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Institutional Regimes for Sustainable Collective Housing :
The Müllerwis/Seilerwis Housing Stock, Greifensee, Zürich

Working paper de l'IDHEAP 2009b
Chaire Politiques publiques et durabilité
Collective Housing Stocks no 2

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L'Université pour le service public

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1.1 INTRODUCTION

1.1.1 Context

The publication of Our Common Future, also known as the Brundtland Report, provided the world with the now common definition of sustainable development, which is development that "meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (WCED 1987: 24). Although the concept of sustainable development is a recent one, housing research and initiatives that by today's definition would qualify as being grounded in sustainability have been numerous over the last 100 years, both in European countries and elsewhere in the world. Aside from various small-scale initiatives, however, the vast repository of knowledge we have acquired regarding housing sustainability has not yet been translated into practice at a mass housing scale.

We believe that one reason for this situation is that the influence of the ensemble of formal rules of private and public law and contracts between parties (i.e., institutional regimes or IR) on the sustainability of residential buildings remains largely unknown. Consequently, informed decisions cannot be made regarding systematic public action toward sustainable development. Thus it is vital that we understand how various actors react to changes in institutional regimes and how their resulting behaviour causes the housing stock to become either more or less sustainable. Only then does it become possible for public and private actors to have at their disposal the knowledge to make rational and legitimate decisions regarding building and urban renewal, and the ability to create innovative legislation at the housing policy level, all within the framework of sustainable development.

This publication describes one of six case studies in Switzerland, Germany and Spain that used the analytical framework of the institutional regime to analyse the evolution (sustainable or otherwise) of a housing stock. By analysing specific stocks, we attempt to address the following questions:

- How have institutional regimes affected the behaviour of the different actors that have direct or indirect influence on the sustainability of the housing stock at each stage of its lifecycle, from construction, to use, to demolition?

- How have the management strategies of housing stock owners adapted over time to changes in institutional regimes and how have these adaptations affected the sustainability of the stock? Furthermore, in cases where owners have a long-term sustainability strategy for their stock, have periods or instances of coherence between regulatory mechanisms allowed owners to better achieve their management and sustainability objectives?

- Are regulatory deficiencies (lack of regulations, inappropriate regulations, contradictions between regulations) the principle reason that, given the existing body of knowledge on housing sustainability, there is still a lack of mass sustainable housing on the ground?

1.1.2 About this working paper series

This working paper presents the results of one of six case studies on housing sustainability conducted in Switzerland, Germany and Spain. It is part of a larger international comparative research project conducted by the Swiss Graduate School of Public Administration (IDHEAP), Switzerland, the Institute for Industrial Building Production (IFIB) at the University of Karlsruhe, Germany, the Institute of Government and Public Policies (IGOP) at the Autonomous University of Barcelona, Spain and the Institute of Historic Building Research and Conservation (IDB) at the Swiss Federal Institute of Technology in Zurich, Switzerland.

This research is funded through the Swiss National Science Foundation's National Research Project 54 on Sustainable Development of the Built Environment, project 405440-107088. It is directed by Peter Knoepfel (IDHEAP, Switzerland), Niklaus Kohler (IFIB, Germany), Joan Subirats (IGOP, Spain) and Uta Hassler (IDB, Switzerland).

1.1.3 Outline of working paper

This remainder of this chapter describes the institutional regimes framework and how it is applied to the artificial resource 'the housing stock'.

Chapter 2 presents the context of the case study housing stock. It begins with a historical overview of the stock including a description of changes in management strategies in time as well as any ruptures in the use of goods and services. This is followed by an overview of the housing situation and housing policy over the period of analysis. It ends with a description of the criteria used for the selection of the housing stock and the resources and methods used for this research.

Chapter 3 is a detailed analysis of the goods and services of the housing stock. Each one is described in terms of the user-actors who use it, its uses, rivalries and complementarities that arise from its use, the effects that are a consequence of its use, relevant public policies, civil laws and contracts that regulate its use, and finally an evaluation of elements that will allow us to eventually determine the extent and coherence of the regime.

Based on the analysis of the previous chapter, Chapter 4 presents a discussion of changes in how user-actors have used the goods and services of the case study and in the stock owner's management strategies and whether these are related to changes in regimes. Chapter 5 is an assessment of the regime in terms of its extent and coherence and Chapter 6 presents some conclusions regarding the institutional regime of the stock.

1.2 ANALYTICAL FRAMEWORK - THE INSTITUTIONAL REGIME

1.2.1 The institutional regime

An institutional regime is the more or less coordinated ensemble of public policies, private laws (most notably property rights) and contracts that relate to all user-actors of a resource, who in turn affect the reproductive capacity of the resource and hence its sustainability. The institutional regimes analytical framework combines institutional economics and property

rights theory with policy analysis. The approach is one that is particularly relevant for the analysis of joint use situations in which several users find themselves as rivals with respect to the different uses of a single resource (Knoepfel, Kissling-Näf and Varone 2001: 11-48; Knoepfel, Kissling-Näf and Varone 2003: 1-58). The analysis is based on the institutional natural resources regimes framework developed at the IDHEAP. Further presentations of this analytical framework can be found in: Kissling-Näf and Varone (2000a), (2000b); Knoepfel, Kissling-Näf and Varone (2001: 11-48), (2003: 1-58); Nahrath (2003: 5-55).

The institutional regime allowing sustainable development is the result of a political process that has gone through three stages of evolution, shown in Figure 1.1, with each stage more comprehensive than the previous one (Knoepfel and Nahrath 2005). The most basic level (and thus incomplete) is the traditional environmental policy whereby policies are in place simply to restrict pollutant emissions. The second stage is that derived from the principle of sustainable development whereby regulations are supposed to guarantee the ecologically, economically, and socially sustainable exploitation of specific services provided by resources. Since these regulations are developed on a sector-by-sector basis and fail to consider the resource as a whole, there is a risk that the pursuit of selected goods and services will ultimately lead to the unsustainable management of the resource. The third level, which is the basis of the institutional regime, is a resource-based approach. This concept distinguishes between the sustainability of the exploitation of the entire resource and the sustainability of the use of individual goods and services. In essence, it is only possible to exploit the many goods and services of a resource sustainably if the reproductive capacity of the resource itself is not put at risk. Consequently, all users of all goods and services of a resource must jointly ensure that their extraction and use do not surpass the limit of its reproductive capacity.

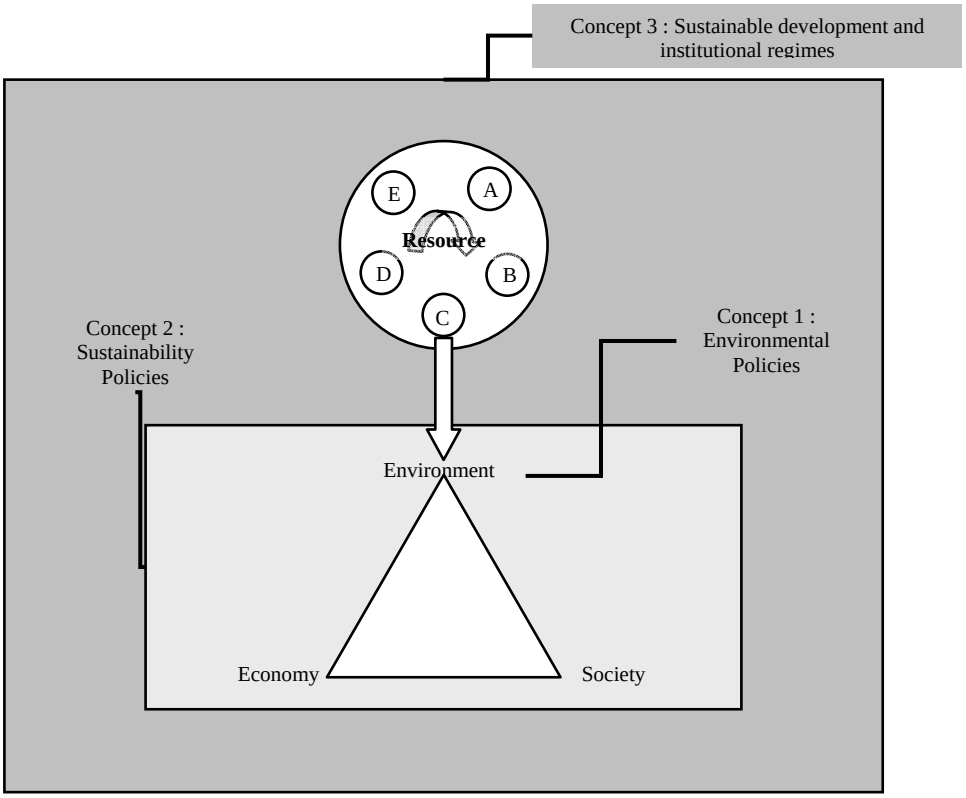


Figure 1.1: The different levels of conception of sustainability ***(source: Knoepfel, Nahrath and Varone 2007)***

The IR analytical framework (Figure 1.2) is useful for analysing a single resource that offers multiple goods and services that are used by different user-actors. User-actors are granted use rights to a good or service through regulations, which describe the conditions under which the good or service may be exploited. Rivalries between different user-actors occur when the use of a good or service by one user-actor interferes with the use of other goods and services by another actor. Conversely, complementarity occurs when a user-actor's use of a good or service helps other user-actors use theirs.

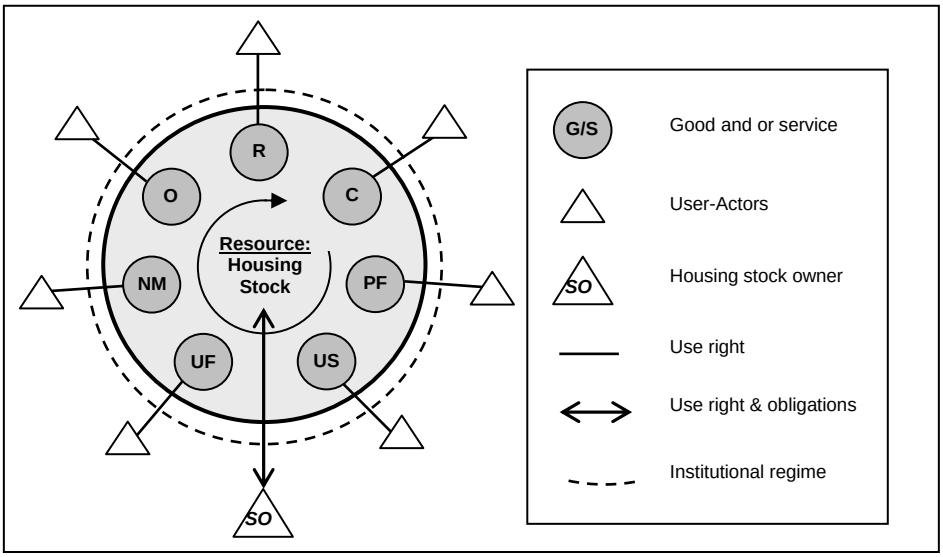


Figure 1.2: Institutional regime framework for housing stocks ***(source: Nicol and Knoepfel 2008)***

An institutional regime can be characterised by its extent and its coherence (Figure 1.3). The extent of the regime describes whether regulations exist for all of the uses of a resource. The coherence refers to the degree of coordination between the public policies, private law regulations, and the contracts that define the regime. An integrated regime (high extent and high coherence) is a necessary, although not sufficient, condition for the sustainable exploitation of a resource.

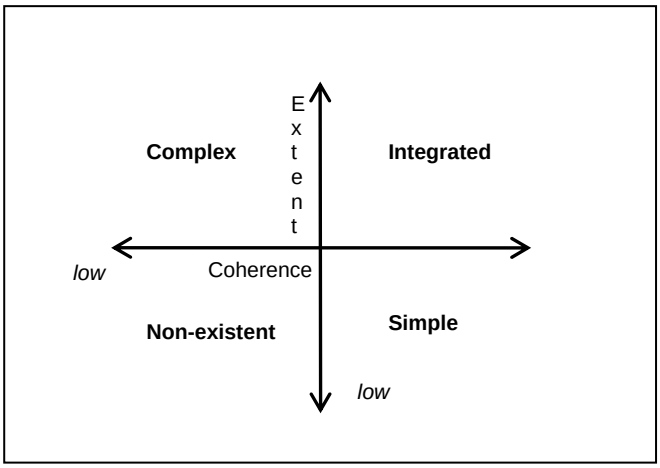


Figure 1.3: Characterisation of institutional regimes ***(source (inter alia): Knoepfel et al. 2001: 38)***

1.2.2 The institutional regime of the housing stock

Although the institutional regime analytical framework has traditionally been applied in the field of renewable resources, the concept is well suited for the analysis of non-natural or artificial resources. Accordingly, the housing stock is an artificial resource that offers several goods and services to several user-actors. The use of these goods and services can produce rivalries that in turn threaten the stock's ability to renew itself and thus disable its capacity to exist sustainably. Furthermore, institutional regimes have a strong influence over the behaviour of housing stock owners, who are the holders of property rights, and other user-actors, who have use rights to the various housing and non-housing related goods and services derived from the stock. These changes in behaviour can result in the sustainable or unsustainable evolution of the housing stock.

Research object: the housing stock

The artificial resource considered in the case studies is the housing stock, defined as a set of residential buildings belonging to a single moral person and for which this person has a certain strategy to manage it. It is this characteristic of common ownership, and not shared geographical location, that is the critical criterion for our definition of a stock. Management strategies and decisions at the housing stock level (such as contracting with a single service provider, or coordinating timing of renovation plans) mean that buildings in different neighbourhoods may have similar characteristics in terms of sustainability evolution.

Thus, although the buildings of a stock may be located in a single geographical area, this is not a necessary condition for selection of a stock. Nonetheless, since there may be regional variations in housing-related regulations and in district characteristics that can affect the implementation of strategies, some case studies focus on a substock (i.e. a subset of a stock existing in a specific district) as the subject for analysis. Finally, the case study housing stocks have existed long enough to have gone through several institutional regimes, they are of sufficient size, and they have been subject to some type of long-term management strategy.

Since our definition of a housing stock is based on ownership and not on location, a single neighbourhood may be composed of multiple stocks, each one belonging to a different regime (e.g. cooperative housing, investment, social housing, etc.). Urban planners must account for these different types of stocks when undertaking neighbourhood planning. They must unify the different strategies of housing stock owners and the regimes in which they function to create sustainable neighbourhoods. Ignoring these different regimes will result in a disjointed neighbourhood.

Components of the IR of the housing stock

The main components of the housing stock institutional regime as well as the consequences that arise from the interaction of these components are described below.

Goods and services of a housing stock

The fundamental units of the housing stock IR are the goods and services that are used by different actors (user-actors). These goods and services encompass a broad range of domains. The goods and services identified and studied in this research are listed in Table 1.1

Table 1.1: Goods and services of the housing stock

RS Residential	
RS 1 Living space	RS 2 Indoor climate and technical services
NR Non-residential	
NR 1 Non-residential space	NR 3 Functional indoor space
NR 2 Collective indoor space	NR 4 Collective outdoor space
PF Production Factor	
PF 1 Capital investment	PF 3 Labour investment
PF 2 Land investment	
US Utility Services	
US 1 Energy demand	US 4 Water sink
US 2 Material storage and sink	US 5 Water source
US 3 Material source	
UF Urban Function	
UF 1 Design	UF 3 Demand for institutional services
UF 2 Demand for transit-related infrastructure	UF 4 Demand for goods and services
NM Nonmaterial	
NM 1 Solving general housing needs	NM 4 Social and cultural diversity
NM 2 Solving non-housing needs	NM 5 Conservation and transmission of social and historical values
NM 3 Shaping the characteristic landscape	

One challenge to identifying the goods and services of an artificial resource such as a housing stock is that one must formulate the question counter-intuitively and rethink the resource as solely a *provider* of goods and services and not a receiver. Thus, a housing stock does not receive the service of electricity provision from electricity providers, but rather supplies a demand for electricity consumption that is used by the electric utility; investors do not provide capital to a housing stock but rather the housing stock provides an opportunity for investment to investors; and a school district may have the right to "use" the children of a stock for its schools.

Actors

Five types of actors interact within an institutional regime:

Housing stock owners have a central role in the institutional regime. Not only do they have a right to use their stock, but they also have an obligation to maintain it. They are entitled to the formal property rights of the stock and thus have the power to select, through contracting mechanisms, which user-actors have use rights on the goods and services within the restrictions set by public policy.

Several forms of housing ownership, however, either remove or obfuscate the relationship between the stock owner and the housing stock. As a simple example, a stock owner may conduct all transactions with tenants through an intermediary actor, such as a property management company, that not only deals with day-to-day tenant issues, but also makes key decisions regarding building maintenance and renovation. From a tenant's perspective, the owner is no longer responsible for the condition of the building or flat; this role is now that of

the managers. An even more complex relationship exists in cases of indirect ownership of housing stocks, such as is the case for real estate funds that may own dozens of buildings. In this case, the owner is the fund itself, which is financed by thousands of investors who purchase its stocks. These types of ownership models, whereby the owner either is far removed from the direct management of the stock or is a vague entity, highlights the importance of actors who take on ownership-type roles but who are not the owners of the property rights to maintain the sustainability of the housing stock. These can be simple actors, such as building caretakers, to complex actors, such as large property management companies.

User-actors directly use a good or service provided by the housing stock through two mechanisms. They either have a right to the use as described in regulations or they simply appropriate a use that is unregulated. User-actors can be divided into two general categories. Single-stock actors only have the use-right to the goods and services offered by a single stock (e.g. a tenant, who has the use-right to the living space of a specific flat in a specific stock). Conversely, multiple-stock actors have use rights to the goods and services offered by many housing stocks at once (e.g. wastewater collection and treatment services, which have the right to the wastewater discharged from many different stocks).

Actors affected by user-actors do not directly use a good or service provided by the housing stock, but they are affected by the user-actors' use of the stock. These can include environmental groups and housing associations amongst many others.

Excluded-actors are those potential user-actors who are excluded from exercising a use right on the building, e.g., individuals who want to rent a flat but who cannot due to a housing shortage.

Regulators create the regulations that dictate use rights of the user-actors. These can include bodies such as public agencies, the courts, and member organisations.

The strength of the institutional regimes framework is that it obliges us to include all decisive actors and to address the interaction between national and local level authorities. Actors whose behaviours influence the evolution of the building stock are not limited to the building owners and their tenants, but also comprise a broad range of stakeholders – such as mortgage lenders, energy and materials suppliers, renovators, and waste disposal service providers – who have various interests in the non-housing goods and services that building stocks provide. These actors and their activities are traditionally addressed on a sectoral basis, yet regulations that are intended to apply to one often have unintentional impacts on another, impacts that may cause behavioural changes that in turn produce negative pressure on the housing stock in terms of sustainability.

Uses of a good or service

Both the actual and the potential uses of a good or service by a user-actor, whether regulated or unregulated, must be clearly understood.

The *intended use* describes the purpose for which a user-actor uses a good or service. It is often (though not necessarily) what society considers a normal and acceptable use of the good and service. Conversely, the *abusive use* describes unacceptable uses of the good or service and comes in three principal forms: 1) potential abuses that are addressed or prevented by regulations; 2) abuses that are known to exist but that are not regulated since it is to the

benefit of a majority or a dominant group; and 3) abuses that are not clearly identifiable or that have simply not yet been addressed in regulations.

The *modality* of a use describes the temporal and spatial conditions of the use of the good or service.

Results of the IR of the housing stock

Rivalry, complementarity and conflict

For any finite or slowly renewable resource, the number of units of goods and services that can be used by user-actors must be limited if the resource is to retain its reproductive capacity. As a consequence, rivalries exist between the different user-actors who, collectively, may wish to use more units of goods and services than are sustainably available. Rivalry, in and of itself, is not necessarily bad – in fact it can promote efficiency in resource use and innovation. Furthermore, it can promote cooperation between actors, known as complementarity, which exists when one actor's use of a good or service intentionally or unintentionally aids another actor in their use of the same or another good or service of the resource. The institutional regime of a sustainably used resource regulates the rivalries so that user-actors can continue to use the goods and services.

If rivalries are not regulated by the institutional regime, however, they can develop into conflicts that may produce a use of goods and services that destroys the reproductive capacity of the resource. Conflicts can stem from unequal power relationships between different actors and their use-right to a good and service. Conflict can be the sign that the IR is not regulating uses in an adequate manner due to low extent, low coherence, or both.

The use of goods and services by actors, whether it produces rivalries, complementarities or conflicts, produce different types of effects.

Effects

Effects describe the consequences of a user-actor's intended or abusive use of a good or service. Although abusive uses, by definition, conventionally produce negative effects, an intended use can produce both positive and negative effects. We distinguish three principal categories of effects:

External effects are characterised in terms of the traditional sustainability dimensions, i.e. environmental, economic, social, and cultural. These effects are typically addressed by the traditional sectoral approach to regulation and sustainability.

Internal or rival effects refer to how the use of a good and service by one actor affects other actors and are the result of competing interests between different actors. There are two types of internal effects. In the first, the actors are homogeneous, i.e. they belong to the same group of user-actors. In the second, the actors are heterogeneous, i.e. they belong to different groups of user-actors.

Effects on the resource are the result of certain uses that have a direct influence on the reproductive capacity of the building stock itself.

External effects

A tenant uses the building's supply of *RS 2 Technical services and indoor climate* in an abusive way by turning up the heat while keeping windows open during winter months. The excessive energy consumption will have a negative effect on the environment.

Internal homogeneous effect

A tenant who uses *R1 Living space* abusively by hosting loud parties will have a negative effect on the other tenants in the building (tenant affecting tenant).

Internal heterogeneous effect

A renovator uses the *PF 3 Labour investment* service of the building to renovate the building to have better indoor air quality, thus having a positive effect on the building tenants (renovator affecting tenant).

Effect on the stock

A building stock owner chooses not to dispose his or her right to maintain the building grounds. The building stock deteriorates and eventually becomes unusable.

1.2.3 Regulation and appropriation

The behaviours of stock owners and user-actors, and therefore their use of a good or service and the effects resulting thereof, are constrained by an extensive set of regulations that describe the conditions under which the housing stock and the goods or services can be exploited. These regulations originate in private law (namely property rights), contracts and public policy.

Civil Law

Civil law defines the legal rights and relationships of natural and moral persons as defined by the civil code and the code of obligations *(code des obligations, das Obligationensrecht*) in Switzerland, the *Burgerliches Gesetzbuch* in Germany and the *Código Civil* in Spain. These address real rights covering real estate, buildings, ground rent, mortgages, land register, etc. as well as the obligations of private law stemming from contracts and legal liability which cover the sale of buildings, rental contracts and tenants. Private law is generally long term and undergoes changes less frequently or rapidly than public policies or contracts. It is in private law that two significant aspects of the institutional regime are found: property rights (of the housing stock owners) and some use rights (of the user-actors).

A housing stock owner is granted *property rights* and is subject to obligations under private law. The civil code grants the property right, the right to hold the formal title of the property generally guaranteed by the state and recorded in a registry. The holder of a property right has the right to benefit and freely and completely dispose of his or her property within the constraints of the law. It describes the rights and obligations of owners toward their housing stocks. As holders of property rights, the stock owners have 1) the right to control and to

make decisions about the housing stock that belongs to them; and 2) the right to obtain at least a portion of the benefits produced by the housing stock. In principle, these two features of property rights guarantee the existence of an interest by the owner to manage the stock sustainably (Nahrath 2003).

Although some use rights and obligations of tenants and investors are described in civil law, most use rights are addressed by public policy.

Public policy

Public policy is the set of policies that forms the foundation of public law, which deals with relationships between persons and the State. It derives from the State's attempt to solve what it considers a public problem and is expressed in the body of laws, regulations, decisions and actions of government. There are many variations in the definition of public policy, but we choose to apply an 'operational' one, defined by Knoepfel et al. (2007: 24):

"A series of intentionally coherent decisions or activities taken or carried out by different public and sometimes private actors whose resources, institutional links and interests vary, with a view to resolving in a targeted manner a problem defined politically as collective in nature. This group of decisions and activities gives rise to formalised acts of a more or less restrictive nature that are often aimed at modifying the behaviour of social groups presumed to be at the root of or able to solve the collective problem to be solved (target groups) in the interest of the social groups who suffer the negative effects of the problem in question (final beneficiaries)."

Examples of public policy areas include water protection and national or regional land use planning.

Public policy has a direct impact on both housing stock owners and other user-actors. Firstly, public policy places limits and restrictions on the rights of stock owners accorded them by property rights. For example, water protection policy prevents a stock owner from dumping untreated wastewater from the building stock into water bodies. Secondly, it accords use rights to persons other than the stock owner. Use rights are the legally authorised uses of the resource or its goods and services to the benefit of the holders of such rights (i.e., user-actors). Use rights can either be obtained directly from the stock owner, or are the result of attribution or redistribution of rights resulting from the implementation of a public policy. For instance, municipal wastewater treatment services are granted the use right to the wastewater from the building stock under the condition that they treat the water to an acceptable level and dispose of it appropriately.

In addition to limiting property rights and granting use rights, public policy can affect the use of the goods and services of the housing stock indirectly. Rather than impose conditions directly onto either the stock owner or the user-actor, they instead provide certain benefits or restrictions that may or may not be used in a housing context. For instance, housing stock owners may be granted low interest loans with a long payback period on the condition that they build flats that conform to certain standards; public aid given to low-income families may or may not be spent on housing; and energy companies may be given subsidies to produce environmentally friendlier energy.

Contracts

Contracts are agreements between two or more parties, enforceable by law, to perform or to refrain from performing some specified act. Although the legal conditions and enforceability of contracts are described in private law, contracts in this context refer to the content of the agreement between parties, and are thus considered separate from private law regulations. As long as contracts conform to the law, they can contain any number of stipulations. It is the effects of these stipulations on the behaviour of the different actors that are of interest.

Contracts are much more flexible than private law regulations or public policy. They can be rigid or flexible, exclusive or multi-party, and long or short term. In the housing institutional regime, the right for two or more parties to draw up a contract stems from the property rights of the housing stock owner. Without ownership of the stock, contracts cannot be concluded. Contracts are typically drawn up between

- stock owners and user-actors (e.g. to describe the conditions of a loan from a financial institution);
- stock owner and the State (e.g. to connect a new building to the municipal sewerage system);
- user-actors and the State (e.g. electricity provider signs servicing contract with a city); and
- user-actors and user-actors (e.g. cable television provider concludes a service contract with a tenant).

Third Party Regulations

Third party regulators are organisations that have the right by law to develop and enforce norms and regulations under which persons must act. Membership organisations can also have sets of regulations that must be followed by their members. In some cases, a user-actor must belong to the member organisation to be able to lawfully exist. In other cases, the benefits of belonging (or the disadvantages of not belonging) are so great that a user-actor is in fact obliged to join. In these cases, sets of internal rules strongly influence the behaviour of user-actors.

1.2.4 Extent and coherence of an institutional regime

Extent

The extent of the institutional regime describes whether regulations exist for all of the uses of a resource. Typically, most goods and services of housing stocks are regulated to some degree; however, a good or service may be sufficiently or insufficiently regulated.

A sufficiently regulated good or service is one in which all aspects of use are addressed. For instance, *RS 1 Living space* could qualify as sufficiently regulated if there are regulations addressing the various components of a tenant's use of the living space, such as tenant protection, housing assistance, rules of tenant conduct, etc. Conversely, an insufficiently regulated good or service may result in conflict. For example, *NR 4 Collective outdoor space* could possibly be qualified as insufficiently regulated if there were rules stating that tenants

are permitted to use the courtyards and walkways connecting the buildings, but there is a regulatory gap concerning what type of activities are or are not permitted (e.g. children playing football on the paths may come into conflict with older tenants who gather on the paths to discuss football).

Practically speaking, it is neither always possible nor desirable to regulate every small aspect of use of a good or service. Yet when conflict arises, one possible cause is insufficient regulation. If a regime contains too many insufficiently regulated uses, it has a low extent.

Coherence

The coherence of a regime refers to the degree of coordination between the private law regulations, the public policies and the contracts that define the regime. A coherent regime is one in which:

- use rights (derived from property rights through contracts) are clearly defined.
- there are no contradictions between public policies of a regime
- there are no contradictions between contracts (or property-rights) and public policies

Note that contradictions do not refer to illegal stipulations in a law, policy, or contract; rather they refer to the situation whereby an actor adheres to the stipulations of one law thus making it difficult or impossible for the same actor or another actor to follow the stipulations of another law. They may be especially evident in regulations that come from two different legislative bodies, such as from the federal and from the regional level. The more a regime is uncoordinated and incoherent, the greater the probability that there exist unwanted effects from the use of the housing stocks' goods and services.

As with extent, the presence of a conflict between actors *may* indicate where regulations are incoherent; it is only a clue, however, and not a definite indication of the existence of contradictions between regulations. Incoherence of regulations may be identifiable when court decisions, tribunals, appeals, etc. have been needed to resolve a conflict.

To summarise, conflict does not necessarily indicate insufficient regulation of a good or service or incoherence between regulations. However, the presence of conflict is very useful for indicating where these problems might exist, and it is the responsibility of the researcher to analyse the pertinent regulations to determine whether this is the case.

1.3 THE RELATIONSHIP BETWEEN HOUSING AND ITS REGIME

We are able to make certain hypotheses regarding housing stocks, their institutional regimes, the use of their goods and services, their management, and sustainability. Although it is inappropriate to evaluate the validity of these hypotheses based on a single housing stock, the analyses of the case studies provide useful insights into institutional regimes of housing stocks, as discussed in Chapters 4 through 6.

Hypothesis 1 – Variance of strategies and use over time

The management strategies and the behaviour of user-actors entitled to use the goods and services of housing stocks show clear variances over time. These can be interpreted in part as reactions to changes in a) use rights and/or b) the practices of other user-actors who hold use-rights. Essentially, changes in management strategies and actor behaviours should not be perceived only as "autonomous" decisions but – at least in part – as the consequence of a changing institutional regime. There are three possible reasons for such changes:

1. New definitions of the rights and obligations of actors entitled to the housing stock's *RS Residential goods and services* (e.g. introduction of flat ownership and elimination of forms of collective ownership);

2. Changes in the definition of the use rights to non-*RS Residential goods and services* at the level of basic property rights (e.g. mortgage law, real estate law, law relating to employment contracts, material and energy supply regimes), which also include the rights of the property rights owner (i.e. the stock owner) to conclude contracts with user-actors;

3. Changes in the public policies that regulate the exercise of the rights to goods and services.

Hypothesis 2 – The regime and the physical condition of the housing stock

Stock owners' management strategies and user-actors' behaviours give rise to demonstrably unsustainable uses of housing stocks if one of the three following conditions regarding the institutional regime is fulfilled:

1. The regime is simple: the number of regulated uses is clearly lower than the number of uses of goods and services provided by the housing stock that are actually availed of;

2. The regime is complex: the rivalries between the different (regulated) goods and services are not regulated due to the lack of binding coordination mechanisms governing the actors authorised to use them;

3. Coordination mechanisms exist, but the regulation of the rivalries favours the use rights to non- *RS Residential goods and services* with the result that the housing stock effectively becomes the "goose that lays the golden egg" and the entire resource stock comes under threat.

In this third circumstance, the physical deterioration of the fabric of the housing stock arises since the regime makes it possible for the housing-related goods and services to be treated as secondary to the other goods and services. Sustainability-oriented political control of housing stocks must include veto positions in favour of actors with use rights to the goods and services that are of importance in terms of the use of housing for living purposes. Consequently, the existence of associations of tenants can be important for the sustainable use of the housing stock's goods and services. For instance, housing cooperatives guarantee the voice of tenants is heard since a) the tenants are investors in the stock, and b) they have voting power on issues at annual general meetings. Other tenants in housing stocks attempt to create such groups to ensure that the residential goods and services remain the priority over non-housing goods and services.

Hypothesis 3 – Importance of non-residential goods and services

The veto position described above can be implemented through legislation on collective property (e.g. state-owned housing, housing cooperatives) or use rights to the goods and services of housing stocks that are important for residential uses. The modification or abolition of this property status due to changes to the forms of ownership of housing stocks (e.g. switching from public to private ownership) is thus important for the sustainability of the uses. We assume that such collective forms of ownership promote sustainability; however, use rights that can only be exercised on a collective basis have the potential to undermine the sustainability of the housing stock if they "stifle" the rights to the non-housing-related goods and services provided by the resource.

This hypothesis is targeted against the ideas that approve collective forms of housing ownership in principle and *a priori* as being highly sustainable in terms of their use. Its empirical confirmation would support the assumption that housing stocks are only permanently viable if their regimes grant use rights to their non-residential related goods and services.

In fact, non-residential uses can have a large impact on the use of residential ones. For instance, in many countries the amount paid for rent consists of two components: the cost for renting the flat and the costs associated with all of the additional uses of goods and services that go along with using a flat, such as technical services (electricity, heating, water, etc.) and parking spaces. These additional costs should not be neglected as they risk becoming a greater component of overall rent to the tenant. The introduction of "facility management", which includes not only the above categories of goods and services but also lifestyle goods and services such as home security, golf club memberships, schooling, etc., will result in further additional costs that could overtake the purely residential ones.

Hypothesis 4 – Continuity of key actors

The sustainable use of housing stocks is only possible if the most important user-actors remain the same over several phases of the life cycle of housing stocks. High rates of turnover would result in increasing interaction costs, the loss of the collective memory of the housing stock, and possibly even confusion over who has what rights to which goods and services. Nonetheless, the regime must accommodate a minimum level of replaceability of user-actors to eliminate the threat of the under-use of important goods and services. Thus, this hypothesis contradicts common perceptions whereby sustainability demands either higher or lower levels of flexibility than unsustainable uses of buildings; the former (i.e. higher flexibility) being associated with a conceptualisation that is close to the market and the latter (i.e. lower flexibility) being associated with a conceptualisation that is close to the State. Neither of these extreme positions can guarantee a sustainable use of housing stocks.

This hypothesis says little, however, about the relationship between sustainability and individual home ownership. Whereas some countries, such as Switzerland, have a low home ownership rate, others, such as Spain, have a particularly high one. Swiss housing policy encourages increased ownership, whereas Spanish policy encourages rental. This indicates that there currently is no preferred strategy for sustainability, and that a mix of ownership and rental may be desired.

1.4 CONCLUDING REMARKS

Although housing is but one element of the built environment, many of the actors who use its goods and services are active primarily within other domains of the built environment, such as banking, insurance (e.g. pension system), or utility services. If housing stocks are to be an element of a sustainable built environment, they must not only develop sustainably themselves but their goods and services must be able to be used sustainably by other actors of the system.

We anticipate that this research will produce critical information that will be used to make more informed decisions about housing sustainability.

CHAPTER 2 – BACKGROUND OF MÜLLERWIS/SEILERWIS

2.1 HISTORICAL OVERVIEW OF THE MÜLLERWIS/SEILERWIS HOUSING STOCK

2.1.1 Description of the Müllerwis/Seilerwis housing stock

The Müllerwis-Seilerwis-Burstwiesenstrasse housing stock (hereafter referred to as Müllerwis/Seilerwis) in the town of Greifensee, canton Zurich, is currently one of many real estate assets owned by the Credit Suisse Investment Foundation (CSF). Previous to its purchase by the CSF on October 1st, 2003, the Müllerwis/Seilerwis development belonged to the Swiss insurance company Winterthur-Versicherungen (since bought by AXA).

Built between 1968 and 1973 by the developer Ernst Göhner AG, Müllerwis/Seilerwis contains 476 flats distributed among 15 low-rise and 4 high-rise buildings spread over 65 000 m2 of land. It is currently undergoing an extensive renovation programme that will be completed in 2010.

Construction phase (1968-1973): Ernst Göhner AG

The Müllerwis/Seilerwis housing stock is one of numerous large-scale housing developments of canton Zurich that was built in the 1960s by the general contractor Ernst Göhner AG using the prefabricated slab system (*Grossplattenbausystem*). This construction technique enabled the very rapid erection of Müllerwis/Seilerwis and other large housing developments, which was particularly important for alleviating the severe housing shortage that had hit Switzerland. Much of the housing built in this and other housing developments in Greifensee had a similar appearance, partly because construction was done by a single company but also because the design was in accordance with a spatial planning model that called for controlled development and a uniform style. This spatial planning model developed for Greifensee was considered a trial for all of the communes of the agglomeration of the city of Zurich (Frei 2006: 202).

At the time of construction, the estate offered many apparent benefits: the design of green spaces was considered well conceived, high-capacity public transportation was located within close walking distance, the new buildings were clearly separated from the historical old town and the cost of construction was low. Moreover, the quality of acoustic insulation, thermal insulation and comfort was higher compared with conventional buildings of the time. However, one consequence of the prefabrication was lack of diversity of floor plans; the 249 dwellings in the low-rise buildings of Müllerwis/Seilerwis contain only five different floor plans and the 225 dwellings in the high-rise buildings are arranged in only three floor plans. The monotonous design and the height of the buildings soon came under criticism.[1]

[1] The construction of the Müllerwis estate, along with other similar large housing estates built in the same period, was not universally popular. The specific case of Greifensee and its developer, Göhner SA, was briefly addressed in a highly publicised book published in 1972 entitled *„Göhnerswil" Wohnungsbau im Kapitalismus (*Autorenkollektiv an der Architekturabteilung der ETH Zürich 1972). Given the controversy surrounding this book and that many of the statements made in it are not verifiable today, it was not used as a reference for this case study. Nonetheless, the reader is encouraged to read it as it presents a very interesting perspective on Ernst Göhner's housing construction activity.

First ownership phase (1968-1992): Winterthur-Versicherungen

The investment funds for the construction of Müllerwis/Seilerwis came from the Winterthur-Versicherungen AG, who then took ownership of the stock and used it as a life insurance investment asset. During the first year of the stock's existence, tenants, who were mostly young to "middle age" familes, were generally pleased with living conditions and vacancy was low.

With the economic slump beginning in 1974/1975, however, many of the flats became (temporarily) empty. But the town of Greifensee still clearly had appeal to newcomers as many city-dwellers wanted to move to and live in "the countryside" (Zimmerman 2006: 56; Weibel 1989: 6). Nonetheless demand changed through the course of time and by the mid-1980s living in housing developments such as Müllerwis/Seilerwis was no longer considered "in". Many of the first renters of the early 1970s moved to more luxurious flats, and demand for the Müllerwis flats abated. In the low-rise buildings were predominantly tenants that had been there for many years, who had moved in as young families and some of whose children were now grown and still living at home. Newcomers were mainly young families with small children or young two-person households (in accordance to the size of the flat). People over the age of sixty lived throughout the development (Weibel 1989: 9).Tenant turnover increased at least in part due to the higher mobility of younger tenants, mostly resulting from changes in work location. Nonetheless, the appeal of the location of Greifensee remained strong and many tenants lamented the fact of having to move. This strengthened the resolve of tenants to improve housing quality (Weibel 1989: 6).

First renovation phase[2]

The impetus to renovate Müllerwis/Seilerwis was based on several developments in the 1980s: the tax-paying capacity of the large housing estates in Greifensee was diminishing, tenant turnover was increasing (especially in the high rise buildings), and for the first time in years there was the need to advertise flats for rent. Furthermore, the town of Greifensee was also dissatisfied with the external appearance of the grey buildings. Thus, in 1985, under pressure from the municipality of Greifensee, the tenants and its own financial needs, the Winterthur-Versicherungen made the decision to renovate the housing estate without evicting the tenants who, it was believed, should stay in their dwellings during the renovation process (Weibel 1990: 31).

In the summer of 1986 and winter of 1987, a comprehensive survey was conducted by a sociologist on behalf of the Winterthur-Versicherungen to ascertain tenants' opinions and wishes concerning all aspects of the stock: building appearance and architecture; buildings, flats and space; outdoor space/neighbourhood; housing stock administration; house rules; and living together. The questions in the survey addressed how the tenants perceived their building and living space and how they would change specific elements (Wehrli-Schindler 1990: 17; Weibel 1989: 8).

The most heavily criticised aspect of the housing stock was the façades of the buildings, with half of the tenants describing them as monotone, ugly, bleak or cold; the overall aesthetic impression of the housing stock desperately needed to be improved. The individual flats were

[2] A complete description of the first renovation phase from the perspective of tenants, stock owner, the town of Greifensee and the architect, amongst other actors, can be found in : Schilling R. (ed.) 1990. *Wenn Mieter mitplannen*. Winterthur-Versicherungen Liegenschaften-Verwaltung.

generally positively judged, with some tenants saying that it was only the quality of the living space and floor plan that kept them in the housing development. The kitchens were the most criticised room with tenants wanting them to be redone according to their individual needs. The green space was appreciated, and the trees and hedges made the development significantly less bleak in summer than in winter. Regarding administration, house rules and living together, the residents had diverging views and were often uncommunicative, particularly when it came to expressing opinions about the landlord (Wehrli-Schindler 1990; Weibel 1989: 11).

Based on the results of the first tenants' survey, the architect Martin Halter conducted a concept study regarding different renovation possibilities (Halter 1990: 49). Finally, the stock owner proceeded with a three-phase renovation plan, with the high-rise buildings being renovated in the first two phases (June 1989 to April 1990) and the low-rise buildings in the third (June 1990 to October 1992).

The improvements to the stock were generally well received by tenants, particularly regarding the improved impression on the landscape that the overall stock now created. Regardless, over the next years the stock once again deteriorated and tenant turnover once again became high.

Second ownership phase (2003-today): Credit Suisse Investment Foundation

The Müllerwis/Seilerwis stock was sold to the Credit Suisse Investment Foundation (CSF) in 2003. Founded in 1974 by the old Credit Suisse (Schweizerische Kreditanstalt), the CSF is an investment foundation available exclusively to tax-privileged investors exempt from VAT and stamp tax. The Müllerwis/Seilerwis stock is one of approximately 240 mostly residential real estate assets that are part of the CSF Real Estate Switzerland (CSF RES) investment product, one of 50 belonging to the CSF. The CSF RES was launched on January 1, 2002.

Second renovation phase[3]

Since the first set of renovations undertaken by the Winterthur-Versicherungen consisted largely of measures to improve the external appearance plus a few smaller internal refurbishments, nearly 40 years after its construction it became evident that the Müllerwis/Seilerwis housing stock was suffering from failing technical equipment and floor plans that no longer satisfied market demand. Furthermore, the external appearance of the housing estate was again considered unattractive due to a general deterioration of the façades. The current stock owner, the CSF, is thus undertaking an integrated renewal of the stock (Halter 2006: 9). The renovations taking place are as follows:

1. Renovation of flats to one of three levels: refurbishment (98 flats), modernisation (139 flats) and remodelling (238 flats) (Credit Suisse Asset Management 2007: 3):

    - Refurbishment includes renewal of the bathroom, kitchen and sanitary piping; new paint on the walls and ceilings, and new ceramic stove top and dishwasher.
    - Modernisation includes the measures of the refurbishment package but also includes the installation of an additional toilet.

[3] A detailed description of the complete renovation plan can be found in Halter (2006). Wohnüberbauung Müllerwis, Seilerwis, Burstwies 8606 Greifensee.

- Remodelling, includes the measures of the modernisation package and also includes removing the wall between kitchen and dining room, optimising the bathroom floor plan and transforming the storage room into a separate bathroom with toilet and shower.

2. External improvements: most windows will be replaced as will all rolling shutters and all blinds and canopies. The landscaping, which is currently small scaled and heterogeneous, will be redone with larger lawns, hedges and trees and a clearer path network traversing the housing estate.

3. A new pavilion will serve as a space for meetings and gatherings for use mainly of tenants but also people external to the housing estate.

4. Finally, since the existing hot water and heating systems are inefficient, a new wood chip burner will replace the gas heater and new solar collectors on two of the buildings will preheat the domestic hot water. The old and poorly insulated piping will also be replaced.

The real estate services company Wincasa has been mandated with the construction management of the project and Allreal Generalunternehmung AG has been commissioned as the general contractor.

On June 30th, 2007, the market value of Müllerwis was 107 million CHF. The amount invested in the current renovation project, which runs until 2010, is 53.5 million CHF. Annual rental income after the completion of the renovation is expected to be 9.40 million CHF (Credit Suisse 2007: 3).

2.1.2 Management strategies of the stock owners

Ernst Göhner AG

Technically, Ernst Göhner AG never owned the completed Müllerwis/Seilerwis estate, but their investment in capital, land and labour enabled the development to be constructed. Their management strategy can be said to be both opportunistic and philanthropic. On the one hand, it was opportunistic in the sense that Ernst Göhner AG positioned itself to have a near monopoly on constructible land in the town of Greifensee at a time when the canton of Zurich was undergoing a severe housing shortage (see section 2.2.2 Housing situation in canton Zurich and in Greifensee). On the other hand, even though the construction of Müllerwis/Seilerwis brought obvious financial benefits to Ernst Göhner AG, the housing they built was desperately needed and the cheaper construction methods meant that lower rents could be charged, two undeniable benefits to the population of the canton.

Winterthur-Versicherungen AG

The management strategy of the Winterthur-Versicherungen can be characterised as being focused on stock maintenance. The renovation project of 1986-1990 highlights this type of strategy. An important concern of the Winterthur real estate administration was the improvement of the collective relationship of the development. It was proposed to establish tenant associations with the objectives of better cooperation, ensuring the rights of tenants with respect to the administration, neighbourly cooperation, etc. The administration wanted to be in discussion with a representative (coordinator) of these organisations (Lienhard 1989: 16). When it became clear that renovations were needed, the Winterthur-Versicherungen

undertook them after a long public participation process with the tenants. The result was a stock that *looked* much better but that had limited design and infrastructural improvements. The project was driven not so much by market demand, but by what the current tenants wanted.

Credit Suisse Investment Foundation

Firstly, the management strategy applied to the Müllerwis/Seilerwis development is shaped by the investment strategy of the CSF RES, that is, the group invests primarily in housing that is well situated, close to an urban agglomeration, profitable and easy to rent (Credit Suisse 2008). More specifically, conversely to the Winterthur-Versicherungen, the actions of the Credit Suisse Real Estate Asset Management (the division delegated by the CSF to manage its real estate assets)—buying, renovating, selling—are driven by current and future market demand. Again, this can be observed in the current modernisation of the stock.

According to Torsten Gottsmann, Head of construction for the CSF RES group "We renovate and conduct rehabilitations to create attractive market-driven living space, to rejuvenate the portfolio and to have a better mix" (translated from Credit Suisse Asset Management 2007a). The CSF RES states that a sustainable return is the most important objective and consequently, it is not prepared to maximise returns for short-term gains.

2.2 HOUSING AND POLICY RELATED TO MÜLLERWIS/SEILERWIS

This section presents two different aspects of housing history related to the Müllerwis/Seilerwis housing stock. The first broadly covers the evolution of housing and housing policy in Switzerland, especially since the 1960s. The second part deals specifically with the housing conditions and the set of circumstances in the canton of Zurich and the town of Greifensee that led to the construction of the Müllerwis/Seilerwis housing development.

2.2.1 Overview of housing and housing policy in Switzerland

The two pillars of housing policy

Since the beginning of the twentieth century, the Swiss housing situation has been characterised by short periods of adequate housing and several long periods of housing shortage, with variations occurring particularly between urban centres and rural areas. Housing became a responsibility of the Confederation in 1973 when article 34^{sexies} (now article 108) was introduced into the federal Constitution, describing the Confederation's obligation to encourage housing construction, home ownership, and the activities of public-interest housing builders and organisations. Article 109 of the Constitution obliges the Confederation to legislate to prevent abuses in matters concerning tenancy contracts.

Housing policy has developed over the years into two principle components: tenancy protection and housing assistance. Tenancy protection addresses the perceived imbalance of power between owners (more powerful) and tenants (less powerful) by protecting tenants primarily from excessive rents and the unfair termination of rental contracts. Housing assistance has developed to encourage the construction of housing and to ensure that low-income households and populations at risk (e.g. the elderly, people with disabilities, single-family households, young families) have access to suitable housing. Regulations concerning these two pillars of housing policy can be found in Appendix 1. Refer to Rohrbach (2009) for

a more complete description of the evolution of tenancy protection legislation, and to Cuennet et al. (2002) for a good overview of the evolution of housing assistance.

The housing situation from the 1960s onward

The Müllerwis/Seilerwis housing stock was built in the late 1960s early 1970s, coinciding with a turbulent time for housing in Switzerland. During this period, the Swiss housing situation was characterised by an ongoing economic boom, rapid population growth (some experts held that that the Swiss population would reach 10 million), rapidly increasing costs of construction, and a long-term acute housing shortage. The overheated conditions were indisputable but the proposed solutions differed greatly (Gabathuler and Peter 2001: 7; Widmer 1990: 42). The rent controls that had been introduced in the years of World War II began eroding, and between 1961 and 1966 controls were gradually replaced by rent monitoring. In 1964, work on the national exposition monopolised all available labour and that, combined with climbing mortgage rates resulted in a housing shortage producing incredibly low vacancy rates. In 1965, Parliament adopted a new federal law to encourage housing construction[4]. It was around this time that Hans Schaffner, the then head of the Swiss department of economy and whose goal it was to have 50 000 housing units built per year, made a request to Ernst Göhner, builder of the Müllerwis/Seilerwis housing development, to take on the position of delegate to the Swiss federal council for the housing building industry.

The price of land and construction costs remained high, and the rents of new flats became prohibitive for many households. By 1970 rent monitoring was eliminated and rents were subject to market forces.

Following the rapid increase in rents at the end of the of the 1960s and the beginning of the 1970s and the introduction of article 34^{septies} of the federal Constitution stipulating that the Confederation legislate against abusive rents, a new federal decree was introduced in 1972 (BMM)[5]. The original objective of the BMM was to set maximum rental increases in areas suffering from housing shortages; however, the BMM was soon expanded to cover the entire Swiss territory. Soon after, in 1974, a new federal law on housing assistance came into effect (WEG).[6]

Once again, a new housing shortage appeared between 1980 and 1990, particularly of flats with affordable rents. Interest rates and construction costs both increased, yet the density of occupation decreased since people were starting to demand more comfort and more space. WEG assistance, which during the slow years of the 1970s was not sought much, was now in high demand. The measures of the BMM were incorporated into the Code of obligations in 1990, thus temporary and emergency tenant protection measures were codified.[7]

A long period of economic stagnation (especially in the real estate sector) came about in the mid 1990s. Housing vacancy, which a decade earlier had been at record lows, was now high, and the construction labour market continued to stagnate. Despite the return of a housing shortage in 1999, the real estate sector continued to stagnate, partly due to the cost of land and

[4] Bundesgesetz vom 19. März 1965 über Massnahmen zur Förderung des Wohnungsbaues (AS **1966** 449)

[5] Bundesbeschluss vom 30. Juni 1972 über Massnahmen gegen Missbräuche im Mietwesen (BMM) (AS **1972** 1531).

[6] Wohnbau- und Eigentumsförderungsgesetz vom 4. Oktober 1974 (WEG) **SR 843**

[7] Art. 253-274 CO: Achter Titel: Die Miete

the cost of construction. The situation has remained similar throughout the first half of the 2000s.

2.2.2 Housing situation in canton Zurich and in Greifensee

The development and growth of the town of Greifensee is marked by the erection of several large housing estates, including Müllerwis/Seilerwis. In 1966, Greifensee was a small village with 400 inhabitants, a historic small town, scattered farms and a handful of new single-family houses. In the following years drastic changes took place: Greifensee came into the agglomeration of the city of Zürich and within six years large housing estates were built, increasing the population more than ten-fold. These constructions were the product of the housing situation in canton Zurich in the 1960s, and especially in the city of Zurich and surrounding small towns.

The Department of regional planning *(Amt für Regionalplanung)* of the canton of Zurich was established in 1943, during which the city of Zurich was experiencing an extreme housing crisis. At the time, the city and canton worked together to use various subsidy programs to promote and encourage construction activity in the countryside, the purpose of which was to discourage immigration into the city of Zurich and to entice city residents to resettle outside the city (Frei 2006: 203).

The town of Greifensee, having experienced its own moderate population growth between 1950 and 1960, was in need of some guidance regarding housing construction. A cantonal ordinance on the protection of Lake Greifensee, in effect since 1941, meant that the town had little room for manoeuvre; much of the town's land was approved for agricultural use only. Furthermore, although Greifensee was largely free to define its own zoning and building specifications, since Greifensee's constructible land fell under the influence of the protection ordinance, all new construction required an additional permit from the canton. A 1959 municipal building ordinance divided Greifensee into three zones: the core zone (the old town), a "country house" zone (maximum one story) and a "general" zone adjacent to the rail lines (maximum two full stories plus an attic or a basement). In the second and third zones, all roofs of new buildings had to be pitched (not flat) and tiled (Frei 2006: 204; Zimmerman 1978: 54).

Three pivotal, interconnected events occurred in 1964 that would dictate Greifensee's growth pattern and that would ultimately result in the construction of the Müllerwis/Seilerwis housing stock. Firstly, an additional paragraph was added to the 1959 building ordinance stating that large construction projects over 10 000m^2 could deviate from the specifications in the building ordinance on the condition that the construction 1) was located in zone 3, 2) had a positive effect, and 3) provided a better architectural, landscape and hygienic alternative. This amendment effectively allowed a building permit to be issued for buildings that contradicted the building ordinance (Frei 2006: 206).

The second event was the high land purchasing activity in Greifensee. Many landowners had been preparing for the sale of farmland for a while and farmers and other "community of heirs" (*Erbengemeinschaft*) had already submitted neighbourhood plans including for the area of Müllerwis. The activity of landowners was based on increasing land prices that were the result of the housing crisis in Zurich. Interestingly, the land purchases in 1964 were not by individuals but by the construction firm Ernst Göhner AG. By 1966 it owned 50 hectares, more than half of the land zoned for building and settlements, effectively giving Göhner AG a land monopoly.

The third pivotal event of 1964 is related to the fact that, thanks to the stipulations of the 1941 protection ordinance, the real planning power in Greifensee belonged not to the municipal administration but to the cantonal Department of regional planning. (In fact, the department had pre-formulated the paragraph that would alter the building ordinance.) The canton knew that the land buying activity would lead to an increase in the number of applications for building permits and it therefore wanted a spatial plan by which any new developments could be assessed. In December 1964, the canton hired the Zurich architect Jakob Schilling to conduct a spatial planning study that in 1966 would become known as the Greifensee model case (Frei 2006: 208; Zimmerman 1978: 54). The spatial model plan was conceived in a terrace or stadium style with high-rise buildings closest to the rail lines on the edge of Greifensee and getting lower as one moved toward the lake. This way, a view to the lake, the countryside and the old town could best be guaranteed for all. The old town and the new builds were to be separated as much as possible by a green belt but be connected by footpaths so that the old town would remain the cultural centre of Greifensee. The development would contain differentiated building groups to offer a sufficiently rich range of flats and the development would be interspersed with ample green space (Frei 2006: 208; Weibel 1989: 5; Zimmerman 1978: 54).

Göhner's virtual land monopoly was fortuitous for the Department of regional planning since Göhner's purchase would hinder fragmented development (which was already underway). From the perspective of the department, aimless rampant development could be avoided and construction could be done according to a plan. Furthermore, with the amendment to the building ordinance, the area could be developed in accordance to Schilling's model plan.

The construction and development plans made by Göhner AG conformed to the model plan since, again most fortuitously, it was aware of this plan in advance (Frei 2006: 214). Göhner AG also argued that the very high rents of the time could be reduced in his buildings due to their inexpensive construction. The Department of regional planning approved of Göhner's development plan since he had the best fees for combating the housing crisis. The canton was interested in high-rise buildings since they reduced cost and made housing available to young families. For the authorities, the planned development was a big success.

Once the model plan was approved, very rapid construction of large housing estates occurred in Greifensee between 1967 and 1975. Investment funds for all of the new developments came from pension funds, banks, and insurance companies (Zimmerman 2006: 56). This period corresponded with an exponential growth in the population of the commune. In 1967 Greifensee's population was 400. By 1975 – only eight years later – it was 4300. This represented the highest growth of all communes in the canton of Zurich (Frei 2006: 202). Ten years after the enforcement of the 1959 building ordinance, the third general zone contained more than a dozen flat-roofed buildings up to eight stories high and a few flat-roofed row housing.

In 1983/1984 the building ordinance of 1959 was revised. At this point, Greifensee was 80% developed and the protection ordinance would not allow any more settlement spreading, thus the revision had little new to say and was changed mostly to reflect reality. The building specifications of the large developments were changed to lower the height of any future buildings. A new revision occurred in 1993/1994. No longer was a cantonal permit required. Furthermore, the revision of the protection ordinance of 1996 gave Greifensee the authority to decide on any developments within its building zone.

In 2004 the population of Greifensee decreased slightly, causing financial problems for the commune, especially the big developments whose worth, and therefore taxing capacity, decreased in the course of time. Thus the commune ordered measures to increase the worth of the buildings. It is anticipated that these measures will increase rents and thus some inhabitants will be forced to leave.

2.3 CRITERIA FOR SELECTION

The Müllerwis/Seilerwis housing sub-stock was selected as a case study for this research project on institutional regimes of collective housing stocks for several reasons. Firstly, it is a for-profit housing stock, a type of ownership that was recommended by the project advisory committee for analysis to complement that of a non-profit cooperative stock already analysed (the *Société coopérative d'habitation Lausanne*). The housing stock is also over 40 years old, a period of time that brackets several regime changes and physical changes to the housing stock, and is sufficiently large. Furthermore, Müllerwis/Seilerwis is currently owned by a large collective pension foundation, a type of actor that is playing an increasingly important role in the Swiss real estate market.[8] Finally the evolution of the stock, particularly the circumstances surrounding its construction, is well documented.

2.4 RESOURCES AND METHODS USED FOR RESEARCH

Management strategies and the behaviour of other user-actors were ascertained by revisiting each good and service offered by the housing stock and describing how these were used by user-actors and owners at different time periods. The regulation (or lack thereof) of use rights to the goods and services indicates where better management of rivalries could lead to a more sustainable stock. Since the full extent of regulations that constitute the institutional regimes of the housing stock over its lifespan is too large to study in detail, it was necessary to focus on those that have had the most important effects on sustainability. Thus, the policies, property rights and contracts that are of interest are chiefly those that threatened the reproductive capacity and sustainability of the system by a) creating incoherencies, and b) producing negative effects.

Interviews, a literature review and a search of cantonal archives were conducted to gain further knowledge about the management's and user-actors' roles in the use of the Müllerwis/Seilerwis housing stock's goods and services. Finally, throughout the course of this research, meetings were held with project partners in Germany and Spain both to share results and to develop ideas regarding institutional regimes as applied to housing stocks.

[8] cf. Csikos (2008) ; Theurillat et al. (2007); Theurillat and Corpataux (2007); Theurillat (2005)

CHAPTER 3 – ANALYSIS OF GOODS AND SERVICES OF THE MÜLLERWIS/SEILERWIS HOUSING STOCK

3.1 INTRODUCTION

The Greifensee housing stock offers a variety of goods and services to diverse user-actors. This chapter provides a detailed analysis of each good and service, and includes:

- the actors involved in the use of the good or service (user-actors, excluded actors, affected actors);
- the characteristics of use of the good or service (intended use, modality of use, abusive use);
- consequences of use (rivalries and complementarities, effects)
- regulations affecting use, including (where possible) current and previous regulations;
- elements for evaluating extent and coherence; and
- explanatory notes for the elements for evaluating extent and coherence.

RS. RESIDENTIAL GOODS AND SERVICES

The category *Residential Goods and Services* is composed of *RS 1 Living space* in which tenants live (i.e. their flats) and the *RS 2 Indoor climate and technical services* that tenants use in order to enjoy an acceptable level of indoor environmental comfort within their flats (e.g. heating, water and wastewater equipment such as showers, toilets and sinks, and electrical outlets).

RS 1 Living Space

User actors

Tenants

Excluded actors

Individuals and families who would like to rent a flat in Müllerwis/Seilerwis but cannot due to lack of availability.

Tenants who leave their flat due to rent increases resulting from renovations.

Affected actors

Tenants' associations (during renovations)

Intended use

To have a home in which to eat, sleep and live comfortably.

Modality of use

Tenants have access to the living space of their flats on a continuous basis, for the duration of their lease. The lease is renewed automatically.

During the first renovation phase tenants were able to stay in their flats. For the second renovation phase, they are being temporarily moved until the work is complete and their flats are again habitable.

Abusive use

Many of the flats have been under-occupied (i.e. small households in large flats), which may cause housing difficulties for larger households during times of housing shortage.

Rivalry and Complementarity

Rivalry

Winterthur-Versicherungen and CSF *(PF 1 Production factor)*: When the flats are in unsatisfactory condition (as they were prior to each of the renovation phases), tenant turnover is high which affects total rental income for the stock owner.

Complementarity

Companies and their employees investing in CSF RES *(PF 1 Capital investment factor)*, CSAM, Wincasa *(PF 3 Labour investment)*: It is anticipated that the remodelled flats will attract tenants with higher incomes. Since rents will be higher and the quality of living space augmented, the rental income over the long term is better assured.

Effects

Social

Prior to the latest renovations, the flats of Müllerwis/Seilerwis were very under-occupied and were not used by households of appropriate size. Families were under-represented in the estate.

Internal Heterogeneous

Mid 1980s onward: Winterthur-Versicherungen *(PF 1 Capital investment)*: Living in large housing developments fell out of fashion and many residents left leaving the flats of Müllerwis/Seilerwis vacant. This had a negative effect on the rental income of the Winterthur-Versicherungen.

Regulations

Public policy

Federal

- Refer to Appendix 1 for a list and description of federal housing public policy in Switzerland.

Canton of Zurich

- *Verordnung über allgemeine und Wohnhygiene vom 20. März 1965*[9]*:* Art. 19-41, 47 & 48 dealing with living space were repealed in 1982 and replaced with the *Besondere Bauverordnung I* of May 6, 1981 and the *Besondere Bauverordnung II* of August 26 1981.
- *Gesetz über die Vermittlung von Wohn- und Geschäftsräumen vom 30. November 1980*[10]

Civil law

- Refer to Appendix 1 for a list and description of civil laws related to housing in Switzerland.

Contracts

- Rental contract between the property manager (currently Wincasa) and the tenant.

[9] LS 710.3

[10] LS 844

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to RS 1 regulated?	Yes	Yes
	Is RS 1 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of RS 1?	Yes	Yes
	Is it the result of unclear or poorly defined property rights or use rights?	No	No
	Is it the result of contradictions between public policies?	Yes (1), (2)	Yes (2)
	Is it the result of incoherence between regulations and policy?	No	No

(1) Conflict with *NM 1 Solving general housing needs* (public authorities): There are no regulations that clearly state that larger flats must be used by families or larger households. *(Contradiction between housing policy, which seeks to ensure housing for all population segments and groups and the rights of tenants to not be evicted from their flats on the basis of size of household).*

(2) Increases in rents following renovations oblige some tenants to move. *(Contradiction between housing policy that seeks to ensure housing for all but that gives stock owners the right to raise rents when added value renovations have been done).*

RS 2 Indoor Climate and Technical Services

User actors

Tenants

Excluded actors

-

Affected actors

-

Intended use

To live comfortably in the flat by having conditions of adequate indoor environmental quality and by using services of drinking water, domestic hot water, wastewater drainage, gas, electricity, etc.

Modality of use

Tenants have access to the indoor climate of their flats on a continuous basis, for the duration of their lease. They generally cannot choose which technical services they use, this being decided through service agreements between the property manager and the service providers.

Abusive use

-

Rivalry and Complementarity

Rivalry

1992-present: Tenants *(RS 2 Indoor climate and technical services)* New emissions limits prescribed in the *LRV* (federal ordinance on clean air) came into effect. The installation of external exhaust gas re-feed devices allowed these emissions levels to be achieved but simultaneously reduced the capacity of the heating system; sacrifices were made in terms of tenant comfort and operating safety. Thus use of the technical services after the retrofit entered into use conflict with indoor climate.

Effects

Environmental

1986: Poor insulation of underground piping (hot water, heat) meant that significant amounts of energy were lost when tenants used the technical services of heating and hot water.

1992 – present: Following the retrofit of the heating system after the introduction in *LRV* of new emissions limits, air pollution from the housing estate was reduced.

Social

1992 – present: The retrofit of the heating system after the introduction in *LRV* of new emissions limits resulted in a decrease in operational safety.

Regulations

Public policy

Confederation

- *Miete im Obligationenrecht (OR), Achter Titel, Änderung vom 15. Dezember 1989* and *Verordnung vom 9. Mai 1990 über die Miete und Pacht von Wohn- und Geschäftsräumen (VMWG)* [11]: Describes which costs of technical services can be passed on to the tenant by the stock owner and how.
- *Luftreinhalte-Verordnung vom 16. Dezember 1985 (LRV)*[12]: includes emissions limits.

Canton of Zurich

- *Tarife der Elektrizitätswerke des Kantons Zürich (EKZ) vom 1. Januar 2007*[13]
- *Bedingungen der Elektrizitätswerke des Kantons Zürich (EKZ) für den Anschluss an die Verteilanlagen vom 1. Januar 2007*[14]
- *Verordnung über die Energieplanung und die Förderung von Pilotprojekten (Energieverordnung) vom 06. November 1985*[15]

[11] SR 221.213.11

[12] SR 814.318.142.1

[13] LS 732.151

[14] LS 732.152

[15] LS 730.11

- *Energiegesetz vom 19. Juni 1983*[16]: Art. 9: All new centrally heated buildings with at least 5 heating units have meters to measure individual demand for heating and hot water.
- *Verordnung über die ordentlichen technischen und übrigen Anforderungen an Bauten, Anlagen, Ausstattungen und Ausrüstungen (Besondere Bauverordnung I; BBV I) vom 6. Mai 1981*[17]

Other regulations and norms

- *Wärmedämmvorschriften, Ausgabe 2008*
- *Verbrauchsabhängige Heizkostenabrechnung (VHKA), Kanton Zürich, Dezember 2004:* at least 60% of billing for heat and hot water in new buildings must correspond to individual use. The owners and managers of many older buildings also subsribe to this.
- *Richtlinien über die Abgasverluste von Öl- und Gasfeuerungen für Prozzesstemperaturen über 110°C. Ausgabe 1992.*
- *Richtlinien über Wärmeleistungsbedarf von Wärmeerzeugern. Kanton Zürich. Juli 1987.*
- *SIA norm 380/1 "Thermische Energie im Hochbau"*

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to RS 2 regulated?	Yes	Yes
	Is RS 2 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of RS 2?	Yes	No
	Is it the result of unclear or poorly defined property rights or use rights?	No	-
	Is it the result of contradictions between public policies?	No	-
	Is it the result of incoherence between regulations and policy?	Yes (1)	-

(1) New emissions levels that were set in the *LRV* were met by modifying the heating system, which had the consequence of decreasing tenant comfort and operational safety. This represents an incoherence between the *LRV* and the regulations concerning a) level of comfort in flats and b) equipment safety.

[16] LS 730.1

[17] LS 700.22

NR. NON-RESIDENTIAL GOODS AND SERVICES

Non-residential Goods and Services are composed of all indoor and outdoor spaces that are not used exclusively for living by individual tenants. They include *NR 1 Non-residential space* that can be rented by third parties, *NR 2 Collective indoor space* and *NR 4 Collective outdoor space* that can be used and enjoyed by all tenants and, at times, other visitors, and the *NR 3 Functional indoor space* such as corridors, stairwells and utility rooms without which the building could not exist.

NR 1 Non-Residential Space

User actors

Doctors' offices, dentist's office, small businesses

Excluded actors

Those who do not have a lease for non-residential space.

Affected actors

Residents of adjacent housing stocks, people visiting or passing through the neighbourhood

Intended use

To lease space in the stock that is not used for residential purposes with the objective of running a business or other service.

Modality of use

Continuous, for the duration of the lease

Abusive use

-

Rivalry and Complementarity

Complementarity

Providers of collective institutional services *(UF 4 Demand for collective institutional services)* and Providers of goods and services *(UF 5 Demand for goods and services within close proximity)*: Owners of businesses and groups that rent non-residential space simultaneously use the demand generated by local residents for various goods and services.

Effects

Social

There are few non-residential spaces in the Müllerwis/Seilerwis stock.

Regulations

Contracts

- Lease between the property owner and the business or service for use of the space.

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NR 1 regulated?	Yes	Yes
	Is NR 1 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NR 1?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

NR 2 Collective Indoor Space

NR 2 Collective indoor space consists of all spaces that are used for particular activities by tenants and building caretakers. This includes laundry rooms, storage areas, meeting and activity rooms, and underground parking.

User actors

Tenants of the Müllerwis/Seilerwis housing stock and in the case of the new pavilion, people external to the Müllerwis/Seilerwis.

Excluded actors

Individuals who do not have access to the collective space (e.g. no building key, no pass code to enter); most often non-tenants.

Affected actors

None

Intended use

To use the new pavilion for activities such as meetings and parties.

To use laundry, storage and other collective rooms for their intended purposes.

To use designated parking spaces in the five underground garages.

Modality of use

Access to collective indoor space may be either with or without restrictions. The pavilion can be reserved and used for a fee.

Abusive use

To be loud and disruptive while using common rooms, or to wilfully damage them.

Rivalry and Complementarity

Complementarity

CSF *(PF 1 Production factor)*: The new pavilion for meetings, gatherings and parties is intended to enhance the value of Müllerwis/Seilerwis.

Effects

Social

A new pavilion at the eastern part of the housing estate is intended to encourage the social cohesion in the Müllerwis housing estate.

Regulations

Regulations for the use of the pavilion can be found in the brochure "Pavilion Müllerwis" [18].

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NR 2 regulated?	Yes	Yes
	Is NR 2 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NR 2?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

NR 3 Functional Indoor Space

NR 3 Functional indoor space consists of all spaces that have a functional purpose and without which the buildings of the stock could not exist, such as hallways, stairwells, entranceway, elevators, etc.

User actors

Tenants and any other people in the building stock

Excluded actors

Those who do not have access to the interior of the building

Affected actors

-

Intended use

To use functional space as a means of accessing different areas of the building

Modality of use

Functional space may be used at all times by those people permitted in the building.

Abusive use

-

[18] http://www.muellerwis.ch/xwiki/bin/download/Content/Mietbedingungen/Flyer.pdf

Rivalry and Complementarity

-

Effects

-

Regulations

-

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NR 3 regulated?	Yes	Yes
	Is NR 3 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NR 3?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

NR 4 Collective Outdoor Space

NR 4 Collective outdoor space is the outdoor space located on the building property that is typically used for parking, play areas, green space, outdoor storage and building access

User actors

1. Tenants and the general public with access to the common exterior space of the stock
2. Tenants on the ground floor with private garden (ca. 1990, after the first renovation phase).

Excluded actors

-

Affected actors

-

Intended use

To enjoy the exterior environment of the building (playgrounds, green space, gardens).

To gain access to the building.

To use the 14 outdoor parking zones

Modality of use

Since the common outdoor space is not enclosed, it can be used at anytime.

Abusive use

-

Rivalry and Complementarity

Complementarity

CSF RES *(PF 1 Capital investment)*: Improved playground areas and better designed green spaces between the buildings will presumably increase the value of the stock.

Effects

Social

Improved playground areas, both in the first renovation period and the current renovation period, make the housing estate more attractive to families with children.

Regulations

-

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NR 4 regulated?	Yes	Yes
	Is NR 4 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NR 4?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

PF. PRODUCTION FACTOR GOODS AND SERVICES

Production Factor goods and services consist of *PF 1 Capital Investment*, *PF 2 Land Investment* and *PF 3 Labour Investment*, each of which allows the investor to perceive some economic benefit.

PF 1 Capital Investment

User actors

1. Current stock owner (2003-present): Credit Suisse Investment Foundation
2. Companies whose pension plans include shares of the CSF RES.
3. Employees of companies whose pension plan include shares of CSF RES.
4. Former stock owner (until October 1, 2003): Winterthur-Versicherungen (merged with Credit Suisse Group in 1997)
5. Housing stock developer (1967-1973): Ernst Göhner SA

Excluded actors

(2003-present): Investors that are not institutional tax-privileged investors and are thus excluded from belonging to the CSF.

Actors who did not or do not invest in the Müllerwis/Seilerwis housing stock.

Affected actors

Bundesamt für Sozialversicherung (BfS): oversight authority

KPGM: auditing authority for the CSF

Konferenz der Geschäftsführer von Anlagestiftung (KGAST): umbrella organisation of investment foundations. Member foundations must adhere to the quality directives of the KGAST. The organisation represents the interests of its members vis-à-vis the authorities, administration, the oversight authority, and other public and private institutions.

Intended use

1. Bodies of the CSF: to use the capital from company pensions to invest in the Müllerwis/Seilerwis housing estate in a way that will best guarantee a suitably high return on investment for its clients and profits for itself.
2. Companies whose pension plans include shares of the CSF RES: to invest pension contributions from themselves and their employees in investment vehicles that will ensure employees a satisfactory pension income.
3. Employees of companies whose pension plan includes shares of CSF RES: to contribute regularly and obligatorily to the company pension plan to be able to obtain a pension upon retirement.
4. Winterthur-Versicherungen: to carefully manage the stock to ensure profits – and possibly to eventually sell.
5. Ernst Göhner SA: to invest in the construction of Müllerwis/Seilerwis and then sell the blocks of flats soon after completion (sold to the Winterthur-Versicherungen).

Modality of use

1. Bodies of the CSF: to invest capital into the renovation and maintenance of the Müllerwis estate.
2. Companies, and 3. Employees: Employees must contribute a minimum percentage of their salary to their pension plans, which are then invested by the company in various investment vehicles of the CSF, including CSF RES. Companies must also provide minimum contributions. The managers of the CSF use these contributions to purchase, renovate and sell housing stocks with the purpose of obtaining sufficient rental income for the pensions and to earn itself income.
4. Winterthur-Versicherungen: to invest capital into the renovation and maintenance of the Müllerwis estate.
5. Ernst Göhner SA constructed the Müllerwis housing estate between 1967 and 1973. There was since no further construction investment in the stock.

Abusive use

Winterthur-Versicherungen: to invest inadequately in a heating system resulting in less comfort for tenants and compromised operational safety.

Rivalry and Complementarity

Rivalry

CSF 2008: Tenants *(RS 1 Living Space)*: With the increase in rent following the renovation of the Müllerwis stock, many tenants are choosing not to return to their flats.

CSF 2008 CSAM (PF 3 Labour investment): The real estate group of the Credit Suisse Asset Management wanted the CSF to invest more in the renovation project than they originally planned (50 instead of 40 million CHF). The CSAM wants the stock to be renovated to a standard that it believes will enable it to maximise its rental income over the long term without requiring additional renovations in the next 20 or so years. The CSF, although in principal in agreement with this strategy, requires convincing as to why the additional investment is necessary.

Winterthur-Versicherungen 1990: Tenants *(RS 1 Living Space, NR 2 Collective indoor space, etc.)*: Tenants complained of increasing rents following the renovations by the Winterthur-Versicherungen. Many believed that they were financing the stock owner's wishes (e.g., new façade) without getting much added value for their own living (not all windows being replaced, removal of crafts room, etc.) (Lienhard 1990, 43).

Winterthur-Versicherungen 1968-2003 Tenants *(PF 1 Production factor)*: Unsatisfactory investment in appropriate appliances and features (e.g. second bathroom) may have discouraged larger households from occupying flats that otherwise had enough rooms and were sufficiently large (Halter 2006: 20).

Complementarity

CSF 2008 Tenants *(RS 1 Living space)*: The largest portion of investment in the renovation project is dedicated to adding value to the flats. Of the 475 flats in the housing estate, 98 are being repaired, 139 are undergoing simple upgrades and 238 (half) are being remodelled. Such investments will improve the living space of the tenants (who will consequently pay higher rents) thus providing a long term rental income for the CSF.

CSF 2008 Tenants (RS 2 Indoor climate and technical services, NR 2 Collective indoor space, NR 3 Functional space, NR 4 Collective outdoor space): Investment in renovations

is anticipated to make significant improvements to the above goods and services, thus encouraging tenants to stay.

Winterhtur-Versicherungen 1990 Tenants *(RS 1 Living space, RS 2 Indoor climate and technical services, NR 2 Collective indoor space, NR 3 Functional space, NR 4 Collective outdoor space)*: Investment in renovations resulted in improvements in the above goods and services available to tenants. Although this would have encouraged tenants to stay (and thus reduce a high tenant turnover and vacancies), the measures were insufficient in the long term.

Ernst Göhner AG 1968-1970 Communal and cantonal public authorities *(NM 1 Solving general housing needs)*: Housing investment in the Müllerwis estate helped alleviate pressures of the housing shortage. This investment was encouraged by relaxing building ordinance restrictions.

Effects

Environmental

2008 Investments in solar hot water and wood burning as well as other energy saving measures will improve the Müllerwis/Seilerwis' environmental performance.

Prior to the current renovations, the poor condition of many of the technical services (e.g. very poorly insulated domestic hot water supply network) resulted in excessive energy consumption.

Social

2008 Current renovations include some high-end flats, which are anticipated to attract tenants with higher income. There are two views on this development: 1) investment in renovation may cause a greater diversity of income levels in the housing estate, and 2) the renovations may force lower income families from their flats.

Economic

1968-1973 At the time of construction investment, Ernst Göhner SA was a very important actor on the housing construction scene and was able to exert considerable influence on housing development.

Today Investment foundations are rapidly becoming important investors in the Swiss housing market.

Internal heterogeneous

CSF 2003-present Employees *(PF 1 Capital investment)*: A successful investment in a housing stock by CSF will guarantee an adequate rate of return for the plans that hold that stock.

CSF 2003-present Tenants *(RS 1 Living space)*: Investment in renovations will result in rents that may be too high for some tenants who will subsequently move out.

Winterthur-Versicherungen 1988 Tenants *(RS 2 Indoor climate and technical services):* New façade insulation helped regulate the indoor climate, since previously some rooms were colder or warmer than others.

Winterthur-Versicherungen 1992 Tenants *(RS 2 Indoor climate and technical services)*: The heating system was retrofitted in 1992 to conform to the lower emissions limits prescribed by *LRV*. The investment was inadequate and resulted in lower comfort for tenants.

Ernst Göhner SA 1968 Tenants *(RS 2 Indoor climate and technical services)*: At the time of construction, the quality of acoustics, heat insulation and comfort was higher compared to conventional buildings, allowing tenants better use of technical services.

On the building

Winterthur-Versicherungen: Several of the building features that were renovated in the first renovation phase were done so inadequately, resulting in a premature deterioration of the buildings. These features include: widening of the balconies (insufficient support), and no replacement of windows at Seilerwis 2/4 (Halter 2006).

Regulations

Public policy and civil law

Confederation

- *Bundesgesetz vom 25. Juni 1982 über die berufliche Alters-, Hinterlassenen- und Invalidenvorsorge (BVG)*[19]
- *Verordnung über die berufliche Alters-, Hinterlassenen- und Invalidenvorsorge (BVV 2)*[20]
- Articles 80 – 89bis Civil code *(Erster Teil : Das Personenrecht, Zweiter Titel : Die juristischen Personen, Dritter Abschnitt : Die Stiftungen)*
- Article 331 Code of obligations

Other regulations

- CSF statutes and regulations
- CSF RES investment guidelines
- Konferenz der Geschäftsführer von Anlagestiftungen (KGAST): statutes and quality criteria.
- SWISS GAAP FER 26, Rechnungslegung von Personalvorsorgeeinrichtungen (accounting norms)

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to PF 1 regulated?	Yes	Yes
	Is PF 1 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of PF 1?	Yes	Yes
	Is it the result of unclear or poorly defined property rights or use rights?	No	No
	Is it the result of contradictions between public policies?	No	No
	Is it the result of incoherence between regulations and policy?	Yes (1), (2), (3)	Yes (3)

[19] SR 831.40

[20] SR 831.441.1

(1) Lower comfort for tenants following the retrofitting of the heating system resulted from an incoherence between LRV, which prescribed lower emissions levels, and tenancy regulations.

(2) Prior to the first renovation phase, insufficient investment in maintenance by the Winterthur-Versicherungen resulted from an incoherence between property rights (and obligations of owner) and tenancy regulations.

(3) Increased rents following renovations have meant that many tenants have moved from their flats. This represents an incoherence between housing policy which seeks to ensure housing for all segments of the population and allowable rent increases.

PF 2 Land Investment

User actors

1. Private land owners
2. Ernst Göhner AG

Excluded actors

-

Affected actors

The canton of Zurich, specifically the Department for Regional Planning *(Amt für Regionalplanung)*

The city of Zurich

The town of Greifensee

Intended use

(1968) To sell land to the builders Göhner AG.

Modality of use

Land was sold to the builders.

Abusive use

To force smaller landowners to sell land at below-market value.

Rivalry and Complementarity

Rivalries

Town of Greifensee (*UF 1 Design of urban space*): Prior to 1965, Göhner purchased enough (inexpensive) plots of land that had been zoned for agricultural use to exert pressure on the commune of Greifensee to declassify the land to constructible land.

Effects

Economic

Purchase of land allowed for the construction of the Müllerwis housing estate (amongst others) at a time of exceedingly high housing demand.

Social

The purchase of agricultural land was for non-agricultural purposes and resulted in a clear shift away from farming in the Greifensee area.

Internal homogeneous

The large-scale purchase of land allowed Göhner to proceed with the construction of the Müllerwis/Seilerwis development (amongst others).

Internal heterogeneous

Department of regional planning *(NM 1 Solving general housing needs)*: The large land purchase by Göhner in 1964 gave the planning department the opportunity to proceed with large-scale housing construction projects, which in turn allowed Göhner to build the housing development (use of *PF 1 Capital investment*).

Planner of the spatial model, Schilling *(NM 3 Shaping the characteristic landscape)*: The massive land purchase by a single owner, Ernst Göhner AG, allowed Schilling to create his spatial model that was based on a "stadium" effect, i.e. buildings increasing in height as one moves away from the lake.

Regulations

Public policy

Confederation

- *Bundesgesetz vom 22. Juni 1979 über die Raumplanung (Raumplanungsgesetz, RPG)*[21]
- *Raumplanungsverordnung (RPV) vom 28. Juni 2000*
- *Bundesgesetz vom 7. Oktober 1983 über den Umweltschutz (Umweltschutzgesetz, USG)*[22]

Canton of Zurich

- *Gesetz über die Raumplanung und das öffentliche Baurecht vom 7. September 1975*
- *Verordnung zum Schutz des Greifensees vom 27. Juni 1941.*

Greifensee

- *Gemeindeordnung der Politischen Gemeinde Greifensee vom 9. Januar 2006*
- *Bau- und Zonenordnung, Gemeinde Greifensee ZH vom 1. Dezember 1993* and *Bauzonenplan vom 1. Dezember 1993*
- *Bauordnung, Gemeinde Greifensee, ZH vom Mai 1959*

[21] SR 700

[22] SR 814.01

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to PF 2 regulated?	Yes	Yes
	Is PF 2 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of PF 2?	Yes	No
	Is it the result of unclear or poorly defined property rights or use rights?	No	-
	Is it the result of contradictions between public policies?	Yes (1)	-
	Is it the result of incoherence between regulations and policy?	No	-

(1) Incoherence in planning regulations which easily allowed agricultural land to be sold and then converted into constructible land.

PF 3 Labour Investment

User actors

1. Credit Suisse Asset Management (CSAM)
2. Allreal Generalunternehmung AG, the current general contractor for renovations
3. Wincasa, renovation project manager and current property managers
4. KPGM, the firm responsible for auditing the CSF
5. Wüest and Partner, responsible for real estate estimations
6. Ernst Göhner AG, general contractor for the construction of the Müllerwis housing estate
7. Other construction and renovation companies, architects

Excluded actors

Actors not contracted by the CSF bodies to work on the Müllerwis estate.

Affected actors

Neighbours of the Müllerwis housing estate that are exposed to noise and pollution from the renovation work.

Intended use

To provide labour services in return for payment.

Modality of use

The signing authorities of the CSF (as designated by the board of trustees) will contract labour services from the providers.

Abusive use

-

Rivalry and Complementarity

Complementarity

The distinction between "labour investment" and "capital investment" can be blurred for certain actors. For instance, although the CSAM purchases and renovates buildings using the capital from pension contributions, how this capital is invested is its decision.

Ernst Göhner SA *(PF 1 Capital investment* and *PF 2 Land investment)*: The capital and land investment of Ernst Göhner allowed the company to build the Müllerwis/Seilerwis development, the labour from which was provided by the same company and the parts of which were manufactured by companies owned by Göhner SA.

Effects

Environmental

Housing construction and renovation has numerous local environmental consequences, which can include noise, an increase in impermeable surfaces, release of particulates, and disruption of local habitat amongst others.

Social

The Müllerwis housing estate was constructed during a time when demand for housing was high. The rapid construction of these dwellings by Ernst Göhner AG using prefabricated slabs helped to alleviate the housing shortage.

Some argue that the large housing estates, such as Müllerwis, built in the 1950s, 1960s and 1970s have generally produced sociological disadvantages.

Internal Heterogeneous

1968 Tenants *(RS 1 Living space):* The modular construction of Müllerwis was and is seen by many tenants as lacking individuality.

1968 Tenants *(RS 1 Living space):* Modular construction kept construction costs, and therefore rents, low.

1990 Tenants *(RS 1 Living space):* Balconies were not properly supported when they were widened during the first renovation phase, causing safety risks for the tenants.

Regulations

Canton of Zurich

- *Verordnung über die ordentlichen technischen und übrigen Anforderungen an Bauten, Anlagen, Ausstattungen und Ausrüstungen (Besondere Bauverordnung I; BBV I) vom 6. Mai 1981*[23]
- *Verordnung über den Baulärm vom 11. November 1969*[24]
- *Bauverfahrensverordnung (BVV) vom 3. Dezember 1997*[25]

[23] LS 700.21

[24] LS 713.5

[25] LS 700.6

Other regulations

- Statutes and regulations of the CSF, describing the responsibilities of the different actors.
- SIA norms and regulations

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to PF 3 regulated?	Yes	Yes
	Is PF 3 sufficiently regulated?	No	Yes
Coherence	Is there a conflict involved in the use of PF 3?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

US. UTILITY GOODS AND SERVICES

Utility goods and services include everything associated with flows into and out of the housing stock, such as energy, materials and water.

US 1 Demand for Energy

User actors

1. EKZ (Elektrizitätswerke des Kantons Zürich), electricity supplier
2. Vendor of the two new wood chip heat stations to be installed during 2007-2010 renovations.
3. Providers of wood chips (after renovations) gas (currently) and oil (formerly) for the on-site district heating stations.
4. The renter of the burner (soon to be replaced).

Excluded actors

Energy providers who do not have servicing contracts with the managers of the Müllerwis housing estate.

Affected actors

Energiedirektorenkonferenz (EnDK), promotes and coordinates the cooperation between cantons with regards to energy matters.

Kantonale Aufsichtsstelle für die Einhaltung der LRV

Intended use

1. EKZ: to use the demand from the housing stock to sell electricity

2. Suppliers of heating energy sources: To manage the supply of heating oil/gas/wood chips required to satisfy the housing stock's demand for heating energy.

Modality of use

Electricity is provided to the tenants of the housing stock on a continuous basis after an electricity provision contract is concluded.

Heating energy is provided to the housing stock on a continuous basis.

Abusive use

-

Rivalry and Complementarity

-

Effects

Environmental

Until 1988: Oil used for heating the stock is a non-renewable and polluting energy source. Emissions occur both during the extraction of the primary oil resources and during the burning of the oil for heating, although the efficiency of oil burners has increased throughout the years.

Regulations

Public policy

Confederation

- *Art. 89 Cst. Energiepolitik:* Para. 4 states that measures concerning energy consumption of buildings remain the responsibility of the cantons.
- *Bundesgesetz vom 7. Oktober 1983 über den Umweltschutz (Umweltschutzgesetz, USG)*[26]
- *Energiegesetz vom 26. Juni 1998 (EnG)*[27] *and Energieverordnung vom 7 Dezember 1998 (EnV)*[28]
- *Bundesgesetz vom 8. Oktober 1999 über die Reduktion der CO2-Emissionen (CO2-Gesetz)*[29]*:* Allows the Federal council to impose a tax on CO2. A tax on heating oil came into effect on January 1, 2008.
- *Bundesgesetz vom 23. März 2007 über die Stromversorgung (Stromversorgungsgesetz, StromVG)*[30]

Canton of Zurich

- *Energiegesetz vom 19. Juni 1983*[31]
- *Gesetz betreffend die Elektizitätswerke des Kantons Zürich (EKZ-Gesetz) vom 19. Juni 1983*[32]
- *Verordnung über die Energieplanung und die Förderung von Pilotprojekten (Energieverordnung) vom 6. November 1985*[33]
- *Energiegesetz des Bundes (Vollzugsregelung) vom 3. Februar 1999*[34]
- *Allgemeine Bedingungen der Elektrizitätswerke des Kantons Zürich (EKZ) für Netzanschluss, Netznutzung und Lieferung elektrischer Energie vom 11. Juni 2007*[35]
- *Tarife der Elektrizitätswerke des Kantons Zürich (EKZ) vom 1. Januar 2007*[36]
- *Bedingungen der Elektrizitätswerke des Kantons Zürich (EKZ) für den Anschluss an die Verteilanlagen vom 1. Januar 2007*[37]

[26] SR 814.01

[27] SR 730.0

[28] SR 730.01

[29] SR 641.71

[30] SR 734.7

[31] LS 730.1

[32] LS 732.1

[33] LS 730.11

[34] LS 730.22

[35] LS 732.15

[36] LS 732.151

[37] LS 732.152

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to US 1 regulated?	Yes	Yes
	Is US 1 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of US 1?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

US 2 Material Storage and Sink

The maintenance and renovation of the Müllerwis housing stock demand large quantities of materials.

User actors

Suppliers of construction, renovation and maintenance materials

During the construction phase, many of the building elements were produced and supplied by companies owned by the Göhner group:

- Ego SA – wood, metal and plastic windows and doors
- Bauwerk SA – parquets, waxes, glues and carpets
- Igéco SA – prefabricated concrete elements
- Artels-Werke GmbH and IbusWerke GmbH – wood and plywood panels, furniture, MFD, etc.

Excluded actors

Those who do not provide materials suitable for construction, renovation and maintenance.

Affected actors

-

Intended use

To rationally exploit the stock of raw resources to produce and sell materials needed for the construction and renovation of housing.

Modality of use

Materials are provided based on the material requirements of the projects.

Abusive use

-

Rivalry and Complementarity

Complementarity

Ernst Göhner AG *(PF 3 Labour investment)*: The manufacture and installation of many materials used in the construction of the Müllerwis/Seilerwis stock came from companies owned by Göhner AG.

Effects

Environmental

The supply of materials for construction and renovation produce numerous environmental effects, most notably related to the depletion of natural resources, the energy required for the extraction and fabrication of the material (i.e. its embodied energy) and air, water and land pollution. These effects can be mitigated by providing recycled or reusable construction materials, and materials with low embodied energy and pollution production.

Regulations

Contracts

- Between the general contractor for renovation or construction work and the material providers

Other regulations and norms

- SIA norms and regulations

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to US 2 regulated?	Yes	Yes
	Is US 2 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of US 2?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

US 3 Material Discharge

The Müllerwis housing estate produces *US 3 Material discharge*, which comes in the form of household waste, household recyclable materials and currently construction waste.

User actors

1. The Greifensee Health Administration (*Gesundheitsbehörde*)
2. Kerichtverwertung Zürcher Oberland (KEZO)

Excluded actors

Those who do not have contracts for the collection of waste or recyclables

Other actors that could use the waste for their disposal services.

Affected actors

Zürcher Abfallverwertungs-Verbund (ZAV)

Intended use

Gesundheitsbehörde: To ensure hygienic conditions in the city by carefully managing the waste collection, treatment and disposal systems that process waste and recyclables.

KEZO: To pick up and incinerate household waste to produce energy

Modality of use

Household waste is collected twice a week. Other products, such as paper, glass, metal, and compost are collected separately or can be disposed of at collection points.

Abusive use

-

Rivalry and Complementarity

Complementarity

KEZO incinerator *(US 1 Demand for energy)*: Household waste that can be incinerated is burned by KEZO to produce energy for a district heating network.

Effects

Environmental

The waste burned by the KEZO incinerator is used to produce electricity and district heating.

Regulations

Public policy

Confederation

- *Art 30-32bbis Bundesgesetz über den Umweltschutz vom 7. Oktober 1983 (Umweltschutzgesetz, USG): Solid waste treatment and disposal is the responsibility of the cantons.*
- *Technische Verordnung vom 10. Dezember 1990 über Abfälle (TVA)*[38]
- *Luftreinhalte-Verordnung vom 16. Dezember 1985 (LRV)*[39]

Canton of Zurich

- *Gesetz über die Abfallwirtschaft (Abfallgesetz) vom 25. September 1994*[40]
- *Abfallverordnung vom 24. November 1999*[41]
- *Verordnung über die Nachsorge und die Sanierung von Deponien vom 8. März 2000*[42]

[38] SR 814.600

[39] SR 814.318.142.1

[40] LS 712.1

[41] LS 712.11

[42] LS 712.12

Greifensee

- *Abfallverordnung der Gemeinde Greifensee vom 2. Dezember 1992, revidiert am 30. Juli 1996*

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to US 3 regulated?	Yes	Yes
	Is US 3 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of US 3?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

US 4 Water Sink

User actors

Bauamt Greifensee - Wasserversorgung

Excluded actors

All other potential water provision companies

Affected actors

-

Intended use

To rationally exploit the water supply from Lake Zurich and from groundwater sources in Uster to deliver potable water in sufficient quantity and quality to housing stocks in Greifensee.

Modality of use

Water is exploited, treated and distributed on a continuous basis; tenants are currently charged Sfr. 1.50/m^3.

Abusive use

-

Rivalry and Complementarity

-

Effects

-

Regulations

Public policy

Confederation

- *Bundesgesetz vom 24. Januar 1991 über den Schutz der Gewässer (Gewässerschutzgesetz, GSchG)*[43] and *Gewässerschutzverordnung vom 28. Oktober 1998 (GSchV)*[44]

Canton of Zurich

- *Wasserwirtschaftsgesetz vom 2. Juni 1991*[45]
- *Verordnung über die Wasserversorgung vom 14. Oktober 1992*[46]
- *Gebührenverordnung zum Wasserwirtschaftsgesetz vom 21. Oktober 1992*[47]
- *Konzessionsverordnung zum Wasserwirtschaftsgesetz vom 21. Oktober 1992*[48]

Greifensee

- *Reglement über die Wasserversorgung vom 1. Januar 2004, Gemeinde Greifensee*

Other regulations and norms

- *Technische Richtlinien des Schweizerischen Vereins des Gas- und Wasserfaches (SVGW)*

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to US 4 regulated?	Yes	Yes
	Is US 4 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of US 4?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

US 5 Water Discharge

User actors

Bauamt Greifensee – Abwasserentsorgung: responsible for the planning, building and maintenance of the sewage transport system.

Wastewater treatment facility (Kläranlage) in Niederuster. Previous to the construction of this plant, wastewater from Greifensee was treated at the Grossriet plant in Uster.

[43] SR 814.20

[44] SR 814.201

[45] LS 724.11

[46] LS 724.41

[47] LS 724.21

[48] LS 724.211

Excluded actors

-

Affected actors

-

Intended use

To accept wastewater of appropriate quality and quantity and to send it to the sewage treatment plant in Niederuster. The sewage fee is currently 1.60 CHF per 1000 liters.

Modality of use

Wastewater is collected, treated and disposed of on a continuous basis.

Abusive use

To discharge water that may result in unsafe water bodies.

Rivalry and Complementarity

-

Effects

-

Regulations

Public policy

Confederation

- *Bundesgesetz vom 24. Januar 1991 über den Schutz der Gewässer (Gewässerschutzgesetz, GSchG)*[49] *and Gewässerschutzverordnung vom 28. Oktober 1998 (GSchV)*[50]*:* The objective of the law is to protect water bodies from adverse effects. The canton supervises the establishment of regional and general water discharge plans *(regionaler Entwässerungsplan, generaler Entwässerungsplan)*, which guarantee protection of water bodies in communes and an adequate evacuation of water from habitable zones.

Canton of Zurich

- *Einführungsgesetz zum Gewässerschutzgesetz vom 8. Dezember 1974*[51]
- *Verordnung über den Gewässerschutz vom 22. Januar 1975*[52]
- *Verordnung zum Schutz des Greifensees vom 27. Juni 1941.*

[49] SR 814.20

[50] SR 814.201

[51] LS 711.1

[52] LS 711.11

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to US 5 regulated?	Yes	Yes
	Is US 5 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of US 5?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

UF. URBAN FUNCTION GOODS AND SERVICES

UF 1 Design of Urban Space

User actors

1. Public planning authorities (particularly communal authorities)
2. Planners and architects

Excluded actors

Planners and architects who are not mandated by the stock owner or public authorities.

Affected actors

Residents of the neighbourhood

Intended use

1. To create and use building and zoning regulations that support good urban design.
2. To create a well-designed urban setting by using the buildings of the housing stock as an element of urban design.

Modality of use

-

Abusive use

To create neighbourhoods that are not functional or that do not satisfy the needs of residents.

Rivalry and Complementarity

-

Effects

Internal Heterogeneous

(1987) Tenants *(NR 2 Collective indoor space)*: Some of the renovation measures, most notably an activity room separate from the rest of the buildings of the stock, were not allowed since the development already exceeded the coefficient of utilisation of the four-story residential zone they were located in (Schilling 1990: 15).

Regulations

Public policy

Confederation

- *Bundesgesetz über die Raumplanung vom 22. Juni 1979 (Raumplanungsgesetz, RPG)*[53]

Canton of Zurich

- *Bauverfahrensverordnung vom 03. Dezember 1997*[54]

[53] SR 700

- *Kantonaler Richtplan vom. 31 Januar 1995*
- *Kantonaler Richtplan vom 13. März 1985 (superseded)*
- *Lärmschutz-Verordnung (LSV) vom 15. Dezember 1986*[55]*:* Annexe 3-7: Describes limits in residential areas for noise from different sources.
- *Verordnung über die ordentlichen technischen und übrigen Anforderungen an Bauten, Anlagen, Ausstattungen und Ausrüstungen (Besondere Bauverordnung I; BBV I) vom 6. Mai 1981*[56]
- *Verordnung über den Quartierplan (Quartierplanverordnung) vom 18. Januar 1978*[57]
- *Gesetz über die Raumplanung und das öffentliche Baurecht (Planungs- und Baugesetz) vom 7. September 1975*[58]
- *Kantonaler Gesamtplan gemäss Planungs- und Baugesetz vom 7. September 1975 (festgesetzt am 10. Juli 1978) (superseded)*
- *Verordnung zum Schutz des Greifensees vom 27. Juni 1941.*

Gemeinde Greifensee

- *Gemeinde Greifensee Bau- und Zonenordnung und Zonenplan vom 1. Dezember 1993*
- *Bauordnung, Gemeinde Greifensee ZH von Mai 1959*

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to UF 1 regulated?	Yes	Yes
	Is UF 1 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of UF 1?	Yes	No
	Is it the result of unclear or poorly defined property rights or use rights?	No	-
	Is it the result of contradictions between public policies?	Yes (1)	-
	Is it the result of incoherence between regulations and policy?	No	-

(1) Although the Müllerwis housing estate contains four highrise buildings, it is actually located in an area zoned as four-story residential (zone W4, sensitivity zone ES II).[59] At the time of the first renovation phase, measures were proposed that would have exceeded the coefficient of utilisation (currently 65%). Thus, although the construction of high-rise buildings had been allowed in 1968, since they now exceed the permissible land use any desired modification that might increase the coefficient of utilisation is restricted. This

[54] LS 700.6

[55] LS 814.41

[56] LS 700.21

[57] LS 701.13

[58] LS 700.1

[59] Gemeinde Greifensee Zonenplan vom 1. Dezember 1993

appeared to have caused a conflict between the Winterthur-Versicherungen and the town of Greifensee during the first renovation phase (Strebel 1990: 57).

UF 2 Demand for Traffic-Related Infrastructure

The Müllerwis/Seilerwis development is located in close proximity to the Nänikon/Greifensee train station. Two urban train services connect Greifensee with the cities Zug via Zürich and Uster (S9) as well as Zürich and Hinwil (S14). A night service goes to Rapperswil SG and Bülach via Zürich Oerlikon (SN 5). There is no bus or tram service in Greifensee.

User actors

1. Zurich Verkehrsverbund – transit providers for the canton of Zurich
2. Schifffahrts-Genossenschaft Greifensee
3. Those who control surfaces used for traffic and parking

Excluded actors

Transit providers that do not have a service contract in the area of the housing stock.

Affected actors

-

Intended use

Public transit providers: To use the demand for public transportation to fill or extend the transit network.

Controllers of traffic and parking surfaces: To provide space for parking.

Modality of use

-

Abusive use

-

Rivalry and Complementarity

-

Effects

-

Regulations

Public policy

Canton of Zurich

- *Gesetz über den öffentlichen Personenverkehr vom 6. Juni 1988*[60]
- *Verordnung über das Angebot im öffentlichen Personenverkehr (Angebotsverordnung) vom 14. Dezember 1988*[61]

[60] LS 740.1

[61] LS 740.3

- *Verordnung über die Gemeindebeiträge an den Verkehrsverbund (Kostenverteiler-Verordnung) vom 14. Dezember 1988*[62]
- *Gesetz über den Bau und den Unterhalt der öffentlichen Strassen (Strassengesetz) vom 27. September 1981*[63]
- *Verordnung über Staatsbeiträge an den Bau und Unterhalt von Strassen (Strassenbeitragsverordnung) vom 8. September 1982*[64]

Gemeinde Greifensee

- *Reglement über das unbeschränkte Parkieren auf Parkplätzen signalisierter Parkzeitbeschränkung 27. September 2003*

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to UF 2 regulated?	Yes	Yes
	Is UF 2 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of UF 2?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

UF 3 Demand for Collective Institutional Services

User actors

1. Persons or groups that provide collective institutional services within close proximity of the Müllerwis estate.
2. Kindergarten Müllerwis

Excluded actors

Institutional services that are not in demand.

Affected actors

Residents of the neighbourhood.

Intended use

To fulfil the demand for institutional services generated by the tenants of housing stocks.

Modality of use

-

[62] LS 740.6

[63] LS 722.1

[64] LS 722.18

Abusive use

-

Rivalry and Complementarity

-

Effects

Environmental

Reduce motorised transportation that would be necessary if the business was not located within close proximity of the stock.

Regulations

Public Policy

Gemeinde Greifensee

- Gemeinde Greifensee Bau- und Zonenordnung und Zonenplan vom 1. Dezember 1993

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to UF 3 regulated?	Yes	Yes
	Is UF 3 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of UF 3?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

UF 4 Demand for Goods and Services within Close Proximity

User actors

Companies or organisations that provide goods and services. During the time of construction, two companies especially used this demand: Migros (opened in 1969) and Mettler Instruments AG (moved to Greifensee in late 1960s).

Excluded actors

Companies whose goods and services are not in demand in the neighbourhood in question.

Affected actors

-

Intended use

To fulfil the demand for goods and services generated by the tenants of housing stocks.

To use the demand for jobs created by an increase in population.

Modality of use

-

Abusive use

-

Rivalry and Complementarity

-

Effects

Internal homogeneous

Prior to 1967, Greifensee was serviced by a single grocery store, which could not sufficiently satisfy the needs of the increasing population. Thus, in 1969 Göhner AG erected a shopping centre in Meierwis, with Migros, hairdresser, bank, post, restaurant and household store to satisfy the needs of newcomers. With the Migros, the business turnover of the single grocery store was halved (Frei 2006: 224). It is worth noting that Ernst Göhner and the founder of Migros, Gottlieb Duttweiller, were close friends and often worked together as entrepreneurs.

Regulations

Gemeinde Greifensee

- *Gemeinde Greifensee Bau- und Zonenordnung und Zonenplan vom 1. Dezember 1993*

Elements for evaluating extent and coherence

		1968 – 2003	**2003 – present**
Extent	Is the use right to UF 4 regulated?	Yes	Yes
	Is UF 4 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of UF 4?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

NM. NONMATERIAL GOODS AND SERVICES

The *Nonmaterial* category encompasses those goods and services that are intangible and include *NM 1 Solving general housing needs, NM 2 Solving non-housing needs, NM 3 Shaping the characteristic landscape, NM 4 Social and cultural complexity* and *NM 5 Conservation and transmission of social and historical values*.

NM 1 Solving General Housing Needs

The service *NM 1 Solving general housing needs* refers to using the Müllerwis stock to address housing problems of either a general nature (e.g. overall housing shortage) or a specific nature (e.g. resolving housing problems of specific groups such as low income households).

User actors

(1964-1973) Public authorities, primarily the canton of Zurich through the Department of regional planning *(Amt für Regionalplanung)* but also the town of Greifensee.

Excluded actors

Public authorities that do not have jurisdiction in the areas where the Müllerwis stock is located.

Affected actors

Residents of Greifensee

Intended use

To use the Müllerwis/Seilerwis stock to solve the housing needs within the canton of Zurich.

Modality of use

To encourage the construction of large housing developments by modifying the building ordinance and proposing a new spatial model plan for the town that shows high-rise buildings.

Abusive use

-

Rivalry and Complementarity

Complementarity

Ernst Göhner AG *(PF 1 Capital investment, PF 2 Land investment)*: The large land holdings of Ernst Göhner gave the cantonal and communal authorities the opportunity to solve general housing needs through the construction of large scale housing developments, also led by Ernst Göhner.

Schilling, Architect *(NM 3 Shaping the characteristic landscape)*: To solve the acute housing shortage in the city and in the canton of Zurich, the cantonal authorities hired Schilling to create a spatial model of Greifensee that would include high-rise buildings.

Effects

Environmental

Agricultural land was converted to built-up land.

Social

The rapid construction of the Müllerwis housing estate provided much needed additional and affordable housing during a time of housing shortage.

The population of Greifensee increased approximately 10-fold in the six-year period following the construction of the Müllerwis housing estate.

To solve the general housing needs of the canton, large housing developments were constructuted. Although generally well-received at first, they soon were considered an eyesore on the landscape. Furthermore, the number of social problem cases increased, particularly in the high-rise buildings.

Economic

The sudden increase in population of Greifensee between 1967 and 1975 placed heavy financial demands on the town, which had to extend nearly all infrastructure.

Internal heterogeneous

1968 City planners and architects (*UF 1 Design of urban space*): Similarly to the above, to satisfy the demand for housing, authorities allowed land to be zoned and the building ordinance to be modified to allow large housing estates to be designed and built.

1968 City planners and architects (*NM 3 Shaping the characteristic landscape*):To satisfy housing demand by drastically increasing the housing units in Greifensee, a model plan was proposed that would produce a “stadium effect” by having low buildings close to the lake and gradually increasing in size as one moved toward the railway tracks. Thus, public authorities’ desire to satisfy housing needs had the effect of drastically changing the way in which the architect Schilling shaped the landscape around lake Greifensee.

1968 Residents of Greifensee *(NM 5 Conservation and transmission of social and historical values)*: The construction of large housing developments completely and rapidly did away with any preservation of Greifensee’s agricultural and village values.

Mid-1980s Tenants *(RS 1 Living space)*: Tastes in housing change over the years. Large housing developments such as Müllerwis/Seilerwis, which were progressive in its time, became unappreciated by tenants due to the repetitiveness of design and the lack of diversity of floor types. Prior to the first set of renovations, tenant turnover was high.

Mid-1980s Town of Greifensee *(NM 4 Social and cultural complexity)*: By the mid-1980s, the social and cultural complexity of the housing stock had greatly diminished, which continued to intensify until the second set of renovation measures.

Regulations

Public policy

Canton of Zurich

- *Gesetz über die Raumplanung und das öffentliche Baurecht vom 7. September 1975*
- *Verordnung zum Schutz des Greifensees vom 27. Juni 1941*

Greifensee

- *Bauordnung, Gemeinde Greifensee, ZH von Mai 1959 (superseded)*

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NM 1 regulated?	Yes	Yes
	Is NM 1 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NM 1?	Yes (1), (2)	No*
	Is it the result of unclear or poorly defined property rights or use rights?	No	-
	Is it the result of contradictions between public policies?	Yes (2)	-
	Is it the result of incoherence between regulations and policy?	No	-

* *assumed*

(1) Tenants *(RS 1 Living space)*: Increasing tenant turnover was partly due to the style of the Müllerwis/Seilerwis housing development becoming unpopular. This was not the result of an incoherence or contradiction in the regime.

(2) Residents of Greifensee *(NM 5 Conservation and transmission of social and historical values)*: The construction of large housing developments completely and rapidly did away with any preservation of Greifensee's historical agricultural and village values. This occurred due to the change in the building ordinance, which effectively was a contradiction of planning public policy. It was also due to a contradiction of the intention of the protection ordinance for Lake Greifensee, and the modified building ordinance.

NM 2 Solving a Non-Housing Need

User actor

Town of Greifensee

Excluded actors

Affected actors

Intended use

To use the housing stock to solve problems not directly related to housing, in this case increasing tax revenues.

Modality of use

The town of Greifensee put pressure on the Winterthur-Versicherungen (mid-1980s) and then on the CSF (2003) to improve the condition of the stock to attract more tenants and more financially diverse tenants to expand the tax base during economically difficult times for the commune.

Abusive use

-

Rivalry and Complementarity

Rivalry

Tenants *(RS 1 Living space)*: The increase in rent following renovations motivated some tenants to move.

Complementarity

Winterthur-Versicherungen and CSF *(PF 1 Capital investment)*: Renovations resulted in higher rental income for the stock owner and simultaneously improved tax revenues for the town.

Effects

Economic

It is unknown whether the renovations had the desired effect of increasing tax revenues.

Internal Heterogeneous

Tenants *(RS 1 Living Space, RS 2 Indoor climate and technical services)*: Renovations improved the conditions of the residential goods and services. Furthermore, tenant turnover decreased, at least temporarily, following the renovations.

Town of Greifensee *(NM 4 Social and cultural diversity)*: The renovations increased the cost of rents, making some tenants move out and others, with presumably higher incomes, to move in.

Regulations

-

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NM 2 regulated?	Yes	Yes
	Is NM 2 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NM 2?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

NM 3 Shaping the Characteristic Landscape

User actors

1. The architect Jakob Schilling (1964)
2. Residents of Müllerwis/Seilerwis (1986-1990)
3. Planners and architects hired by the stock owner or by public authorities

Excluded actors

All other actors

Affected actors

Residents of the area; people visiting or passing through the area

Intended use

To add characteristic features to the landscape through the placement and design of the buildings and green space of the Müllerwis/Seilerwis stock.

Modality of use

1. Jakob Schilling (1964): hired by the Department of regional planning of canton Zurich to design a spatial model plan for the town of Greifensee that would accommodate large housing developments.

2. Residents of Müllerwis/Seilerwis (1986-1990): requested by the Winterthur-Versicherungen to propose measures to improve the visual effect of the Müllerwis/Seilerwis stock on the landscape.

3. Planners and architects hired by the stock owner or by public authorities: to make improvements to the visual effect of the stock on the landscape during the two renovation periods.

Abusive use

For the stock owner to allow the external appearance of the stock to deteriorate (i.e., underuse NM 3) to the point where the stock is a definite blight on the landscape.

Rivalry and Complementarity

Rivalry

1986 Winterthur-Versicherungen *(PF 1 Capital investment)*: Due to the unappealing appearance of the Müllerwis/Seilerwis stock, the municipality of Greifensee put pressure on the Winterthur-Versicherungen to undertake renovations that would at least improve its outward appearance (Halter 2006: 9).

1986 *(NM 5 Conservation and transmission of social and historical values)*: The measures of the first renovation phase were also intended to halt the "slumming" of the Müllerwis/Seilerwis and to stop the increase in the number of social cases originating in the housing development (Wehrli-Schindler 1990: 17).

Complementarity

1967 Göhner AG *(PF 1 Capital investment, PF 2 Land investment, PF 3 Labour investment)*: The spatial plan proposed by J. Schilling allowed Göhner to proceed with the development and construction of Greifensee's large housing developments. Göhner's purchase of a large amount of land and eagerness to build large housing developments gave Schilling the scope to make his design.

1967 Cantonal authorities (NM 1 Solving general housing needs): The Department of regional planning hired Schilling to create a spatial plan in a way that would allow many housing units to be erected.

Effects

Internal heterogeneous

1967-1973 Residents of Greifensee (NM 5 Conservation and transmission of social and historical values): Schilling's spatial model plan eliminated any preservation of Greifensee's historical agricultural and village values.

1986 Tenants *(RS 1 Living space)*: Monotony and poor appearance of the exterior of the housing estate reduced the desirability of the flats and tenant turnover increased. Renovations of the façade improved (at least for a short while) the appearance of the stock as a whole and tenants had more pride in their living space.

1986-1990 Town of Greifensee *(NM 5 Conservation and transmission of social and historical values)*: The town encouraged the improvement of the visual effect of the buildings in part to strengthen the identification that residents have with their neighbourhood (Wehrli-Schindler 1990: 17).

2009 CSF *(PF 1 Capital investment)*: Investment in renovations includes specific objectives to make Müllerwis/Seilerwis appear to be a cohesive neighbourhood. These include identical sun canopies for all buildings and coordinated painting of all concrete elements and steel supports of balconies and winter gardens (conservatories). Such measures will improve the attractiveness of the housing estate and thus increase return on investment.

Social

1967: The monotonous architecture, the unattractive appearance and the lack of individuality drew criticism from the local population.

1967: The spatial model radically changed the landscape of Greifensee, changing it from an agricultural community to a more urban one.

1986: The deteriorating façades of the stock created an eyesore on the landscape.

Regulations

Public policy

Confederation

- *Bundesgesetz vom 22. Juni 1979 über Raumplanung (Raumplanungsgesetz, RPG)*[65]

Canton Zurich

- *Kantonaler Richtplan 1995:* The old town of Greifensee is newly listed as a "view worthy of protection" *(schutzwürdiges Ortsbild)*, but this does not include the area of the Müllewis/Seilerwis development.
- *Gesetz über die Raumplanung und das öffentliche Baurecht vom 7. September 1975*
- *Verordnung zum Schutz des Greifensees vom 27. Juni 1941*.

Town of Greifensee

- *Bauordnung, Gemeinde Greifensee ZH von Mai 1959:* amendment (para. 13a) to this ordinance allowed Schilling to design the spatial model plan and the development to be built.

[65] SR 700

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NM 3 regulated?	Yes	Yes
	Is NM 3 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NM 3?	Yes	No
	Is it the result of unclear or poorly defined property rights or use rights?	No	-
	Is it the result of contradictions between public policies?	Yes (1)	-
	Is it the result of incoherence between regulations and policy?	No	-

(1) The construction of large housing developments completely and rapidly did away with any preservation of Greifensee's historical agricultural and village values. This occurred due to the change in the building ordinance, which effectively was a contradiction of planning public policy. It was also due to a contradiction of the intention of the protection ordinance for Lake Greifensee, and the modified building ordinance.

NM 4 Social and Cultural Complexity

User actors

1. Town of Greifensee
2. Winterthur-Versicherungen (1970-2003)
3. Credit Suisse Investment Foundation (2003-present)

Excluded actors

-

Affected actors

Residents of the neighbourhood and of Greifensee

Intended use

To reduce the number of social cases in the housing stock by encouraging the increase of social diversity.

To be able to charge higher rents for upscale flats by increasing the number of tenants with higher incomes.

Modality of use

To convert some of the flats in the stock during renovations to more upscale flats, thus attracting higher income tenants and charging higher rents.

Abusive use

-

Rivalry and Complementarity

Rivalry

Tenants (RS 1 Living space): By attracting higher income tenants through improvements in renovations and subsequent rent increases, some tenants are motivated to move to more affordable housing.

Complementarity

1990 Winterthur-Versicherungen (PF 1 Capital investment): Remodeled flats will satisfy more upmarket requirements. These will have more expensive rent and the tenant income diversification presumably will be greater.

2006 CSF (PF 1 Capital investment): Remodeled flats will satisfy more upmarket requirements. These will have more expensive rent and the tenant income diversification presumably will be greater.

Effects

Social

The renovations increased income diversity in the Müllerwis/Seilerwis housing stock

Regulations

Public policy

Confederation

- Tenant protection legislation, which allows stockowers to increase rents only to cover the costs of added value renovations. With the new tenant protection legislation, allowable increases in rent for added-value renovations (as opposed to maintenance renovations) cannot be charged to the exsiting tenants in the year following the signing of the lease, unless the increase is specified in the lease.

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NM 4 regulated?	Yes	Yes
	Is NM 4 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NM 4?	No	No
	Is it the result of unclear or poorly defined property rights or use rights?	-	-
	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

NM 5 Conservation and Transmission of Social and Historical Values

User actors

1. The residents of Greifensee
2. The town of Greifensee

Excluded actors

-

Affected actors

-

Intended use

To conserve the "positive" social values that were present in the first years of the stock's existence to ensure in part that the slumming of the development doesn't occur.

Modality of use

To create tenant associations and to renovate the buildings to improve tenant identification with the housing stock.

Abusive use

To have a housing stock rapidly eliminate existing social and historical values

Rivalry and Complementarity

Town of Greifensee *(NM 1 Solving general housing needs)*: To relieve the housing crisis, mass-produced, large-scale housing was built on land that previously had been agricultural. This represents a rivalry due to the underuse of NM 5.

Effects

Social

The social and historical values of the town of Greifensee were radically changed after the construction of the Müllerwis/Seilerwis and other housing developments.

Regulations

Confederation

- *Bundesgesetz vom 1. Juli 1966 über den Natur- und Heimatschutz (NHG)*[66]

Canton Zurich

- *Kantonaler Richtplan 1995:* The old town of Greifensee is newly listed as a "view worthy of protection" *(schutzwürdiges Ortsbild)*, but this does not include the area of the Müllewis/Seilerwis development.
- *Verordnung über den Natur- und Heimatschutz und über kommunale Erholungsflächen (Natur- und Heimatschutzverordnung) vom 20. Juli 1977*[67]
- *Planungs- und Baugesetz PBG vom 7. September 1975. III. Titel: Der Natur- und Heimatschutz:* deals with natural and monument protection.
- *Gesamtpläne 1964-1973*
- *Baugesetz 1959* (superseded)
- *Verordnung zum Schutz des Greifensees vom 27. Juni 1941.*

Town of Greifensee

[66] SR 451

[67] LS 702.11

- *Bauordnung, Gemeinde Greifensee ZH von Mai 1959:* amendment (para. 13a) to this ordinance allowed Schilling to design the spatial model plan and the development to be built.

Elements for evaluating extent and coherence

		1968 – 2003	2003 – present
Extent	Is the use right to NM 5 regulated?	Yes	Yes
	Is NM 5 sufficiently regulated?	Yes	Yes
Coherence	Is there a conflict involved in the use of NM 5?	Yes	No
	Is it the result of unclear or poorly defined property rights or use rights?	No	-
	Is it the result of contradictions between public policies?	Yes (1)	-
	Is it the result of incoherence between regulations and policy?	No	-

(1) The construction of large housing developments completely and rapidly did away with any preservation of Greifensee's historical agricultural and village values. This occurred due to the change in the building ordinance, which effectively was a contradiction of planning public policy. It was also due to a contradiction of the intention of the protection ordinance for Lake Greifensee, and the modified building ordinance.

CHAPTER 4 – USE OF GOODS AND SERVICES AND RELATED MANAGEMENT STRATEGIES

4.1 INTRODUCTION

As described by the first hypothesis of this research, the management strategies applied to the Müllerwis/Seilerwis housing stock and the use of goods and services by user-actors has varied over time. This chapter describes the key changes in use that occurred for each good and service and how these changes either may have influenced or may have been influenced by management strategies and decisions. The reasons for changes are also discussed and include analysis of regime-related reasons (i.e. changes in regulations) and external reasons.

4.2 CHANGES IN USE AND MANAGEMENT STRATEGIES

RS. Residential Goods and Services

RS 1 Living Space

The good *RS 1 Living space* has undergone two substantial changes since the Müllerwis housing estate was constructed in 1970, both of which relate to periods leading up to and immediately following renovations. These changes are: 1) high tenant turnover prior to renovations, and 2) some tenants moving out of flats due to increased rents following renovations and other tenants, presumably with higher incomes, moving in.

The Müllerwis housing estate was constructed in response to a severe housing shortage in the region and across Switzerland. The buildings' pre-fabricated panels enabled their rapid erection (and hence occupation) but also meant that they lacked variety in their floor plans. Nonetheless, the flats were well received by tenants upon construction.

The next 16 years saw a deterioration in the quality of the living space and the high-rise buildings in particular were subject to a high tenant turnover rate. Between 1989 and 1992 the Winterthur-Versicherungen undertook renovations of the buildings, which included some changes to the living space. Each household was given the option to select certain features for their own flat, such as the addition of a conservatory or a second toilet, thereby giving tenants the opportunity to personalise their dwelling. The increase in rents was therefore dependent on the extent of renovations; increases in rent due to global renovations were shared among all tenants and to this an additional rent increase per flat was added, depending on the renovation measures selected by the tenant.

By the time the CSF bought the Müllerwis housing estate in 2003, tenant turnover was again high. Furthermore, the flats were heavily under-utilised and had few children, even in 4 and 5 room flats. According to the architect who conducted the most recent study, the minimalistic appliances, equipment and finishing made these flats more suitable for single-person households than for families with children (Halter 2006: 20).

The renovations that are currently underway include measures that will make the flats more suitable for families (e.g. installation of second bathrooms). Thus, changes in the use of *RS 1 Living space* that are anticipated to take place are:

- lower tenant turnover (with consequences on the use of *PF 1 Capital investment* and *PF 3 Labour investment*);

- higher density (i.e. larger households) (with consequences on the use *NM 4 Social and cultural complexity*); and

- greater income diversity of tenants due to different "qualities" of flats and more floor plan diversity (with consequences on the use of *NM 4 Social and cultural complexity*).

There appear to be two different management strategies concerning *RS 1 Living space*. The first is that of the Winterthur-Versicherungen, the owner of the housing stock until 2003. Changes in the living space were secondary to the external improvement of the buildings of the housing estate. Furthermore, improvements to the living space were done on a piecemeal basis; each household had the option of selecting (or not) renovations that would change its flat and only its flat, improvements that would come with a rent increase for that particular household. Thus, the Winterthur did not appear to have an overall strategy concerning the living space.

The second strategy is that of the CSAM who oversees the Müllerwis/Seilerwis development. Since the renovations are not yet complete, it is too early to tell what effect they will have on the use of the living space by tenants. However, it is safe to say that the CSAM has a global strategy for the ensemble of the buildings in the Müllerwis stock. Furthermore, this strategy is one of *"Neupositionierung"*, that is, renovating the stock so that the living space (as well as other goods and services necessary for living in the stock such as technical services, and *NR Non-residential* goods and services) conform to market demand now and in years to come (Halter interview 2007). Approximately half of the flats will become more upmarket, thus diversifying tenant composition.

RS 2 Indoor Climate and Technical Services

During the first renovation phase, some tenants chose to make certain improvements to their technical services, e.g., a second bathroom or a new kitchen. However not all households made this decision, therefore after the renovation, different tenants had access to and use of different technical services.

In 1985, the new federal law on protection of air (LRV) came into effect and in 1992 emissions levels were set. Exhaust gas recuperation was added to the heating system at Müllerwis/Seilerwis with the consequence that nitrous emissions fell below limits, but at the expense of comfort and reliability (Halter 2006: 45). Thus between 1992 and the current renovations, tenants did not have access to a suitable level of indoor climate.

During the first renovation phase, the Winterthur-Versicherungen did not make many global renovations that improved the technical services available to the tenants. The exception is the insulation of the north-facing façade and a basic renovation of all kitchens.

With the state of the technical services now critical, the strategy of the CSF is to replace or renovate most of the technical equipment; new kitchens and bathrooms as well as some additional bathrooms are being installed. Other changes include the technical installations for heat and water provision and wastewater evacuation, allowing tenants to have access to better – and safer – technical services and indoor environment.

NR. Non-Residential Goods and Services

NR 1 Non-Residential Space

There have been no significant changes either in the use of *NR 1 Non-residential space* by the user actors or in the related stock owner management strategies.

NR 2 Collective Indoor Space

The first renovation phase saw the construction of two-storied pavilions at the beginning of the roofed passageways which provided space for garbage bins, gardening tools, as well as meetings. The current renovation includes a pavilion for meetings and get-togethers. Tenants must rent this space.

NR 3 Functional Space

There have been no significant changes either in the use of *NR 3 Functional space* by the user actors or in the related stock owner management strategies.

NR 4 Collective Outdoor Space

At the time of construction, the collective outdoor space was considered better than that provided on average by other housing estates built during the same period. The maintenance and renovation measurements of the late 1980s improved the entrance situations of the eight-storied buildings by roofing the way from the parking spaces and streets to the buildings' entrance. In this current renovation phase, the outdoor space will be modified with the objective of making the housing estate more cohesive. Changes include reducing the number of playgrounds from eleven to six in addition to redesigning them, redesigning the pathway system, planting trees and adding private gardens to eight ground floor flats.

Management strategy has not changed regarding this good.

PF. Production Factor Goods and Services

PF 1 Capital Investment

Changes in the use of *PF1 Capital investment* are related primarily to the sale of the stock from one actor to the other. In the transfer of the Müllerwis/Seilerwis stock from Göhner SA to the Winterthur-Versicherungen, the stock went from being a private investment by a company to an investment vehicle for an insurance company. With the sale to the CSF, the stock retains its function as an investment vehicle. As part of a pension foundation, many actors, such as company employees, have a vested interest in the rental income of the stock. Periodic changes occur in the use of *PF 1 Capital investment* during renovation periods, which is a normal event in the lifecycle of a housing stock.

The first investment in the Müllerwis housing estate after construction was for the renovation project of 1987-1990. Aside from the value added to individual flats and to the external appearance of the buildings, the strategy was to maintain the condition of the stock.

Regarding the strategy of the CSF, it must guarantee the company pension funds that it is investing employee contributions wisely to ensure a guaranteed return on investment – and

naturally profits to itself. To ensure such a scenario, the CSF uses the real estate branch Credit Suisse Asset Management (CSAM) to guide the foundation's strategy concerning buying, selling and renovating. Thus, the CSF must also invest the funds available to it through shares of CSF RES in maintaining and increasing the value of their housing stock. Although the money invested in the foundation that owns the Müllerwis housing estate is that of contributors, the CSAM must take these funds and make investment decisions that will give themselves income through various fees.

As a long-term investment, the rental income from the Müllerwis/Seilerwis stock must remain high over the next 20 years or so. The project managers try to foresee future market demand and renovate the housing estate accordingly. In other words, it is pointless to renovate a building if the flats are going to be too small, the floor plans impractical and conveniences not modern (e.g. not enough bathrooms). Thus, the investment strategy of the CSF is that of *"Neupositionierung"*, i.e., new or strategic positioning, whereby the Müllerwis/Seilerwis housing estate undergoes more than just a technical renovation. The buildings and flats are being modified to reflect the current demand for style, comfort, size, etc. To do otherwise creates a risk that flats will go unrented even though they are newly renovated.

The insured value of the Müllerwis housing estate is CHF 115 million. The CSF RES will be spending approximately CHF 50 million on this renovation project, an investment of approximately 43 percent of the value of the estate (this amount is considered high – renovation investments normally run about 30 to 35 percent of the insured value of the project).

The CSF is obliged to have a long term outlook for its real estate investments due to 1) its accountability to its clients who are not interested in short term gain, and 2) its obligations as a pension foundation.

PF 2 Land Investment

No new land purchases have occurred since Müllerwis/Seilerwis was built. Before then, however, Göhner SA and another private land buyer bought much of the agricultural land that fell within the town of Greifensee. Once this land was acquired and the town realised just how much was in possession of these two owners, the land was declassified and converted to constructible land. This paved the way for the construction of the Müllerwis estate.

PF 3 Labour Investment

There have been no significant changes in either the use of *PF 3 Labour investment* by the user-actors or in the related stock owner management strategies. Changes that have occurred have been the result of new ownership of the stock and thus the involvement of different actors.

The owner of the factory that produced the prefabricated elements, Ernst Göhner AG, was also the most prominent developer of these large housing construction projects.

US. Utility Services Goods and Services

US 1 Demand for Energy

The service *US 1 Demand for energy* has been used by several actors since the construction of the Müllerwis housing estate. The change in use in demand for heating energy is characterised by a shift from non-renewable energy to renewable energies.

Originally, two independent district heating stations powered by oil burners serviced the Müllerwis estate, one at Burstwies and the other at Seilerwis. At the beginning of the 1990s, the two systems were switched to gas and the tank at Burstwies was decommissioned. Until the completion of the renovations, the heating system depends on a rented burner.

Current renovation measures include replacing the existing heating system with a wood chip heat station that will produce 65% of the annual energy requirements. Two new natural gas heaters at the Seilerwis station will make up the difference. Furthermore, domestic hot water solar heating panels will be installed on one of the low-rise and one of the high-rise buildings. These should produce 12% of the energy required for hot water consumption. These changes are driven in part by the poor efficiency of the current system and by a request from the municipality to improve the heating of the housing estate (Halter 2006: 18).

The shift toward renewable energy at Müllerwis reflects not only concerns about the cost of oil and gas and the effect of non-renewable energy on the environment, but also a concern for the profitability of the flats. Although heating and hot water are figured into the accessory charges of a flat, with increasing costs of energy, potential tenants are also evaluating their anticipated heating costs when selecting a flat. Wood chip and solar heating can cut energy costs, and are therefore incentives for potential tenants to live in Müllerwis/Seilerwis.

US 2 Material Storage and Sink

There have been no significant changes either in the use of *US 2 Material storage and sink* by the user actors or in the related stock owner management strategies.

US 3 Material Discharge

There have been no significant changes either in the use of *US 3 Material discharge* by the user actors or in the related stock owner management strategies.

US 4 Water Sink

Several different actors have used *US 4 Water sink* since the construction of the Müllerwis/Seilerwis development due to the rapid increase in water demand in Greifensee following the population explosion.

At the time of construction of the new housing developments, drinking water was provided by two sources: a groundwater pump house near the train station and a small reservoir on Wildsberg. In 1967, this could satisfy the needs of about 1000 people. Additionally, the commune drew water from the water works in Uster, for an additional 500 to 600 people. This was obviously not enough to fulfil the needs of a rapidly expanding town. Firstly, there was insufficient water pressure from the Wildsberg reservoir (and no higher hill suitable for another reservoir), and secondly the groundwater was only 60 cm deep and therefore

presented a risk of contamination. The first solution was to connect to water supplies in Volketswil, then Zimikon. Since 1973, water comes mainly (70%) from lake Zurich although water is still provided by Uster. The railway groundwater pump house was decommissioned in the 1970s (Frei 2006: 233).

There have been no significant change in stock owner management strategies related to the use of *US 4 Water sink.*

US 5 Water Discharge

US 5 Water discharge has been used by several actors since the construction of Müllerwis/Seilerwis.

The new housing developments created a situation of under-use of *US 5 Water discharge* as the Greifensee's capacity to treat wastewater was inadequate. From the time of construction of Müllerwis/Seilerwis, wastewater was directed into a provisional connecting pipe that went to the treatment plant that serviced Volketswil, Schwerzenbach and Fällanden. A long-term solution, however, was found in Uster. The town of Uster participated in the construction of the Grossriet treatment plant and made land available for its construction just outside the city limits of Greifensee. The plant treated the wastewater over the next 20 years but it eventually became too expensive. A less expensive solution was found by connecting to the treatment plant at Niederuster. The Grossriet plant was then decommissioned (Frei 2006: 235).

There have been no significant changes in stock owner management strategies related to the use of *US 5 Water discharge.*

UF. Urban Function Goods and Services

UF 1 Design of Urban Space

The change in use of *UF 1 Design of Urban Space* occurred in the development stages of the Müllerwis/Seilerwis housing stock.

The construction of the Müllerwis estate occurred on land that had recently been declassified from agricultural land. Thus, the architect and planner of the estate Joseph Schilling had a clean slate for designing his spatial model plan. Since then, additional large housing estates have been built in the area and the Müllerwis/Seilerwis development constitutes one aspect of this urban area of the town of Greifensee. During the previous and current renovation phases, design actors, directed primarily by the stock owner and not public authorities, have changed some of the features of the estate with the objective of improving the urban space, but the estate essentially remains the same.

Although Müllerwis/Seilerwis contains four high-rise buildings, it is actually located in an area zoned as four-story residential (zone W4, sensitivity zone ES II). At the time of the first renovation phase, measures were proposed that would have exceeded the coefficient of utilisation. Thus, although the construction of high-rise buildings were allowed, since they now exceed the permissible land use any desired modification that might increase the coefficient of utilisation is restricted. Thus the town of Greifensee mobilised their right to *UF 1 Design of urban space* to prevent the construction by the Winterthur-Versicherungen of a separate common room (Schilling 1990, 57).

The CSF, however, seems to have avoided any similar conflict regarding the construction of a new pavilion. In this situation, it would appear that the town of Greifensee chose not to use their right to *UF 1 Design of urban space* to prevent the construction.

UF 2 Demand for Traffic-Related Infrastructure

There have been no significant changes either in the use of *UF 2 Demand for traffic-related infrastructure* by the user actors or in the related stock owner management strategies.

UF 3 Demand for Institutional Services

The demand for institutional services in Greifensee increased in proportion to the explosive population growth that occurred in the late 1960s to early 1970s. One example of the significant change of use in *UF 3 Demand for institutional services* was the construction and the opening in 1968 of a kindergarten adjacent to Müllerwis/Seilerwis. Since this period, there have been no significant changes either in the use of *UF 3 Demand for institutional services* by the user actors or in the related stock owner management strategies.

UF 4 Demand for Goods and Services

Previous to 1967, Greifensee was serviced by a single grocery store. This was not sufficient to satisfy the needs of the increased population. Thus, in 1969 Göhner AG erected a shopping centre in Meierwis, adjacent to Müllerwis/Seilerwis, with a Migros, hairdresser, bank, post, restaurant and household store to satisfy the needs of newcomers. With the Migros, the business turnover of the single grocery store was halved. Competition also came from the big stores in Volketswil and Uster (Frei 2006: 224). Since this period of population explosion, the use of this *UF 4 Demand for goods and services* has not significantly changed.

NM. Nonmaterial Goods and Services

NM 1 Solving General Housing Needs

The most significant use of NM 1 Solving general housing needs occurred during Müllerwis/Seilerwis' construction phase. Public authorities, particularly at the cantonal level used their control over planning regulations to encourage the construction of large housing estates to relieve the pressure of the acute housing shortage that the canton was experiencing. The series of events related to NM 1 Solving general housing needs is presented in detail in section 2.2.2 Housing situation in canton Zurich and in Greifensee.

Since the construction period, the use of Müllerwis/Seilerwis' *NM 1 Solving general housing needs* has not been specifically used, thus there have been no changes in this good and service.

NM 2 Solving Non-Housing Needs

The main non-housing need for which the Müllerwis/Seilerwis development was used was that of the shrinking tax base of the town. Thus, the town of Greifensee exerted pressure on the Winterthur-Versicherungen to renovate the housing stock in order to reduce vacancies and tenant turnover.

NM 3 Shaping the Characteristic Landscape

There have been three occurrences of the *NM 3 Shaping the characteristic* being used, during construction and during each of the two renovation phases.

The first user of NM 3 was the architect Shilling who, with the support of the canton and the town, designed a spatial model plan that would use the buildings of the Müllerwis/Seilerwis development to create a landscape from the waterfront that would produce a "stadium" effect, with low rise buildings in the foreground and increasing in size back toward the rail lines. The amendment of the 1959 building ordinance is the regime element that paved the way for this design to become a reality. In terms of management strategy, Ernst Göhner SA coincidentally conceived of his low-rise and high-rise buildings as part of the plan. Essentially, the canton, the town of Greifensee, Schilling and Göhner were each working toward the same goal.

As mentioned previously, large housing developments soon fell out of fashion and, furthermore, by the mid-1980s the buildings of Müllerwis/Seilerwis were looking grey, monotonous and worn and had become a point of shame for the residents. This period represents the second time the stock was used to shape the landscape. Encouraged by the Winterthur-Versicherungen, the tenants proposed measures to improve the overall outward appearance of the stock, which was then finalised by the architect Martin Halter. By the end of the first renovation phase, the buildings had been painted with a new colour motif, and features such as planter boxes outside windows had been added. Thus, the stock was no longer such a blight on the landscape.

The third use of NM 3 is occurring now, with the most recent renovation of the stock. Between 1990 and today, the buildings again became run-down with the faded painted façades and elements such as canopies and shutters looking very worn. Although the current renovation focuses mainly on added value features of the flats, external modifications are also being done by the CSF to improve the overall impression of the stock.

NM 4 Social and Cultural Diversity

The change in use of *NM 4 Social and cultural diversity* was motivated by a desire to benefit from increased rental income of the stock but also to avoid a homogenous social structure in the housing stock.

By the late 1980s, many tenants had moved from the housing blocks; now single-family homes were trendy. The once tight-knit community of the Müllerwis/Seilerwis (and other Göhner blocks in Greifensee) started to drift apart. Thus the principal of "social topography" emerged in Greifensee, where the neighbourhoods with houses with the fewest stories had the highest prestige and the eight-story high-rise buildings had the lowest; thus the number of stories of housing buildings became a reflection of their internal social structure (Frei 2006). This situation was neither beneficial to Greifensee nor to the stock owner. To be able to have better use of *NM 4 Social and cultural diversity* renovations were proposed.

In the case of the Winterthur-Versicherungen, the strategy was to improve the overall appearance of the stock as well as to individualise the flats in accordance with the wishes of the tenants, with the hope that these measure would encourage a larger social diversity of tenants to move in, thus producing a lower turnover, a more harmonious community and, of course, better use of *PF 1 Capital investment* through increased rental income.

The strategy of the CSF for gaining better use of *NM 4 Social and cultural diversity* was, similarly to the Winterthur-Versicherungen, through improvements made by renovations. However, the CSF chose a different renovation strategy, that of *Neupositionierung*, whereby the flats were modified significantly to conform to today's market demand and tomorrow's anticipated market demand. Part of this strategy involved converting some of the flats into higher-end/luxury flats where higher income tenants would live.

In both cases, the use of *NM 4 Social and cultural diversity* was a means to an end, meaning the objective in each case was to improve rental income (*PF 1 Captial investment).*

NM 5 Conservation and Transmission of Social and Historical Values

The construction of the Müllerwis/Seilerwis stock radically changed the character of the town of Greifensee, which had previous to 1967 been historical and agricultural. One could make the argument that this represented an underuse of NM 5 by the town of Greifensee and cantonal authorities. Since then, this good and service has not been used.

4.3 THE ACTORS AND REGULATIONS THAT SHAPE MANAGEMENT STRATEGY

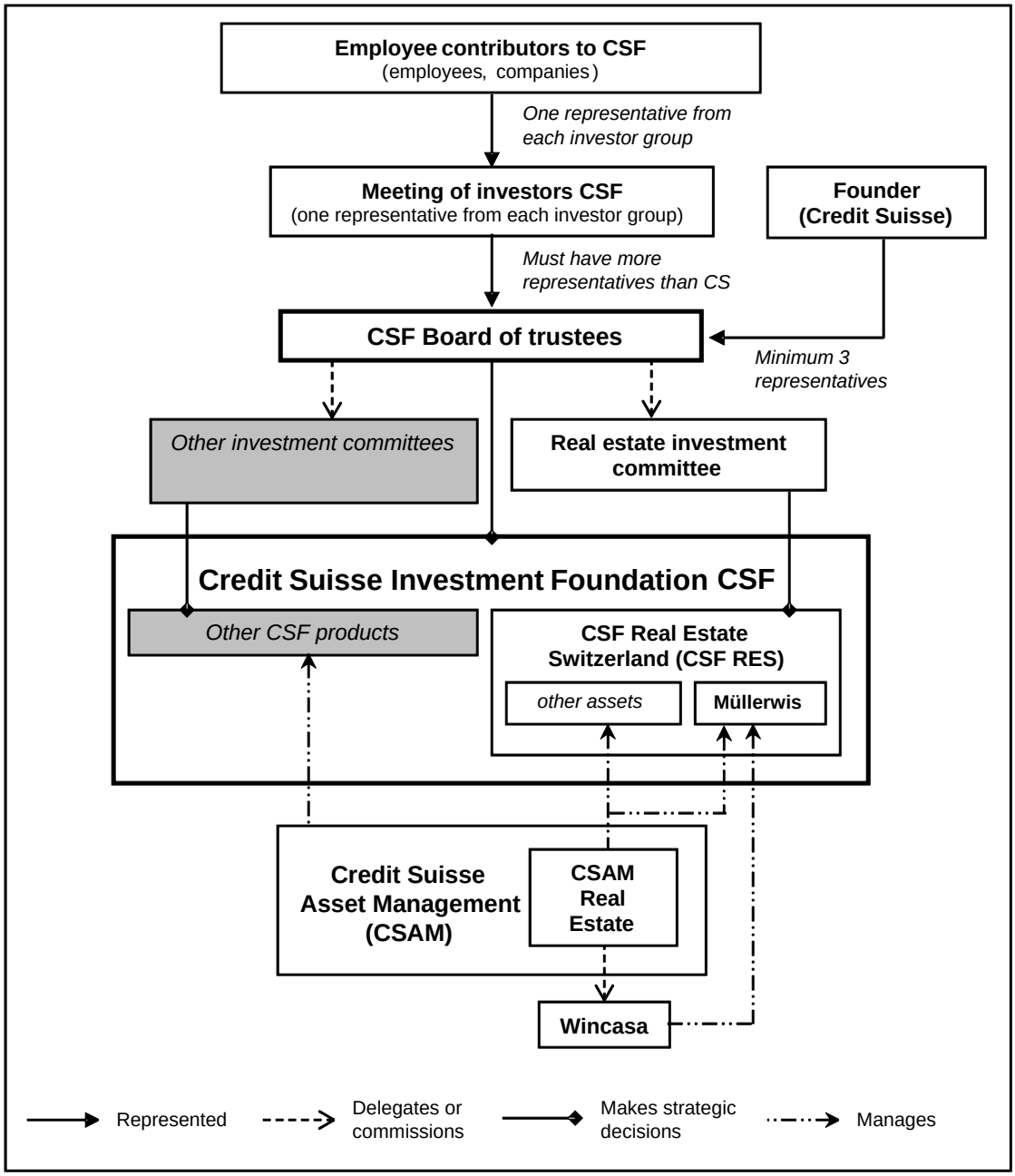
The circumstances surrounding the construction of Müllerwis/Seilerwis, the regime changes that allowed it to happen, and the roles of various actors are addressed in Chapter 2, which describes the historical context of the housing development.

The situation of the Müllerwis/Seilerwis stock is very different today. Swiss pension funds and foundations are playing an increasingly larger role in the housing market in Switzerland. Chapter 4.3 discusses the actors and regulations implicated in the management strategies of Müllerwis/Seilerwis's most recent stock owner, the Credit Suisse Investment Foundation.

4.3.2 Actors that shape management strategy

The relationship between the investors, the stock owner (i.e., the holders of the property rights), the foundation managers and the Müllerwis/Seilerwis housing stock managers is complex, particularly with regards to their roles in shaping the management strategy of the housing stock. Before discussing the influence that various actors have on management strategy, it is worthwhile to review the structure of the stock owner. Their relationship is shown in Figure 4.1 and is described below.

Structure of the CSF



CSF : Credit Suisse Investment Foundation
CSF RES : Credit Suisse Investment Foundation Real Estate Switzerland
CSAM : Credit Suisse Asset Management

Figure 4.1: The relationship of actors within and outside of the CSF related to the management of the Müllerwis/Seilerwis.

The **investors** are those employees whose companies have turned over the investment and management of pension contributions to the CSF. The **general meeting of investors** is the highest governing body of the investment foundation. It is composed of one representative from each investor group and meets annually.

The **board of trustees** (*Stiftungsrat*, *conseil de fondation*) is the highest executive body of the investment foundation. It is composed of at least seven members who are representatives of the founder (i.e. Credit Suisse) and representatives of the investors, the latter of which must always be in a majority. Currently, the CSF board of trustees is composed of eight investor representatives and five founder representatives as well as a president. The board of trustees has the right to delegate certain tasks to investment and management committees, the members of which are appointed by and subordinate to the board (CSF Articles of Incorporation 2007). The board of trustees is responsible for defining the responsibilities and obligations of the managers and the investment committees and determines the investment directives (Règlement art. 9.2).

The **investment committees** define the investment policy within the framework of the current legislation as well as the investment guidelines and instructions of the board of trustees. They oversee the implementation of the investment policy as well as the results of the investments and are answerable to the board of trustees (Règlement art. 11).

The "hands on" management of the CSF, however, is done by the **Asset Management** division of Credit Suisse (CSAM). More specifically, the real estate investment products are managed by the real estate group of CSAM. It is this group that evaluates the potential for various real estate assets for inclusion into all real estate products of Credit Suisse, including the CSF RES. The proposal to purchase and renovate Müllerwis/Seilerwis would have come from this group. Consisting of an interdisciplinary team of architects, engineers, bankers and building managers, amongst others, there is considerable pressure on this group to make the correct decisions concerning building strategies (Halter 2007).

Finally, the day-to-day management of the housing stocks of CSF RES, including the Müllerwis housing estate, is conferred to **Wincasa**, a 100% subsidiary of the Credit Suisse Group. The building management division of Wincasa is also heading the project management of the current renovation programme.

The actors who do not shape management strategy

The legal owner of the Müllerwis/Seilerwis stock is the Credit Suisse Investment Foundation. It is important to note here that, legally, a foundation *has no members*; one can refer to the members of the board of trustees but not to members of the foundation itself (Bord 2006: 59). Rather, a foundation is composed of a grouping of individual assets, which can including real estate (art. 80ss CC). Thus, strictly speaking, the CSF as the legally registered *stock owner* is devoid of any ability to form a management strategy for its stock. As will be seen in the following section, its board of trustees and third parties designated by the board of trustees do, however, possess the ability to form a strategy for the stock.

Employees and employers are the principal users of *PF 1 Capital investment* yet they have virtually no leverage in terms of forming the management strategy of the housing stock into which their money is invested. The ability of the CSF to obtain real estate such as the Müllerwis/Seilerwis development depends on securitisation of buildings belonging to company pension funds in return for shares in the foundation.[68] The only power available to

[68] Until January 1, 2004, the CSF RES was open to all institutional tax-exempt investors, meaning that company pension schemes could purchase shares in the CSF RES and thus give the CSF the capital with which to purchase real estate. The CSF RES investment vehicle has been closed since this date, however, due to insufficient investment opportunities in Swiss real estate (CSF 2009). Therefore, it is only by the first method, securitisation, that a company can become a member of the foundation.

employees in terms of management is their exit strategy (i.e., leaving the CSF by selling their shares) but even this must come as a decision by the board of the company pension fund. Individual employees do not have the liberty to withdraw from using the *PF 1 Capital investment* service of the Müllerwis/Seilerwis stock.

The actors who do shape management strategy

The management strategy of the CSF housing stock is formulated by several actors, some of whom are users of *PF 3 Labour investment* and others who do not directly benefit from the use of any good or service of the housing stock. Most important of these actors is the board of trustees, whose purpose it is to ensure the foundation fulfils its objectives as described in the deed of foundation (articles of incorporation). Composed of representatives of the founder (Credit Suisse) and the investors (pension funds investing in the CSF), it provides the investment directives for the foundation, and is thus responsible for devising the foundation's global or high-level strategy.

The CSF board of trustees delegates tasks to investment and management committees, each of which is responsible for some part of the stock strategy. Credit Suisse Asset Management manages the assets of the CSF and, as mentioned in chapter 2, the real estate group of CSAM is the actor who assesses and recommends buildings to purchase, renovate and sell.[69] They are paid through a variety of means including management fees and through other fixed fees and are thus users of *PF 3 Labour investment*. The CSAM may also delegate the task of property valuation to a third party, such as Wüest and Partner.

Wincasa, who has been mandated by the CSAM to manage the day-to-day operations of the stock also uses *PF3 Labour investment*. Their strategy is concerned with the successful rental of flats (e.g., low vacancy rates, low tenant turnover, reasonable rents) all while keeping tight control on costs and quality. To many actors of the Müllerwis/Seilerwis stock, Wincasa is the most visible and most important shaper of management strategy.

Thus, the management strategy applied to the Müllerwis/Seilerwis stock is one that is devised by successive layers of actors, each one with a different scope and room for manoeuvre.

4.3.3 Regulations that shape management strategy

The relationship between actors and their roles in the management strategy of the Müllerwis/Seilerwis housing stock is shaped by the regime of occupational pension foundations, which is governed by federal legislation (articles 80ss CC, 331ss CO and the Occupation Pensions Act (BVG)), and the deed of foundation and regulations of the Credit Suisse Investment Foundation. The important features of the regime are described below.

[69] CSAM's real estate group manages not only the real estate assets of the foundation (e.g. the buildings of CSF RES), but also those of all other investment funds such as Credit Suisse 1a Immo PK and CS Real Estate Fund LivingPlus.

The Swiss pension system

The Swiss pension system consists of three pillars: the public pension plan[70], the occupational pension plan and the individual pension plan[71].

The second pillar, the occupational pension plan, is obligatory for all salaried individuals and optional for all self-employed individuals. It is governed by the law on occupational pension plans (*Bundesgesetz über die berufliche Alters-, Hinterlassenen- und Invalidenvorsorge* – BVG[72]), which was introduced in 1985 and which underwent a first revision in 2005. Its objective is to maintain the level of quality of life previously enjoyed by the insured in the case of retirement or invalidity. It is financed through capitalisation, whereby one's contributions directly fund one's own pension. Increased life expectancy, losses over the last few years and insufficient yields have obliged the Federal council to take certain measures to guarantee the long-term perspectives of the system.

A portion of contributions to the second pillar is used for investment in real estate. It is worth providing an overview of the structure of pension funds, which will enable for a clearer understanding of their real estate investment strategies.

Administrative and legal forms of pension funds

The Swiss Federal Office of Statistics counts six different administrative forms of pension funds. The two of interest in this study are the simple funds and the collective funds:[73]

- A simple fund is one created by a single employer for the benefit of only its employees.
- A collective fund is most often created by an insurance company, a bank or, to a lesser extent, a fiduciary company with the objective of allowing several independent employers to affiliate.

Pension funds can exist in two legal forms. A public law fund is one to which public employees are affiliated (Confederation, cantons and communes). A private law pension fund is created by private companies for their employees. These take the form of a foundation (constituted in accordance with article 80ss of the Swiss civil code) or, much less commonly, a cooperative.

The Credit Suisse Investment Foundation is a collective, private law pension foundation.

Direct and indirect investment

Pension funds invest in property using two principal channels: direct investment and indirect investment. Most pension fund property investment (78%) is still done through the traditional approach of direct investment (Theurillat and Corpataux 2007: 5). In this case, the pension fund directly owns the property rights to specific buildings, and thus has responsibility for their operation and management. This requires that the fund directors have at their disposal

[70] The purpose of the first pillar, the public pension plan, is to guarantee the basic necessities for living during retirement, invalidity, or death. Current contributors, who contribute through dues deducted from their salary, fund current beneficiaries within the same year. An aging population means that soon there will not be enough people to pay for the increasing number of beneficiaries.

[71] The objective of the third pillar, the individual pension plan, is to make up any shortfalls from the first and second pillars.

[72] SR 831.40

[73] The other four are common funds, funds resulting from a fusion of firms, funds belonging to a group and combined funds.

property investment management skills that encompass technical knowledge (e.g. architectural, urban planning, and legal) as well as financial knowledge (e.g. property valuation, tax). These skills may be onerous for small- and medium-sized pension funds, consequently many institutions rely on outside experts to help them make decisions regarding property investment and assess the value of buildings. Furthermore, they may also hire a property management company to handle the day-to-day management of their stock, including rental of flats and tenant relations.

Indirect investment in property is done by funds through the purchase of shares in collective property investment vehicles, thus the fund no longer owns the property rights to specific real estate assets. Funds thus give up their management responsibilities and simply act as investors.

In 2006, Swiss pension funds were managing assets worth CHF 583 billion (120% of Switzerland's GDP). Real estate accounted for 14.2% of this investment, for a total of CHF 83 billion, an increase of 8.5% over the previous year. Although the percentage of investments in real estate has declined from a high of 17% in 1992, the total worth of real estate investments continues to increase. The largest share of real estate investment by pension funds is property in Switzerland, either directly or indirectly via real estate investment funds, foundations and investment companies; however, investment in foreign real estate is increasing dramatically (OFS 2008). Many small companies choose to affiliate themselves to collective funds, although collective funds are increasingly being used (in whole or in part) by large companies.

Civil code and code of obligations

As previously stated, the CSF is a foundation as described in articles 80ss of the Swiss civil code. In general, the purpose of foundations is to help the State accomplish certain tasks of the public service or in the public interest. Although they are subject to state oversight, they are in principal shielded from its direct influence. A revision of the federal law on foundations came into effect on January 1st, 2006 with the express purpose of encouraging the establishment of foundations.

Foundations must have the following features:

- A deed of foundation (i.e. articles of incorporation) which designates the bodies of the foundation and the manner in which it is to be administered (art. 83 CC).

- An independent auditor who is tasked with verifying the financial situation of the foundation (art 83b CC). In the case of the CSF, the reviewing body is KPMG in Zurich.

- An oversight authority to protect not only the intentions of the founder but also the goal of the foundation to the extent that it is in the state's interest. Oversight is conducted by a public corporation which, in the case of the CSF, is the Federal office of social insurance *(Bundesamt für Sozialversicherungen (BSV)*).

Furthermore, article 89*bis* CC regarding occupational pension foundations (as established in virtue of article 331 of the code of obligations) indicates that occupational pension funds are additionally governed by the Occupation Pensions Act (BVG and its implementation ordinance BVV 2). The BVG and BVV 2 are more comprehensive than articles 80ss CC,

which apply to foundations in general and are in fact poorly adapted to occupational pension foundations (Bord 2006 : 64).

Occupation Pensions Act (BVG and BVV)

The rules for pension fund investment are set out in the Occupational Pensions Act (BVG) and its implemention ordinance (BVV 2). The changes to BVV 2 that came into effect in April 2000 brought more flexible investment options. Several articles of the BVG and BVV 2 have particular relevance to the shaping of the management strategy applied to the Müllerwis/Seilerwis stock.

Articles 50 BVG and 49a BVV 2 deal with the management of the pension fund. It must set clear objectives and principals concerning investment (al. 1) and the conditions that the people and institutions responsible for investment and management must fulfil (al. 3). The fund must also establish regulations concerning the benefits, organisation, administration and financing, control and relationships with employers, insured and beneficiaries. These may be found in the deed of foundation, statutes or regulations.

In terms of financial transparency, pension funds must also be able to furnish information regarding return on investment, risk, administration costs, principles regarding the calculation of the coverage capital as well as degree of coverage (art 65a al. 3 BVG). Administration fees must be included in the operating statement and must include general administration costs, fortune management costs, and marketing and publicity costs (art. 48a BVV 2). As of January 1st, 2004, pension funds must use the Swiss GAAP FER 26 accounting norms (art. 47 al. 2 BVV 2).

Pension funds must administer their fortune in a manner that guarantees security of investment, reasonable return on investment, diversification of risks and have sufficient liquidity to cover foreseeable needs (art. 71 BVG). In terms of risk diversification, article 50 al. 3 BVV 2 states that the pension fund must also follow the principle of appropriate risk diversification in that investments must be distributed between different categories of investment as well as in different regions and economic sectors. Articles 54 and 55 BVV 2 describe the limits for each allowable investment category as well as global investment limits. For real estate, this means that a maximum of 50% of a pension fund's assets may be invested in property in Switzerland and, all together, material assets such as equities and property may not account for more than 70% of total assets. In addition to this, a maximum of 5% is allowed for direct or indirect property investments abroad (OFS 2004; Credit Suisse Economic Research 2007).

Deed of foundation, regulations, and investment guidelines of the CSF

The deed of foundation and regulations encompass the activities of the CSF as a whole, and not just the real estate investment vehicles such as the CSF RES. Specific mention of the CSF RES is made in the investment guidelines.

The deed of foundation describes the organisation of the foundation (Credit Suisse Investment Foundation, Articles of incorporation). Article 4 describes the purpose of the CSF which is "the joint investment and management of the pension assets entrusted to it by cofounders and investors." The governing bodies are listed in article 8 and consist of the general meeting of investors (whose role is described in art. 9), the board of trustees (art. 10) and the auditors (art. 11). It is worth noting that article 10 states that the board of trustees represents the

foundation and appoints the persons with legally binding signing powers. It also "issues the investment guideline and the organizational guidelines and regulations, as well as prospectuses to supplement the regulation and investment guidelines."

As stated in article 12 of the deed of foundation, the regulations and investment guidelines govern the foundation's internal organisation, the principles of collective asset investment and the rights and obligations of investors.

The regulations of the CSF describe in greater detail many of the elements found in the deed of foundation and deal mostly with the organisation of the foundation (Credit Suisse Investment Foundation, Règlement). Of particular interest are articles dealing with management, investment committees and administration fees. The management of the foundation (the CSAM) deals with the daily business of the foundation within the limits of the statutes, the regulations, the investment guidelines and the instructions of the board of trustees; it is also answerable to the board of trustees (art. 10). Investment committees define the investment policy and oversee the adherence to this policy as well as the results of investments; they too are answerable to the board of trustees (art. 11). Finally, the bodies of the foundation are compensated on the basis of costs, whereas third parties (mandatees) are compensated by means of fees per investment vehicle.

Article 5.1 of the investment guidelines are dedicated to the CSF RES, of which the Müllerwis housing estate is an asset (Credit Suisse Investment Foundation, Directives de placement). Wealth is invested in buildings located in Switzerland, preferably in low price housing. Investment in commercial and mixed-use buildings as well as constructible land is also permitted.

Swiss GAAP FER 26

The Swiss GAAP (General Accepted Accounting Principles) FER 26 (*Fachempfehlung für Rechnungswesen*) came into effect on January 1st, 2005, and applies to pension funds. Before these new standards were introduced the basis for financial accounting was specified in the Swiss code of obligations. Real estate investments must now be entered at their market value. Previously, real estate investments were assessed based on their book value and any depreciation; this method is no longer accepted (OFS 2004: 10). Latent reserves are not allowed, whereby the value of a building is underestimated. However fluctuation reserves are permitted for underlying market-specific risks to investments (OFAS, Financial reporting).

4.4 STRATEGIES FOR THE CONSTRUCTION, RENOVATION AND MANAGEMENT OF THE MÜLLERWIS/SEILERWIS HOUSING STOCK

The strategies applied for the construction, renovation and management of the Müllerwis/Seilerwis housing stock

4.4.1 Ernst Göhner AG : stock creation

After its construction, Göhner AG never technically managed the Müllerwis/Seilerwis stock, therefore its strategy cannot properly be compared to that of the two subsequent stock owners. The strategy applied to construction of the Müllerwis/Seilerwis housing stock involved the

mobilisation and use of capital, land and labour, which required the support of public authorities.

4.4.2 Winterthur-Versicherungen : stock maintenance

The Winterthur-Versicherungen's strategy centred on *maintaining* the stock and making it appealing primarily to the tenants who lived there. This was evidenced by the insurance company's experiment in public participation whereby the tenants were consulted extensively on the renovations, and in the individualisation of the flats to meet the wishes of the current tenants. Emphasis was placed on the exterior elements of the stock to recreate in the existing tenants (and also to appeal to future ones) a sense of pride in their neighbourhood.

4.4.3 Credit Suisse Investment Foundation: *Neupositionierung*

The renovations directed by CSAM on behalf of the CSF were motivated by different objectives, many of which are shaped by the pension foundation regime. This regime influences the various actors responsible for the strategy to have a long-term perspective with regard to their stocks. The various bodies of the foundation and the CSAM need to make decisions that will maximise rental income over the long term; they are not motivated to purchase, renovate and then flip real estate assets for their short-term financial benefit.

Regardless of this common goal, there exists a certain tension between the board of trustees and the real estate investment committee of the CSF on the one hand, and the CSAM on the other. As noted in chapter 2, the CSAM appreciates the necessity of applying a "new positioning" strategy to the Müllerwis stock (*Neupositionierung)*. This strategy involves renovating the stock so that it meets current and future tenant expectations in terms of layout, design, amenities, features and comfort.

These renovations require substantial investment, in this case CHF 50 million. This financial commitment of the CSF is such that no additional renovation measures should be required in the next 15 years (Halter 2006: 6). However, the CSF at first had wanted to invest only CHF 45 million which would not have been enough to accomplish *Neupositionierung*. Thus, although the real estate group of the CSAM understands this dynamic, it experiences difficulty in convincing the decision-makers at higher levels that the added investment is necessary. There also lie challenges in conveying the need for *Neupositionierung* to the contractors and construction managers, who may not fully appreciate the need for a long-term perspective and be tempted to cut (small) corners to cut costs. Thus, although there is the desire for renovations that will ensure the stock will be able to offer its goods and services in the long term, this need can be lost on some of the actors who are critical for the renovation project.

CHAPTER 5 – EVALUATION OF THE MÜLLERWIS HOUSING ESTATE INSTITUTIONAL REGIME

5.1 INTRODUCTION

This chapter analyses the institutional regime of the Müllerwis/Seilerwis housing stock over broad periods that best show changes in management strategy and in the institutional regime. The first period is between the planning of the Müllerwis housing estate in 1964 to its sale to the CSF in 2003. The second phase is between 2003 and today.

The first period incorporates two distinct subperiods. The construction phase of the first few years and the ownership of the stock by the Winterthur-Versicherungen from 1973 to 2003. These may seem quite disparate, but many of the decisions and regime components of the construction phase had repercussions on the use of goods and services in the following years, hence the decision to treat this time period as one. The second period coincides with the sale of the stock to the CSF. As a pension foundation, an entirely different set of regulations apply to it, regulations that have a direct effect on its management strategy. Although it is a very short period, it is worthy of analysis both for its effects on the Müllerwis/Seilerwis stock and, more broadly, on investment in real estate and housing in Switzerland.

Table 5.1 and table 5.2 summarise the elements of extent and coherence of each good and service described in Chapter 3 for each period (1964-2003 and 2003-today). To recapitulate, elements of extent are evaluated by asking whether 1) the good or service is regulated, and 2) the good or service is sufficiently regulated. Elements of coherence are evaluated first by assessing whether there is a conflict in the use of the good or service. If there is, the source of the conflict is categorised as being due to : 1) unclear or poorly defined property rights or use rights; 2) contradictions between public policies; 3) incoherence between property rights, contracts and policy; or 4) none of the above, and thus to a factor external to the institutional regime. Table 5.3 shows how elements for evaluating extent and coherence have evolved from one period to the next.

Caveat: although a change in management strategy appears obvious in 2003, since renovations are not complete it is difficult to judge how some goods and services will be used and whether conflicts will emerge.

5.2 EVOLUTION OF EXTENT AND COHERENCE

Table 5.1 – Elements for evaluating extent and coherence: 1968 – 2003

Good or service	Extent		Coherence			
	Reg?	Sufficient?	Conflict?	Poorly defined use-rights?	Contradictions between public policies?	Incoherence btwn. property rights, contracts and policies?
RS Residential						
RS1 Living space	Yes	Yes	Yes (x2)	No	Yes (x2)	No
RS2 Technical services	Yes	Yes	Yes	No	No	Yes
NR Non-residential						
NR1 Non-residential space	Yes	Yes	No	-	-	-
NR2 Collective indoor space	Yes	Yes	No	-	-	-
NR3 Functional indoor space	Yes	Yes	No	-	-	-
NR 4 Collective outdoor space	Yes	Yes	No	-	-	-
PF Production factor						
PF1 Capital investment	Yes	Yes	Yes (x3)	No	No	Yes (x3)
PF2 Land investment	Yes	Yes	Yes	No	Yes	No
PF 3 Labour investment	Yes	Yes	No	-	-	-
US Utility services						
US 1 Energy demand	Yes	Yes	No	-	-	-
US 2 Material sink	Yes	Yes	No	-	-	-
US 3 Material discharge	Yes	Yes	No	-	-	-
US 4 Water sink	Yes	Yes	No	-	-	-
US 5 Water discharge	Yes	Yes	No	-	-	-
UF Urban function						
UF 1 Design urban space	Yes	Yes	Yes	No	Yes	No
UF 2 Demand for traffic infrastructure	Yes	Yes	No	-	-	-
UF 3 Demand institutional services	Yes	Yes	No	-	-	-
UD 4 Demand goods and services	Yes	Yes	No	-	-	-
NM Nonmaterial						
NM 1 Solving housing need	Yes	Yes	Yes (x2)	No	Yes (x1)	No
NM 2 Solving non-housing need	Yes	Yes	No	-	-	-
NM 3 Shaping characteristic landscape	Yes	Yes	Yes	No	Yes	No
NM 4 Social and cultural complexity	No	No	No	-	-	-
NM 5 Conservation and transmission of values	No	No	Yes	No	Yes	No

Table 5.2 – Elements for evaluating extent and coherence: 2003 – present

Good or service	Extent		Coherence			
	Reg?	Sufficient?	Conflict?	Poorly defined use-rights?	Contradictions between public policies?	Incoherence btwn. property rights, contracts and policies?
RS Residential						
RS1 Living space	Yes	Yes	Yes	No	Yes	No
RS2 Technical services	Yes	Yes	No	-	-	-
NR Non-residential						
NR1 Non-residential space	Yes	Yes	No	-	-	-
NR2 Collective indoor space	Yes	Yes	No	-	-	-
NR3 Functional indoor space	Yes	Yes	No	-	-	-
NR 4 Collective outdoor space	Yes	Yes	No	-	-	-
PF Production factor						
PF1 Capital investment	Yes	Yes	Yes	No	No	Yes (x1)
PF2 Land investment	Yes	Yes	No	-	-	-
PF 3 Labour investment	Yes	Yes	No	-	-	-
US Utility services						
US 1 Energy demand	Yes	Yes	No	-	-	-
US 2 Material sink	Yes	Yes	No	-	-	-
US 3 Material discharge	Yes	Yes	No	-	-	-
US 4 Water sink	Yes	Yes	No	-	-	-
US 5 Water discharge	Yes	Yes	No	-	-	-
UF Urban function						
UF 1 Design urban space	Yes	Yes	No	-	-	-
UF 2 Demand for traffic infrastructure	Yes	Yes	No	-	-	-
UF 3 Demand institutional services	Yes	Yes	No	-	-	-
UD 4 Demand goods and services	Yes	Yes	No	-	-	-
NM Nonmaterial						
NM 1 Solving housing need	Yes	Yes	No	-	-	-
NM 2 Solving non-housing need	Yes	Yes	No	-	-	-
NM 2 Shaping characteristic landscape	Yes	Yes	No	-	-	-
NM 4 Social and cultural complexity	No	No	No	-	-	-
NM 5 Conservation and transmission of values	No	No	No	-	-	-

Table 5.3 – Evolution of extent and coherence

Good or service	Extent			Coherence		
	1968 - 2003	2003 - today	Change	1968 - 2003	2003 - today	Change
RS Residential						
RS1 Living space	High	High	+	Low	Low	-
RS2 Technical services	High	High	+	Low	High	↗
NR Non-residential						
NR1 Non-residential space	High	High	+	High	High	+
NR2 Collective indoor space	High	High	+	High	High	+
NR3 Functional indoor space	High	High	+	High	High	+
NR 4 Collective outdoor space	High	High	+	High	High	+
PF Production factor						
PF1 Capital investment	High	High	+	Low	Low	-
PF2 Land investment	High	High	+	Low	High	↗
PF 3 Labour investment	High	High	+	High	High	+
US Utility services						
US 1 Energy demand	High	High	+	High	High	+
US 2 Material sink	High	High	+	High	High	+
US 3 Material discharge	High	High	+	High	High	+
US 4 Water sink	High	High	+	High	High	+
US 5 Water discharge	High	High	+	High	High	+
UF Urban function						
UF 1 Design of urban space	High	High	+	Low	High	↗
UF 2 Demand for traffic infrastructure	High	High	+	High	High	+
UF 3 Demand for institutional services	High	High	+	High	High	+
UD 4 Demand for goods and services	High	High	+	High	High	+
NM Nonmaterial						
NM 1 Solving housing need	High	High	+	Low	High	↗
NM 2 Solving non-housing need	High	High	+	High	High	+
NM 2 Shaping characteristic landscape	High	High	+	Low	High	↗
NM 4 Social and cultural complexity	Low	Low	-	High	High	+
NM 5 Conservation and transmission of values	Low	Low	-	Low	High	↗

+	Remains high	↗	Increases
-	Remains low	↘	Decreases

5.2.1 Overall evaluation

The current institutional regime of the Müllerwis/Seilerwis housing stock can generally be considered integrated. The regime of the stock during its construction phase, however, was less so.

Regime extent

The extent of the regime is very high since there are only two use-rights to goods and services of the housing stock that are unregulated, *NM 4 Social and cultural complexity* and *NM 5 Conservation and transmission of social and historical values*.

The high extent of the stock is likely typical of most housing stocks in Switzerland and is the consequence of two factors. First, the housing stock is an *artificial* resource that was purposefully created and the creation process required regulations. (Conversely, natural resources exist independently of human intervention so it is much more conceivable that their goods and services would be appropriated by user-actors.) Secondly, there have only been two stock owners during the existence of the stock (excluding Göhner SA during the construction phase), the second of which, the CSF, has had ownership only since 2003. This very low stock owner turnover has ensured that regulations regarding use-rights to goods and services have not been "lost".

Regime coherence

Although the second regime period analysed is only six years old, the assessment of the coherence to date indicates that it has increased.

There are four ways in which elements for assessing coherence can evolve:

1. the coherence of a good or service has remained high;
2. the coherence of a good or service has remained low;
3. the coherence has decreased from the first period to the second; and
4. the coherence has increased from the first period to the second.

These cases are described in greater detail below.

Coherence remains high

The majority of goods and services have not been subject to conflicts resulting from incoherencies in the regime. This is particularly true of goods and services belonging to the NR Non-residential and US Utility services categories.

Coherence remains low

Two goods and services have maintained a low coherence.

RS 1 Living space

In the first period leading up to the second renovation phase, the occupation density of the flats decreased to the point where the average occupation of flats (72 one-bedroom flats, 43 two-bedroom flats and 356 three-bedroom flats) is 2.15 people, including 0.52 children (Halter 2006: 20). This underoccupation of flats can produce conflict during times of housing

shortage, particularly for families. This conflict is, in small part, the result of housing policy that promises adequate housing for everyone, tenancy protection policy that prevents landlords from evicting tenants on the basis of under-occupation, and policy to ensure housing for everyone. It should be noted, however, that the origins of this conflict was a demographic and social shift that resulted in smaller households.

A second source of conflict concerns the increase in rents that tenants are subject to following a renovation that adds value to the living space. Each of the two renovation phases resulted in some tenants moving from Müllerwis/Seilerwis. Although it is difficult to definitively say whether rent increase was the only cause of the tenants moving, in most cases it certainly was at least partly responsible. Furthermore, at least in the case of the first renovation phase by the Winterthur-Versicherungen, some tenants felt that there was little added value for residents and that the stock owner was doing renovations that would principally benefit itself (Lienhard 1990: 43). This conflict, however, is nothing new and was a point of debate regarding the revision of recent tenancy protection legislation (*Message relative à la modification du code des obligations* 2008). Regardless, this conflict is the result of policy that protects tenants from unwarranted rent increases, but still allows sufficient increases to occur to oblige them to move.

PF 1 Capital investment

One conflict took place in the first period that was the result of an underuse of *PF 1 Capital investment*. In the first case, to conform to new emissions levels, the Winterthur-Versicherungen retrofitted the heating system. However, the retrofit was inadequate and resulted in lower comfort levels for tenants (i.e., diminished use of *RS 2 Indoor climate and technical services*) as well as operational safety concerns (i.e. negative social effects). The incoherence between the emission levels prescribed in the LRV and expectations for comfort outlined in tenancy protection policy allowed this situation to exist until the second renovation phase.

A second conflict, however, occurred in both periods, and that is the one of increasing rents following housing stock renovation, as described in *RS 1 Living space* above.

Coherence has decreased

No good and service has experienced a decrease in coherence.

Coherence has increased

Six goods and services have experienced an increase in their level of coherence.

RS 2 Technical services

Prior to each renovation phase, the technical services available to tenants was inadequate, either due to out of date equipment or poor insulation on piping and facades which resulted in excessive use of technical services. However, these characteristics are common in housing prior to renovations. More significantly, however, is the problems of inadequate indoor comfort that occurred beginning in 1992 after the exhaust refeed system was installed on the heating system following the new emissions levels being brought into effect. This contradiction between policy (i.e. the LRV) and the regulations concerning the obligation of the stock owner to mainatain a certain level of comfort will no longer exist after the current renovation programme. The new heating system will solve comfort (and safety) issues while keeping emissions well below the legislated levels.

PF 2 Land investment

The land of Müllerwis/Seilerwis has not played a role in the development of the stock since land acquisition by Ernst Göhner AG took place in 1964. Therefore, by default the use of *PF 2 Land investment* had played a minor role in the evolution of the stock during the second analysis period. The conflict that occurred in 1964 concerned many parcels of agricultural land being sold to a single buyer who in turn could exert some pressure to have it declassified to constructible land. To allow this to happen, the building ordinance of 1959 had to be modified and was done so in a way that effectively gave *carte blanche* to developers to propose large housing estates.

UF 1 Design of urban space

During the first renovation phase, the town of Greifensee refused a building permit to the Winterthur-Versicherungen for a proposed activity room that would have been built on land of the Müllerwis/Seilerwis development, thus denying tenants the use of *NR 2 Collective indoor space*. Although the building ordinance of 1959 was modified in 1964 to allow the construction of the large housing developments, the ordinance was changed once again to make sure that no additional density or high-rise construction occurred on the site (i.e. the town of Greifensee used zoning regulations to use UF 1 as it saw fit), thus effectively making the existing buildings contradict the ordinance that now applied to them. Interestingly, the CSF has been granted building permission for a new pavilion. This may be due to a change in the planning regulation or an exception having been granted.

NM 1 Solving general housing needs

To combat the housing crisis that was raging in the mid-1960s, the canton of Zurich encouraged the construction of large housing developments in towns that were within the agglomeration of the city of Zurich. In conjunction with the town of Greifensee, the Greifensee building ordinance was modified to allow such builds. The large housing developments completely altered Greifensee's historical agricultural and village values (underuse of *NM 5 Conservation and transmission of social and historical values*). Today, there is only a couple of parcels of land that are used for agricultural purposes.

NM 3 Shaping the characteristic landscape

Joseph Schilling's creation of a new spatial model plan at the request of the Department of regional planning radically changed the characteristic landscape and also eliminated possible use of *NM 5 Conservation and transmission of social and historical values*. Furthermore, by the time of the first renovation phase, the landscape that was created by Müllerwis/Seilerwis was considered dull and monotonous, which eliminated any pride tenants had of their living space. These conflicts were again the result of the modification in 1964 of the 1959 building ordinance which so radically changed the ordinance's original intention.

NM 5 Conservation and transmission of social and historical values

The construction of the Müllerwis/Seilerwis estate meant that this good and service would be underused by the simple fact that the design of the large housing development would radically change the historical values of the town of Greifensee. Prior to 1967, Greifensee was a small agricultural town. Following the erection of the housing developments, nearly all traces of farming were eliminated. *NM 5 Conservation and transmission of social and historical values* is regulated indirectly through planning ordinances and cantonal directive plans and the articles and building zones pertaining to monument protection that are contained within them.

The amendment to the building ordinance that radically changed it and could therefore be interpreted as an incoherence, allowed the construction to happen.

5.2.2 Characterisation of the regime

The regime of the Müllerwis/Seilerwis housing development has undergone three principle changes (two of which occur in the first period of analysis), each one related to ownership. In each phase, the use of different goods and services are emphasized.

During the first phase, land acquisition and construction (1964-1973), Ernst Göhner SA played the most important role. He was aided in his endeavours through changes in planning regulations that were encouraged by the canton of Zurich and, to some extent, the town of Greifensee. These regulatory changes were in opposition to a 1941 protection ordinance for lake Greifensee, and it can be argued that the critical 1964 amendment to the building ordinance (refer to section 2.2.2 Housing situation in canton Zurich and Greifensee) that paved the way for large housing developments to be erected was in stark contradiction to the intent of the ordinance it was amending, which had come into effect only five years earlier. Although this change enabled public authorities to quickly and fully use such goods and services as *NM 1 Solving general housing needs*, it produced a number of conflicts in other goods and services both at the time (mostly related to the radical change in landscape and character of Greifensee) and in the following years (mostly related to the undesirability of large housing developments). Thus the regime can be characterised as having a moderate degree of coherence. In addition to the issue of coherence, we also observe that there is little direct regulation on *NM 5 Conservation and transmission of social and historical values*. Had there been, the radical change from agricultural, historical town to urban town may not have occurred so rapidly. Thus, the extent of the regime is generally high, but not perfect (Figure 5.1).

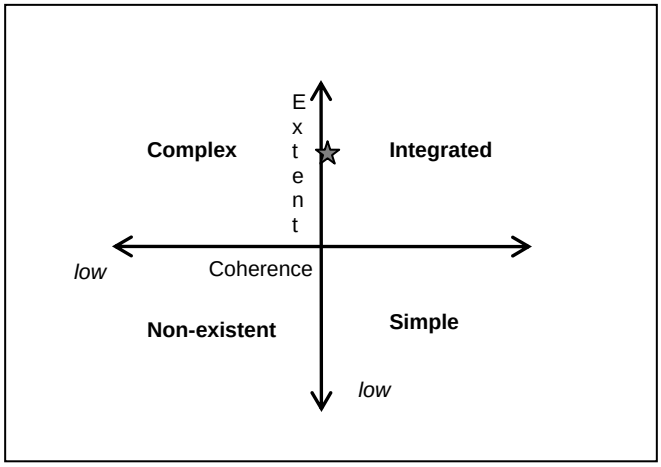


Figure 5.1 – Characterisation of the Müllerwis/Seilerwis institutional regime (1964-1973), represented by the star.

The second phase is the longest one, between 1973 and 2003 when the Winterthur-Versicherungen was the stock owner. Many of the conflicts encountered during this period were the result of the style and type of construction and therefore can be referred back to the first phase. Others, however, occurred close to the time of renovation (1986-1990) and were

the result of a deterioration in the buildings that was normal for all large housing developments built during the 1950s to the early 1970s. The goods and services that are most prominent in this period differ than those of the previous one; for instance, *PF 2 Land investment* is no longer pertinent but *RS 2 Indoor climate and technical services* is. In general, the regime during this phase was also fairly integrated, with regime-related conflicts occurring mostly as a consequence of coherence problems (Figure 5.2).

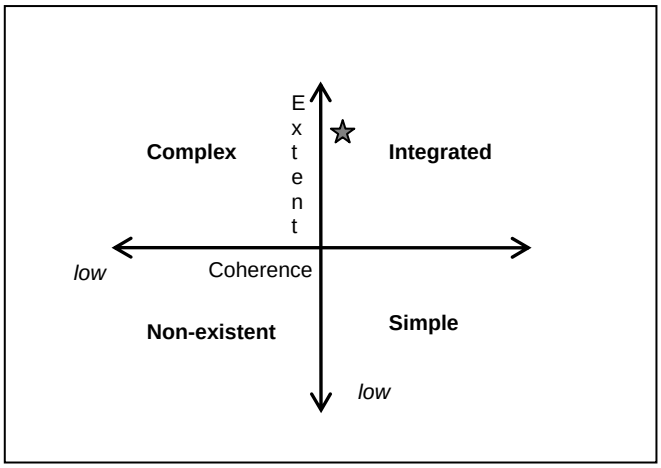


Figure 5.2 – Characterisation of the Müllerwis/Seilerwis institutional regime (1973-2003), represented by the star.

The third and final period began in 2003 when the Credit Suisse Invesment Foundation purchased the stock and added it to the CSF Real Estate Switzerland investment vehicle. It is still early to be able to judge the effect of this new ownership on the regime. However, based on regulations related to pension foundations plus the extensive renovation plan that will be ending shortly, it is possible to already ascertain some of the effects on the goods and services of the Müllerwis/Seilerwis stock. Improvements in several goods and services, notably the *RS Residential* and *NM Nonmaterial* coincide in part to better coherence of the regime.

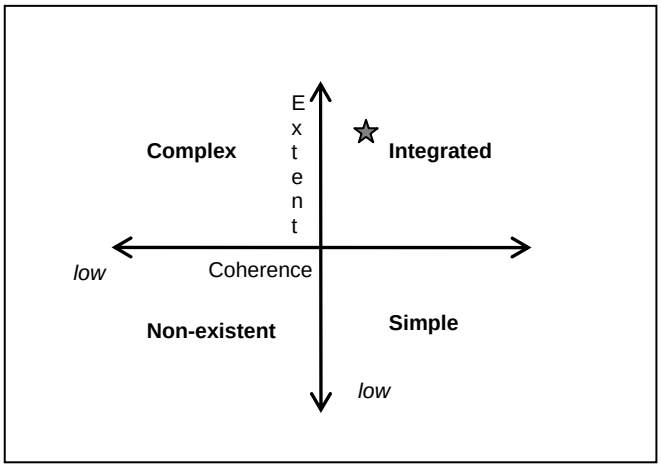


Figure 5.3 – Characterisation of the Müllerwis/Seilerwis institutional regime (2003-present), represented by the star.

Finally, it is worth noting that the causes or partial causes of some conflicts are the result of factors external to the institutional regime. The state of the economy, demographic shifts, the

real estate market, changing awareness of social and environmental issues, increasing expectations of living comfort and changing behaviours are all factors that have been instrumental (in part or in whole) in affecting management decisions of the Müllerwis/Seilerwis stock owners as well as the use of goods and services by other user actors.

CHAPTER 6 – CONCLUSIONS

6.1 INTRODUCTION

The institutional regime of the Müllerwis/Seilerwis stock has been analysed from two different perspectives. In the first, presented in chapter 4, the relationship between changes in the use of each good and service by user-actors and changes in the management strategy applied to Müllerwis/Seilerwis were identified. In the second, discussed in chapter 5, the extent and coherence of the regime was related to conflicts that have arisen in the use of goods and services over two time periods, 1964 to 2003 and 2003 to today. This chapter first provides some links between these two analyses by presenting some key findings arising from the application of the institutional regimes framework to the Müllerwis/Seilerwis building stock. Finally, the hypotheses presented in Chapter 1 are reviewed again in light of the results from the case study.

6.2 THE INSTITUTIONAL REGIME OF THE MÜLLERWIS/SEILERWIS HOUSING STOCK – KEY FINDINGS

6.2.1 The past: a regime to solve housing needs

The effects of a single regulation and a single actor on the regime

The Müllerwis/Seilerwis case study provides interesting insight into the housing situation of Switzerland in the 1960s and 1970s and the drastic steps that were taken to alleviate an acute shortage. In terms of the regime, this case study highlights two features: 1) how a single amendment to a building ordinance—a single change in the regime—could have such profound effects not only on housing and the use of its goods and services, but many other areas as well, and 2) how a single actor (supported by others) with the use right to several goods and services can so greatly influence housing, whether for the better or for the worse.

The radical changes that occurred in Greifensee following the construction of the large housing developments—a population explosion, a drastically altered landscape, pressure on existing infrastructure—were, in the short term, not entirely unexpected. Public authorities from the canton of Zurich and the town of Greifensee were aware of the consequences of the building ordinance amendment that effectively allowed large-scale housing construction on parcels greater than 10’000m^2. This amendment enabled them to obtain use of *NM 1 Solving general housing needs*, a service that would become available with the construction of Müllerwis/Seilerwis and other similar housing developments in Greifensee.

The actor Ernst Göhner AG also played a critical role in the establishment of the Müllerwis/Seilerwis housing stock. By mobilising use-rights to all of the *PF Production factor* goods and services by acquiring a near land monopoly on constructible land, providing construction materials and labour, and developing the housing complex, he became the driving force behind the project, from initiation to completion. Clearly, he was supported in his endeavours, which dovetailed neatly with the objectives of public authorities who were seeking to erect mass housing. Nonetheless, as an entrepreneurial force in the Swiss housing sector, we cannot be sure the housing development would have succeeded to the extent that it did had it not been for his involvement.

Trade-offs between goods and services

The urgency of the housing situation meant that public authorities felt the need to prioritise the use of *NM 1 Solving general housing needs* over nearly all other goods and services. At the time, it can be said that the objectives were met with success: the Müllewis/Seilerwis housing development helped alleviate the housing shortage problem. Simulateneously, new tenants had success with the use of goods and services related to living, particularly the *RS Residential* and *NR Non-residential* goods and services.

However, the prioritisation of these goods and services in 1964-1973 came at the expense of the use of others. For instance, the subsequent boom in Greifensee's population produced enormous pressure on infrastructure as water and wastewater infrastructure was stretched to the limits and on services within the community as the small local grocery store and the non-existence of schools were unable to accommodate the increased demand for their services. In the language of the institutional regime, at the beginning of the stock's life there was an underuse of all of the *US Utility services*, *UF 3 Demand of institutional services* and *UF 4 Demand for goods and services*. These challenges were solved in a fairly short period. Furthermore, these problems were all part of the trade-offs that the public officials were aware of.

Unknown trade-offs, though, were to occur in the future and these were due to evolving circumstances rather than the regime. Firstly, living in housing developments gradually fell out of fashion and families were choosing to live in single family houses. Those who could afford to, moved, and the Müllerwis/Seilerwis stock eventually suffered from high tenant turnover. Secondly, the population projections of 10 million Swiss that were bandied about in the 1960s did not come close to occurring and that, combined with the housing slump of the mid-1980s, meant that flats in the Müllerwis/Seilerwis stock were not in great demand.

Thus, although the extreme prioritisation of some goods and services can make sense in a particular context, it can have detrimental effects at a future time when the context no longer exists.

6.2.2 The future: Swiss pension funds and housing

Scale of analysis

Regardless of the financial and social challenges that many large housing developments now present, Müllerwis/Seilerwis does offer some clear advantages to its residents, namely proximity and easy access to the city of Zürich, easy access to lake Greifensee, and cheaper rental prices than are found in the city of Zürich. Furthermore, despite the unattractive impression given by the cluster of high-rise buildings, they are nonetheless interspersed with green space and several children's playgrounds.

The purchase and renovation of Müllerwis/Seilerwis by the CSF is indicative of the potential that the development has to be a desirable place to live and thus give the CSF good use of *PF 1 Capital investment* through increased rental income. From the perspective of the buildings of the case study stock, the repercussions of the CSF's ownership on the use of the goods and services of Müllerwis/Seilerwis is generally positive: in addition to the improvement of *PF 1 Capital investment*, the renovation will produce higher quality goods and services related to living (*RS Residential*, *NR Non-residential*). Other improvements will be seen in terms of a

better environmental use of *US 1 Demand for energy* and a better overall exterior impression from improvements in use of *NM 3 Shaping the characteristic landscape.*

However, the case study of Müllerwis/Seilerwis is only a substock of the more than 200 residential or mostly residential real estate assets that are part of the CSF RES investment vehicle, and one of only approximately 230 owned by the Credit Suisse Investment Foundation. A study of the full stock would have produced a different type of analysis since the entire set of buildings would include a wide range of ages and histories. Since the full stock was not the object of this study, we cannot make any conclusive statements about its regime; however, we can look at other research on the real estate activity of pension funds and foundations and interpret these results in terms of the language of institutional regimes and goods and services.[74]

Firstly, there is the phenomenon of concentration whereby fewer but larger pension funds and foundations are active in the real estate sector (Credit Suisse 2008: 54; OFS 2004: 6). Since the introduction of the second pillar in 1985, the increasingly complex requirements for the management of pension schemes in addition to ever-increasing legal dispositions have meant that many small and medium sized companies have decided against creating their own pension scheme and have affiliated themselves to common foundations and collective foundations. In fact, real estate investment vehicles of investment foundations have proliferated in recent years mainly because of asset swaps by pension funds. The vast majority of these institutions, such as the CSF, are based in Zurich.

One apparent consequence of the above is limited spatial diversification of real estate investments (Theurillat et al. 2007: 23). Historically, the housing owned directly by a given company pension fund was used to house its employees with the consequence that nearly all of its housing was located within close proximity of the work locations. Now, collective funds invest disproportionately in Switzerland's main metropolitan areas, namely Basel, Geneva, Lausanne and Zurich. The CSF RES is no exception. Properties belonging to the CSF RES and CSF RES Dynamic (both of which are real estate investment vehicles of the CSF) are concentrated in the regions around Zurich, the northwest of Switzerland and the area of Lac Léman (Table 6.1).

Table 6.1: Geographical distribution of building in % (as of May 2008)

	CSF RES	CSF RES Dynamic
Zurich region	30.70	22.45
Northwest of Switzerland	22.30	42.65
Lac Léman	21.10	-
Bern region	8.05	14.01
Western Switzerland	6.60	8.80
Central Switzerland	5.00	6.47
Suisse romande	4.00	5.62
Southern Switzerland	2.25	-

Source: CSA Real Estate Switzerland CSA Real Estate Switzerland Dynamic Data Report per 30. Juni 2008. (CSF 2008a).

[74] Recent studies on Swiss pension funds and foundations and real estate (Csikos 2008; Theurillat et al. 2007; Theurillat and Corpataux 2007; Theurillat 2005) and reports from the Swiss federal department of statistics (OFS 2008; OFS 2004) reveal some of the consequences of recent but pronounced activity of pension funds and foundation on the Swiss real estate market.

In terms of institutional regimes, the introduction of the second pillar has changed the emphasis of goods and services. The use of production factor goods and services have particularly experienced change. *PF 3 Labour investment* is being increasingly given up by the small pension funds who find they can no longer manage their own property investments and have been transferred to the larger collective funds who have the size and the internal knowledge and skills to offer the full range of services required to own and manage a stock. *PF 2 Land investment* is also changing in that geographical concentration of residential investments occurs in the large metropolitan areas (although it should be noted that collective funds mostly invest in already-existing buildings and not as much in new construction, thus still limiting the changes in PF 2). Finally, the use of *PF 1 Capital investment* is also changing importantly as individual investors (i.e., companies and their employees) become further and further removed from direct investment in residential properties.

6.3 ANALYSIS OF HYPOTHESES

Hypothesis 1 – Variance of strategies and use over time

The management strategy of the stock owners and the behaviour of actors with use-rights to the goods and services of the Müllerwis/Seilerwis housing stock have varied over time. Our hypothesis lists three possible reasons for such changes: 1) new definitions of the rights and obligations of actors entitled to the housing stock's *RS Residential goods and services*; 2) changes in the definition of the use rights to non-*RS Residential goods and services* at the level of basic property rights, which incorporate the rights of the property rights owner to conclude contracts with user-actors; and 3) changes in the public policies that regulate the exercise of the rights to goods and services.

Regarding the first possible reason, the rights and obligations of actors entitled to the *RS Residential goods and services* has remained more or less consistent throughout the life of the stock. The main change that has occurred is related to the two renovation phases, and especially this current one, where increases in rents were put into effect. In the case of the CSF stock owner, the financial obligation (through the rental contract) of the tenants living in the new luxury flats represents a significant (financial) change in use-rights, one that effectively changes the global composition of tenants in the stock. Regardless, aside from changes in the price of rent, the definitions of use-rights of residential goods and services have remained largely the same.

The second reason, changes in the definition of use rights to non-RS Residential goods and services and the level of basic property rights, has a relationship to the first. When change in ownership occurred in 2003 between Winterthur-Versicherungen and the CSF, the management strategy governing the stock also changed. Now that the Müllerwis/Seilerwis stock is owned by a pension foundation, the strategy that governs the stock is shaped by the laws and regulations governing pension foundations (see section 4.3.3 Regulations that shape management strategy). In particular, the regulations regarding *PF 1 Capital investment*, which address such issues as risk management, return on investment, portfolio diversification, establishing investment objectives and pension contributions from employees have a very clear bearing on the management strategy now applied to the stock.

Finally, changes in public policies that regulate the exercise of the rights to goods and services also have had clear effects on management strategy. Firstly, there is the case of the construction of the stock, which was made possible only by a change in the 1959 building

ordinance that effectively allowing large housing developments in Greifensee to be built. Göhners's strategy regarding the style of housing to build at Müllerwis/Seilerwis, as well as his use of all of the *PF Production factor* goods and services was clearly affected by the above. Another case of a change in public policy producing a change in management strategy and use-rights occurred when new emissions levels of the federal ordinance on air were put into effect in 1992. The Winterthur-Verischerungen was obliged to retrofit the heating system to comply, but this had a negative effect on tenants' use of *RS 2 Indoor climate and technical services*.

To summarise, changes in management strategy and the use rights of user-actors have occurred due in part to each of the three reasons presented in the hypothesis, without any one of the reasons dominating.

Hypothesis 2 – The regime and the physical condition of the stock

We hypothesise that unsustainable use of the housing stock resulting from stock owner strategies and user-actors' behaviour can occur when the institutional regime of the stock is 1) simple (i.e. extent is low); 2) complex (i.e. rivalries are not properly regulated) or 3) the regulation of rivalries favours the use of non-*RS Residential* goods and services. Furthermore, this last condition in particular can result in the physical deterioration of the building stock.

The Müllerwis/Seilerwis case study can neither confirm nor reject this hypothesis. The regime during all three periods was relatively integrated, tending toward complex particularly in the construction phase of the development.

The physical condition of the stock showed marked deterioration around the mid-1980s, particularly the façades. The renovations undertaken by the Winterthur-Versicherungen were driven by a desire to increase rental income (i.e., gaining better use of *PF 1 Capital investment*) by improving the use of *NM 3 Shaping the characteristic landscape* and *NM 4 Social and cultural diversity* by repainting the façades and to attract a more economically and socially diverse tenancy to the stock. Improvements were also made by personalising and upgrading some of the flats (an improvement of the *RS Residential* goods and services), but these modifications were by all accounts not the priority. By the time the second set of renovations began, approximately 25 years later, the condition of the stock – from flats, to infrastructure, to façades – was poor. A greater prioritisation of the residential goods and services at the time of the first renovation, which would have required a greater investment, may have resulted in a less pronounced deterioration of the stock, but this is pure speculation.

At no time during the stock's lifespan to date have the non- RS Residential goods and services been overly emphasised, therefore any correlation with the periodic deterioration of the stock cannot be concluded.

Hypothesis 3 – Importance of other goods and services

The regime has not experienced changes in ownership that have resulted in a prioritisation of the use of residential goods and services to the detriment of the use of non- RS Residential goods and services. Thus, the regime has permitted a range of actors to use the goods and services of the stock over long periods of time, with little disruption in their use.

Hypothesis 4 – Continuity of actors

The sustainable use of housing stocks is only possible if the most important user-actors remain the same over several phases of the life cycle of housing stocks. High rates of turnover

would result in increasing interaction costs, the loss of the collective memory of the housing stock, and possibly even confusion over who has what rights to which goods and services. Nonetheless, the regime must accommodate a minimum level of replaceability of user-actors to eliminate the threat of the under-use of important goods and services.

This hypothesis appears to be confirmed by the Müllerwis/Seilerwis case study. Indeed, in the years leading up to the mid-1980s, a high turnover of tenants did result in increased interaction costs and, according to some long-term tenants, the collective memory of the housing stock. Ironically, although there was high tenant turnover, a fair number of other tenants have remained in the stock for many years even as their children moved out. Thus, a minimum level of replaceability was not achieved and as the number of people per flat decreased, the *RS Residential* goods and services became underused.

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Federal

Constitutional articles

Articles 35sexies, 36septies (1972)

Art. 89 Energiepolitik

Article 108 Wohnbau- und Wohuneigentumsförderung

Article 109 Mietwesen

Civil code and Code of obligations

Art. 253-274 CO: Achter Titel: Die Miete

- Articles 80 – 89bis Civil code (Erster Teil : Das Personenrecht, Zweiter Titel : Die juristischen Personen, Dritter Abschnitt : Die Stiftungen)
- Article 331 Code of obligations

Laws in effect

Verordnung vom 9. Mai über die Miete und Pacht von Wohn- und Geschäftsräumen (VMWG) **SR 221.213.11**

Bundesgesetz vom 1. Juli 1966 über den Natur- und Heimatschutz (NHG) **SR 451**

Bundesgesetz vom 8. Oktober 1999 über die Reduktion der CO2-Emissionen (CO2-Gesetz) **SR 641.71**

Bundesgesetz vom 22. Juni 1979 über Raumplanung (Raumplanungsgesetz, RPG) **SR 700**

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Energieverordnung vom 7. Dezember 1998 (EnV) **SR 730.01**

Bundesgesetz vom 23. März 2007 über die Stromversorgung (Stromversorgungsgesetz, StromVG) **SR 734.7**

Bundesgesetz vom 7. Oktober 1983 über den Umweltschutz, (Umweltschutzgesetz USG) **SR 814.01**

Bundesgesetz vom 24. Januar 1991 über den Schutz der Gewässer (Gewässerschutzgesetz, GSchG) **SR 814.20**

Gewässerschutzverordnung vom 28. Oktober 1998 (GSchV) **SR 814.201**

Luftreinhalte-Verordnung vom 16. Dezember 1985 (LRV) **SR 814.318.142.1**

Lärmschutz-Verordnung vom 15. Dezember 1986 (LSV) **SR 814.41**

Technische Verodnung vom 10. Dezember 1990 über Abfälle (TVA) **SR 814.600**

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Bundesbeschluss vom 20 Juni 1972 über Massnahmen zur Stabilisierung des Baumarktes sowie über den Schutz der Währung (AS **1972** 3102)

CANTON OF ZURICH LEGISLATION

In effet

Gesetz über die Raumplanung und das öffentilche Baurecht (Planungs- und Baugesetz) vom 7. September 1975 **LS 700.1**

Verordnung über die nähere Umschreibung der Begriffe und Inhalte der baurechtlichen Institute sowie über die Mess- und Berechnungsweisen (Allgemeine Bauverordnung) vom 22. Juni 1977 **LS 700.2**

Verordnung über die ordentlichen technischen und übrigen Anforderungen an Bauten, Anlagen, Ausstattungen und Ausrüstungen (Besondere Bauverordnung I; BBV I) vom 6. Mai 1981 **LS 700.21**

Bauverfahrensverordnung (BVV) vom 3. Dezember 1997 **LS 700.6**

Verordnung über den Quartierplan (Quartierplanverordnung) vom 18. Januar 1978 **LS 701.13**

Verordnung über den Natur- und Heimatschutz und über kommunale Erholungsflächen (Natur- und Heimatschutzverordnung) vom 20. Juli 1977 **LS 702.11**

Verordnung über allgemeine und Wohnhygiene vom 20. März 1965 **LS 710.3**

Einführungsgesetz zum Gewässerschutzgesetz vom 8. Dezember 1974 **LS 711.1**

Verordnung über den Gewässerschutz vom 22. Januar 1975 **LS 711.11**

Gesetz über die Abfallwirtschaft (Abfallgesetz) vom 25. September 1994 **LS 712.1**

Abfallverordnung vom 24. November 1999 **LS 712.11**

Verordnung über die Nachsorge und die Sanierung von Deponien vom 8. März 2000 **LS 712.12**

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Verordnung über die Wasserversorgung vom 14. Oktober 1992 **LS 724.41**

Gebührenverordnung zum Wasserwirtschaftsgesetz vom 21. Oktober 1992 **LS 724.21**

Konzessionsverordnung zum Wasserwirtschaftsgesetz vom 21. Oktober 1992 **LS 724.211**

Energiegesetz vom 19. Juni 1983 **LS 730.1**

Verordnung über die Energieplanung und die Förderung von Pilotprojekten (Energieverordnung) von 06. November 1985 **LS 730.11**

Energiegesetz des Bundes (Vollzugsregelung) vom 3. Februar 1999 **LS 730.22**

Gesetz betreffend die Elektrizitätswerke des Kantons Zürich (EKZ-Gesetz) vom 19. Juni 1983 **LS 732.1**

Allgemeine Bedingungen der Elektrizitätswerke des Kantons Zürich (EKZ) für Netzanschluss, Netznutzung und Lieferung elektrischer Energie vom 11. Juni 2007 **LS 732.15**

Tarife der Elektrizitätswerke des Kantons Zürich (EKZ) vom 1. Januar 2007 **LS 732.151**

Bedingungen der Elektrizitätswerke des Kantons Zürich (EKZ) für den Anschluss an die Verteilanlagen vom 1. Januar 2007 **LS 732.152**

Gesetz über den öffentlichen Personenverkehr vom 6. Juni 1988 **LS 740.1**

Verordnung über das Angebot im öffentlichen Personenverkehr (Angebotsverordnung) vom 14. Dezember 1988 **LS 740.3**

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Gesetz über die Vermittlung von Wohn- und Geschäftsräumen vom 30. November 1980 **LS 844**

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Wärmedämmvorschriften, Ausgabe 2008

Verbrauchsabhängige Heizkostenabrechnung (VHKA), Kanton Zürich, Dezember 2004

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Bau- und Zonenordnung, Gemeinde Greifensee ZH vom 1. Dezember 1993 and Bauzonenplan vom 1. Dezember 1993

Bauordnung, Gemeinde GreifenseeZH von mai 1959

Abfallverordnung der Gemeinde Greifensee vom 2. Dezember 1992, revidiert am 30. Juli 1996

Reglement über die Wasserversorgung vom 1. Januar 2004, Gemeinde Greifensee

Reglement über das unbeschränkte Parkieren auf Parkplätzen signalisierter Parkzeitbeschränkung 27. September 2003

APPENDIX 1 – DESCRIPTION OF LAWS RELATED TO RENTAL HOUSING

CONFEDERATION

Constitutional articles

1975 – present

Introduction in 1975 of articles 34*sexies* and 34*septies* into the federal Constitution. Moved to articles 108 and 109 Cst in 2000 with the acceptance of the new Constitution.

Art 108 Cst. : The Confederation supports the construction of housing and the activities of public-interest housing organisations. Furthermore, it encourages the acquisition of land and infrastructure for housing construction, and the reduction of construction and housing costs. It also takes into particular consideration the housing requirements of families, and other people with specific needs (the elderly, people with disabilities, etc.)

Art 109 Cst.: The Confederation can legislate against abuses in tenancy agreements, especially abusive rents and the cancellation of leases. It can also legislate to enforce standard tenancy contracts, which must take into account the interest of minorities and regional characteristics.

Housing assistance

1918-1924

Introduction of measure to encourage construction by covering 5 to 15 percent of construction costs and providing loans at preferential rates up to 30 percent of costs on the condition that an equal contribution comes from the cantons and the communes.

1924-1942

Federal measures to encourage housing are stopped.

1942-1950

Introduction of measures to encourage construction by providing loan guarantees, and financial aid equivalent to 5 percent of construction costs or 10 percent in the case of public interest housing organisations. The cantons had to provide an equal contribution. This assistance was granted on condition that household revenues did not exceed a set limit.

1950 – 1958

The Confederation stopped providing any housing construction aid in 1950 after the Swiss people voted to end subsidies in a national referendum. The people believed that it was the cantons that should be responsible for housing since the shortage was a consequence of their economic success (Cuennet et al 2003: 30).

1958 – 1965

Bundesbeschluss vom 31. Januar 1958 über Massnahmen zur Förderung des sozialen Wohnungsbaues

- The decree included provisions to reduce rents by taking care of interest on capital and to obtain loans for housing construction (up to 30% of the total investment). It set limits on maximum construction costs and defined who was eligible to rent subsidised flat, based primarily on criteria such as ratio of household revenue to rent, size of flat, and return on investment per room. This decree was largely deemed a failure since criteria often excluded cities where the shortage was greatest (Cuennet et al. 2002: 30).

1965 – 1974

Budesgesetz vom 19. März 1965 über Massnahmen zur Förderung des Wohnungsbaues

- The Confederation sought to reduce rents by up to 30% while allowing developers/owners to maintain a normal return on investment by 1) providing loan guarantees, 2) granting loans through the intermediaries of banks (and therefore circumventing the quotas imposed on banks in the fight against inflation), 3) providing assistance for infrastructure (introduced in the execution ordinance of 1970). Construction had to be simple and adapted to the needs of families and the rents of these flats were controlled for 20 years.

- Since the law was incentive driven, there existed no spatial or temporal link between tension in the housing market and applications for assistance from the cantons and developers. When the housing market was tight and demand high, developers preferred not to use the housing assistance since the rent controls were too restrictive and they could easily find renters on the market; on the other hand, when the market was relaxed and housing demand low, developers were interested in receiving assistance since they could be guaranteed a revenue, but the cantons saw no reason to provide funds. Furthermore, the law didn't directly lower construction costs. Instead, it assumed that costs were a given from which rents were calculated and then lowered by means of subsidies. Thus, there was no incentive for developers to reduce construction costs (Cuennet et al 2003: 31).

1974 – 2003

Wohnbau- und Eigentumsförderungsgesetz vom 4. Oktober 1974 (WEG)

- The base assistance *(Objekthilfe*) consists of a refundable advance to owners that allows the initial rent to be lowered. Rent is gradually increased over the next 25 to 30 years according to a schedule set by the Federal Housing Office *(Bundesamt für Wohnunugswesen, BWO)* so that the advance and interest accrued can be repaid. Rents can be lowered further as a function of individual assistance *(Subjekthilfe)*. These subsidies to the owner are non-refundable and therefore are reserved for the most economically and socially vulnerable households. The Confederation also provides loan guarantees to banks and assistance for housing renovation and home ownership. Finally, additional assistance is granted to public interest housing organisations, which become the sole receiver of rental housing construction assistance beginning in 1998.

- Subsidised housing built with WEG assistance must meet quality criteria defined in the *Wohnungs-Bewertungs-System* (housing evaluation system), or WBS.

- WEG, developed during economically overheated years, showed its limitations during the stagnation of the 1990s when vacancy rates were high and incomes were at a standstill but rents of subsidised flats continued—as planned—to increase. Many owners who built WEG housing in the 1980s when interest rates were relatively low and costs high defaulted on their loan repayments (Cuennet et al. 2002: 34).

- No new assistance has been provided under the WEG since 2002, but the Confederation must continue to provide the base assistance already promised until 2015 and the additional assistance until 2025.

2003 – present

Wohnraumförderungsgesetz vom 21. März 2003 (WFG)

- The objective of the WFG is to increase the offer of housing for low income households by encouraging the construction, renovation and acquisition of low rent housing and supporting the activities of public interest housing organisations. Direct assistance consists of no or low interest loans for public interest housing organisations building rental housing. For indirect assistance, the Confederation 1) guarantees loans granted by the EGW, 2) provides back guarantees to cooperatives that provide loan guarantees in the rental sector, and 3) ensures umbrella organisations for public interest housing the means necessary to fund working capital.

- The federal budget reduction programme of 2003 *(Entlastungsprogramms 2003 für den Bundeshaushalt)* has suspended direct loans from the Confederation until the end of 2008. Housing assistance in the rental sector is therefore currently limited to indirect assistance (BWO 2004).

Tenant protection

For a good overview of Swiss tenant protection legislation, refer to Rohrbach 2005.

1911 – 1946

The provisions in the Code of Obligations of 1881 are for the most part directly transferred to the new Code of Obligations of 1911. Public law is frequently used during this period, however, to modify the civil law provisions, particularly as concerns rent control and monitoring. The exception is between 1912 and 1914 and again between 1926 and 1936 when only the civil law regulations apply. With the decline in the construction sector and increase in the housing shortage resulting from the Second World War, the Federal Council again passes urgent decrees to strictly control rents and limit the cancellation of leases (Rohrbach 2005).

1946 – 1961

Rent control continues, although provisions are modified to allow modest increases in rent. Furthermore, certain ordinances and decrees restrict any increases without approval from the proper authorities. For instance, the *Verordnung vom 28. Dezember 1956 über die Mietzinskontrolle und die Beschränkung des Kündigungsrechts*[75] forbids rent increases past

[75] AS **1956** 1731

those existing on December 31, 1956; similarly, the Verordnung vom *11. April 1961 über die Mietzinskontrolle und Kündigungsbeschränkung* [76] sets maximum rents at the level of those of April 1, 1961.

1961 - 1972

Rent controls are slowly transformed into rent monitoring, and by 1970 even rent monitoring disappears. Rent levels are now dictated by the spirit of market liberalisation, but it soon becomes evident that tenancy protection remains necessary.

1972 – 1990

Bundesbeschluss vom 30. Juni 1972 über Massnahmen gegen Missbräuche im Mietwesen (BMM)

- Originally, the BMM was designed to protect tenants living in communes with a housing shortage against abusive rental conditions. It was modified in 1987 to cover the entire country. Although rental increases were no longer subject to controls, the BMM gave tenants the opportunity to legally dispute abusive rents, specifically when the owner's return on investment was excessive or when it resulted in an exaggerated purchase price.

- The BMM, originally limited to a five-year period, was extended three times. Finally, most of the provisions of the BMM are transferred to the revised Title Eight of the Code of Obligations on rental and farm leases *(die Miete und die Pacht)*.

1990 – present

Obligationenrecht OR Art. 253 - 274 (Achter Teil : Die Miete)

- Title eight of the Code of Obligations *("Obligationenrecht")* consists of articles addressing abusive rents and other abusive actions by the owner as well as tenant protection against illegitimate lease cancellations. Although principally composed of the dispositions or the AMSL, the position of the renter versus the owner is further reinforced.

- The new droit du bail is based on the principle of cost pass through *(Kostenmiete)*. Rents may be raised if they are warranted by additional costs to the owner, including increases in mortgage rates. Acceptable rents are also calculated based on market criteria, such as the normal rent for a similar flat in the same region or neighbourhood.

Verordnung vom 9. Mai 1990 über die Miete und Pacht von Wohn- und Geschäftsräumen (VMWG) SR 221.213.11

- The ordinance consists of complementary measures for the execution of Title 8 of the Code of Obligations – *Die Miete*.

- Article 2 states that only certain articles of Title 8 of the Code of Obligations and of the present ordinance are applicable to flats that have received subsidies and for which the rent is set by a public authority. Articles not applicable generally are those relating to setting and increasing rents and allowable returns on investment.

[76] AS **1961** 307

- On November 28, 2007, the Federal Council approved a modification to the ordinance that took effect on January 1, 2008. Rents are no longer based on the mortgage rates of different cantonal banks, but on an interest rate applicable to the whole of Switzerland. Furthermore, rents may be increased following energy saving renovations, which are now considered an “added value” benefit (BWO 2008).

Institutional Regimes for Sustainable Collective Housing / Institutionelle Regime für nachhaltige Wohnbaubestände

1. Nicol, Lee*, 2009a. *Institutional Regimes for Sustainable Collective Housing: La Société Coopérative d'Habitation Lausanne.* Chavannes-près-Renens : Working Paper de l'IDHEAP (Collective Housing Stocks no 1).

2. Nicol, Lee, 2009b. *Institutional regimes for Sustainable Collective Housing: The Müllerwis/Seilerwis Housing Stock, Greifensee, ZH*. Chavannes-près-Renens : Working Paper de l'IDHEAP (Collective Housing Stocks no 2).

3. Subirats, Joan, Hernández, Aitor, García, Alejandro**, 2009. *Institutional regimes for Sustainable Collective Housing: Public Housing Stocks in the City of Terrassa (Catalonia): Can Tussell and Can Vilardell.* Chavannes-près-Renens : Working Paper de l'IDHEAP (Collective Housing no 3).

4. Hassler, Uta, Kohler, Niklaus, Rach, Matthias, Zak, Jan : *Institutionelle Regime für nachhaltige Wohnbaubestände: Volkswohnung GmbH Karlsruhe, Nassauische Heimstätte Frankfurt.* Chavannes-près-Renens : Working Paper de l'IDHEAP (Collective Housing Stocks no 4).

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** With the collaboration of Biel Quer and Roger Segú in the early stages of research