided by banks or in some cases also by the municipality.

4.2.2. *Care & Supervision*

Building

Most services within *Care & Supervision* of a building are often provided by the housing organisations. In Vienna, the janitor or a building care taker is a service offer of the housing organisation as is the provision of space for commercial activities. Since there are hardly any housing organisations in Litschau, and one or two family houses are the norm, these services are lacking. Again, in this area, there are some mandatory services to be supplied directly by the housing organisations or by outsourcing like fumigating.

Apartment

For *Care & Supervision* of the apartment there is no broad service offer in Austria. Housing organisations will not enter in this area as they - at least at the moment - tend not to supply services in the resident's dwelling (due to open questions of insurance, but also of too close personal contact). Apartment cleaning, home-sitting, maintenance of heating, water and electricity supply as well as chimney cleaning, the last being a mandatory service in Austria, are supplied by external service providers.

It must be assumed that in this part of the service area there is a large quantity of illegal employment, most often for apartment cleaning.

Person

Regarding person-related services, a growing demand is assumed. This is due to the fact of a growing rate of elderly people staying at home with no relatives living nearby to care of them. This is a tendency that can be observed throughout all of Europe and in fact it turned out, that in all countries involved in this study the same trends are observed. There is a high demand for medical care and health support at home, also for care-taking of elderly as well as of children.

The offer in Vienna and Litschau contains medical care and health support at home, mobile nurse, day mom, child-sitting and diaper wash.

These services are most often supplied by non-profit or public external service providers. This however, is a service area, wherein socially organised self-help is also wide spread. Particularly in Litschau, it turned out that good neighbourhood contacts often replace professional services supply (e.g. in children caretaking).

Pets & Plants

The pet & plant services are often supplied by neighbourhood help. Only in Vienna some commercials offer pet transport or care at home. Also, a growing number of veterinarians come to the home of their patients.

4.2.3. *Leisure Time Activities*

Sport

The focus in the service area sport is mostly on construction measures. In Vienna particularly, in big building blocks a sport infrastructure is more or less state of the art. This could be a court for playing ball, a playground, a sauna or even a swimming pool. This offer is completely absent in Litschau, not only because there are hardly any housing organisations but also because this kind of infrastructure is not needed.

Social aspects

To fulfil the social aspects, again some construction measures can be of good help. Here we find all kinds of common rooms that can be rented only for local events but also on long term basis for neighbourhood groups to meet and offer their program. Also, rather simple facilities like common courtyards or playgrounds for children are a good medium to facilitate social contacts.

Surprisingly, two good practice providers have been found in this area, one in Vienna, and one in Litschau. Both are non-profit organisations. The Viennese provider focuses on the integration of migrants and non-Austrian inhabitants, whereas the provider in Litschau emphasises good social contacts within the community and provides environmental information on specific aspects like measuring water quality.

Culture & Communication

The service area culture & communication includes services that are linked to big housing complexes, like a residents' webpage, newspaper and other media of communication. In Litschau, they are completely absent, and also in Vienna there are only few examples for residents' parties and get-togethers.

Food service & delivery

Services like cook on demand or event organisation at home are not common in Austria. Of course there are weekly markets and specialised companies as well as some restaurants that offer catering for parties or private events, but so far these are not sustainable.

4.2.4. *Repairs*

Repairs is a typical service sector, in which high sustainability benefits can be achieved. However, it contains only a few Homeservices. The main demand is a repair service in combination either with home delivery, or one that consults at the dwelling, or a co-ordination with several repair services.

A good medium to facilitate Homeservices in this service area is the provision of a workshop for *Repairs* that can be used by the residents. This facilitates small repairs that can easily be done by amateurs, however, not in the dwelling but in an extra room, because a workbench or other particular equipment is needed.

4.2.5. *Mobility & Delivery*

Vehicle rental & sharing

Vehicle & rental services are only available in Vienna from commercial service providers. The only carsharing company co-operates with some of the good practice housing organisations, but mainly offers its cars directly to the client. Car and bicycle *rental* are wide spread but do not focus on sustainable items.

Parking areas

Parking areas, not only for cars, but also for bicycles and strollers are a construction measure. The supply of parking areas for cars or a garage is partly mandatory for the housing organisations. Only good practice housing organisations provide additional parking areas for carsharing cars. In most buildings there is only one storage room for bicycles and strollers, which is very unpractical.

In Litschau, no parking areas are supplied as the buildings are too small and there is no need for this kind of infrastructure.

Delivery

The best known *Delivery* service is meals on wheels, which is offered both in Vienna and Litschau. It is most often supplied by non-profit external service providers. From all the other delivery services, only two are available in Vienna. These two are shopping delivery services, which are offered by the Viennese chamber of commerce in the time before Christmas and a pilot project for delivery without the resident being at home.

Other logistics

Other logistics is a field with a wide spread offer of single services that are somehow connected to transport, like movers or ticket selling by the housing organisations. However, such services are neither available in Vienna nor in Litschau.

4.2.6. *Safety & Security*

Building & Dwelling & Persons

Most of the services in the service area *Safety & Security* are provided by external service providers. Housing organisations are only involved in the case of construction measures, e.g. in prevention of fear rooms or the separation of walk and bike paths. This service area also contains some mandatory services, such as the evacuation light, or the emergency telephone in elevators.

A particular service, which is of gaining importance, is the emergency telephone for the elderly. It is often supplied by those non-profit organisations that have their core business in providing *Care & Supervision* services.

4.2.7. *Supply & Disposal*

This service area describes basic *Supply & Disposal* services, such as water and electricity supply and waste disposal. These services, although basic supply, can be provided in a more or less sustainable way and thus have a high optimising potential. Furthermore, a lot of different construction measures, such as energy efficient houses and appliances, organic processing plants for grey water or a rainwater collector are summarised in this service area. Differences between Vienna and Litschau can only be found in the area water supply, because in Litschau 50% of all households are not connected to the public water net but have a well of their own.

Energy Supply

Emphasis is given to energy efficient houses and appliances as well as all kind of energy savings, like energy management and accounting or using the heat from waste water. In Austria, one commercial provider, Ökostrom, supplies renewable energy. Apart from that, there is only a very small service offer in the field of energy supply.

Water Supply

In the area of water supply, emphasis is given to water savings by technical as well as by financial means. By billing water by units consumed, savings in water consumption can be achieved. Also the use of grey water or rainwater can lead to a significant reduction in water use. However, separate meters, e.g. per dwelling, are not at all state of the art in Austria. Water is not yet recognised as a rare good and therefore nearly no services are provided. Wells are also very common in some part of Austria.

Waste Disposal

Waste reduction has been one of the major environmental issues Austrian municipalities have dealt with during the last ten years. Therefore, waste separation and individual containers for recycling are rather common. The municipality of Vienna offers several additional services, like *counselling* on waste separation and prevention and it publishes brochures of repair shops. However, as the amount of waste is still paid by a lump sum, there are only little incentives in waste prevention.

5 Who provides Homeservices?

5.1 Homeservices offered by housing organisations

When taking a close look at the Universe Austria attached in the annex it quickly turns out that the main difference between Vienna and Litschau is the number of construction measures, which are very numerous in Vienna and only a few in Litschau.

Throughout the upcoming chapter 5.1., there are references to two housing organisations which in many cases offer good practice examples. To provide a better understanding we provide a short description of these two companies.

Mischek Bau AG (stock corporation) is planning and constructing multi-dwelling buildings with emphasis on comfort and ecology. The company is situated in Vienna and has 650 employees. The main interest of Mischek is the combination of reduced resource consumption on the one side and low construction and managing costs on the other side to fulfil economic and ecological goals. The Department of Ecology of Mischek is co-ordinating these activities. By providing the “Mischek Ökopass” (Ecology Pass) the residents are provided with extra information on the building. This includes evaluation of the building material by the Austrian Institute for Construction Biology (Baubiologie) which is based on comfort, health, and ecological characteristics of the building. The company provides services by direct supply, outsourcing, co-operation and as intermediary.

GESIBA GmbH is a non-profit housing organisation also situated in Vienna and has 206 employees. Within the housing projects, emphasis is given to man and nature. The company tries to include environmental aspects in construction and provides *Counselling & Information* on environmental aspects to their residents. Services are provided by direct supply, outsourcing, co-operation, intermediary and facilitation.

5.1.1 Homeservices which are considered a core activity of housing organisation

A core business of a housing organisation is the main source of the company's turnover. Core business can comprise of housing people, planning, financing, compiling, management, and disposal of the building.

In Austria, all activities that are related to building, selling, or managing the building are considered core activities of a housing organisation. A lot of these are not services in the proper sense. For instance, construction measures can facilitate a service that is later on provided by an external service provider or by socially organised self help. The differences of service supply shown in the table above are based on the outcome of the assessment of offered services.

Many of the services, that housing organisations provide, are their core business, but not Homeservices in the understanding of this paper and are therefore not included in the universe of Homeservices, as they are simply necessary to manage the building.

Service	Vienna	Litschau
1. Counselling & Information		
Information on utility costs	x	x
Information on additional functions and costs	x	x
Information board of the housing manager	x	x
Information on the building infrastructure	x	x
Counselling on technical aspects of the apartment	x	x
Information on financing and subsidies for owners	x	x
Information on financing and subsidies for residents	x	x
2. Care & Supervision		
Janitor	x	
Building care taker	x	x
Apartment adapted for use by elderly and handicapped	x	x
Common laundry room	x	
3. Leisure time activity		
4. Repairs		

5. Mobility &Delivery		
Parking for cars	x	
Parking for strollers	x	
6. Safety & Security		
7. Supply & Disposal		
Energy efficient houses	x	
use of renewable energy	x	

Tab. 19: Homeservices that are the core business of the housing organisations

Table 19 shows that within the service areas *Counselling & Information* and *Care & Supervision* there are no differences between Vienna and Litschau, except for the janitor and the common laundry room. The construction of a common laundry room is regulated in the state building code, which is different in each federal state. As the multi-dwelling buildings in Litschau are not that big, they do not have common laundry rooms.

There has been significant legal change concerning the janitor. Three years ago, the so called janitor's law[12] was cancelled, which led to a very complicated situation in Vienna. This law was necessary, because janitors had to be on duty more than eight hours a day, also during the weekends. They fulfilled different tasks not only cleaning, but also doing small repairs, changing bulbs, checking for security and in former days residents also paid their rent in cash to the janitor, who delivered it to the housing manager. On the whole they would have needed a lot of professional licences, but due to that law that was not necessary. On the other hand, janitors lived for free. They did not have to pay rent. They got all kind of extra charges for different tasks and they also earned a little salary. The janitors were employees of the housing organisation or the housing manager.

With growing utility costs, which included the expenses for the janitors, discontent arose with the janitor's work. This was also due to the fact, that often they were not on duty the whole day but were only part of it.

Different initiatives have evolved to handle the problem of a legal vacuum. Some commercial housing organisations like Mischek have tried to implement concierge concepts. For the municipality, the housing organisation establishes a so-called "Hausbetreuungsgesellschaft", which is situated at three bases throughout Vienna and tries to fulfil the janitor's tasks in the social buildings (Schuster, 2003).

In the few multi-dwelling buildings in Litschau, the residents fulfil the minor janitor's tasks themselves, like cleaning the staircases, changing light bulbs or snow shovelling. Maintenance and repair is carried out by commercial providers. So neither the housing organisations nor the residents feel any need for a janitor.

Throughout all of Austria, most of the housing organisations see themselves as supplier of homes. In that sense they do not feel as service providers. As there is no economic and competition pressure – at the moment – they will not change that attitude in short terms. Nevertheless, there are some companies that are interested in this new approach, as they see a potential market for themselves and for their concierge systems. At the moment no other services that are considered core business were detected.

[12] The janitor's law regulated in full detail the following issues:

- General duties of the janitor (supervision)
- Keeping the house clean and maintained
- Holding building and dwelling keys and providing them if necessary
- Obligation of secrecy concerning private and family relations
- Payment
- Cost compensation for cleaning agents
- Overtime payment: payment for janitor if services are required outside regular working hours
- Other payments: for other services
- Service dwelling
- Vacation
- Duty on demand
- Early cancellation of the service contract
- Reasons for firing
- Reasons for leaving
- Several procedures when terminating the service relation

In order to describe good practice examples, two big Viennese housing organisations were chosen, one non-profit and one commercial, which indeed provide a large number of services.

Services	non-profit - GESIBA	commercial – MISCHEK
Counselling & Information		
Counselling on Environment and Energy	Waste prevention and separation Energy management (consumption, costs etc.) ecological cleaning materials Directions to building technology Information board of facility manager Evacuation plan Changing apartments	Waste prevention and separation, Energy management (consumption, costs etc.), ecological cleaning materials, ecological building materials and interior design, comfort of interior design, Directions to building technology Evacuation plan Changing apartments
Social Aspects	Counselling on social issues Mediation Information centre of facility manager	Counselling on social issues Mediation
Finances	Information on financing and subsidies for owners Operating charges, Costs of additional equipment	Information on financing and subsidies for owners Operating charges Costs of additional equipment
Care & Supervision		
Building	Emergency service, Janitor Building care taker, Concierge, environmentally friendly cleaning, Fumigating	Emergency service, Janitor, Building care taker, environmentally friendly cleaning service, Fumigating
Dwelling	Maintenance of heating, water supply, and electricity in dwellings, Home-Sitting (plant care, airing out, stocking refrigerator during vacation), Apartment renovation	Maintenance of heating, water supply, and electricity in dwelling Apartment renovation
Person	Laundry room	Laundry room, special cleaning

Tab. 20: Examples of core business services of Austrian housing organisations within the service area of Counselling & Information and Care & Supervision. (ref. ioew online catalogue on service providers)

The focus of table 20 was only set on two service areas – *Counselling & Information* and *Care & Supervision* – and already within those two, we found a large supply. There are only little differences in the service offer, so from this table, one cannot detect a significant distinction between a non-profit and a commercial housing organisation. Our explanation is that during the last two years, the awareness and attitude of proactive housing organisations has changed significantly. Regardless whether commercial or non-profit, in their good practice buildings, which participate in the project, both of them experiment with a broad range of services. We would go so far as to claim this is a direct success of our previous project.

5.1.2 Mandatory Homeservices of housing organisations

Several services and construction measures are mandatory. The federal state decided what is mandatory. Nevertheless, in eastern Austria, there are only few differences, so the services below are mandatory in Vienna as well as in Litschau. The only exception concerns fumigation and the construction of parking areas for cars.

To give an example of how regulated and restricted the housing market is in Austria, all laws and regulations that refer to mandatory Homeservices were counted and total 19,[13] not including particular federal state laws.

[13] A short list of the laws: Straßenverkehrsordnung, Wasserversorgungsgesetz, Gebührenordnung und Abgabenordnung, Luftreinhalteverordnung, Gasversorgungsgesetz, Feuerpolizeigesetz, Hausbesorgergesetz, Denkmalschutzgesetz, Baumschutzgesetz, Elektrizitätsversorgungsgesetz, Konsumentenschutzgesetz, Kanalgesetz, Einheitswertbescheide, Grundbuch, Steuerrecht, ABGB, Arbeitnehmerschutzgesetz, Bauordnung und weitere spezielle Landesgesetze

Service	Vienna	Litschau
1. Counselling & Information		
Evacuation plan	x	x
Information on utility costs	x	x
2. Care & Supervision		
Fumigating	x	
Chimney cleaning	x	x
5. Mobility &Delivery		
Parking for cars	x	
6. Safety & Security		
Evacuation lighting	x	x

Tab. 21: Homeservices that are mandatory

The parking for strollers and the common laundry room have not been mentioned a second time, because they are not mandatory for all types of buildings. They depend on the number of dwellings and the type of subsidy.

With regard to the Homeservices of the Universe Austria, it seems that not many services are mandatory in Austria. However, there are a lot but most of them are simply necessary to manage a building and therefore are not considered as a sustainable Homeservice. In the federal building codes, mandatory services and construction measures are fixed. The list includes:

- Refurbishment and maintenance of the building, building technology and technical infrastructure
- Supply of water and energy, as well as guaranteed waste removal as required by law (minimal requirement)
- Security services not part of maintenance (elevator maintenance), such as snow shovelling
- Cleaning the general building floors (stairs, cellar, attic)
- Specific construction measures are required if the building is a subsidised multi-dwelling house depending on number of dwellings. e.g.
    - As of a given number of dwellings (depending on the federal building code) there needs to be a laundry room and a playroom for children.
    - One parking place in the garage per dwelling.

All these services have to be provided independent of the type of building.

Most of Austrian housing organisations do not feel as service providers but as living space suppliers. So the services they provide focus on the building and not on the resident. In an international comparison, there are many mandatory services and there are some outstanding examples of how they can be provided in a very environmentally sound and/or attractive ways.

Waste removal is one of the mandatory services a housing organisation has to deal with. The minimum standard is just the supply of a suitable number of waste and waste paper containers. Anything else is an extra offer to the residents which is willingly accepted. Viennese are very conscious on waste and waste management, so these services are very important not only for the residents themselves but also to give the housing organisation a good environmental performance and image.

5.1.3 Complementary Homeservice activities of housing organisations

A complementary business of a housing organisation goes beyond the core activity but is still related to what real estate companies usually do (e.g. providing facilities for multimedia access, swimming pools, or wine cellars). Complementary activities are those, which nicely complement the services provided by the housing organisation. They facilitate living and make it more comfortable, but they still stay in close relation with the dwelling, the building, or its surrounding.

Working through the universe of possible services, it is easily understandable, that a big city simply demands more infrastructures to manage its inhabitants than a small town.

In Vienna, many construction measures are necessary in addition to simply building a house, for example parking areas, sport fields and so on, because of the high number and density of residents in one building. Open green space and comfortable arranged common rooms can avoid isolation, facilitate social life and provide a good forum for communication.

In Litschau, these construction measures are not necessary, because there is enough green or free space around to park the cars or go for a soccer match.

Service	**Vienna**	**Litschau**
1. Counselling & Information		
Information on local infrastructure	x	x
2. Care & Supervision		
3. Leisure time activity		
Court for playing ball	x	
Facilities for sports	x	
Open green area (field for recreation or sports)	x	
Swimming pool	x	
Sauna	x	
Rooms that are rented to groups or individuals on long term base	x	
Playroom for children	x	
Common courtyard	x	
4. Repairs		
Workshop room for repairs	x	
5. Mobility &Delivery		
Carpooling	x	
Parking area for bicycles	x	
6. Safety & Security		
7. Supply & Disposal		

Tab. 22: Homeservices that are complementary activities of housing organisations

Table 22 clearly shows that complementary services are much more pertinent in Vienna than in Litschau, where there is only one. It also makes evident that most are construction measures, that can facilitate communication or *Leisure Time Activities*, but the housing organisation – once having done the construction - has not much to do once the construction has been completed, except of every now and then sending a gardener to cut the lawn or do some cleaning.

A very good example for a complementary service is carpooling. There is only one carpooling organisation in Austria, Denzeldrive[14] that has been co-operating for quite some time with housing organisations. Housing organisations make space available for carsharing cars in the buildings, garages, or parking lots, instead of having to bring carsharing cars in from a central parking lot. The law states that every dwelling requires one garage or parking lot spot per dwelling. If this is not used, it is rented to other individuals, including the carpooling organisation. The law as such, still requires parking lots per dwellings, but co-operations between carpooling organisation and several housing organisations, has led to buildings where free space is rented out to the carpooling organisation. More and more housing organisations are renting their free space to the carpooling organisation.

5.1.4. Good Practice Buildings

The Homeservices concept is already implemented in Austria as seen in the descriptions of some outstanding buildings with good examples for sustainable Homeservices provided by housing organisations. They provide more than one service and often have a clear mission statement towards sustainability. The complete description of all examples is also available on the web page www.sustainable-homeservices.com. Here go the Austrian examples:

[14] See Section 2.2.3., where the organisation Denzeldrive is described.

Autofreie Mustersiedlung (Housing Organisation: Mischek/Gewog, Profit-oriented)

In this car-free residential area the constructors used the space and money usually required for parking areas to create a wide range of common facilities including green areas, a gym, a playroom for children, a bicycle workshop, a sauna, and several others.

The supply of such common areas gives residents the opportunity to use facilities that usually require a car or public transportation to get to, while also being a social platform for residents. The large areas of green, including playgrounds, grass areas, and gardening plots, increasing the environmental profile of this residential area. During the planing stage, future residents gave input on what rooms they wanted and how they wanted them. Since the building was built in 1999, these common rooms have become very popular. They are completely independently managed by the residents, and are regularly used. There are regular residential parties in the courtyard. The parties, along with all the other meeting places are also a platform for organising self-help-activities. Finally, the easy access to a gym, sauna, and fields for sports is a factor to increase resident's health if they make use of it.

By developing a residential area that is car-free, Mischek promotes residents not to use cars. At times however, it is necessary to use a vehicle. For these times, four carsharing cars are made available in co-operation with Denzeldrive Carsharing (also surveyed in this project).

Hanging Gardens in the Wienerberg City (Housing organisation: BUWOG, profit-oriented)

The building is situated in the outer district; it provides 101 2-4 room dwellings

Although there is not a special philosophy behind the building, the architecture incorporates nature. Common rooms act as a platform for communication and socially organised self-help.

This building was considered a good practice building because of its common areas, the service centre, and the building care taker, all of which promote Homeservices. A laundry room, a clothes drying room, separate rooms for bicycles and baby strollers, a playground, the entire roof as a garden, an internet café, and a presentation hall are offered to all residents. These areas increase communication between residents and can promote socially organised self-help.

A space for a service centre has been included. This service centre will be run by a subsidiary of BUWOG, primarily with long-time unemployed workers. Apartment cleaning and child-sitting are two services that will be offered. Next to these two, BUWOG will temporarily offer other services to test for their acceptance among residents. Ones that are successful will be kept after the trial period. More information is available in the Online Catalogue under "Service centre in the Hanging Gardens".

The service centre is managed by the building care taker, who is the contact person for residents and who will be onsite during regular working hours. The contact person is the most demanded service by residents of BUWOG buildings. Outside regular working hours, a hotline can be called for information or to report problems.

Harlacherweg 2 (Housing organisation: GESIBA, non-profit)

The Harlacherweg 2, a building of the Gemeinnützige Siedlungs- und Bauaktiengesellschaft called Gesiba (a non-profit settlement and building corporation), was built by the famous Viennese architect Harry Glück. In 1974 the first residents moved into the building. The twin building consists of two equal and reflecting houses and each of the two houses has an approximately 14 metre long out door swimming pool on the roof. Between the houses is a maintained, park including a little playground for children. The building also has bicycle and stroller parking areas and each dwelling has a balcony.

Gesiba, as builder and manager is responsible for maintenance, rent collection, cleaning and new developments. The house has a management centre (the so called Hausbesorgerzentrum) with highest technical standard, which facilitates the residents to do the damage reports or to ask for information or help needed etc. Apart from the services mentioned above, the employees of the management centre make sure that the swimming pool, the parking facilities in the cellar, and the elevator functions 24 hours a day. Beyond

that, the house has common rooms such as laundry rooms and a sauna. Small repairs are accomplished by the employees of the management centre. They also check regularly whether everything is lit and clean. Nevertheless, it is particularly important for the residents to find somebody present to turn to if they have a problem.

The focus of the management centre of Gesiba is maintenance and security. By taking care of several buildings, the service is actually cheaper than the old “Hausbesorger” who’s main duty was to clean the staircase.

Herrenhauspark Döbling (Housing organisation: ig-immobilien, profit-oriented)

The social integration of the residents is a special issue and many more services are provided by the Management Centre. Personal contact between the housing management and the residents is a priority that is much appreciated and demanded by the residents.

The building complex at Döblinger Hauptstraße 52A leaves enough space between the dwellings for gardens and greens. Besides that, there is a common garden with a children‘s playground and a swimming pool in summer. The Management Centre is available 7 days a week and for emergencies a 24-hours-hot line is installed. The residents are mostly international and the management centre provides all kinds of services from organising opera tickets to helping find one’s way in a foreign city, like help in renewing a drivers license, to more common services like apartment cleaning, gardening, and maintenance advise. The Herrenhauspark is surrounded by shops, public transportation, and still the living area is nice and quiet. As far as the suppliers are concerned, ig-immobilien and the Management Centre aim at lasting, amicable business relations that offer satisfaction and profit for both sides and are constantly reviewed to ensure punctuality, market prices and professional services with innovative solutions. ig-immobilien and the Management Centre attach great importance to environment-friendly ideas, which begin at the planning stage of every project and extend through to the materials and consumables they use. They pass on this same philosophy not only to the suppliers but also to the clients and customers.

Project Attemsgasse (Housing organisation: Hübl & Partner, profit-oriented)

The building is situated in the outer district and provides 138 dwellings.

The clientele of this self-funded building are well-off international residents, with a high service demand.

This building was considered a good practice building because of the wide range of Homeservices that are offered to its residents and its outstanding environmental performance. The building was finished in spring 2003. It is located a few minutes from the UN and Vienna International Centre, where the international population is very high. It is also located directly by the U1, the subway line that goes downtown; it takes ten minutes to get to the centre of the city by subway.

The target clientele are well-off international professionals who change apartments every 3 to 5 years. The infrastructure is geared towards these young working professionals with children. There are 138 sunlight filled apartments from 45 to 190 m^2. There is a garage with 186 places for the residents. There are several bicycle storage and stroller storage rooms. There is plenty of playing area for children. There is a large wellness area, with pool, gym, sauna, and massage area.

The ground floor is reserved for commercial purposes, like a dancing school, restaurants, and area for service providers. An apartment cleaning and mobile laundry and ironing service is co-ordinated out of the laundry centre on the ground floor. The first floor, which has 1,340 m^2, is reserved for offices. The residential dwellings are on the higher floors.

Besides these services that increase residents’ comfort and social contacts, the building scores highly on its environmental performance due to its reuse of energy. Even though the building has a heated pool, residents pay particularly low heating bills, because the warm waste water is reused to heat the pool.

Wienzeile 19 (Housing organisation: Wagner & Co-owners, profit-oriented)

The building is situated in the city centre and provides 10 dwellings

The special philosophy behind the building is the social integration of the residents and therefore many more services are provided either via the condominium association or via socially organised self help.

The building at Rechte Wienzeile 19 is owned and managed by a condominium association of relatives and friends. The dwelling has a very strong communication and integration profile, so most services are provided either via the condominium association or via socially organised self help. Separate rooms for bicycles, wine, and wood are made available. Specially cleaned and energised water (Granderwasser) is provided to all residents. The residents organise common dinners, one of the residents cuts other residents' hair, and house parties and house flea markets are organised. The cleaning lady who cleans the staircase also works in most dwellings and both offices. The two offices in the house act as service centres (key drop off, parcel delivery, messenger centre).

It is also common that external service providers are organised by the condominium association, such as Biowichtl, an organic food delivery service, or Ökostrom, which provides renewable energy to most dwellings in the building.

5.1.5. Terms of supply of Homeservices by housing organisations

Terms of supply describe how the service is provided. That means, it can be

- done by employees of the housing organisation themselves,
- outsourced to another company,
- a co-production between the housing organisation and an external service provider, or
- the housing organisation acts only as an intermediary to the service provision

This distinction is also reflected in the Universe Austria in the attachment.

Term of supply	number of services (in Vienna and Litschau)	Number of construction measures within
Direct supply by housing organisation	28	18
Outsourcing	6	1
Co-production	8	8
Intermediary	2	1
Socially organised self help	2	

Tab. 23: Number of Homeservices in Vienna and Litschau per term of supply

Referring to table 23, it seems as if housing organisations rather prefer to directly supply Homeservices. As most of the services provided by the housing organisations are either construction measures or (mandatory) core activities of the housing organisations, it looks as if direct supply is the most important. However, this is a wrong interpretation of the numbers because most of the direct supply are construction measures, as shown in the third column of the Universe Austria in the attachment. If we leave those out, it turns out that direct supply, outsourcing, and co-production have nearly the same importance. In the case of co-production it is interesting to see that in most cases the housing organisation provides the infrastructure while the service itself is operated by an external service provider, which is often a public or non-profit organisation.

Most services in the service areas *Leisure Time Activities* as well as *Mobility* need particular construction measures. Housing organisations prefer to provide these "services" because once built, this infrastructure does not need much maintenance and therefore has no high operating costs, but helps to sell or rent the dwelling as it is an extra gadget. Since construction measures dominate, material related services overweigh. Apart from the very core business there are hardly any personal services due to the high extra labour costs.

The only service found which is supplied as socially organised self-help is the support of parties and resident get-togethers. Also in this case the housing organisation primarily supplies the infrastructure (a courtyard or an open green space) with tables and benches, the party itself is organised by the residents.

The advantages of the different terms of supply for housing organisations are compiled in the table below.

Term of supply	Advantage	Disadvantage	n° of services
Direct supply	Makes only sense for big companies with their own service department		28
Outsourcing	No specialists are needed e.g. for fumigating or chimney cleaning No special operating licence is needed, this is very important in Austria where most professions still have a highly regulated professional law and licence system.	Liability issues	6
Co production		Often lack of a clear concept of responsibilities	8
Intermediary		Frequent contact to residents demands lot of time and staff	2
Facilitation		Frequent contact to residents demands lot of time and staff	1
socially organised self help	Residents requests can be fulfilled rather easily, without getting involved too much		1

Tab. 24: Service offer by terms of supply in correlation with advantages an disadvantages for the housing organisations

It might be astonishing that housing organisations, particularly the housing managers, try to avoid close contacts to the residents. This fact is explained by the need of staff and time to communicate with the residents, and indeed constantly ringing telephone can be very disturbing. However, there are some irrational reasons that we cannot explain, leading to a statement from one of the interviews that once an apartment is rented or sold, any contact to the resident is undesired.

5.1.6. Summary: Homeservices offered by housing organisation

In Austria, housing organisations have not yet developed a good service mentality and only focus on their core business. Nevertheless it can be assumed that they rely on a fallacy, if they do not recognise that living does not only mean providing a roof over one's head but also offering a bunch of accompanying services to make life easier and more comfortable. Some housing organisations have broadened the service offer as the good practice examples have shown.

Regarding commercial and non-profit housing organisations, no difference in the attitude could be detected, however the only Viennese public provider is sceptical, concerning a Homeservice offer for it residents due to financial reasons.

Beginning from chapter 5 onwards, the summaries of these chapters contain not only the condensed results, but also a number of theses. These are theoretical statements that should be proved or disproved by the findings that were made throughout the survey.

Thesis 5.1.1.: The spectrum of services rises in relation to population and number of housing organisations.

There is in fact a broader offer of Homeservices in big cities, in so far as there is a larger number of housing organisations and inhabitants in the big cities and thus also a broader spectrum of services. The important key figure is the density of population. The more residents there are in relatively small space, the more services one can expect. This is due to

the fact, that in closed units, like e.g. big housing complexes, it is easier to provide services than in surroundings with innumerable one-family houses.

So far a difference in the number of offered services was found. But interestingly, all service areas are covered alike, which means that there are more service providers in a specific service area, but there is no lack of a service in a smaller community.

Thesis 5.1.2.: Housing organisation offer services that are mandatory

Most important are mandatory services, followed by those core business activities that are closely related to selling or renting a dwelling. By terms of supply direct supply overweigh all others. In case one excludes construction measures outsourcing and co-production are important. In many cases construction measures are preferred to other activities, as they do not demand a lot of maintenance.[15]

In big cities, the primary services are construction measures, because they are necessary to manage a large number of residents in a relatively small space.

Thesis 5.1.3: The service mentality of housing organisations depends on the pressure by the market (the more vacancies, the more service mentality)

This thesis can only be partially accepted as the mentality of the good practice housing organisations has changed in respect to providing Homeservices. This means that in Vienna, Homeservices are not supplied because of a high vacancy rate, but they are seen as attractive supplements to the living space and proactive housing organisations experiment with that concept in their newest buildings.

5.2 Homeservices offered by external service providers

The services offered by the public provider – the municipality – are the same in Vienna and Litschau with only one exception and that is the shopping delivery in Vienna and the billing of extra trash bags in Litschau. There are significantly less non-profit housing organisations (only one third) in Litschau, which is due to the fact that Litschau is much smaller and many services are supplied by neighbourhood help. Emphasis is on *Care & Supervision* which in Vienna is supplied mostly by non-profit housing organisations or by public providers.

However, two thirds of the services supplied by commercial providers are also available in Litschau. This is possible because they do not only concentrate on the services but also have other fields of action, so that the service is often only a medium of keeping customers. This applies e.g. to the baker and the butcher coming to the small villages to sell their goods. Often the residents do not have the time to shop during opening hours so either they go to the big supermarkets or they buy at the mobile baker or butcher, which they prefer in most case, because of the high quality and means of communication.

	Indicator:	**Austria**	**Lower Austria**	**Vienna**	**Litschau**
	Summary				
F1	Number of services offered by public providers			13	13
F2	Number of services offered by non-profit organisations			30	13
F3	Number of services offered by industrial/commercial providers			35	25

Tab. 25: Indicators for external service providers

[15] To be honest this is most HOs thinking. In fact many construction measures need a lot of maintenance, but nobody cares for them and they finally are not used any more because they are in very bad condition. This often happens to the common laundry rooms.

5.2.1. Homeservices offered by public providers

Public providers focus on those services that require a lot of personnel to be provided and because of high labour costs cannot be provided profitably by commercial service providers. Hence, public offer will often be found in the service areas of *Counselling & Information* and *Care & Supervision*. Rooms that can be rented for various events are most often situated in schools. Others, like the waste collection area for separate containers for recycling, must be provided according to the Austrian waste management law.

Service	Vienna	Litschau
1. Counselling & Information		
Counselling on waste prevention and separation	x	x
Counselling on social issues	x	x
Counselling for elderly people	x	x
Counselling on financing and subsidies for owners	x	x
Counselling on financing and subsidies for residents	x	x
2. Care & Supervision		
Medical care at home	x	x
Nurse in home mobile nurse	x	x
3. Leisure time activity		
Facilities for sports	x	x
Rooms that can be used for local or social events	x	x
Markets	x	x
4. Repairs		
5. Mobility &Delivery		
Shopping delivery[16]	x	
6. Safety & Security		
7. Supply & Disposal		
Billing trash bag per unit consumed		x
Waste collection area for separate containers for recycling	x	x
Separate days for collection of old furniture etc. and hazardous waste	x	x

Tab. 26: Homeservices by public providers

In Vienna the municipality offers a huge amount of different services not only related to living but to all kind of daily life situation. This includes:

- People's service: for all kinds of complaints
- Partner telephone: therapeutic *Counselling* for problematic relationships
- Social psychology emergency service: advice and help with crises and problems
- Psychosocial information: advice and help with crises and problems
- Social call Vienna: acute help with care at home
- Children and youth attorney ship: lobby for children and youth
- First Love Ambulance: *Counselling* for boys and girls
- Women's telephone: for women's questions on family, work, and health
- Food and nutrition *Counselling*: everything about foods, health, and nutrition
- Traffic information: aid for problems in traffic
- Light telephone: for extinguished street lights, lamps, and traffic signs
- Public transportation call centre: comments and complaints.

Specialisation in specific service areas by public provider

Most services by public providers are offered in the service area of *Counselling & Information*. Providing information on specific issues requires the knowledge of different information sources and networks. So it seems easily understandable that public providers focus on those

[16] This service is only provided during the four weeks before Christmas; it is only available in the large shopping streets in Vienna and it is provided by the Viennese chamber of commerce.

services, because they unite a lot of different specialists in their administration. Concerning the services enumerated in the universe there are hardly any differences between Litschau and Vienna. That might be surprising, but the differences becomes obvious when we look outside and see the enormous service offer of the municipality of Vienna – only they are not Homeservices (see enumeration of Viennese service offer above). Concerning disposal, the offered services are mandatory, apart from the separate days for bulky waste collection.

In Vienna, the most important motivation for all kinds of activity of the municipality is political. Vienna, since the early twenties has always been governed by a socialist or social-democratic government. And indeed, particularly in the big municipality housings nearly 100% of the residents vote the social-democratic. So by providing a lot of services and helping residents the municipal government tries to attract even more potential voters (and in fact they got absolute majority in the last election in the year 2000).

Homeservices and legal obligations of public providers

Water supply as well as waste and sewage management is regulated by federal law. Waste management and any activity for pollution prevention are carried out by one particular department of the municipal administration. Water is supplied by the Viennese Waterworks which are part of the Viennese City Works. This organisation always belonged to the municipality. Only in the last years, the gas and electricity branches were privatised. Additionally, water supply is excluded by law from earning profit for any company (private or public).

There are two mandatory services that are not provided by the housing organisations themselves but by commercial providers.

One is chimney cleaning. In Vienna, the housing organisation is not allowed to choose the cheapest chimney cleaner, but has to contract the one, who is responsible for the istrict. The market is regulated. There are in fact some chimney cleaners that want to get rid of these regulations, but the professional institution is still sticking closely to them. In Lower Austria, and this applies to Litschau, the market is not that strictly regulated. Nevertheless, one chooses a chimney cleaner rather close to the home, to avoid high costs of travel.

The second mandatory service in Vienna that is provided by private organisations is fumigating. Every year, the house and especially the cellar have to be checked and if necessary poisoned against rats. This can be audited by local authorities in case of hygienic nuisances.

Examples for services offered by public providers

Regardless of any political preferences, one has to admit that the Viennese municipality offers a large number of services to the residents, a lot of them are even for free. Within these, few are Homeservices.

Two departments of the city administration are described below as examples.

Administration department (Magistratsabteilung (MA) 48 (included in online catalogue as service provider) is a public organisation that collects and disposes of Vienna's solid waste, and consults individuals and businesses on waste reduction and waste separation. Along with these services, MA 48 supplies a call centre, and a regularly updated guide to repair, rental, and second-hand shops. By separate collection of waste, paper, glass, and metal a lot goes to recycling. Further non-recyclable materials are disposed of or burnt. More responsible purchasing results from the increased consciousness that consumers gain from having to separate waste.

Administration department (Magistratsabteilung) 25 – District management: Vienna's magistrate for district management offers information free of charge on: living, housing environment, infrastructure, urban regeneration, general information, and living in a community. These service centres are decentralised and located in the areas of urban regeneration. There is also one mobile service centre that travels to "problem buildings". The primary problem of the inner city is that of overpopulation. Buildings have to be renovated. There is a lack of parking areas and green space. The district management offers

improvement and secures the quality of living together in a district. The UN prized the magistrate as a useful and practical instrument for urban regeneration.

5.2.2. Homeservices offered by non-profit organisations

Non-profit organisations mostly provide services that demand high labour input within the service areas of *Counselling & Information*, *Care & Supervision* and *Leisure Time Activities*. Their service offer is often linked with labour market stimulating measures. This leads to a double positive effect. Their clients profit as well from the service supply as the employees themselves as they get opportunities to re-enter the regular job market.

On the other hand, services that are offered by non-profit organisations can in some cases also be easily provided by neighbourhood help or by illegal work. Due to the fact that labour costs are very high, people tend to save money by preferring the “black market”.

Service	**Vienna**	**Litschau**
1. Counselling & Information		
Counselling on waste prevention and separation	x	x
Counselling on changing to renewable energy sources	x	
Counselling on energy consumption and reduction	x	
Counselling on environmental friendly cleaning detergents	x	x
Counselling on gardening and plants	x	
Counselling on ecological building materials and use in interior design	x	
Counselling in appropriate living conditions for elderly	x	x
Counselling on social issues	x	x
Mediation	x	
Counselling on debt reduction	x	
2. *Care & Supervision*		
Apartment cleaning	x	
Medical care at home	x	
Nurse in home mobile nurse	x	x
Health support at home	x	x
Day mom for children	x	
Child sitting	x	x
Diapers wash and delivery	x	
3. Leisure time activity		
Youth centre	x	
Rooms that can be used for local or social events	x	x
Supervision of the playground	x	
Organising field trips	x	x
Support for social initiatives and groups	x	x
Non-profit organisation of residents	x	
Leisure Time Activities for the elderly	x	x
Leisure time activities for children and teenagers	x	x
Markets	x	
4. Repairs		
Co-ordinated repair service	x	
Workshop room for rent	x	
5. Mobility &Delivery		
Meals on wheels	x	x
6. Safety & Security		
Emergency telephone for elderly	x	x
7. Supply & Disposal		

Tab. 27: Homeservices by non-profit organisations

Specialisation of non-profit organisations

Non-profit housing organisations mostly focus on services that demand a high amount of human resource especially in the service areas of *Care & Supervision* and *Leisure Time Activities*. Related tasks can easily be performed by interns, part-time employees, civil servants, and volunteers. These jobs often require a social engagement that goes beyond that of a regular job.

Examples for services offered by non-profit organisations

"Die Umweltberatung": „Quality of Life, not Quantity of Life", is the mission statement of "Die Umweltberatung". This non-profit oriented organisation is guided by preventative environmental protection. The problem "Die Umweltberatung" sees is that the general awareness is increasing about the current and future economic problems, but there is a far way to go to act upon this awareness. "Die Umweltberatung" has made it their goal to simplify this path, to consult on how to act environmentally in practically all ways of life.

"Die Umweltberatung" is a decentralised organisation that offers personal and telephone *Counselling*, along with seminars, presentations, etc, for schools, private gatherings, associations, and entire communities. A large part of the work is done in co-operation with the national and district agencies. They also act as an intermediary when specialised solutions are required. They offer independent *Counselling* on all environmental questions, support other educators with projects and research and inform in numerous publications.

Volkshilfe – FAWOS is an organisation that offers aid to residents living in private or co-operative dwellings that are close to eviction. Specifically they offer information, mediation to facility management, *Counselling* on possible funds from insurance and social services, *Counselling* on managing to pay back not paid rent, and they help in developing a financial plan for the resident.

The goals of FAWOS is the:

- Prevention of further homelessness,
- Prevention of negative social carriers, social exclusion and personal pain,
- Reduction of homelessness,
- Saving of social financial aid, and the
- Continuation of cheap living space

5.2.3. Which Homeservices are offered by commercial providers

The spectrum of Homeservices offered by commercial service providers is rather broad. The table below shows examples in all service areas with exception of *Supply & Disposal*, which is a domain of the public provider.

Service	Vienna	Litschau
1. Counselling & Information		
Counselling on gardening and plants	x	x
Counselling on ecological building materials and use in interior design	x	
Counselling on appropriate living conditions for elderly	x	x
Counselling on safety	x	x
Counselling on security	x	x
Counselling on financing and subsidies for owners	x	x
Counselling on financing and subsidies for residents	x	x
2. Care & Supervision		
Emergency service	x	x
Gardening	x	x
Supply of Cable, satellite and internet	x	x
Cleaning service	x	x
Fumigating	x	x
Maintenance of heating, water supply and electricity	x	x
Apartment cleaning	x	x
Apartment renovation	x	x
Chimney cleaning	x	x
Specialised cleaning	x	
Walking pets	x	
Pet transport	x	
Pet care	x	
Vet at home	x	x
3. Leisure time activity		
Sporting equipment rental service	x	x

Rental service for party accessories	x	x
Weekly market	x	x
4. Repairs		
Co-ordinated repair service	x	
Preventative inspections	x	x
Tool rental	x	x
Bicycle repair service	x	x
Household appliance repair service	x	x
5. Mobility &Delivery		
Car rental	x	
Bicycle rental	x	
Carpooling	x	
Delivery service that delivers without the recipient being present	x	
6. Safety & Security		
Key drop off service	x	x
7. Supply & Disposal		

Tab. 28: Homeservices offered by commercial providers

Specialisation of commercial providers

There is no evident specialisation in any service area. In Vienna, most of the commercial service providers are just service companies while in Litschau the service is often an additional offer to support the core company activity. That is easy to understand: offering just services in Litschau in most cases would not work because there are too little potential clients. Hence, commercial providers always have to have two different fields of action.

It is difficult for commercial providers to enter markets in which there already are existing providers that receive public aid. These markets show large price differences between the two types of provider, which makes it difficult for the commercial provider to survive.

Examples for services offered by commercial providers

Biowichtl offers and delivers a wide range of organic foods and cosmetics.

Organic farmers have the chance to sell their produce without having to go through large supermarkets. Benefits of organic meat production include:

- Fair animal husbandry with grazing on organic fields, the barns have sufficient sunlight, fresh air and dry, soft stall floors. Only organic fodder is used. No artificial supplements, such as growth enhancers.
- Benefits of organic plant farming:
- Use of manure and green manure is allowed. Crop rotation is practised to guarantee soil richness.
- No chemical fertilisers are used.

Due to these benefits, the produce has highest levels of valuable nutrients and no traces of harmful substances. Besides, the strain on the environment is significantly reduced. To become an official organic farmer, the entire business has to be transformed to adhere to the strict national guidelines. These are controlled at least once a year from independent controllers. Also foreign organic farmers importing to Austria are controlled regularly.

Cooperative Fahrrad not only sells bicycles and accessories, but also maintains the bicycles. This extends the lifetime of the bicycle and increases the product's value. Bicycles are the ideal mode of urban transportation since they do not emit any emission and their movement is not restricted by traffic. Cycling also adds to the general health, which is another slogan of the organisation's philosophy and which the employees use.

Denzeldrive offers vehicle mobility on call. Reservations can be made online or over the telephone. Over 100 centres Austria-wide offer a wide range of vehicles, which can be rented with the DENZELDRIVE-Card. The consumer is charged once a month by the time and kilometres driven. This cost includes comprehensive insurance coverage, autobahn tolls, and

gasoline. It is cheaper to use Denzeldrive car than own one if one drives less than 15,000 kilometres a year.

The **Ökostrom AG** offers environmentally friendly electricity produced in Austria. The organisation brings together independent electricity producers, creates a sales system and offers this to the general public. The electricity comes from wind, water, geothermal, biomass and solar energy. Ökostrom is the market leader for ecological electricity. By increasing its total market share, Ökostrom is helping in reducing the amount of greenhouse gases (CO_2) produced by oil and coal generators.

The **ReparaturNetzWerk Wien** is an association of 31 commercial repair shops. The goal of this association is networking clients with suppliers. “Die Umweltberatung” described above, is the point of contact between the two. They also co-ordinate the member organisations, offer services to the organisations (such as disposing of hazardous waste), and is in charge of public relations and social work. The client receives a cost and quality guarantee, and the assurance that the repair shops are adhering to the environmental criteria.

The ReparaturNetzWerk Wien is a “Triple-Dividend-Project“. It fulfils a massive client interest, increases the turnover of the member repair shops, and creates high quality employment opportunity, and also fulfils the sustainability criteria, by extending the lifetime of the products repaired. It also reduces the amount of waste disposed of. Approximately 1000 tonnes of waste are avoided by the ReparaturNetzWerk Wien.

Reparatur- und Service-Zentrum R.U.S.Z. The RUSZ *Repairs* or dismantles and disposes of a wide range of household appliances. These appliances are gathered from waste collection sites or are picked up from or delivered by individuals. Usable parts from irreparable appliances are collected for repairing other appliances. Furthermore, hazardous substances are removed and appropriately disposed of. R.U.S.Z. *Repairs* competitively, and gives a one year warranty on the appliances. R.U.S.Z also offers other organisations the maintenance of their equipment and appliances. Along with reducing the amount of waste pilling up in landfills, R.U.S.Z also increases the life span and use intensity of appliances.

The organisation consists of 8 full-time employees, one full-time secretary, and 24 transitional employees that have been unemployed for many years. These individuals are not only reintegrated into the working world (punctuality, performance expectation, team work), but also gain invaluable qualifications such as technical and social skills. R.U.S.Z allows re-entrants to work for them only for one year, before a new job is found for them. When R.U.S.Z. was founded in 1998, 40% of the workers successfully found and stayed with a new job. A year later this number grew to 72%.

Sozial Global offers services in and around the home such as cleaning, ironing, childcare, plant care, shopping, running errands, visiting services, nursing, and meals on wheels. Through a telephone call, the service is agreed on, along with the cost to the customer. The customer’s income is considered when calculating cost. The service offered by Sozial Global significantly can increase the well-being and quality of life for needy and elderly people. Customers of this service are aided in continuing to live in their familiar surroundings, instead of having to move into a nursing home or the like. Expensive hospital stays are also avoided. A recently initiated project called „Homeservices“, gives 30 long time unemployed women a chance to re-enter to workforce. They are given maximum one year before having to start a new job. The success rate is 70%.

5.2.4. Summary: Homeservices offered by external service providers

The survey of the external service providers showed clearly that most of them provide the service themselves as it is their core business. This is reasonable from an economic perspective, as the provider does not get much benefit from only being an intermediary.

The external service providers mainly offer labour intensive services in the areas of *Care & Supervision* and *Counselling & Information*. It is also clear that external service providers do not readily offer services that require extensive space or technical infrastructure in the building unless they work together with a housing organisation during the planning and construction phase of the building.

	Public		Non-profit Organisation		Commercial	
Service	Vienna	Litschau	Vienna	Litschau	Vienna	Litschau
1. Counselling & Information	5	5	10	4	7	6
2. Care & Supervision	2	2	7	3	15	11
3. Leisure time activity	3	3	9	5	3	3
4. Repairs	0	0	2	0	5	4
5. Mobility &Delivery	1	0	1	1	4	0
6. Safety & Security	0	0	1	1	1	1
7. Supply & Disposal	2	3	0	0	0	0

Tab. 29: Overview on number of services per type of service provider in Vienna and Litschau

Regarding the mapping in the table above, there are some significant results. Emphasis is on *Counselling & Information* as well as *Care & Supervision*. *Leisure Time Activities* are supplied by non-profit organisations. This service area is not important for commercial or public providers. There is only a very poor offer within the service area of *Safety & Security* as well as *Supply & Disposal*. For that last service area it turns out that the offer is only provided by the public service provider.

Again for the summary of the chapter “Homeservices by external service providers”, some theses were are tested.

Thesis 5.2.1: External service providers prefer labour intensive services

While the service areas *Counselling & Information* and *Care & Supervision* usually are provided by non-profit organisations and public providers, infrastructure and construction measures fall into the domain of the housing organisations. In contrast to the thesis, commercial external service providers are often found in *mobility* or *security* services that demand more technical equipment than working hours.

However, due to the fact that public and non-profit external service providers often get subsidies for their employees, it is easier for them to provide more labour intensive services.

Thesis 5.2.2: There is no difference in the quality of service provision between city and town, but only in the quantity of service providers

The difference between big cities and small towns is related to factors that cannot be easily influenced by politics or by the economy. It is due to the smaller number of residents and thus of potential clients, that there are less external service providers in small towns. Particularly small towns like Litschau make clear, that also in cities with very few residents, all types of external service providers (commercial, non-profit, public) are necessary to provide the full range of Homeservices. However, this difference concerns the number of service providers, but not the number of services. It means that also in small towns a similar service offer exists like in big cities, but for one service there might only be one provider instead of five different providers in the city.

In fact, there is a significant difference between city and town. In the town, commercial external service providers offer the services as a complementary business, to improve the clients’ relationship, whereas in the city the service provision is in most cases the core business of the commercial external service providers.

5.3 The role of intermediaries for providing Homeservices

Housing organisations might be good intermediaries to provide Homeservices in Austria. A lot of them are not interested in the service provision via own supply, but in acting as an intermediary they can offer extra services to their residents apart from those they have to provide (the mandatory ones, the core business and the construction measures).

With the forth going of the study it turned out that the housing organisation’s attitude towards Homeservices changed significantly. They are increasingly interested in the Homeservices concept and in the role as intermediary.

One important difference between big cities and small towns is that within small towns there are hardly any housing organisations. One would assume that other organisations take on this role; however, it turned out that there is no need for an intermediary. This result actually also applies to residential buildings with approximately the same number of people. Intermediaries are only needed if the social and communication structure requires support. Intermediaries can facilitate the provision of information. Several external service providers have stated that this is the function they see for housing organisations: to act as intermediaries between the external service providers and the resident in providing information about the needs of the resident and the supply of the external service providers.

A quick and easy information link between the resident, the housing organisation and the external service provider would be needed. One of the possibilities is a common screen in the lobby (or any common room) of a building where only residents can log in and get into contact with the service providers via the housing organisation. Also an information board can be of good use for those who are not willing to deal with a computer. The proof is Litschau, where there are a lot of these information boards throughout the whole town, so every citizen easily can get the information they need.

5.4 Different Types of Homeservices

As described in chapter 3, different types of services can be distinguished. These are

- primary services without a material component
- secondary services with a more or less important material component.

These are further divided into

- use-oriented
- product-oriented and
- result-oriented services

Apart from that, there are construction measures. They are not services but can be a medium to ease the service provision.

This chapter deals with the construction measures, the primary services and two types of secondary services: those that are product- and use-oriented.

5.4.1. Homeservices with a high construction intensity

Particularly in the service areas *Leisure Time Activities* and *Mobility & Delivery,* a lot of services are related to construction intensity. This is shown in the table below. Within this area most of the services are supplied by housing organisations. Also the municipality supplies sports facilities, like courts for playing ball or swimming pools. But to name them a Homeservice, they must be closely related to a housing complex. The same applies to playgrounds. Again they are a part of public gardens and parks, but as a Homeservices they should be closely linked to a housing complex.

The advantages of services related to construction intensity are within the cost of *care, supervision* and maintenance. Once they are built they do not require much more care, implying low labour costs. Since the costs can be split among several residents, unlike with services that are charged by amount of usage, these service can be supplied a lot cheaper by the housing organisation.

Service	Vienna	Litschau	who provides them
1. Counselling & Information			
2. Care & Supervision			
Common laundry room	x		HO
3. Leisure time activity			
Court for playing ball	x		HO, public exSP
Facilities for sport	x		HO, public exSP
Open green area	x		HO, Public exSP
Swimming pool	x		HO
Sauna	x		HO
Rooms that are rented out to groups	x		public exSP, HO
Rooms that can be used for local social events	x	x	public exSP, HO
Playroom for children	x		HO
Common courtyard	x		HO
Playground	x		HO, Public exSP
4. Repairs			
5. Mobility &Delivery			
Parking area for bicycles	x		HO
Parking area for strollers	x		HO
Parking area for cars	x		HO
6. Safety & Security			
7. Supply & Disposal			
Energy efficient houses	x		HO
Waste collection area	x	x	HO, public exSP

Tab. 30: Construction intensive Homeservices per service area

Construction measures are most often provided by the housing organisations themselves.

A good example that construction measures, such as swimming pools, are not only a privilege for the rich are the pools of a Gesiba building as well as the Herrenhauspark (Luxury Apartments), both in Vienna. In Herrenhauspark, the pool is part of an outdoor recreational area. It is surrounded by lawn and includes a small pool for children and the supply of deck chairs and sunshades. These facilities make it a frequently used meeting place not only for neighbours but also for friends of the residents that pass by. The costs of the pool are charged with a monthly utility costs to all residents, not depending on their form of contract, as there are rented as well as owned dwellings.

In a similar way the charging is organised in the GESIBA building, where the pool is situated on the roof. This pool is also frequently used as it gives a bright view of the surroundings. There are daily controls and maintenance by the employees of the management centre. It was planned to completely renovate the pool in autumn 2003. In this process, Gesiba also wanted to install video surveillance to avoid potential misuse.

Thesis 5.4.1.: Housing organisation offer construction intensive services, that later do not require labour for operation

In Austria, this thesis can be accepted. It was sufficiently tested during the survey.

5.4.2. Homeservices that are primary services

Primary services are the majority of services in the service areas *Counselling & Information* and *Care & Supervision* shown in table 31. Most of the social services are included in these areas; most of them not having an evident environmental relevance. However, most often these services are related to transport, so there is a potential to make them more environmental friendly. They are most often offered by external service providers, a lot of which are non-profit organisations. In some cases the housing organisation acts as an intermediary by providing *information* on these services to their residents.

Service	V	L	who provides them
1. Counselling & Information			
Counselling on waste prevention and separation	x		np. exSP
Counselling on changing to renewable energy sources	x		np. exSP

Counselling on energy consumption and reduction	x		np. exSP
Counselling on environmental friendly cleaning detergents	x		np. exSP
Counselling on gardening and plants	x	x	np. exSP
Counselling on ecological building materials and use in interior design	x		np. exSP
Counselling on the environment in general	x	x	np. exSP
Counselling on healthy nutrition	x		np. exSP
Counselling on agriculture	x		np. exSP
Counselling on social issues	x		np. exSP
Counselling on debt reduction	x		np. exSP
2. Care & Supervision			
Gardening	x	x	com. exSP
Building care taker	x		com. exSP
Cleaning service	x		com. exSP
Apartment cleaning	x		HO, np. exSP
Maid	x	x	np. exSP
Medical care at home	x	x	np. exSP
Health support at home	x	x	np. exSP
Nurse in home mobile nurse	x	x	np. exSP
Day mom for children		x	np. exSP
Child sitting	x	x	HO, np. exSP
Visiting service	x		np. exSP
Accompaniment service	x	x	np. exSP
3. Leisure time activity			
4. Repairs			
5. Mobility &Delivery			
Meals on wheels	x	x	np ex Sp
6. Safety & Security			
7. Supply & Disposal			

Tab. 31: Primary services per service areas

A good example for a primary service is the service supply by Hilfswerk Litschau, as they offer many services within the service area *Care & Supervision* out of one hand. Their mission statement focuses on:

- individual service package in accordance with actual needs
- Preventative help
- Help for self-help

The service package for care at home consists of several different modules, which can be selected individually. It includes medical care at home, mobile nurse, support in the home, meals on wheels, and emergency telephone. Hilfswerk Litschau is further described in the good practices Homeservices catalogue, in print in the annex of this report and on the web (www.sustainable-Homeservices.com).

Thesis 5.4.2.: Most services are primary services so that it is quite difficult, to define a reference product and assess the environmental benefit.

It is agreed that for primary services no reference product can be defined and thus environmental benefits are difficult to be measured. However, examples of several services show clearly that there are indirect effects. In the service areas *Counselling & Information* as well as *Care & Supervision* primary services dominate. However, information on environmental aspects contributes to changes in the behaviour and thus allows achieving better environmental performance. The conclusion is that also primary services reduce environmental and social impact, but it is hardly possible to quantify this effect if there is no reference product.

Finally, this leads to the conclusion that, not only if a service replaces a product, environmental burdens can be minimised.

5.4.3. Homeservices that are use-oriented

As shown in table 32, use-oriented Homeservices are exclusively found in two service areas, one is *Repairs* and the other are the parking lots within the area *Mobility & Delivery*. While *Repairs* have a very high environmental significance (lengthening of product life spans and reduction of waste), parking lots do not. Some of these services have indirect effects such as

parking areas for bicycles that cause residents to buy a bicycle and use this to ride to work. The supply of carsharing parking areas also has a positive effect on the environment.

Service	Vienna	Litschau	who provides them
1. Counselling & Information			
2. Care & Supervision			
3. Leisure time activity			
4. Repairs			
Co-ordinated repair service that consults at the dwelling	x		com. exSP
Preventive inspections	x		com. exSP, HOs
Workshop room for repairs	x		HO
Household appliance repair service that comes to the dwelling	x	x	com. exSP
Repair service with hotline, pickup and delivery	x	x	com. exSP
Mobile knife sharpener	x		com. exSP
Home delivery by shoemaker	x		com. exSP
5. Mobility &Delivery			
Parking area for bicycle	x		HO
Bicycle storage room	x		HO
Parking area for special use (car-sharing, etc)	x		HO
Parking area for cars (outside or garage)	x		HO
Storage room for strollers	x		HO
6. Safety & Security			
7. Supply & Disposal			

Tab. 32: Use-oriented services per service area

The construction measures in this category are primarily provided by housing organisations, and Repairs are primarily provided by commercial external service providers. There are also initiatives for co-operations with the Viennese Employment Agency to reintegrate long-time unemployed people into the workforce.

Thesis 5.4.3.: Use oriented services are available only in some very specific service areas, like repair and maintenance.

Use oriented services are only available in a few service areas. Not only good practice use-oriented service examples but all that were detected, came from the service areas *Repairs* and *Mobility & Delivery*.

5.4.4 Homeservices that are product-oriented

Only a few Homeservices are product-oriented. Initially it was assumed that there is a high potential to reduce environmental strains when a product is substituted by a service (Behrendt et al. 2000). Then it became clear that the substitution (product rental or pooling) is often linked to increased transport which again increases environmental strain. From this, the idea of the “Homeservice” originated, where the service is supposed to be offered close to the resident. Regarding product oriented services this might be a market niche particular for external service providers that offer the services complementary to their core business and provide new Homeservices.

Service	Vienna	Litschau	who provides them
1. Counselling & Information			
2. Care & Supervision			
Diapers wash and delivery	x		np exSP
Common laundry room	x		HO
3. Leisure time activity			
4. Repairs			
5. Mobility &Delivery			
Car sharing	x		com exSP
Car rental	x		com exSP
6. Safety & Security			
7. Supply & Disposal			

Tab. 33: Product-oriented services per service area

Although table 33 only contains very few services, they have a high environmental benefit. However none of them have any social component, apart from the common laundry room that can develop into a well flourishing communication centre in case it is well maintained.

Again, a thesis was postulated concerning particularly the environmental aspects of product oriented services.

Thesis 5.4.4.: From an environmental point of view, product-oriented services are what we are looking for, but we hardly find any.

In fact, there are only few product-oriented services. Primary services dominate, most of them being result-oriented. On the other hand, all product-oriented services do have positive environmental effects and might also have positive sustainability effects. It is assumed that the provision of the services still can be improved to give them a better sustainability performance.

5.4.5. Summary on the types of services

There are significant trends in the links between service areas, type of service providers, and type of services.

There is a clear preference for construction intensive, low-labour intensive services by the housing organisations. Social or informational services are most often provided by non-profit external service providers. Commercial external service providers are the major providers in the areas of *Mobility & Delivery* and *Safety & Security*. This division can be explained by the economic effects and the labour intensity of the various service areas.

There is a clear distinction between service areas with significant environmental effects and other service areas with significant social effects. While the areas *Information & Counselling* as well as *Care & Supervision* have predominantly positive social effects, but nearly no environmental effects, the areas *Repairs*, *Supply & Disposal* and *Mobility & Delivery* can have positive environmental effects while totally disregarding social effects.

There are only a few product-oriented services, which is a true pity, because they have high environmental benefits. The majority of services are either primary services or result-oriented. However, all services have a potential for improving their sustainability profile as will be shown further onwards.

5.5 Summary: Who provides Homeservices

There is no difference in the service supply of public providers (in most cases the municipality) between Vienna and Litschau. Also, the supply of commercial providers is very well developed also in the small town. One would have assumed that there could be a larger supply in Vienna. There is however, a significant difference in the services offered by housing organisations, as in Litschau one- and two-family houses are wide spread and housing organisations only play a minor role.

Homeservices exclusively offered by housing organisations

Core activity and mandatory services, except chimney cleaning and fumigating, are the only exclusive services provided by housing organisations.

All Homeservices that exclusively depend on a construction measure can only be offered by the housing organisations. This seems to be a first step towards Homeservices for housing organisation. They only gradually develop a service mentality, but by offering infrastructure they can facilitate or procure the supply of a service. In order to stimulate this concept, there has to be a change in the Austrian subsidies system, because up till now there is only “Subjektförderung” which means, that the subsidy goes directly via the housing organisation to the resident for providing living space but not for common areas. With the change to “Objektförderung” subsidies can be given to the construction of the whole building, so also any kind of infrastructure can be provided easier. (Hrauda et al., 2002)

Homeservices exclusively offered by external service providers

External service providers are divided into public, non-profit organisations and commercials. All of them focus on *Counselling & Information* and *Care & Supervision*. Municipals are the only ones who offer services in the area of *Supply & Disposal*. In Vienna, most services are provided as core business, while in Litschau, most companies who provide services do this in addition to selling products or having other core businesses.

There is a clear distinction between public providers and non-profit organisations providing mostly social services which are highly labour intensive, while commercial providers focus on technical services.

The structure of supplying services

The table below shows clearly that external service providers offer a lot more services than housing organisations. Both groups focus on *Counselling & Information* as well as *Care & Supervision*. Concerning *Leisure Time Activities,* housing organisations mostly provide construction measures, whereas externals focus on primary services. However, the biggest number of services in the universe is found in the service area of *Care & Supervision* and *Leisure Time Activities*. In the service area of *Repairs*, there are only seven services, all of them supplied by external service providers.

	Housing organisations		**External Service provider**		**Overall sum of offered services**		**Number of potential services according to the universe**
Service	**V**	**L**	**V**	**L**	**V**	**L**	
1. Counselling & Information	**9**	**9**	**22**	**15**	**31**	**22**	**28**
2. Care & Supervision	**7**	**4**	**24**	**16**	**31**	**20**	**41**
3. Leisure time activity	10	0	15	11	25	11	41
4. Repairs	1	0	7	4	8	4	7
5. Mobility &Delivery	6	1	6	1	12	2	22
6. Safety & Security	1	1	2	2	3	3	15
7. Supply & Disposal	0	0	2	3	2	3	20

Tab. 34: Overview on number of services per type of service provider in Vienna (V) and Litschau (L)

To sum up this whole chapter on who provides Homeservices, five theses have been defined. They refer to main results and prove that the supply of Homeservices is linked to a certain service mentality of the housing organisation as well as of the residents and to a well developed building infrastructure that can ease the provision of services. It also makes clear in which cases an intermediary can stimulate the residents' interest in Homeservices.

Thesis 5.5.1: Only if there is no adequate supply of Homeservices by external service providers, housing organisations are interested to provide Homeservices.

Particularly in the inner district of Vienna, where there is a good infrastructure residents do not demand Homeservices from their housing organisations. External service providers cover the Homeservices market sufficiently. For Housing organisations it would be a big financial effort to enter this market, particularly if the services are complementary businesses.

However, innovative housing organisations started pilot projects in outer districts and earned so far good results.

Thesis 5.5.2: There has to be a basic supply of housing organisations as well as potential co-operators to provide Homeservices.

This is not necessarily so, that there has to be a basic supply by the housing organisations. Also, in regions where there are (nearly) no housing organisations, a well developed offer of Homeservices was found. However, they are mostly provided by external service providers that go directly to the residents without a housing organisation as intermediary.

Thesis 5.5.3: More Homeservices are provided directly to residents than via an intermediary.

Most Homeservices are directly provided to the resident, as it is much more efficient than to go via a housing organisation. This applies particularly to small towns, where there are good informal communication channels. In big cities, however, housing organisations can be the intermediary to help providing a homeservice.

Thesis 5.5.4: If there are no housing organisations the role of intermediaries is more important.

The importance of an intermediary is not linked to the lack of a housing organisation but to the number of residents. In big conglomerations, intermediaries are much more important than in small towns. Housing organisations are one possible intermediary with the benefit of close contact to the resident.

Thesis 5.5.5: The more owner occupied houses, the less Homeservices.

It is not the question whether there is a large number of owner occupied houses but whether these are one- or two-family houses or multi-dwelling buildings. In the later type of houses we found a larger service supply regardless whether the dwellings are owner occupied or rented.

6 Sustainability Effects

The following chapter is based on the Austrian good practice examples that are listed in the Universe per Sustainability Dimension in annex 10.2. The first three subchapters describe the applicability of the sustainability criteria as well as the environmental, social and economic aspects of the good practice service examples. Within each description there is a part combining the sustainability criteria with the service areas and good practice examples and an additional paragraph on who provides most of the services that score high within this criterion. This should allow an interpretation of the sustainability performance of the providers.

In the summary in chapter 6.4., we tried to measure the sustainability effects and with simple calculations, it turned out that qualitative and quantitative results correspond.

In chapter 3.7., the theoretical background how the sustainability criteria were implemented is described. Therefore, here is only a short repetition of the main themes. The criteria for assessing sustainability of Homeservices have the particular problem, that they are measuring open systems. In an open system, the problem arises that no fixed point against which the potential impact of the service should be measured, exists. Even in a simple case, if one looks at a particular building and a service offered to its residents, it may be possible to see e.g. that a common room reduces need of individual space, but it cannot be measured exactly how much space is being saved – the result would always remain to some extent hypothetical. Therefore, the criteria for assessing the sustainability of Homeservices are bound to be 'relative criteria', indicating a move to a positive direction, e.g. "increasing employment", "promote environmentally friendly transport" or "reduce waste". No absolute value is involved.

Furthermore as a pragmatic solution it was suggested that if a service fulfils two of the three sustainability conditions (environment, social, economy), it could be considered sustainable.

The list of criteria for ecological, social and economic sustainability is given below.

Environmental aspects	**Social Aspects**	**Economic Aspects**
1 Material Use	6 Equity	13 Employment
2 Energy Use	7 Health	14 Financial Situation of the Residents
3 Water Use	8 Safety and security	15 Regional Products and Service Use
4 Waste and Emissions	9 Comfort	16 Profitability of the Company
5 Space Use	10 Social Contacts	17 Profitability of the Region / Community
	11 Empowerment	
	12 Information and Awareness	

Tab. 35: The set of indicators for sustainable Homeservices.

Finally, social and economic criteria are occasionally overlapping. However, is not necessarily a major concern since it reflects the situation that occasionally occurs in real life: some outcomes lie in the socio-economic sphere and should not be artificially separated.

To assess sustainability of Homeservices, a five-point ordinal scale of each indicator has been developed, and the Homeservices identified as potentially sustainable are rated along this scale. Table 36 depicts the rating scale with one example indicator from each sustainability dimension. As mentioned above, the indicators are relative, i.e. they indicate a move towards a positive (or negative) direction, e.g. a reduction in waste or an increase in employment. For a relative method the point of reference is an important element. For this method, the point of reference is the 'status quo' alternative where the service would not exist (i.e. the 'current situation' or the 'do nothing/base line scenario'). This would score 0 in the scale.

Both direct and indirect effects of the services have been included in the scoring. For example, a service that delivers organic food from the economic region has the direct effect of reducing the amount of vehicle emissions, since one trip can be made from the farmer to the consumers, instead of several by the individual consumers to the farmer. Furthermore, since the service promotes organic farming and food, the indirect effects is also included (e.g. environmentally friendly farming, healthy nutrition, etc.). The basis of what considerations the scoring was made was explicitly described whenever ticking a service.

Durability (environmental)							
The effect of the service on the life span of related products							
		-2	-1	0	1	2	NA
Shortens the life span of related products							Lengthens the life span of related products
Promote social self-help (social)							
The effect of the service on the social self-help, barter shops and swap internet sides							
		-2	-1	0	1	2	NA
Less opportunities							More opportunities
Employment (economic)							
The effect of the service on the employment							
		-2	-1	0	1	2	NA
Less jobs/job opportunities lost							More jobs are created

2: a major positive change
1: a substantial positive change
0: the service does not make a change to status quo
-1: a substantial negative change
-2: a major negative change
NA: not available/not possible to assess

Tab. 36: A condensed example of the ordinal rating scale with one indicator from each sustainability dimension.

To ease the reading of this chapter, it is proposed to refer to annex 10.2., and the Universe per Sustainability Dimension in the annex.

The following section explains in detail what effect services of the seven service areas have on the three dimensions of sustainability and their criteria.

6.1 Environmental aspects

6.1.1. Environmental aspects according to the sustainability criteria

Effect on material use

Reduction of material use is only affected by two service areas, *Supply & Disposal*, and *Counselling & Information*. While the service area *Supply & Disposal* has direct effects, the area *Counselling & Information* has indirect effects. Positive environmental effects can be achieved through the dissemination of information. *Counselling & Information* in nearly all areas in *Environment* and *Energy* have a high qualitative and quantitative effect; the latter being more difficult to judge.

For the use of hazardous materials, a switch to renewable resources, and the use of recyclable materials, the areas *Information* and *Supply & Disposal* are most beneficial. However, to attain a serious change in consumer behaviour regarding waste management, legal requirements like waste separation have to be implemented efficiently.

Since the mentioned service areas are not part of the core activity of housing organisations, these areas are primarily supplied by external service providers; *Counselling & Information* by non-profit organisations, and *Supply & Disposal* by commercial and public providers.

Effect on energy use

The effects of energy use are similar to the effects on material use. Again the same two service areas - *Counselling & Information*, as well as *Supply & Disposal* - lead to the same

direct and indirect effects. Especially for the service *Supply* with renewable energy sources, the privatisation of the market has allowed consumers to switch away from conventional energy sources. The increased costs to the consumers have acted as a brake, however.

On the other hand, also within the areas *Leisure Time Activities* as well as *Mobility & Delivery* there are quantitative effects. Through carsharing – as part of a changed mobility behaviour – as well as delivery services, the number of total privately driven kilometres can be reduced. This effect is also seen by the offer of common rooms for sports, social and cultural activities, which allow residents to stay in their building.

Many social services increase driven kilometres, especially in the outer districts of Vienna and on the country side. This can be countered by using natural-gas or bio diesel-powered vehicles.

The service offer in the area *Mobility* is provided primarily by commercial external service providers, while housing organisations have been responsible for the construction of common rooms.

Housing organisations only have little opportunity to react to *Mobility* problems. The main framework conditions that concern and restrict *Mobility* structures are described in chapter 2.3. Accordingly, housing organisations offer the parking areas that the law requires them to provide – one automobile parking space per dwelling – but do not supply effective *Mobility* services. Carsharing is provided in co-operation with external service providers. *Mobility* is seen as an issue of the resident and not of the housing organisation.

Effect on water use

This criterion is useful in production, and hardly applies to the investigated services. It is only applicable to the service areas *Counselling & Information* and *Supply & Disposal*. As with the criteria Material Use, savings in water consumption can be reached by raising the awareness and information of the resident. We also found construction measures like installing separate water meters for each dwelling, using rainwater, and recycling of grey water that target water and cost reduction. However, it can be assumed that there might be services that have a positive effect in water use, but until now these services do not exist.

Furthermore, the interviews showed that wells provide 50% or more of water on the country side. Thus water consumption cannot be reduced by raising prices.

Effect on waste and emissions

The results stated above for the effects on energy use also apply to the effects on waste and emissions. This is due to the fact that transport is included in this criterion and a reduction of transport also reduces the amount of volatile emissions. Again, the change to environmentally friendly fuels like liquid gas has significant effects on the environmental performance of transport[17]. *Mobility* services that use eco-friendly cars can easily score positive for this criterion.

Not only the services that are related to *Mobility* can have an effect on waste and emissions, but again services in the area *Counselling & Information* lead to changed consumer behaviour.

Concerning Water Emission, the same applies as to the criterion Water Use. Water Emissions are also most often related to production processes, so this criterion has only little relevance in describing the environmental aspects of most of the services. Again, until now, only few services have been detected that have positive effects in water emissions.

Effect on space use

This criterion affects primary construction measures outside of the building. Through the supply of various infrastructures, additional land is used and there is often a reduction of green space. Accordingly, there is a quantitative influence.

[17] The positive effect is due to a high potential of reducing emissions like CO_2, NO_x, etc., that destroy the ozone layer and contribute to the green house effect.

On the other hand, through space use on roofs – for gardens or just as green space – there is not only an increase in living space but also a positive effect on the microclimate of the area. This fact leads to a positive qualitative effect that plays a large role in the city and significantly improves the living environment. Building projects of Mischek and BUWOG are good examples where this was implemented (see chapter 5.1.4. good practice building).

6.1.2. Results of environmental aspects

The results show that within the service areas that have a strong environmental relevance, such as in *Supply & Disposal*, environmental benefits can also be high. However, the advantage of the Sustainability Evaluation Tool is to uncover the indirect effects of service areas such as *Counselling & Information*. They might not have any direct effects, but the indirect effects can be significant. In the service area *Leisure Time Activities*, a high environmental relevance can be seen in the construction measures that can reduce transportation. This effect is also an indirect effect.

6.2 Social aspects

6.2.1 Social Aspects according to the sustainability criteria

Effect on equity

Services that score in this criterion are primarily provided by external service providers. The highest scoring service areas are *Care & Supervision* and partially *Mobility*.

These services have qualitative effects, as disadvantaged people have a chance to increase their living standard. The examples for services include personal care, from the mobile nurse and the day mom for children, to the transportation of disabled but also meals on wheels, which gives elderly and disabled the chance to have a properly cooked meal every day.

Furthermore, in the provision of the service, there are very close contacts between the provider and the private life of residents. Since the relationship between housing organisation and resident is still quite cold, the services are most often provided by external service providers or as socially organised self help.

Effect on health

Positive effects on health are seen in many of the Homeservices. The primary services that have this effect are in the *Care* area, which are based on the fact that elderly people recover quicker at home than they do in a hospital. The care at home is however only possible with the aid of mobile nurses and therapists. *Counselling & Information* can also have indirect effects on this criterion, as the residents' awareness on health is increased.

One should not underestimate the effects of construction measures as described in the service area *Leisure Time Activities*. The direct access to sports facilities allows the resident to keep in shape without long trips to a fitness studio or swimming pool. The importance of regular endurance sporting activities is recognised in various studies. This also has a financial effect, as there is a reduction of money spent by the government and the resident on health care. These services therefore, have qualitative as well as quantitative effects, especially on the macro-economy. Of course, it depends on the individual on how much they use these services. The services only give them the option to use them as they please.

Effect on safety and security

This criterion affects almost all services within the service areas *Care & Supervision* and *Safety & Security*. The examples found, like visiting services, mobile nurse, or the emergency telephone are mainly primary and result-oriented services. Construction measures do not play a vital role for this criterion.

Services like surveillance or rented alarm systems primarily result in qualitative effects that can however result in quantitative effects as with vandalism prevention. They are mainly provided by external service providers. In some cases, especially in apartment and building

security, housing organisations and external service providers have created co-operations. These co-operations are necessary to avoid costs that probably can occur due to vandalism. It can be estimated that the costs of the service supply are lower than those of the destruction. As it is always the resident who pays, this service supply is beneficial, because the costs to provide the service are lower than the costs to remove destruction.

So far, the services in the area *Safety & Security* and *Care & Supervision* have the potential to reduce crime and vandalism as well as the risk of injuries.

Effect on comfort

Nearly all Homeservices in the Universe Austria have a significant positive impact on the comfort of the resident. This is the reason why housing organisations offer services and they are becoming even more important. There are two important factors that lead to an increase in comfort. The services help the resident to save time and they increase convenience and/or luxury of the residents. The conclusion is that mainly positive effects occur. There hardly are services with negative effects on comfort. Services in the service areas *Counselling & Information* and *Supply & Disposal* however do not score high on this criterion.

The distinction between the types of provider is that the external service provider provides this service as their core activity and the housing organisation provides it to attract residents and create stronger customer loyalty. This criterion is thus also very important financially to the housing organisation.

Effect on social contacts

Not regarding the classic social services that have a positive effect on social contacts, it is interesting that the various construction measures with a focus on common rooms – indoor and outdoor – have a strong positive effect on social contacts.

It is again the housing organisations that provide services that score high in this criterion. It is not surprising that there were complaints about the construction of elevators in buildings that lead to less spontaneous meetings between residents. Since the contacts were often not tight enough to invite a resident into ones dwelling, the importance of common rooms became apparent.

The importance of these social areas has always been known. This is the reason why large communal buildings have large green areas with quiet zones for the elderly, zones for the children and more recently zones for the dogs. As the trend is moving away from only providing living space to creating complex living infrastructures, these areas can now once again be integrated.

The argument that these areas are only possible in the outer districts where more space is available is not strong, as the ground floor of most buildings is not attractive to residents and could be used for common rooms. The obstacle is the Austrian laws for construction subsidies for these endeavours, as they only subsidise living space and not common areas.

Effect on empowerment

Within the good practice examples there are only *Counselling & Information* services, like counselling on energy consumption and reduction or counselling on change to renewable energy sources that have a positive effect on this criterion. For the rest of the services the question, whether the service increases opportunities of participation or provides new channels to residents toward decision-makers (e.g. electronic ones) is not relevant.

Effect on information and awareness

Apart from the *Counselling* services, there are hardly any services provided by the good practice providers that score positively in this criterion. *Counselling & Information* services focus primarily on the environmental sector and contribute not only to the increased level of information but also to increased awareness. These services are mainly provided by external service providers. Housing organisations do not provide them as they are not their core activity and invade the residents' private life.

6.2.2. Summary of social aspects

Homeservices can help to reduce general social problem fields. They can fulfil a preventative role to avoid social problems, as for example with common rooms that allow residents to communicate before any social problems arise. This aspect is an important part of the function of Homeservices and seems to be one of the major findings of this study.

An expected effect that is verified by the study's findings is that most services have a positive effect on the residents' comfort. Especially primary services, such as apartment cleaning, care taking, and information of any kind make life easier for the residents.

Positive direct effects can be expected from *Safety & Security* services that can reduce social tensions to a certain point. With vandalism prevention, an economic benefit can also be achieved. However, if social problems already exist, it is questionable if Homeservices can help remedy them.

Housing organisations do not primarily want to solve social problems themselves. The interviews showed that the housing organisations do not feel responsible for the social problems of residents, and would at the most be an intermediary between the resident and the social service provider. There are several specialists in the government and also in non-profit organisations that can help solve social problems.

6.3 Economic aspects

6.3.1 Economic Aspects according to the sustainability criteria

Effect on employment

A positive scoring within this criterion must be explained precisely. Of course a new service supply, either by the housing organisation or by an external service provider, creates new jobs or at least secures existing jobs. However, this criterion is aiming at new concepts that help to revitalise the job market. There has been an increase in socio-economic businesses that are run economically but also help long-time unemployed people to reintegrate into the workforce. These businesses are often in the service areas *Care & Supervision* and *Repairs*. More recently, there have also been co-operations between these kind of businesses and housing organisations that require workers to care for their buildings, for example in the Austrian project "Equal".

The most promising services to create new jobs are offered by external service providers in the areas *Care & Supervision*, *Repairs*, and *Mobility & Delivery* combined with activities by labour market initiatives to reduce unemployment. Examples are concierge or building care taker concepts, delivery services or special repair services.

Effect on financial situation of the residents

One important finding of this study was that the assumption that residents can save money through Homeservices is only realised in a few cases. These are restricted to *Counselling*, e.g. debt *Counselling*, *Information* on utility costs, etc. Fact is that Homeservices are linked to costs to the resident and this is the reason why public housing organisations hardly supply them, as their residents cannot afford to pay for them (Payr, 2003).

There are hardly any services that do not cost anything besides some socially organised self-help services, which are nonetheless also usually linked to costs. It is not desirable to offer services free of charge, because people often have the idea that what is for free is of no value.

Construction measures, like a swimming pool that can be used by the resident free of charge, have usually been paid for during construction. But since there is no monthly fee, residents often forget that they helped pay for it.

For several social services, especially in the medical area, there are income dependant prices for the residents. These services are most often provided by non-profit organisations that are supported by public organisations or the public health care system. As soon as the service is

provided by a commercial provider, the resident has to pay the service in full. This effect results from the fact that the service is usually the core activity and can only be charged in this way.

Effect on regional products and services

For a positive effect on regional products and services, there needs to be a regional provider. This regional provider is supposed to be an external service provider supplying directly to the resident or working together with a housing organisation. Housing organisations themselves normally act on a broader level, which means they do not only supply housing in one or two municipalities but most often within one or two federal states. So they mainly affect the regional situation during the construction of a building in employing regional craftsmen and other companies and later on by outsourcing services and maintenance work.

The Austrian good practice providers receive only very low scores for this criterion. Therefore, it is impossible at the moment to identify quantitative and qualitative effects. The same problem occurs as in the environmental dimension with the criterion water use, that actually no services that significantly affect this criterion have been detected until now.

Delivery services of environmentally friendly products achieve a positive direct effect. The services in *Counselling & Information* have positive indirect effects through raising awareness about the regional products and services.

Effect on profitability of the company

The effect on profitability of the company depends on who is providing the service. As soon as the service is provided by a commercial organisation, housing or external service provider, it has to cover costs. Even the most optimistic housing organisations do not believe that there are high profits in providing services, but providing services pays, as customers' satisfaction increases and the residents are willing to pay for more comfort if they can afford it. It should be noted however, that housing organisations are more regularly implementing long-term service projects, and giving it some time to become successful. This business practice is important, since Homeservices are a new concept and must slowly be integrated into the Austrian style of living.

There are no real direct subsidies for services, but some supporting measures for the service provision. If employees are hired with the idea to decrease unemployment, then the Austrian employment agency picks up parts of the labour or indirect labour costs. Both non-profit organisations like R.U.S.Z. and commercial organisations benefit from these subsidies.

Effect on profitability of the economy / region / community

From a macroeconomic perspective, there are a lot more benefits than from the microeconomic perspective. All educational services, as well as the social and care services are beneficial to the economy. Herein are included all *Counselling* activities on environmental issues also *Care* for the elderly or children like day moms or child-sitting and all the activities preventing social tensions and crime.. Homeservices that allow the employment of disadvantaged or long-time unemployed people also have positive ratings, so that the evaluation from the macroeconomic perspective is even more positive. This result should be strongly communicated as it highlights the importance of Homeservices for the economy as a whole.

6.3.2. Summary of economic aspects

For the scores of the entire dimension there are no significant patterns when relating to the service area. They rather depend on the organisation providing the service, if housing organisation, external service provider, non-profit, or commercial. This is different from the dimensions Social and Environmental.

When deciding on the variety of economic criteria, emphasis was given to cover both the macroeconomic as well as the microeconomic effects. The criteria include the economic effects for the residents, the service providers, and the people involved in providing the service. Most of the criteria focus on long-term economic effects according to the concept of sustainability.

A positive evaluation of a service therefore, results less in immediate monetary profit, but rather focuses on the long-term profitability of the organisation and of the region. These criteria are often underestimated since their effects are difficult to measure and usually do not show up on the balance sheet. They are, however, the supporting foundation of a sustainable economy.

6.4 Summary of sustainability effects

Below is an attempt to calculate the sustainability effects per service area and per sustainability dimension. This quantitative evaluation should correspond with the qualitative evaluation that was given in the three previous subchapters 6.1. - 6.3.

For the calculation in the following tables the average score per service area and criteria is listed. For example in table 37, for the criteria Material Use, the 13 listed services provided scoring in *Counselling & Information* have been added and divided by 13 to give the average score. As the scores have a range from –2 to +2, highest possible score is 2 (theoretically, the lowest possible would be –2). As we only deal with good practice examples our ratings primarily have positive values.

Below is the mathematical sentence to show this calculation:

$$\frac{\text{Sum of scores listed in one service area}}{\text{Number of listed services in that service area}}$$

Fig. 5: Equation to calculate the mean score for a service area

It will be recognised that some of the criteria do not lead to any evaluation. This is partly due to the fact that some criteria are still rather product-oriented, therefore primary services are difficult to evaluate in those cases. On the other hand it shows however, that at the moment possible services that score on that criterion are not yet available.

When comparing the service areas it must be taken into account that in the service area *Repairs* there is only one good practice service example.

6.4.1 Environmental Aspects of the Universe

In the dimension Environment, it is evident that the criteria used are related to products rather than to services. This is extremely evident with water use. Table 37 shows that the services we surveyed do not have any effect on water use.

	material use	**energy use**	**water use**	**waste**	**emissions**	**space use**	**Sum (maximum 12)**
Counselling & Information	1,4	1,5	0,9	1,2	1,8	1,0	**7,8**
Care & Supervision	0,3	0,6	0	0,6	0,5	0,3	**2,3**
Leisure time activities	0	1,5	0	0,4	1,8	1,5	**5,2**
Repairs	2	2	0	2	0	0	**6**
Mobility & Delivery	0,8	1,1	0	0,8	1,3	0,6	**4,6**
Safety & Security	0,3	0,5	0	0,6	0,2	0,2	**1,8**
Supply & Disposal	2	2	0,6	2	1,3	0,6	**8,5**

Tab. 37: Environmental profile of Austrian Homeservices

But at the same time one can notice that in general, service areas with a strong environmental relevance, such as *Supply & Disposal* can give concrete results, and allow for the best environmental effects. Surprisingly, the service area *Counselling & Information* shows similar results. Initially it was assumed that the service areas with a majority of primary services would have only limited environmental relevance and therefore the effects would be

minimal. The table shows however, that this is not true. The type of service (primary, secondary, etc.) does not determine the environmental relevance; it is rather the service itself that determines the environmental performance. This is also seen in the service area *Care & Supervision*, where most services are primary but have a high environmental effect.

The service area, *Repairs*, also shows a high environmental relevance. This is due to the fact that these product-oriented services extend the lifespan of products. The service area *Leisure Time Activities*, which consists of a lot of construction measures, also has positive effects that primarily result from the criteria energy use, emissions, and space use.

Table 37 shows that there is a strong fluctuation between criteria for each service area. There is not one service area that has high scores throughout the criterion.

6.4.2. Social Aspects of the Universe

Throughout the social criteria of the surveyed Homeservices, the fluctuations are not as strong as with the environmental effects. As seen in table 38, the sum of scores, which are out of a possible 14, are larger than the sums for the environmental effects. This finding shows that the social effects are more significant than the environmental effects.

	equity	**health**	**safety & security**	**comfort**	**social contacts**	**empowerment**	**information & awareness**	**Sum (maximum 14)**
Counselling & Information	1,6	1,7	0	0,8	1,8	1,5	1,7	9,1
Care & Supervision	1,7	1,2	0,8	2	1,5	0,3	0,3	**7,8**
Leisure Time Activities	0,5	1,9	0,5	1,8	2	1,4	0,5	**8,6**
Repairs	2	0	1	2	1	0	1	**7**
Mobility & Delivery	1,1	1,6	0,2	1,7	0,7	0,1	0,1	**5,5**
Safety & Security	1,2	0,3	1,5	2	1	0	0	**6**
Supply & Disposal	1,3	0,6	1	0,6	0,3	0,3	1	**5,1**

Tab. 38: Social profile of Austrian Homeservices

As expected, the service areas *Mobility & Delivery* and *Supply & Disposal* have rather low social effects, while *Safety & Security* has a higher social relevance due to the increased comfort to the resident.

It is surprising that the area *Counselling & Information* has the highest social rating, and not the area *Care & Supervision*. *Leisure Time Activities* also have a high social relevance even though there are a lot of construction measures, which do not imply social relevance. The findings also show that the criteria health, comfort, and social contacts have high scores. This can be explained by the involvement of housing organisations in creating a comfortable living space for their residents.

6.4.3. Economic aspects of the Universe

When looking at the sums, it is evident that the economic effects show the most similar scores among all service areas. Only *Counselling & Information* and *Repairs* have significantly higher scores than the rest. Within *Repairs,* the high scoring can be explained by the fact that the service provider is involved in a special re-employment project and thus contributes to a reduction of long-term unemployed people. Services in the area *Counselling & Information* score rather equal in four of the economic criteria, which lead to a high summarising score. Particularly within the criteria regional products and services as well as profitability of the region / community information services, e.g. *Counselling* on waste prevention or on reduction of energy consumption, gain a high scoring because they supply important knowledge.

	employment	financial situation of the residents	regional products and services use	profitability of the company	profitability of the region /community	Sum (maximum 10)
Counselling & Information	1,5	1,5	1,7	0,3	1,7	**6,7**
Care & Supervision	1,7	0,6	0,4	0,7	1,3	**4,7**
Leisure Time Activities	0,5	1,6	0,1	1,5	0,5	**4,2**
Repairs	2	1	1	0	2	**6**
Mobility & Delivery	0,8	0,7	0,4	1,2	0,8	**3,9**
Safety & Security	0,3	0,2	0,2	1,8	1,8	**4,3**
Supply & Disposal	1,6	0	1	0,6	1	**4,2**

Tab. 39: Economic profile of Austrian Homeservices

It may be surprising that the area *Mobility & Delivery* has the least positive economic effects, especially as most of the services are provided by commercial external service providers that rely on profitability.

The five criteria in the economic section cover as much of the macro and micro-economic dimension as possible. They do not only concentrate on the profitability for the service provider, but also on the residents, and the people directly offering the service. Criteria to identify the long-term economic effects are also included to make the sustainability concept complete.

6.4.4. Conclusion of Sustainable Aspects

The columns “sum” of table 37, 38 and 39 are summarised in table 40.

	Environment	Social	Economic
Counselling & Information	7,8	9,1	6,7
Care & Supervision	2,3	7,8	4,7
Leisure Time Activities	5,2	8,6	4,2
Repairs	6	7	6
Mobility & Delivery	4,6	5,5	3,9
Safety & Security	1,8	6	4,3
Supply & Disposal	8,5	5,1	4,2
highest score per dimension	**12**	**14**	**10**

Tab. 40: Sustainable profile per service area

When comparing the sustainability effects of the separate service areas, three essential results are evident:

- Even though all the surveyed services were good practice examples, the scores are relatively low. Only 2 to 4 service areas reach more than half of the possible score. These are in the dimension:
    - Environment: *Counselling & Information*, *Repairs*, *Supply & Disposal*
    - Social: *Counselling & Information*, *Care & Supervision*, *Leisure Time Activities*, *Repairs*
    - Economy: *Counselling & Information*, *Repairs*

  We can thus conclude that the environmental effects of the good practice services are only relatively low. We can also conclude that all the services and criteria show a significant social profile. For the indicators in the economic section, it must be stated again that there is no clear picture. This also implies that there is a large potential to optimise both with the service providers as also with the sustainability criteria. If using criteria that target services more specifically, higher scores might be attained.

- For the sustainability effects, it does not play any role if the services are primary, secondary or construction measures. It was initially assumed that primary services will not have large sustainability effects, which the results disproves.
- It is extremely surprising that the best effects were found in the service area *Counselling & Information*. Throughout all three dimensions, this area has the highest performance, while the other areas have distinct concentrations. The service area *Repairs* also has high performance in all three dimensions, but there was only one surveyed good practice provider, which was designed as a sustainable service provider.

To finally summarise the sustainability effects again four theses have been postulated.

Thesis 6.4.1.: Homeservices reduce environmental impact.

Services of the areas *Supply & Disposal*, *e.g*. provision of energy from renewable source, as well as *Repairs*, e.g. repair of household appliance, not only have a strong environmental relevance, but also their environmental benefits are high. Indirect effects also can be obtained with services in *Counselling & Information*, like *Counselling* on waste prevention and separation.

Thesis 6.4.2.: Homeservices have beneficial social effects.

Homeservices can act as a preventative tool for social problems. Examples for such services might be playground surveillance but also residents meetings where arising conflicts can be solved before they become too serious. However, as housing organisations do not intend to come to close to their residents, it is not the housing organisations' first emphasis to deal with the social aspects. Further, most Homeservices that were analysed had positive effects on the residents' comfort.

Thesis 6.4.3.: Homeservices help to maintain existing workplaces and create new jobs.

Homeservices can maintain existing workplaces as well as create new jobs. However, particularly for the latter, subsidies from the national employment agencies are necessary. This assumption is already proven by service providers like R.U.S.Z. or Sozial Global that offer Homeservices and create new workplaces with support from the employment agencies.

Many of the Austrian good practice examples stem from projects that were cross-funded by the unemployment agency of Vienna. This is also the most important stimulating option for the municipality to increase Homeservices and decrease at the same time.

Thesis 6.4.4.: Homeservices create additional profitable income.

The assumption that Homeservices directly create additional profitable income was not proven. However, from the interviews with housing organisations it became clear, that even though the Homeservice supply is not an instant gold mine, they cover their costs and more importantly help prevent serious costs arising from social problems. Indirectly, Homeservices contribute to the companies' profile by increasing customer's satisfaction and by making the dwelling more attractive.

Thesis 6.4.5.: Homeservices have a positive macroeconomic effect

In the sustainability profiles it turned out that educative, as well as social and care services not only score high in the social and environmental dimension, but they also have a significant macroeconomic benefit.

7 Actor groups perspective

7.1 National actor groups

To record the attitude of the different actor groups in each country all project partners carried out national actor group workshops. It was rather wide spread who was in the national actor group in the different countries. It ranged from residents, housing organisations and external service providers to representatives of energy and water supply companies, local government authorities and politicians from the municipality government.

To obtain comparable results the SWOT methodology was chosen for the first workshop. This method confronts strengths and weaknesses on an internal level, as well as opportunities and threats on an external level. To ease the distinction one might also distinguish between present (strengths and weaknesses) and future (opportunities and threats) situation.

internal - present	strengths	weaknesses
external - future	opportunities	threats

Fig. 6. SWOT scheme

In Austria, the first national actor group workshop took place in April 2003 at the Facility Management Congress. The participants were asked on their attitude towards Homeservices.

- Internal factors:
    - Strengths: External service providers look for market niches, where they can offer their services. They also expect that standardised product service packages would have a good opportunity. Residents want to have quick solutions for problems that occur in the dwelling.
    - Weaknesses: External service providers fear to invest in workers with special qualifications. The service supply demands high flexibility which is often limited by the regulated working hours. Also, the restricted Austrian system of trade licences is a hindrance. Residents are aware of the costs for using the services. Particularly if it is related to transport, high travel costs are expected.
- External factors
    - Opportunities: Housing organisations suppose that by offering Homeservices they can make their buildings more vivid and avoid living silos. External service providers can imagine offering additional services that are not their core business. Finally the residents assume a stronger social connection that contributes to a better “living climate” in the building.
    - Threats: Housing organisations see themselves forced to maximise the rentable area in a building so that there is no space left for common rooms. This is partly due to the Austrian system of giving subsidies. For external service providers, it is very difficult to estimate the consumers’ response to new service and their acceptance of it. Also the release of a new service on a rather small market causes costs. Finally some residents fear fraudulent intentions of services providers.

In this workshop, it turned out that there is a general interest in the Homeservice concept, but inspecting the details brought about a lot of obstacles and uncertainties.

7.2 The residents perspective

The residents' attitude towards the Homeservice concept is surveyed by different means. With a standardised questionnaire, interviews were carried out in all participating cities and towns. This led to a rough overview on the residents' service mentality. Additionally, students from a university course on facility management at the University of Kufstein carried out a similar study in their town and provided a seminar paper on the results.

7.2.1. The residents in Vienna and Litschau

In all cities, 50 interviews were carried out. In Vienna, particular attention was paid to have an equal amount of residents living in the city centre and in the outer districts. Also, the interviewed residents reflected the major age groups.

Out of the mentioned services that residents demanded in Vienna, approximately one third falls in service area *Supply & Disposal* and another third in the service area *Care & Supervision* (fig. 7). However, this only means that within both service areas some services are mentioned frequently. The services used most are Energy Supply in General and Waste Disposal in General within the service area *Supply & Disposal* and the Janitor, Supply of Cable, Satellite and Internet and Cleaning Service within *Care & Supervision*.

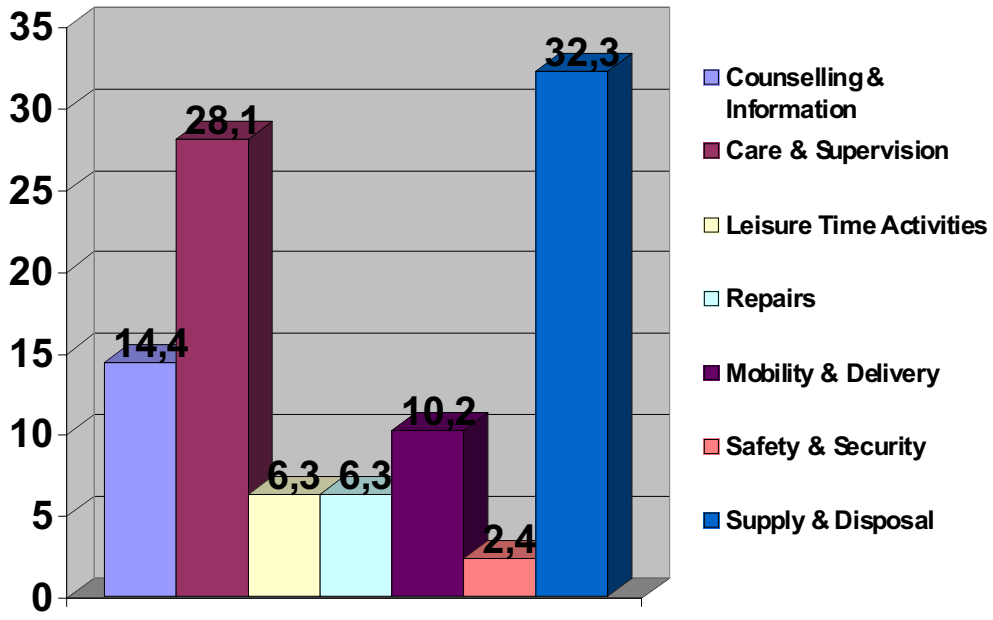

Fig. 7: Percentage of services mentioned in Vienna residents' survey, per service area

Regarding the demand for services, the areas *Counselling & Information*, *Leisure Time Activities* and *Safety & Security* show little demand. There is a slight demand for *Repairs* and *Mobility & Delivery*, while the highest demand is in the areas of *Supply & Disposal* and *Care & Supervision*.

In Vienna, the relative majority of stated services is used daily (37,5%) or weekly (32,2%), is known by the respondents because it is visible (52,5%), followed by advertisement (25,5%), is supplied by a commercial provider (42,1%) and is paid for (78,8%). Interviewees not willing to pay or pay more for improved services represent 78,8%.

There is also no clear link between the age of the resident and the demand for services. There is a small trend for residents above the age of 40 to use more services, but this is not conclusive as the sample of the population was pretty small. The link between the age of the building and the demand for services is also pretty small. There was the assumption that in older buildings, the service offer is less and cannot be implemented easily. This was not proven though.

It was further assumed independent of the statistical evaluation, that elderly residents living in old buildings are predestined to consume services like delivery service and help around the dwelling. On the other hand, the interest by younger residents for services is pretty small. The cause is the lack of information and primarily the costs linked to the service supply.

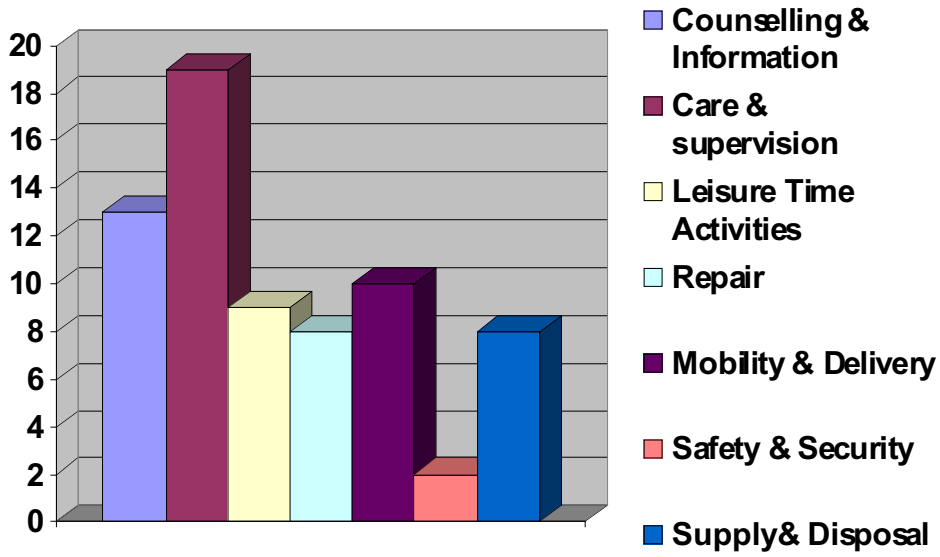

Fig. 8. Number of different services per service area that are used by residents in Vienna

Fig. 8 shows two important findings. Different services in *Care & Supervision* are demanded the most, whereas *Safety & Security* services do not play an important role. Only two different services were used. All the other service areas are demanded more or less equally besides in *Counselling & Information* where there is greater emphasis.

Because Litschau is very small in only 10 interviews were carried out. Due to the majority of owner occupied houses, only residents living in their own house were interviewed. Contrary to Vienna there is no link between rising age of the resident and the number of services that are used.

Residents in Litschau demand services from all service areas except *Safety & Security*. The services are mostly used daily (43,5%) or less frequently than monthly (34,8%), were known through advertisement (34,8%) and are in most cases supplied by commercial providers (78,7%). The majority of the services are paid (90%).

As shown in fig. 9, the largest variety of services is demanded in *Care & Supervision*, followed by those in service area *Repairs*. On the contrary, in *Safety & Security* not a single service was used. Those results are similar to the findings from Vienna, only that in Vienna *Repairs* services are not demanded that much. On the other hand it is typical for rural, not wealthy regions that emphasis is given to *Repairs*.

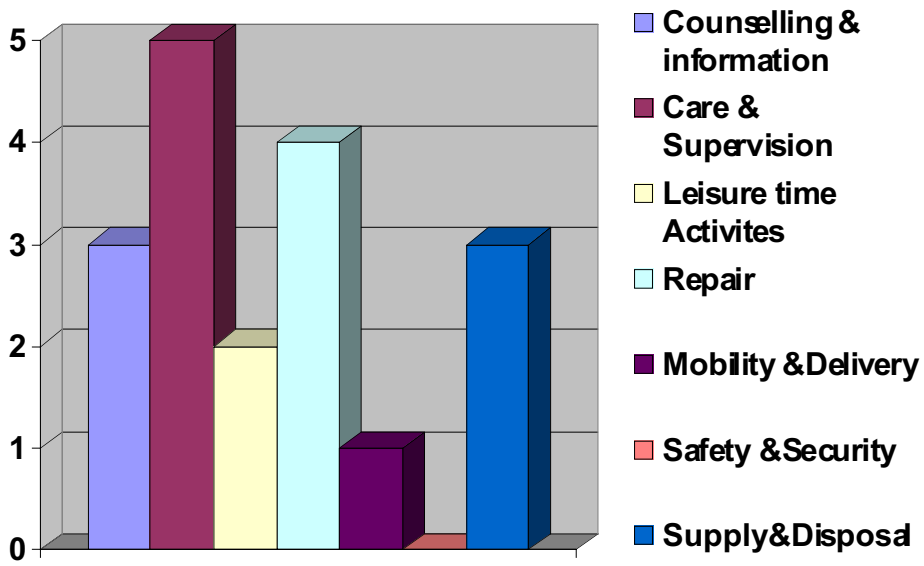

Fig. 9: Number of different services per service area that are used by residents in Litschau

Regarding the frequency with which single services are demanded, there is an emphasis in the area of *Supply & Disposal*, due to energy supply, the use of a well and waste disposal. As stated in the description of the sustainability dimensions, this service area contains a number of services, which are basic necessities and therefore are demanded very often. However these services contain a high optimising potential regarding their sustainability profile.

A second important field of service demand is *Care & Supervision*. The most identified service in this area is chimney cleaning. Although this service seems rather irrelevant concerning sustainability, its sustainability potential is not to be underestimated. Contrary to Vienna, where the housing organisation charges the chimney cleaner to come, Litschau residents, most of them living in single houses have to care themselves for this duty. Increasingly, chimney cleaners not only advise on ways to reduce air emissions but they also do maintenance and control testing. By these means, emissions can be reduced significantly and improve air quality and the region's emissions profile.

It is also interesting that no services from the area *Safety & Security* are demanded, and only a few from *Mobility & Delivery* and *Leisure Time Activities*. The area *Leisure Time Activities* contains a lot of construction measures, which are generally not provided in Litschau as there are no large housing organisations.

In the interview, services were mentioned that are not in the universe. These are niche services that exist for many years, such as the mobile baker or the butcher who deliver their products either once or more times a week. However, these activities are only a complementary business for those companies to improve the clients' relationship.

7.2.2. Thesis on sustainable housing

Within the resident survey a theses in ethnography was started under the title "*Sustainable Housing in the City of Tomorrow. Which social and cultural changes result from Homeservices.*". This thesis is based on interviews with residents in four housing blocks and thus supplied extra data on the residents' behaviour for the Homeservice project.

The key question of the thesis focuses on the influence of sustainable Homeservices on the residents´ behaviour. It is supposed that there might be changes in the neighbourhood relationships, that the housing community as such will undergo a development towards better social contacts. That might be due to the fact that lots of the Homeservices are based on joint use of products or on common interests of the residents. Finally it should lead to the question

whether sustainable Homeservices influence the development of social structures in building blocks.

The study is carried out in four buildings with rather different structure. All four are shortly described:

- **Private condominium**, Wienzeile 19, 1040 Vienna, Austria, managed by a condominium association

  This is an old stock building situated in the city centre and provides 10 dwellings.

  The building is owned and managed by a condominium association of relatives and friends. The dwelling has a very strong communication and integration profile, so most services are provided either via the condominium association or via socially-organised self help. Separate rooms for bicycles, wine, and wood are made available. Specially cleaned and energised water (Granderwasser) is provided to all residents. The cleaning lady who cleans the staircase also works in most dwellings and both offices. The two offices in the house act as service centres (key drop off, parcel delivery, messenger centre). It is also common that external service providers are organised by the condominium association, such an organic food delivery service, or a provider for renewable energy to most dwellings in the building.

- **Herrenhauspark Döbling**, Döblinger Hauptstrasse 52A, 1190 Vienna, Austria, managed by ig Immobilien

  This object was built about four years ago, is situated in the outer district of Vienna and provides 104 dwellings.

  The building complex leaves enough space between the dwellings for gardens and greens. Besides that, there is a common garden with a children‘s playground and a swimming pool in summer. The Management Centre is available 7 days a week and for emergencies a 24-hour hotline is installed. The residents are mostly international and the management centre provides all kinds of services from organising opera tickets to helping find one’s way in a foreign city, like help in renewing a drivers license, to more common services like apartment cleaning, gardening, and maintenance advise. The Herrenhauspark is surrounded by shops, public transportation, and still the living area is nice and quiet. As far as the suppliers are concerned, ig-immobilien and the Management Centre aim at lasting, amicable business relations that offer satisfaction and profit for both sides and are constantly reviewed to ensure punctuality, market prices and professional services with innovative solutions. Ig-immobilien and the Management Centre attach great importance to environment-friendly ideas, which begin at the planning stage of every project and extend through to the materials and consumables they use. They pass on this same philosophy not only to the suppliers but also to the clients and customers.

- **Autofreie Mustersiedlung**, Nordmanngasse 27-35, 1210 Vienna, Austria, managed by GEWOG

  This building complex was built about 8 years ago, situated in the outer districts of Vienna, managed by Mischek AG a commercial housing organisation

  During the construction of this building complex emphasis was given to reduction of resource consumption and use of ecological building materials Residents received the Mischek “Ecology Pass” that provides extra information on the building. This includes evaluation of the building material by the Austrian Institute for Construction Biology which is based on comfort, health, and ecological characteristics of the building. Services are provided such as home delivery of different goods, several co-operations with external service providers, and mediation. Carsharing cars are available. This is due to the fact, that the residents had to sign within their rent contract, that they will not have a car of their own. Existing parking lots are only for visitors.

- **Harlacherweg 2**, Harlarcherweg 2, 1220 Vienna, Austria, managed by GESIBA

  This building was constructed in the early 1960s. It is situated in the outer districts of Vienna and managed by a non-profit housing organisation. As a particularity, a swimming pool on the roof is offered to the residents, which is not usual in a social housing complex. In this building, the janitor was removed and a group of building care takers, that also

care for other houses, comes once a week for cleaning activities, maintenance and small *Repairs*. It will be interesting to see the residents' attitude towards this service offer as in the neighbouring twin-building the janitor is still at work.

The survey is based on personal contacts with residents. Emphasis is given on the comparison of residents, who already live in the surveyed housing blocks for years and those residents, who just moved in. In the study there is one object that is rather newly built. In that case the survey focuses on the comparison of the residents' former living situation to the actual one. The information and data are gathered by

- participating in daily life of the residents
- documentation in diaries
- non standardised questionnaires
- interviews with a guideline
- group discussions with the residents
- individual expert interviews with the responsible *Care & Supervision* personal (building care taker, janitor, concierge)

The thesis started in the summer of 2003. Interviews and field work are in progress and first results will be obtained in the summer of 2004. The foreseen end of the study is October 2005.

7.2.3 Results of the Kufstein university course "facility management"

In Kufstein, students carried out a small version of the Homeservices project for their university course on facility management in their community. Kufstein is situated in Tyrol in western Austria, near to the border to Germany. It has 15,000 inhabitants, with a significant growing rate in the last decade. Due to the particular situation of housing organisations playing not a prominent role in the housing market, which is similar to the Litschau findings, the survey focused on the residents' perspective.

52 interviews were carried out, most of them with young or middle aged people, nearly no elderly people (over 65 years) were interviewed. In the sample 21% were single households and 42% were three to four person households.

Their service demand contains nothing particular. They gather information from the black board of the housing manager and are interested in information on waste prevention. So far they live in a multi-dwelling building they benefit from a janitor. Similar to Litschau, infrastructure for *Leisure Time Activities* is common municipality space and often used. Most often, demanded services within the service area *Repairs* are the preventative inspections and the *Repair* service that consults at the dwelling. More than half of the interviewed residents use parking lots for their cars and bikes or a bicycle storage room. The use of this infrastructure is for free. *Safety & Security* services do nearly not exist, even infrastructure like evacuation light, which should be mandatory, is installed only in few cases. Apart from the basic supply with water and electricity, emphasis is given to waste management. Waste collection areas for separate containers for recycling are frequently used.

Improvements and extra services are demanded in the area *Safety & Security*. Additionally, some residents want to have a helpdesk, were they can find a trouble shooter in case of problems at the dwelling. They can imagine paying 20 to 50_ per month for this service.

Regarding the service offer by external service providers, it turned out that there is a rather "familiar" contact between provider and resident. This leads to "tailor-made" solutions that fulfil the individual need of the client. This mentality is typical for cleaning, pet care and *Mobility* services.

Furthermore, there is a well developed network of subcontracting companies that provide services in the service areas *Care & Supervision* as well as *Supply & Disposal*, but also for counselling on Energy and Environment.

Surprisingly, first contact between service providers and residents takes place via internet-platforms and other IT applications. Only in a second step or in case of a personal service a

face-to-face contact between both actors is established. This is an unattended result which might be linked to the age of the interview sample. In Vienna and in Litschau, where also lot of elderly people were interviewed, they use conventional ways of information, like going to an office or making a telephone call.

Although Kufstein is already a larger town, a lot of service providers emphasise personal contact as the most important marketing instrument. Service providers that supply C*are* or cleaning services primarily rely on that. However, in the technical field (energy supply and *Counselling*, maintenance, *Repair*), where only commercial providers supply services, traditional marketing instruments are favoured.

As a significant result from the survey arose the trend that the larger the service offer the more innovative is the providing company. A good example is the Kufsteiner Stadtwerke, which at the moment, apart from their core business as energy supplier, step by step is supplying the municipality waste management.

7.2.4. New services

Within the study, the residents' attitude was surveyed with a questionnaire that was based on the existing Universe Austria. To capture the residents' ideas, they were asked to propose new services, they want to have and use. These proposals are only made according to interest and ignore the cost for them.

Table 41 shows the most often mentioned new services that are not part of the Universe Austria until now. As the enumeration is rather scattered, it is difficult to find a common trend in what residents might prefer as services offer throughout whole Europe.

Vienna	Amsterdam	Bilbao	Helsinki	Lisbon
Library on wheels	Restaurant with low prices	Improved service information	ADSL-internet connection possibilities provided by the housing organisation	Wood cellar
Wake-up call	Windows cleaning (tall buildings)	wider range of services at common areas of the building	Possibility to buy repaired used household appliances	Home support done by the parish
Motorbike sharing	Better door lockers	improved internet security	Cash dispenser at building	CD / DVD rent with home delivery
Dry cleaning home delivery	Car parking facilities for short time periods		Janitor for the neighbourhood	neighbourhood library
Bike sharing			Monitoring and optimisation of building automation	Information on selected cultural events
			Recycling market	Improve the neighbourhood security

Tab. 41: Comparison of new services outside the universe

This overview shows clearly that the residents' interest is very much linked to the current national housing situation, which differs a lot in the participating countries. Therefore, a service that is common in Vienna like for example a recycling market, is a desired service in Helsinki. Also bike sharing that might be quiet usual in Amsterdam is a new idea for Vienna.

Also within the national proposal the service ideas are wide spread, coming from nearly all service areas. There might be a trend towards *Mobility*–linked services in Austria, with the motor-bike and bike sharing idea and a tendency to *Repair*–linked services in Finland with the recycling market and the possibility to buy repaired used household appliances. But over all, residents are rather creative in thinking of new services.

7.3 Housing organisations perspective

7.3.1. General aspects

Regarding housing organisations in Austria, it is important to distinguish between housing organisations that construct buildings and ones that manage buildings. Most often these are not the same. The interviews have shown that there is a significant difference between these types of housing organisations. The housing constructors see themselves as constructors and Homeservice providers, a very recent development that was not mentioned in the previous project in 2000/2001. Housing managers solely see themselves as pure mangers and administrators, who do not want close contact to the residents. The residents feel the same way.

The project developers and construction companies see themselves as service providers. At this point it is important to supply certain services and construction measures to be able to sell or rent the buildings. In contrast, there are housing managers that, especially in the old buildings of Vienna, have a very distant relationship to their residents.

Within the service range that housing organisations supply, there is an emphasis on cleaning services that can be provided outside of the home, e.g. with pick-up and delivery service. This can be used to build trust in the service provider, followed by offering services that are provided in the dwelling. There is a natural threshold that exists between residents and housing organisations that has to be reduced carefully.

There is a conflict of interests between the construction housing organisation, the housing management and the resident. If the first two are the same or belong to the same corporation, this conflict is not that important. As soon as the construction housing organisation includes additional infrastructure like common rooms, the costs are passed on to the residents in form of increased rent, or direct payments. If the residents, due to social conflicts do not use the common rooms, they feel the dwellings are too expensive.

It is important to recognise that residents often have a wrong impression of the form of payment when a housing manager introduces a new service into the building. They fear that the housing manager will often add the cost of the additional service to the utility costs (as with waste disposal costs), and residents pay for a service they do not use, and possibly do not want to use (Payr 2003). Furthermore, residents generally see the housing managers' billing as quite unclear and therefore would criticise additional costs (Vest 2003). However, as the good practice examples show, most of the services are billed by units consumed. So in this case a lack of information of the residents exists.

A well functioning service supply thus depends not only on the housing organisation but also on the individual user as well as on the building community. This is also evident from the interviews in Litschau.

7.3.2. Financial aspects

Regarding financial aspects it is difficult to detect common issues because the spectrum of services is too diverse. However, some common tendencies are obvious. In most cases the services are charged by units consumed. So whenever a service is provided to a resident it will be charged e.g. by hour and he or she will get a monthly bill apart from the rent and utility cost statement. Only very few services are charged per lump sum, or are included in the construction costs; this applies primarily to construction measure like the swimming pool.

Comparing prices is difficult as already said but we found an interesting relation.

Service	Provided by	Price per hour
Home sitting	HOs	11 –13 _
Cleaning and Washing service	ExSP, non-profit organisation	12 _
Laundry Service	HO	approx. 15

Tab. 42: Price of services per type of provider

Although these services are not identical and difficult to compare, there is an interesting fundamental result. It has been assumed that non-profit organisations provide services cheaper than external service providers and housing organisations, making their entry into the service market more difficult. It can be seen however, from the table that this is not true. Whenever Homeservices are charged separately, the average costs are _ 10 -15 per hour. Most housing organisations provide them in co-operation with unemployment projects of the municipality. The average price for an unemployed cleaning lady would be _ 7-10.

The subsidies that non-profit organisations receive from the municipality can also be acquired by the housing organisations if they run some employment project. This is a large benefit, since the social dimension of a service can be increased. This would not be possible for unsupported private organisations.

Concerning numbers of clients and success of a service it is nearly impossible to gain objective findings. There are key numbers from housing organisations on how many customers they need to run a service profitably. Some housing organisations state that they can profitably provide a service in an area of 300-400 residents, where 10-15% of the residents use the service. In one case the housing organisation expects 60% of total residents to demand a laundry service. This is in a high-income building with primarily foreign residents, who are used to a service supply in their building (Hübl, 2003).

The success of housing organisations is difficult to monitor and quantify as these service-oriented buildings have only been on the market for very short time. For external service providers, one can assume that as they have been on the market for over 20 years, they are economically successful, even if they receive subsidies, because these cannot cover continuous deficits.

7.3.3. The housing organisation as service provider

It is in the interest of the service provider to distinguish and seek out the residents interested in their service. From our surveys it can be deduced that the service user is young, single or with a small family, and has a high income. The proof for this is that most of the analysed buildings were financed by the residents, which automatically separates out the lower income groups.

As service supply by housing organisations is a rather new offer, no one has gone so far as to think of environmental or social concerns when implementing a service. Of course, environmental and also social issues are taken into account during construction of a building but only as far as they are common state of the art. There are only very few housing organisations going further (like Mischek does with its Building Pass). The most important factor for the service provision is comfort for the resident. By that, housing organisations hope to attract more residents and can differentiate themselves from other housing organisations in the market. Until now, most housing organisations have not acted as service providers. Now they have to present their new role to their clients. This is a completely new position, which has to be communicated first of all. Only one housing organisation was found that evaluates the clients' expectations. However, it can be foreseen, that with a wider spread of services these surveys will become more important.

Concerning co-operation with external service providers, it shows that often there are already close co-operations, because everything that is not core business of the housing organisation is outsourced to other companies. This includes cleaning as well as carsharing or the supply of IC technologies like cable or intranet. Even if the services are provided by own supply, these employees are part of a subsidiary.

Regarding hindrances of service supply, there are of course those commonly known services like information on a service or the cost involved. Also legislation as well as restriction of trade licenses can play a role. However, if a housing organisation is really interested in the implementation of the service there are means to overcome these obstacles (Kurzmann 2003). Getting into contact with potential clients is a question of functioning marketing. It should not be a problem particularly with newly constructed buildings where resident are on the point of moving in. The closest contact between the resident and the housing organisation exists in the phase of moving, so it is up to the housing organisation how it benefits from this contact. There are also different ways of financing a service. One might be the co-operation

within employment promoting measures, which allow the optimisation of a service supply so that it can stand on its own feet.

7.3.4. Future plans

The current pioneers in offering Homeservices allow two to three years to for the service to take off. The measures that are considered promoting factors during this time depend on the individual service and its framework.

Housing organisations do not like to talk about problems, but two problems have been clear from the interviews (Malloth 2003, Weinberger 2003, Ziegler, 2003). The good practice providers see the main challenge in urban development. It has become very difficult to find an attractive area in the city that the targeted type of residents would move to. The other problem is the costs involved in providing a service, especially for the housing manager who must transfer the cost of a service to the residents. These costs are particularly high in technical services. This results in a still small tendency for the creation of co-operations between the housing organisation and external service provider and charge the service per consumed unit.

Future plans only concern innovative housing organisations. Those housing organisations think of an implementation phase for new services of about 2 years. Within this period the status quo will remain, only with small adjustments so far as they are necessary. After these two years a review will be carried out to assess which services will be continued, dropped or included in the service offer. Housing organisations that are at least willing to enlarge their service spectrum a little, plan only small measures that, however, can help to make residents used to that kind of service supply and thus ease the implementation of a more elaborated service offer.

In Litschau, the municipality is the largest housing organisation. It owns and manages only 6 residential buildings with a total of 30 dwellings. These were built around 1950. The average size of the household is 2 residents, and the resident structure is diverse, with young families to single elderly residents (Zimmermann, 2003). The dwellings are regularly maintained and renovated to include state of the art equipment (new windows, central heating, etc.), but there is no incorporation of social or environmental factors.

Both the cleaning of the building and the maintenance of the green spaces is organised and done by the residents themselves. This practice has a long history, and does not cause any complaints. The only traditional services not provided by the residents are snow clearing and chimney sweeping, which are done by external service providers and the costs are added to the utility bills. Large-scale *Repairs* are also outsourced. Co-operations between residents and external service providers do not exist, as they would not want to carry the costs for a service they can successfully provide by themselves.

8 Opportunities for Homeservices

This chapter deals with the actual and future situation for the Homeservice provision. Already at the moment there are not only obstacles that hinder the supply, but also promoting factors. However, some of them might not be well known or demand to take a certain risk or simply need new ideas and creativity.

8.1 Obstacles and promoting factors

8.1.1. Political framework

It is easy to complain about politics and make them responsible in case a plan does not work. In fact, the strict Austrian industry regulations are often identified as an obstacle by the housing organisations. Trade licences are very strictly regulated to narrowly defined professions, which leads to the situation that a potential “free-lance janitor” would need 15 to 20 different licences. This would result in an extremely high administrative expense, which also costs a lot for the one, who applies for these licenses. This situation is also common to external service providers, if they want to offer a bundle of services that are not closely related at first view. But a lot of them have succeeded in overcoming this obstacle.

Also housing organisations face this problem, but most of the Homeservice providing housing organisations plan to deal with it by creating a subsidiary for facility management that has the legal rights to perform certain services.

The annulment of the janitor’s law forced housing organisations to think of new ways to fulfil the janitors’ duties. This included not only cleaning but also doing small *Repairs*, changing bulbs or checking for security. Without being forced by law as well as by economic factors the situation would not have changed recently. The survey showed that there are lots of concepts like “concierge” or “building-care taker”, which left space also for extra services. The municipality housing organisation, Wiener Wohnen, established a so-called “Hausbetreuungsgesellschaft”, which is situated at three bases throughout Vienna and fulfils the janitor’s tasks in the buildings. Commercial housing organisations offer service desks to their residents, where they can book complementary services that contribute to the residents comfort. One can say that without the need to fill this legal vacuum, new concepts would not have been developed so quickly.

Legal obligations are most often based on national or federal state laws. However, the municipalities also have a good chance to stimulate the provision of Homeservices by defining which areas are used for what kind of activity, as construction or green space, or as space to build common infrastructure. By providing this the municipality offers the possibility to small-sized commercial and non-profit external service providers to bring their service offer close to the residents. When regarding the development of new city districts in the outer parts of cities in the last three decades, one will recognise that in the 1970s and the beginning 1980s emphasis was given to constructing as much living space as possible and any kind of other infrastructure was missing. In these “sleeping cities“, a Homeservice provision is not possible at all. However the attitude changed and in recently built districts, there is often a well developed mixture of living space, basic infrastructure like shops, schools, kindergarten, churches and all kind of possibilities for cultural and sport activities, like cinemas, common rooms for use of private initiatives, youth centres, sport fields, etc. In these districts, the Homeservices provision will work out easily.

8.1.2. Economic conditions

Regarding economic aspects some common tendencies are obvious. Services must be paid, either by the one who consumes it, or by a subsidising organisation. This might be a public institution, but there is also the possibility that a service is partly cross-financed by the providing company, because the services improve the clients-company relationship or attracts new clients.

Concerning numbers of clients and success of a service, it is nearly impossible to gain objective results. There are key numbers from housing organisations on how many customers

they need to run a service profitably. Some housing organisations state that they can profitably provide a service centre in an area of 300-400 residents, where 10-15% of the residents use the service. In one case the housing organisation expects 60% of total residents to demand a laundry service. Housing organisations are in favour of external service providers that sometimes have difficult ways of informing their potential clients.

It is important to recognise that residents often have a wrong impression of the form of payment when a housing organisation introduces a new service into the building. They fear that the housing manager will often add the cost of the additional service to the utility costs (as with waste disposal costs), and residents pay for a service they do not use, and possibly do not want to use. The survey showed that in most cases the services are charged by units consumed. So whenever a service is provided to a resident it will be charged e.g. by hour and he or she will get a monthly bill apart from the rent and utility cost statement. Only very few services are charged per lump sum, or are included in the construction costs; this applies primarily to construction measure like the swimming pool.

However, one of the main obstacles to providing services or expanding existing services is the high indirect labour costs, which make employing more people financially difficult. Based on a net income of 7, 10, 20 or 50 Euro per hour, the additional costs for taxes and social security for the employer and the employee are between 90 to 120%. For the provision of labour intensive services, providers therefore may obtain subsidies for labour costs if they take part in a job creation projects. Most services are charged at _ 10-15 per hour. A private cleaning lady would cost _7-10.

Net income per hour (_)	**7**	**10**	**20**	**50**
Gross income (_)	10.10	16.17	35	94.96
Gross income plus cost to employer (_)	13.08	21.02	41.96	110.15
Total % in addition to net income	89.6	110.6	110	120
Assumptions: 40hours per week; 173 hours per month				

Tab. 43: Calculation of indirect labour cost percentage

To stimulate the job market, a lot of initiatives have been started to provide new jobs particularly in the service sector. These projects are often carried out by non-profit organisations or companies that receive special subsidies from the national labour market agency. The service offer focuses on the service area *Care & Supervision* and *Repairs*. The subsidies that non-profit organisations receive from the municipality can also be acquired by the housing organisations if they run some employment project, for example within a building care taker concept e.g. the Equal project (Payr 2003).

In general, it can be stated that most Homeservices are provided in co-operation between housing organisations and employment projects and they are included at the time when the dwelling is being constructed to make it more attractive on the market. The residents are willing to pay for additional comfort and time saving services if they can afford it.

8.1.3. Changes in the housing situation

In Austria, there is no competition between the housing organisations, as there is no shortage of dwellings. A large portion of small housing organisations and condominium associations in the Austrian market are satisfied with the status quo, and hence would not be interested in introducing Homeservices. The idea of sustainable Homeservices is even further removed from their interest. These organisations are not pressured to join the sustainability movement, as ones especially on the country side and in small cities do not have strong competition and have plenty of demand for their living space.

However, a few large housing organisations are prepared to further develop the Homeservice concept in the framework that exists in Austria. The primary obstacle here is the construction subsidies that make it difficult to provide services, especially construction measures. But with innovative concepts and taking a little risk, they can overcome these obstacles, as shown by the Austrian good practice building examples.

The supply of Homeservices by housing organisations is also influenced by the offer of external service providers that have their shops within walking distance to one's home. If there is a rich variety, it is not worth for housing organisation to offer the same service that is already provided by the externals. They only can succeed with new services. This is the reason why in the city centre the offer by housing organisations is rather small. In newly built quarters the offer is much bigger, because they most often lack those local shops.

In the old stock of buildings, the supply of common rooms is nearly impossible, which restricts the supply in the whole city centre of Vienna. There might be a possibility to use ground floor rooms that are not easily rented out as common rooms such as residents' cafés. This will stay rare exceptions, however.

Although Austrian housing organisations are rather conservative in their professional mentality, they are undergoing a significant change. More frequently than in former times they act as intermediaries for their residents. That means that a lot of them do not offer any services on their own, but they provide information to their residents whom to contact if they need a certain service. This information flow can work traditionally via telephone or an information board, but increasingly also via the internet. The easiest way is for the housing organisation to provide a small communication platform that might be a bench in the courtyard with some flowers surrounding it to stimulate social contact within the housing community and thus also the information flow. In Litschau, the municipality overtook this task, offered some meeting points, where citizens come together, chat, exchange information and also get new ones from all kind of information boards.

8.1.4. Life style

Service mentality within most residents is not yet well developed in Austria. This results from different sources. First of all was the attitude of saving money by doing a lot of things oneself. As many Austrians are gardening amateurs and own their little green space, the do-it-yourself mentality is wide spread. Second is the attitude that jobs in the service sector, particularly in cleaning etc. are neither well paid nor have a good reputation. Such an attitude of course limits the demand of Homeservices.

Apart from that, sustainability is a key word in politics. However, the concept behind it is not yet well known. Environmentally conscious people can be attracted with all kinds of environmental protection activities, but the same does not work out with sustainability. From the citizens front there still is no lobby for sustainability.

However, changes in life style contribute to a higher demand of Homeservices. Families with both parents working, people who are out of their home for most of the day are often not happy doing traditional type household maintenance when they are at home. Also, the dislocation of families leads to a higher demand in *Care & Supervision* services, concerning e.g. the care for an elderly family member. Restricted free time favours only short distance to the fitness-centre, the sauna or the swimming pool. Offering these recreational infrastructures improves the individual well-being and health and – in a large step further - finally results in reduced national health costs.

The most important aspects for residents are increased comfort and saving time. They are willing to pay for that if they can afford it.

So one can imagine that there is a large potential user group of Homeservices, however with one important limitation factor: money. A service must be paid for, at least partly, by the resident. In case of restricted finances, which is the norm for most families, no extra budget for Homeservices will be available. Sometimes however, Homeservices might even contribute to saving money, e.g. by carsharing. If the *Mobility* demand of a family is rather fulfilled by public transport and a car is only needed occasionally, then carsharing might be a lucrative alternative.

Apart from all these considerations, it should be kept in mind that Homeservices also can be provided as socially organised self help. As it was shown in the survey, this way of supply works well in small agglomerations, and it can be easily transferred to building blocks in large cities. Only very few are needed to catalyse this process. This might be a common area to

allow an informal get together and a well working information flow, which might start traditionally with advertising a residents meeting.

It will turn out that a good Homeservice supply is a mixture of all three actor groups, the housing organisations, the externals services providers and the residents.

8.2 Future development of homeservices

Throughout the report, theses arose that described a potential result and had to be proved or disproved by the survey's findings. Eight new theses follow that consider a potential development of Homeservices that at the same time finalise the study and predict the concept's future.

1. **Sustainable Homeservice demand is not linked to rent or ownership.**

   The legal form of the housing contract, whether a dwelling is rented or owned, does not play a role for the demand of Homeservices. However, it is important for the supply by the housing organisation. In the case of owned dwellings, the construction companies lose contact with the residents and the housing manager as well as the condominium associations mostly is not interested in supplying services. In the best case, they act as intermediaries to provide information. It can be assumed therefore, that residents in owned dwellings focus on the service offer of external service providers.

2. **Sustainable Homeservice demand is linked to the surrounding infrastructure.**

   The demand of Homeservices by housing organisations is influenced by the offer of external service providers that have their shops within walking distance to one's home. If there is a rich variety, it is not beneficial for housing organisation to offer the same service that already exists. The housing organisations will only succeed with new service ideas, particularly if they make use of their contact to the residents. Therefore, at the moment, offers like service centres are very popular.

   Apart from that, housing organisations are forced to offer services that the municipality stopped providing due to poor regional planning in the city suburbs.

3. **Sustainable Homeservice demand is linked to personal living situation.**

   There is a close link between the personal living situation and the demand of Homeservices. However, it does not say anything on the actual use of the services.

   In the case of someone who does not spend a lot of time at home due to work, earns a good salary, and wants to find his home nice and cosy when he returns, the demand for Homeservices is high and the services will be used a lot.

   In the case of someone who needs constant care for a sick family member, however, only earns a low salary, the demand for Homeservices also is high but the actual use will be rather low due to the cost. The only way to improve this situation is to give subsidies either to the resident or the service provider so that the costs are reduced.

4. **Homeservices are a marketing-instrument for housing organisations to help sell/rent the dwelling. Homeservices are an instrument for client integration and satisfaction. They do not need to make profit themselves, but increase profit in general for the housing organisation, as they prevent problems.**

   Only few housing organisations in Austria have already incorporated the Homeservice concept as part of their company philosophy. The same applies to the value of services as a marketing instrument. This is due to the fact that there is nearly no market pressure for the housing organisations, and that in large parts of the country they do not play an important role, as most residents live in owner occupied one-family houses. Therefore this thesis is proved in the good practice case studies, but does not reflect the average Austrian situation.

5. **Only services that give more comfort have a chance.**

   Although it is a little disillusioning, already now, the most important feature to demand Homeservices is comfort. This tendency will get even more prominent in the future. It is a

relict from the early “eco-movement”, that something is only acceptable from the environmental point of view, if it is linked to renunciation. This slogan does not attract anybody anymore.

6. **The design of the building and its common facilities define part of the Homeservice demand.**

   In fact the design of a building is very important for the provision of Homeservices. The availability of common facilities is directly linked to a service offer. This includes of course leisure time facilities that have already been described sufficiently. But it also includes that empty space is available for different uses. One example is the delivery service without the recipient being at home. Therefore there need to be drop-off boxes. In the case of food delivery, the drop-off boxes need a cooling facility. However, if nobody thought of that service during construction, no space will be available to place these boxes legally. So already when planning and designing a building, the architects as well as the housing organisations should reflect on a homeservice provision.

7. **An important way to promote sustainability is to address the already existing services and their providers.**

   Of course when entering the market with a new service, one can design its supply already in a sustainable way. However, this might be a disadvantage, because eco-efficient or sustainable services tend to have the reputation of being more expensive than “normal” services.

   It is supposed that the easier way to go is to address existing services, and assess how they can be made more sustainable. For example, all services that are linked to transport can be improved by changing the type of vehicle. Also, services in the service area *Supply & Disposal* possess a high potential of sustainability.

   It is the advantage of the Sustainability Evaluation Tool that a single service can be evaluated in all three dimensions with several relevant criteria. They clearly can show an improvement potential to make the service more sustainable.

8. **It is important to focus on developing innovative new services that could replace unsustainable (product–related) consumption patterns.**

   The change in consumption patterns from product-related behaviour to a demand of sustainable services is the major challenge for the next five to ten years. However, this change in life-style is not a national, but a European emphasis. As shown in the study, innovative housing organisations as well as all kind of external service providers have already started with the concept of Homeservices and as demonstrated they are successful.

   What is necessary now is to start a European campaign to inform the residents on the possibilities that exist and on the advantages they can gain from Homeservices. Public administration and politics are asked to make surrounding conditions more service friendly and thus stimulate the service mentality of all actor groups.

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