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Institutional Regimes for Sustainable Collective Housing : Société Coopérative d'Habitation Lausanne

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Institutional Regimes for Sustainable Collective Housing

Volume 1

Société Coopérative d'Habitation Lausanne Case study report

Lee Nicol

Working paper de l'IDHEAP Novembre 2008

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CHAPTER 1 – ANALYTICAL FRAMEWORK OF THE INSTITUTIONAL REGIME

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 stockowners 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 stockowner'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, 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.

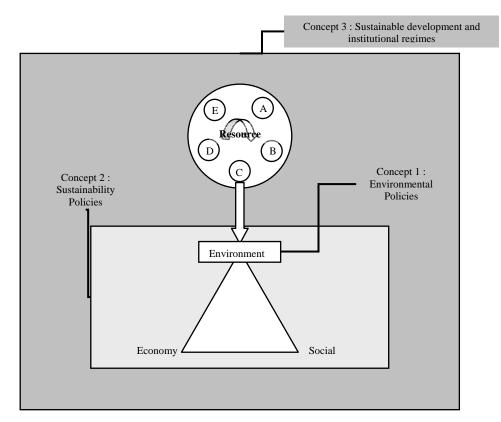


Figure 1.1 – The different levels of conception of sustainability (source: Knoepfel, Narharth and Varone 2007)

The IR analytical framework (Figure 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.

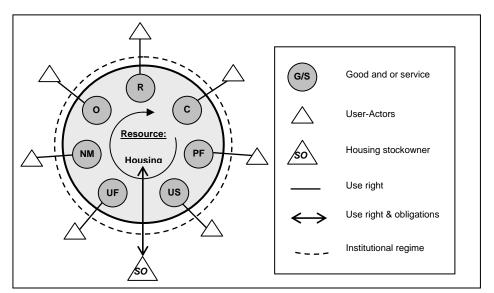


Figure 1.2 – Institutional regime framework for housing stocks (source: Nicol and Knoepfel 2008)

An institutional regime can be characterised by its extent and its coherence (Figure 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.

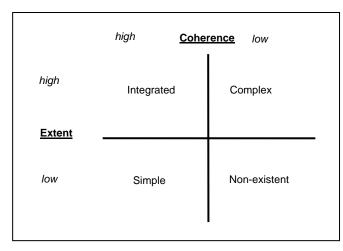


Figure 1.3 – Characterisation of institutional regimes (*source (inter alia): Knoepfel et al. 2001:38*)

1.2.2 <u>The Institutional regime of the housing stock</u>

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 stockowners, 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 stockowners 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.

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	UF 4 Demand for goods and services				
infrastructure					
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					
O Other					
O 1 Political gain	O 2 Economic gain				

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 stockowners 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 stockowner and the housing stock. As a simple example, a stockowner 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 apartment; 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 apartment 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 apartment 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 sectorial 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 sectorial 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 stockowner chooses not to dispose his or her right to maintain the building grounds. The building stock deteriorates and eventually becomes unusable.

1.2.3 <u>Regulation and appropriation</u>

The behaviours of stockowners 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 stockowners) and some use rights (of the user-actors).

A housing stockowner 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 stockowners 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 stockowners and other user-actors. Firstly, public policy places limits and restrictions on the rights of stockowners accorded them by property rights. For example, water protection policy prevents a stockowner from dumping untreated wastewater from the building stock into water bodies. Secondly, it accords use rights to persons other than the stockowner. 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 stockowner, 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 stockowner 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 stockowners may be granted low interest loans with a long payback period on the condition that they build apartments 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 stockowner. Without ownership of the stock, contracts cannot be concluded. Contracts are typically drawn up between

- stockowners and user-actors (e.g. to describe the conditions of a loan from a financial institution);
- stockowner 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 userights. 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 apartment 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 stockowner) 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

Stockowners' 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 apartment and the costs associated with all of the additional uses of goods and services that go along with using an apartment, 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 THE SCHL

2.1 HISTORICAL OVERVIEW OF THE SCHL AND ITS HOUSING STOCK

2.1.1 Description of SCHL

The Société Coopérative d'Habitation Lausanne (SCHL)¹ was founded in 1920 in response to the extreme shortage of hygienic and reasonably priced housing in Lausanne following World War I. Originally intended for the working class, when the statutes of the SCHL (specifically the obligation for members to purchase shares) became incompatible with the conditions for receiving housing subsidies from the commune, the SCHL shifted its focus to middle-income families. To respond to the needs of low-income workers, the SCHL created the Fondation du Logement ouvrier in 1928 (today the Fonds Pro-Habitat Lausanne).

The housing market over the next few years loosened, however, and by the early 1930s the housing market was saturated. Nonetheless, the SCHL continued building since affordable housing was still lacking. By 1932, the SCHL began experiencing vacancies in its apartments and in 1934 management decided to stop construction activities and to focus on holding on to the stock it had. The next ten years were a difficult time for the survival of the cooperative, as it was for many housing companies. It is the only period of the SCHL's history in which they were obliged to sell buildings.

Immediately after the Second World War, the availability of housing diminished once again, and the SCHL returned to construction activities. Material and labour shortages and rising construction costs occasionally resulted in long delays in building; regardless, the housing stock expanded and apartments were successfully rented. When Swiss citizens voted in a 1950 referendum to end all federal subsidies for housing, the SCHL feared that it would mean the end of the cooperative movement since they simply were unable to afford the land prices that speculators could. Thus, between 1949 and 1953 the SCHL again put construction activities on hold and instead invested in the renovation and modernisation of some of its older buildings. Despite the national results of the 1950 referendum, the citizens of the Canton of Vaud and of the City of Lausanne had voted in favour of subsidies, thus the canton drafted and enacted a cantonal law on housing on December 8, 1953² that encouraged and coordinated housing subsidies within the canton. Thus, in response to the new law and with yet another severe housing shortage developing, construction began again in 1954.

In 1968, Maurice Weiss, president of the SCHL for 38 years, retired and the SCHL administrative council elected Bernard Meizoz as his replacement. In 1970, the statutes of the SCHL were completely rewritten in order to allow the SCHL to better adapt to the current housing situation. In the first years of the 1970s, approximately 150 apartments were built by the SCHL in the Lausanne region.

¹ For a detailed history of the SCHL from 1920 to 1995, refer to Neuenschwander Feihl (1995)

² Loi cantonale du 8 décembre 1953 sur les mesures de coordination générale en matière de logement et d'encouragement à la construction de logements à loyers modestes

The oil shock of 1973 had hard repercussions on the economy, particularly in the building industry where half the jobs disappeared starting in 1975. The crisis of the mid-1970s never reached the proportions of the one in the 1930s, however, and the SCHL managed to emerge from it relatively unscathed. The oil shock also prompted the SCHL to rethink its energy policy. All subsequent refurbishment activities focused on energy diversification and efficiency. This coincided with the SCHL's decision to invest in heavy renovations of the older buildings of its stock, in part because the lack of amenities in these buildings (such as elevators and centralised domestic hot water) made them more difficult to rent. Thus, the SCHL began to move away from oil heating and diversified to electricity (a decision it will later regret), district heating (even though it is more expensive than heating oil), and even solar collectors for one building (as part of a demonstration project).

By 1981, demand for housing again increased due in part to sociological and demographic reasons, notably an increase in the number of divorces, the entry of baby-boomers into the housing market, and the aging population. Thus, after five years of concentrating on heavy renovations, the SCHL began once again to build. But the issue of subsidised housing, which has always been a point of contention for the SCHL, once again became an issue. Throughout its history, the SCHL has at various times refused to accept subsidies due to the constraints placed upon it by the subsidising authority. After years of not accepting subsidies, in 1983 the SCHL's administrative council revised its decision and began again to accept subsidies from the canton and communes. Construction of several buildings continued throughout the 1980s.

The economic crisis at the beginning of the 1990s was particularly bad for the construction sector. The SCHL, however, managed to escape many of the consequences of the crisis, partly due to federal legislation that gave public-interest housing greater opportunities to acquire land despite runaway speculation, and partly due to the SCHL's solid financial standing. Nonetheless, the SCHL still had to contend with rising interest rates (increasing by 40% between 1989 and 1992), which it was able to do without increasing rents.

The SCHL continued to construct new buildings throughout the 1990s up until the beginning of the 2000s. Today it has over 1700 dwellings shared amongst 30 buildings located in the greater Lausanne area. The SCHL has over 3000 members.

2.1.2 Management strategies of the SCHL

The management strategy of the SCHL has evolved since its foundation to include the following features:

1. Retention of management independence

As a cooperative, the SCHL is primarily responsible towards its members. Problems arising from the use of federal, cantonal and communal subsidies during different periods have motivated the SCHL to become more financially independent and rely less on assistance from public authorities for the construction of housing. Starting as early as 1928, the SCHL has periodically avoided accepting subsidies whenever it has felt its management independence would be threatened by such action. To the SCHL, their position is one against the constraining aspects of housing policy and not against public authorities in general (Virchaux 2006); they are willing to work with authorities to create affordable housing but only if they can keep their independence.

2. Renovation and modernisation philosophy

Throughout the SCHL's history, renovation and construction activities have occurred in phases. Beginning in the 1970s, however, the SCHL developed a long-term renovation and modernisation plan for its stock. In general, it prefers infrequent heavy renovation projects rather than lighter renovation projects that are more frequent (as is done by some other cooperatives). Modernisation of buildings occurs 30 to 35 years after construction, allowing buildings to change to the standards that have evolved over the preceding years (such as larger living spaces and modern appliances). The SCHL's objective is to maintain a building stock that is in good condition, long lasting, and thus financially healthier in the long run. In general, buildings are expected to be demolished 70 to 90 years after construction.

3. Energy efficiency

The SCHL's concern for energy efficiency dates back to 1940 when the increasing costs of heating prompted it to undertake energy-conserving renovations in some of their buildings. Following the oil shocks of the early 1970s, the SCHL began a policy of building insulation and energy diversification, with an emphasis on clean energies. Today, the SCHL continues to strive for energy efficiency and seeks energy from lower polluting sources as long as the costs remain reasonable. No buildings have yet been built to the Minergie standard.³

4. Building quality

Building construction and maintenance has also traditionally been to standards above the minimum. From early times, the choice of materials has been durable; despite the initial additional cost, the SCHL recognised that such materials require less maintenance and are replaced less often. Furthermore, construction and renovation methods have taken into consideration occupant health by not including (or by removing) materials that hinder indoor environmental quality (such as carpets).

5. Selection of labour

The strategy of the SCHL regarding the selection of labour for construction and renovation projects has evolved over time, with a noticeable shift occurring in the 1970s. During the earlier years of the SCHL, trade cooperatives were used extensively for construction of buildings. Work contracts were also given by preference to workers from the Lausanne region. In 1932 the SCHL even asked for subsidies from the city of Lausanne to cover the additional cost of hiring local joiners and woodworkers whose cost was more expensive than their Swiss-German counterparts. Today, although cooperative suppliers are requested to submit a bid, the SCHL awards contracts to many different types of suppliers. Furthermore, although companies from the Lausanne region are preferred, they are not used exclusively. Cost has become a greater consideration in the selection of labour (Meizoz, February 2006).

6. Housing density and location

The SCHL is careful about locating its buildings in areas that are not subjected to nuisances such as noise and pollution from traffic. This was evident in 1986 when the SCHL refused

³ The Minergie label is awarded to buildings that meet energy and comfort standards. For http://www.minergie.com/index_en.php

surface rights that it had been granted for a parcel adjacent to a highway. With very few exceptions, the SCHL has also ensured that its buildings are well serviced by public transportation and other amenities such as shops and schools.

It is the objective of the SCHL to contribute to urban density wherever possible, not only for the urban benefits that density can produce, but also to be able to increase the number of apartments available to members on any given lot, and thus increase revenue per property. Currently, the SCHL uses all legal means possible to densify. The SCHL (amongst other stockowners) wishes to have apartments that are carefully designed to give tenants the space they require, while at the same time allowing the maximum number of apartments. This has historically been one of the main challenges of the SCHL, however, as increasing the allowable density has often not been permitted by public authorities. For instance, as early as the 1930s, the SCHL entered into heated discussions with the city to increase the number of floors permitted to maximise the number of apartments.

2.2 OVERVIEW OF HOUSING IN GENERAL AND HOUSING POLICY

2.2.1 Overview

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.

Beginning before the appearance of the Constitutional articles, housing policy has developed over the years into two principle components: tenancy protection and housing assistance. Tenancy protection address 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. Housing assistance comes in the form of housing assistance to individuals (*"aide à la personne"*) and to housing construction organisations (*"aide à la personne"*) and to housing construction organisations (*"aide à la personne"*) and to housing construction organisations (*"aide à la personne"*), the latter being the method overwhelmingly (but not exclusively) favoured in Switzerland. Whereas *aide à la personne* goes toward specific households whose income is insufficient to obtain adequate housing, *aide à la pierre is offered to builders who are able to reduce the cost of construction and who must pass on the savings to the tenants in the form of reduced rents.*

The two pillars of housing policy – tenancy protection and housing assistance – were used both simultaneously and at different times in order to combat inadequate housing situations. This section provides an overview of the evolution of housing in Switzerland as well as the actions taken by governments to address unfavourable conditions.

2.2.2 Housing conditions and policy in Switzerland: 1911 to today

Housing conditions at the end of the nineteenth century were considered very poor due to deplorable sanitation conditions and a chronic shortage of housing in the growing urban areas. Politicians found themselves unable to ignore the crisis and the federal government was spurred to action to take measures for protecting tenants and for increasing the supply of adequate housing for its citizens. Thus, conditions for tenancy contracts first emerged in 1881 and subsequently were mostly copied to the new code of obligations of 1911. Although these remained largely unchanged until 1970, public law was often used during this time as a means to mitigate private law provisions. Only in two short periods, between 1912 and 1914 and between 1926 and 1936, did the articles regarding tenancy contracts in the code of obligations remain unrestricted from public law constraints (Rohrbach 2006).

At the beginning of World War I, many foreigners living in Switzerland left the country, causing a short-lived relaxation in the housing market. As the war progressed, however, construction became so stifled that by 1917, the housing shortage returned and became one of the key causes of large-scale protests and the general strike that shook Switzerland in 1918. Consequently, in 1917 the federal government began enacting a series of emergency measures to further protect tenants, which included restricting increases in rents and appropriating unoccupied apartments. In addition to addressing tenant protection, the Confederation also sought to stimulate housing construction and granted the first loans, in cooperation with the canton and the communes, for this purpose in 1919. These measures had their desired effect and by 1922 the shortage was essentially over. Housing assistance at the federal level was stopped in 1924 and by 1926 all emergency measures enacted for tenant protection were repealed.

Between 1926 and 1936, the Swiss economy expanded. Interest rates were low, housing construction resumed and Switzerland was soon in a situation of a saturated housing market. Nevertheless, World War II brought with it similar housing conditions as experienced in the previous war. The stagnation in housing construction was a result of an extreme shortage not only of qualified builders but also of construction materials, which were being diverted towards the war effort. Fearing that a housing shortage would result in a rise in inflation, the federal government enacted a series of strict rent controls between 1936 and 1941. These started with measures requiring landlords to obtain the authorisation of the Federal Department of the Public Economy for any rent increase and, later, giving public authorities the power to lower excessive rents. In 1939 and 1941, further decrees limited the rights of landlords to evict tenants and cancel leases. New measures in the form of public guarantees of loans were introduced to encourage housing construction in 1942. The main objective was to reduce unemployment, rather than reduce the housing shortage. Nonetheless, costs of construction continued to climb and the rents of new apartments soon became much greater than those of older apartments.

A series of federal initiatives to encourage housing construction occurred throughout the 1940s; however, in 1950 the Swiss people voted in a referendum to discontinue these subsidies. Construction costs started to rise and the lack of building materials, and in particular cement, caused the reappearance of a shortage. After an improvement in the situation between 1950 and 1955, the housing shortage reappeared. Mortgage rates soared along with construction costs, and skilled workers became very difficult to find. In 1954, rent controls were removed from housing built after December 31st, 1946, thereby creating two classes of housing: cheaper rent in older buildings, and higher rents in new buildings.

Although this measure was enacted to encourage investment in housing, the housing shortage continued.

By 1958, the Confederation once again intervened to encourage housing construction. A new federal decree⁴ enacted an article with the double objective of lowering rents and of obtaining capital for housing construction. Unfortunately, these measures were largely considered a failure; by 1962, of the 47 million Swiss francs allocated only 25 million had been used due to the existence of several very restrictive eligibility criteria (such as maximum income for tenants, and maximum allowable costs of construction). Furthermore, the distribution of assistance between cantons was very uneven, with the more rural cantons able to benefit more than the urbanised ones that were suffering more from the effects of the housing shortage. Moreover, in 1964 measures were taken to cool an overheated economy, measures that contradicted the encouragement of housing construction.

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 Lausanne: by the end of 1964 only 30 vacant apartments could be found in the city. In 1965, Parliament adopted a new federal law to encourage housing construction⁵. Nonetheless, the price of land and construction costs remained high, and the rents of new apartments became prohibitive for many households. Regardless, by 1970 rent monitoring was eliminated and rents were subject to market forces. The effects of these decisions were felt strongly in Lausanne. Between 1966 and 1970 rents increased by 40% in Lausanne, a national record, and by 1974 they had doubled.

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 1972⁶. The original objective of the AMSL was to set maximum rental increases in areas suffering from housing shortages; however, the AMSL was soon expanded to cover the entire Swiss territory.

The oil shock of 1973 had repercussions on the housing construction industry in Switzerland. Half of the jobs in the building industry were eliminated by 1975 and unemployment in general rose. In response to this stagnation in the economy, Parliament passed a law in 1974 to encourage housing construction and home ownership, known as LCAP.⁷ This law introduced the concept of "regressive assistance" (i.e. a progressive increase in rents), personal subsidies, specific requirements for quality of subsidised housing, and additional subsidies for public-benefit housing organisations.

⁴ Arrêté fédéral concernant l'encouragement à la construction de logements à caractère social du 31 janvier 1958 (RO **1958** 433).

⁵ Loi fédérale encourageant la construction de logements du 19 mars 1965 (RO **1966** 449)

⁶ Arrêté fédéral urgent institutant des mesures contre les abus dans le secteru locatif du 30 juin 1972 (AMSL) (RO **1972** 1531).

⁷ Loi fédérale encourageant la construction et l'accession à la propriété de logements du 4 octobre 1974 (LCAP) RS 843

Once again, a new housing shortage appeared between 1980 and 1990, particularly of apartments 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. LCAP assistance, which during the slow years of the 1970s was not sought much, was now in high demand. To calm the frenzy of real estate speculation that began in 1985, Parliament passed three urgent federal decrees in 1989 that included measures to help public-interest housing organisations gain the means to access land. In parallel, the measures of the AMSL were incorporated into the Code of obligations in 1990, thus temporary and emergency tenant protection measures were codified.⁸

The limitations of the LCAP, which was developed and well-used during economically 'overheated' years, did not become apparent until the long economic stagnation (especially in the real estate sector) of the mid 1990s. Many owners who had built housing under the LCAP regime during the 1980s—when revenues were high and interest rates low—found themselves unable to generate enough rental revenue to repay the loans from the Confederation. 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 the cost of construction. The situation has remained similar throughout the first half of the 2000s, with vacancy rates less than 0.5% in Lausanne. In 2003, the Confederation replaced the LCAP with a new law on housing (LOG)⁹, which introduced new measures for housing assistance.

2.3 CRITERIA FOR SELECTION

The Société Coopérative d'Habitation Lausanne was selected as the first of four Swiss case studies for this research project on institutional regimes for collective housing stocks since it fulfils a number of criteria that were first established at the outset of the project, namely that it is non-profit, is over 50 years old, and the stock is of sufficiently large size (at least 10 buildings and 150 dwellings). Furthermore, housing cooperatives have played an important role in the history of Swiss housing, of which the SCHL has been an important actor in Suisse romande (the French-speaking part of Switzerland). Finally, he SCHL has well documented its evolution, making access to information easy.

It should be noted that the subsequent case studies in Switzerland will focus on for-profit housing in order to gain insight into different types of regimes.

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

⁸ Art. 253-274 CO: Titre huitième: Du bail à loyer

⁹ Loi fédérale encourageant le logement à loyer ou à prix modérés du 21 mars 2003 (LOG) RS 842

user-actors and owners at different time periods. The regulation (or lack thereof) of use rights to the goods and services indicate 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 were conducted to gain further knowledge about the SCHL's and user-actors' roles in the use of the SCHL housing stock's goods and services. Actors interviewed include housing stockowners, user-actors, and public authorities (refer to the bibliography for the full list of interview subjects). A literature review, a search of archives and a review of SCHL annual reports were also conducted. 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.

CHAPTER 3 – ANALYSIS OF GOODS AND SERVICES OF THE SCHL

INTRODUCTION

The SCHL 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, denoted by bracketed numbers, e.g., (1), (2), etc.

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 apartments) 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 apartments (e.g. heating, water and wastewater equipment such as showers, toilets, and sinks, and electrical outlets).

RS 1 Living Space

User actors

1. SCHL cooperative members who are tenants

Only SCHL cooperative members are eligible to be tenants and therefore use the *RS 1 Living Space* of the SCHL housing stock. To become a member, an individual must purchase SCHL shares.

Excluded actors

People who are not members of the SCHL.

People who are on the waiting list for an apartment.

For SCHL subsidised housing, people who do not qualify for subsidised apartments.

Affected actors

Potential tenants

ASLOCA – Association suisse des locataires (Swiss tenants' association)

Intended use

To have a home in which to eat, sleep and live comfortably. For some tenants, the living space also has a secondary use as a workspace (e.g. for telecommuting).

Modality of use

Tenants have access to the living space of their apartments on a continuous basis, for the duration of their lease. The lease is renewed automatically. During building renovation, tenants are moved into other apartments in the building while work is being done on their own. Once the work is completed, they are able to move back.

Abusive use

1928-1943: During this period of housing over-abundance, tenants were more likely to break their lease and leave their apartment in poor condition.

1960-present: Occupying a apartment that is bigger than that intended for the size of household. (2)

Rivalry and Complementarity

Rivalry

1960-present: SCHL (*NM 1 Solving general housing needs*): Similarly to the above, under-occupancy of apartments prevents the SCHL from fully accomplishing its goal of solving the housing needs of its members, many of whom are on the waiting list. (2)

Effects

Internal homogeneous

1960-present: Potential Tenants (*RS 1 Living space*): Households that under-occupy a apartment (i.e. too few household members for too big a apartment) prevent households of appropriate size from using the living space of the SCHL stock. (2)

Internal heterogeneous

1960-present: SCHL (*NM 1 Solving general housing needs*): A high tenant turnover in subsidised apartments plus a general request from the members for market apartments has motivated the SCHL to avoid building new subsidised housing, whenever possible.

1990-present: SCHL (*NM 1 Solving general housing needs*): Tenants who work at home require slightly greater space to accommodate computer equipment. The SCHL accommodates this need with greater floor space area per apartment in the designs of new buildings.

On the stock

1928-1943: During this period of overabundance of housing, tenants left their apartment in poor condition when moving to a new home.

Regulations

Public policy

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

Civil law

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

Contracts

- SCHL membership agreement: defines how many shares must be purchased for a household to gain the use-right to the living space (i.e. rent an apartment).
- Tenancy agreements between SCHL and tenants for various categories of apartments, including market housing, housing subsidised by the canton and commune, housing constructed using federal assistance (LCAP¹⁰ of 1974), housing renovated using federal assistance, housing constructed with indirect federal assistance.

¹⁰ Loi fédérale encourageant la construction et l'accession à la propriété de logements du 4 octobre 1974 (LCAP) RS 843

Other regulations

• Statutes of the SCHL: revised statues in 1920, 1940, 1970 and 1995

1970: number of shares that must be purchased to rent an apartment can be as high as two per room (art. 51)

1995: number of shares that must be purchased to rent an apartment can be as high as three per room (art. 44)

• Règles et usages locatifs de la SCHL (Rental rules and uses of the SCHL)

Describes the rules of use regarding RS Living Space.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – 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	Yes (2)
	Is it the result of contradictions between public policies?	No	No
	Is it the result of incoherence between regulations and policy?	Yes (1)	No

(1) Conflict with *NM 1 Solving general housing needs* (Public authorities): Tenants (members of the SCHL) gained the use-right to the living space by becoming members of the SCHL and by fulfilling federal occupancy conditions for subsidised apartments (e.g. maximum household revenue). These occupancy conditions did not change for many years although the average Swiss salary continued to climb. Consequently, many SCHL members found themselves no longer eligible to rent their apartment according to federal housing regulations, although they still fulfilled SCHL conditions. (Incoherence between SCHL regulations and federal housing policy)

Occupancy conditions started to loosen (though insufficiently) in 1965, thus reducing the incoherence and conflict associated with the use of the living space.

(2) Conflict with *NM 1 Solving general housing needs* (SCHL) and *RS 1 Living space* (potential tenants): There are no SCHL regulations that clearly state that larger apartments must be used by families or larger households. (*Unclear use right to the living space*)

This conflict arose primarily because of an external factor, namely a demographic shift toward smaller households (children moving out, aging population, death of a spouse, etc.).

RS 2 Indoor Climate and Technical Services

Tenants must pay in order to have the use right to *RS 2 Indoor climate and technical services*. Either tenants are charged directly by the service provider, such as for electricity, or the SCHL receives a global bill based on per building usage for each service that it then passes on to the tenants, such as for water, wastewater and heating. In the latter case, these costs are included in the "additional costs" that tenants pay each month in addition to their rent.

User actors

2. SCHL members who are tenants

Excluded actors

People who do not live in the SCHL housing stock

Affected actors

ASLOCA – Association suisse des locataires (Swiss tenants' association)

Intended use

To live comfortably in the apartment 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 apartments 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 SCHL and the service providers.

Abusive use

Disposing chemicals and medications into the wastewater drainage system via sinks and toilets. (1)

Rivalry and Complementarity

Rivalry

Tridel (US 1 Demand for energy): Since 2006, the energy for district heating is produced by the Tridel incinerator, the design of which requires it to burn a minimum quantity of waste and thus produce a minimum amount of energy. During the summer months, underuse of district heating by tenants of all housing stocks on the network causes the Tridel incinerator to produce excess waste heat. Conversely, heating demand is high during the winter months, and the Tridel incinerator cannot supply sufficient energy to satisfy the demands of tenants on the district heating network.

Complementarity

eauservice (US 4 Water sink): Each new connection to the water supply network and use by tenants of the domestic water technical services allows the water in the pipes treated by

eauservice to circulate faster and thus stagnate less. This flushing mechanism is good for the water supply network and the quality of water.

Effects

Environmental

Tenants who flush medications increase the concentration of micro-pollutants in water bodies, producing effects on the environment that remain poorly understood. (1)

Use of all technical services consume or transform resources and produce emissions. When tenants use services less frequently or more efficiently, there is the potential that these effects become less pronounced.

Internal homogeneous

The total cost of heating is divided amongst the tenants, often as a function of floor space or number of rooms in the apartment and independently of the actual amount of heating energy used by each individual household. If a tenant heats her or his apartment excessively, all tenants are required to share this additional cost.

Internal heterogeneous

eauservice (US 4 Water sink): During the winter months when the water cycle has a greater volume, consumers (such as the SCHL tenants) do not consume enough water to maintain the reservoirs at appropriate levels (i.e. reservoir levels become too high). In these cases, eauservice must adjust the water levels in reservoirs to keep them reasonable.

Services d'assainissement (US 5 Water discharge): Tenants of all housing stocks (not only the SCHL) are increasingly disposing medications and other micro-pollutants into the wastewater stream. The Services d'assainissement are currently unable to remove these micro-pollutants in their treatment process and therefore must invest in new technologies and water treatment processes to be able to do so. (1)

SCHL (*NM 1 Solving general housing needs*): SCHL tenants have on occasion debated what technical services they are required to pay in addition to rent. The SCHL now clarifies this obligation in each of their tenancy agreements.

Regulations

Public policy

Confederation:

Ordonnance sur le bail à loyer et le bail à ferme d'habitation et de locaux commerciaux du 9 mai 1990 $(OBLF)^{11}$

Art. 4-8: Describes which costs of technical services can be passed on to the tenant by the stockowner and how.

¹¹ RS 221.213.11

Canton of Vaud :

• Loi cantonale sur l'énergie du 16 mai 2006 (LVLEne)¹², Règlement d'application de la loi sur l'énergie du 4 octobre 2006 (RLVLEne)¹³:

Art. 28(2h) LVLEne and Art. 41-44 RLVLEne: Describes requirements for individual heat meters in new residential buildings or in buildings undergoing major renovations.

Contracts

• Tenancy agreement: restates that the tax for wastewater treatment is passed onto the tenant

Other regulations

Ville de Lausanne

• Règlement sur la fourniture d'énergie électrique du 18 avril 1977

Describes the provision of electricity distributed by the commune of Lausanne by its electricity service (*Service de l'électricité*). Articles 38-52 describe electricity rates, billing and payment, and suspension of service.

• *Règlement sur le raccordement et utilisation pour la fourniture de gaz du 28 janvier 1983*

Describes the provision of gas distributed by the commune of Lausanne by its gas service (*Service du gas*). Articles 43-54 describe gas rates, billing and payment, and suspension of service.

• Règlement sur l'eau du 3 décembre 1965

Describes the provision of water distributed in the commune of Lausanne. Article 14 describes billing for water treatment and distribution.

• *Règlement sur la taxe pour l'épuration des eaux usées du 16 mars 1962 and Annexe au règlement sur l'évacuation des eaux 1 juin 1995*

Describes fees and billing for wastewater treatment and wastewater collection, respectively.

• Règlement sur la gestion des déchets de 25 avril 1996

Describes the collection, the transportation and the treatment of waste. Article 30 describes billing.

SCHL

¹² RSV 730.01

¹³ RSV 730.01.1

• *Règles et usages locatifs de la SCHL* (Rental rules and uses of the SCHL)

Art: 29-32(f): Describes payment of domestic cold water, domestic hot water and heating.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to RS 2 regulated?	Yes	Yes
Ext	Is RS 2 sufficiently regulated?	Yes	Yes
()	Is there a conflict involved in the use of RS 2?	No	Yes
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	Yes (1)
Coherence	Is it the result of contradictions between public policies?	-	No
	Is it the result of incoherence between regulations and policy?	-	No

(1) Conflict with US 5 Water discharge: Flushing of medications is not forbidden in any regulations (which would be difficult to enforce in any case) and many tenants are likely unaware of the conflict their actions produce for the Services d'assainissement (who is unable to use the good US 5 Water discharge satisfactorily, i.e. can no longer treat wastewater to acceptable standards due to unavailability and cost of technology) nor of the negative consequences on the environment. (Poorly defined use right to water discharge technical services)

This conflict has arisen primarily because of an external factor. Tenants of all housing stocks have likely always used toilets and drains to dispose of medications, but the recent overall increase in use of medications now makes the concentration of these micropollutants detectable in receiving waters.

Public awareness campaigns have been successful in getting people to use less water; whether they can be successful in getting people to stop flushing compounds and objects that should not be flushed is still unclear. The forthcoming reconstruction of the treatment plant at Vidy will be adapted to handle new types of pollutants.

NR. NON-RESIDENTIAL GOODS AND SERVICES

Non-residential Goods and Services are composed of all indoor and outdoor spaces that are not used exclusively by individual tenants for living. 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

1. Stores, schools, daycares, etc.

Excluded actors

Restaurants and bars, due to late night noise issues.

Affected actors

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

Intended use

To lease ground-floor level space that is unused by the SCHL 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

Use of non-residential space by stores, schools, daycares, etc. promotes mixed-use neighbourhoods.

Earlier in the SCHL history, various cooperatives (e.g. the Société coopérative de consommation) rented the non-residential space of the SCHL, thereby helping to reinforce the cooperative movement.

⁻

Regulations

Public policy

Ville de Lausanne

• Plan général d'affectation (PGA), règlement du 26 juin 2006 (Ville de Lausanne)¹⁴

Defines the rights of landowners with respect to land use and defines different zones in which certain construction conditions are applied. Thus, the PGA describes on what land businesses or services have the right to rent space in the SCHL housing stock.

• Règlement concernant le plan d'extension (RPE), du 3 novembre 1942 (Ville de Lausanne)

Revised on several occasions (most recently in 1992) and replaced by the above PGA in 2006.

Contracts

• Lease between the SCHL and the business or service for use of the space.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NR 1 regulated?	Yes	Yes
Ext	Is NR 1 sufficiently regulated?	Yes	Yes
1)	Is there a conflict involved in the use of NR 1?	No	No
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Coherence	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

1. SCHL members who are tenants

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.

¹⁴ For details on the *plan général d'affectation* of the Ville de Lausanne, consult http://www.cadredevie.ch/

Affected actors

None

Intended use

Where available, to use group rooms for activities such as meeting and parties.

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

To use designated parking spaces in the garages provided by the SCHL.

Modality of use

Access to collective indoor space may be either with or without restrictions

Abusive use

To not maintain the collective indoor space and to let it deteriorate.

Rivalry and Complementarity

Rivalry

1960: SCHL (*PF 1 Capital Investment*): Tenants used free outdoor street parking rather than rent the spaces that were made available to them at the Boisy building, thus depriving the SCHL of rental revenue. The SCHL subsequently changed their rules to ensure tenants with a car had to rent an SCHL space. (1)

Effects

Internal heterogeneous

SCHL (*NM 1 Solving general housing needs*): The SCHL has on two occasions built activity meeting rooms on the condition that the tenants of the building maintain them. These rooms were looked after for approximately two years until tenant turnover and lack of interest meant that no one took initiative to maintain them and they fell into disrepair. Consequently, the SCHL no longer includes them in their buildings. (2)

Regulations

Other Regulations

• *Règles et usages locatifs de la SCHL* (Rental rules and uses of the SCHL)

Art. 10: Obligation of the landlord. Describes obligation of the SCHL to maintain collective indoor spaces.

Art. 12: Life in the building. Describes obligation of the tenant to help maintain the common indoor spaces to ensure good relations with neighbours.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NR 2 regulated?	Yes	Yes
Ext	Is NR 2 sufficiently regulated?	Yes	Yes
0	Is there a conflict involved in the use of NR 2?	Yes	Yes
rence	Is it the result of unclear or poorly defined property rights or use rights?	No	Yes (2)
Coherence	Is it the result of contradictions between public policies?	Yes (1)	No
	Is it the result of incoherence between regulations and policy?	No	No

(1) Conflict with *UF 2 Demand for traffic-related infrastructure*: The explosion of the presence of cars in the 1950s caused great demand for parking spaces. The city both required new housing construction projects to provide parking spaces and expropriated land from housing projects for street widening to accommodate the greater volume of traffic and on-street parking. (*Contradiction between public policies*)

(2) No formal agreement or contract was ever drafted between the tenants and the SCHL management regarding maintenance of communal activity rooms. (*Poorly defined use rights to the activity rooms*)

This conflict was resolved since the SCHL no longer provides common rooms in their buildings.

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

1. 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

-

Rivalry and Complementarity

-

Effects

-

Regulations

Other Regulations

• *Règles et usages locatifs de la SCHL* (Rental rules and uses of the SCHL)

Art. 10: Obligation of the landlord. Describes obligation of the SCHL to maintain collective indoor spaces.

Art. 12: Life in the building. Describes obligation of the tenant to help maintain the common indoor spaces to ensure good relations with neighbours.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NR 3 regulated?	Yes	Yes
Ext	Is NR 3 sufficiently regulated?	Yes	Yes
1)	Is there a conflict involved in the use of NR 3?	No	No
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Coherence	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 other people with access to the exterior of the stock

Excluded actors

People without access to the exterior of the stock

Affected actors

None

Intended use

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

To gain access to the building.

To use the bins in designated areas to put recycling and household waste.

Modality of use

Since the outdoor space is not enclosed, it can be used at anytime. However loitering and noisy activities at night are not permitted.

Abusive use

Rivalry and Complementarity

Complementarity

Services d'assainissement (US 3 Material discharge): The Service d'assainissement has a specific location from which to pick up waste and recyclables that the tenants discard.

Effects

Internal Heterogeneous

Tenants (*RS 1 Living space*): Noise from children playing in the outdoor area *may* disrupt other tenants from enjoying their living space.

Regulations

Other Regulations

• *Règles et usages locatifs de la SCHL* (Rental rules and uses of the SCHL)

Art. 14: Gardens, terraces and sidewalks. Describes obligation of the tenant to maintain common outdoor spaces.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NR 4 regulated?	Yes	Yes
Ext	Is NR 4 sufficiently regulated?	Yes	Yes
0	Is there a conflict involved in the use of NR 4?	No	No
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Coherence	Is it the result of contradictions between public policies?	-	-
Ŭ	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. Banks, through traditional construction and renovation loans and mortgages;
- 2. The SCHL itself, through investment of its own capital into construction and renovation projects;
- 3. SCHL members, through the purchase of shares for which they are allowed a maximum dividend as defined in the stamp tax law;
- 4. Non-profit housing umbrella organisations, through the granting of loans to non-profit housing entities; currently consisting of the Association suisse des coopératives d'habitation radicales (ACR), Association suisse pour l'encouargement à la construction et à la propriété (ASCP), and the Association suisse pour l'habitat (ASH, to which the SCHL belongs).

This use of *PF 1 Capital investment* by public authorities is closely linked to the service *NM 1 Solving general housing needs* insofar as these authorities use capital investment specifically to address housing shortages, high rents, and insufficient social housing, but not to gain a return on investment. Furthermore, loans from public authorities, which, since they must be repaid, could be considered capital investment, are tied to other non-investment type measures of housing assistance such as loan guarantees and sunk cost subsidies. Consequently, the use by public authorities of *PF 1 Capital investment* in the SCHL stock is described in the section on *NM 1 Solving general housing needs*.

Excluded actors

Banks with which the SCHL does not negotiate loans and mortgages or that do not want to offer loans to the SCHL.

All actors aside the SCHL

Non-members of the SCHL

The two umbrella organisations to which the SCHL does not belong, notably the Association suisse des coopératives radicales (ACR) and the Association suisse pour l'encouragement à la construction et à la propriété (ASCP)

Affected actors

Other borrowers active within or outside of the housing sector.

Other public-interest housing organisations that seek capital for investment in housing projects.

Intended use

<u>Banks</u>: to provide loans and mortgages for housing activities (building, renovation, etc.) when the risk of loss is low and an acceptable rate of return is set.

<u>SCHL</u>: to invest capital into the construction, renovation and acquisition of housing with the objective of reducing loans and assistance from other sources and thus reducing dependence on other actors. Since 1995, to increase the economic benefits of members.

<u>SCHL members</u>: to purchase member shares in the SCHL with the objectives of 1) becoming eligible to rent a apartment, 2) receiving dividends on cooperative shares, and 3) contributing to the capital stock of the SCHL

<u>Umbrella organisations</u>: 1) to manage capital received from the Confederation as working capital from which loans can be provided to members; 2) to use the capital generated from members to provide loans at favourable interest rates; 3) to use these as complements to other financial assistance (i.e. they constitute the part of financing for which the bank does not provide loans) as well as for transitory financing: 4) for the CCL, to acquire long term funds at favourable interest rates for the financing of rental housing of public-interest organisations.

Modality of use

<u>Banks</u>: Mortgages and loans are granted at a specific interest rate and over a specified amount of time. Second mortgages are also granted, usually at a higher interest rate. Loans are sometimes guaranteed by public authorities or other entities such as the Société coopérative de cautionnement hypothécaire (CCH).

<u>SCHL</u>: The SCHL invests a portion of its own capital when acquiring, constructing, and renovating buildings of the stock. The amount invested depends on many factors, such as economic conditions, availability of housing assistance, and conditions tied to assistance and subsidies.

<u>SCHL members</u>: Members must purchase shares to become members and be eligible to rent a apartment. They also have the option of buying additional shares, which is particularly encouraged by the SCHL during "share drives". From the shares, members receive yearly dividends.

<u>Umbrella organisations</u>: The ASH receives loan credits from the Confederation, which it then manages as working capital. Loans are made to housing cooperatives and other public-interest housing organisations at interest rates of 1 ½% less than the interest rate published by the Banque nationale suisse (minimum 2%). Loans are provided over a period of no longer than 20 years. For the CCL, funds are acquired essentially by public bond issue, but also private investments. Loans are subject to certain conditions.

Abusive use

<u>Banks</u>: late 1960s-1972; mid to late 1980s: To vastly under-use the capital investment potential of the SCHL and other public-interest organisations (i.e. not lend capital) during times of housing shortage (especially of affordable housing). (1)

<u>SCHL members</u>: To not purchase additional shares when capital is needed by the SCHL for construction projects destined for new member-tenant. This is contrary to the cooperative spirit.

Rivalry and Complementarity

Rivalry

<u>Banks</u>: SCHL (*NM 1 Solving general housing needs*): Lack of capital investment by banks made new SCHL construction projects difficult to finance and complete. (1)

<u>Banks</u>: Public authorities (*NM 1 Solving general housing needs*): During periods of affordable housing shortage, the under-use of capital investment by banks prevented public authorities from appropriately housing all of its citizens and forced the Confederation to enact emergency measures to force banks to provide loans to public-interest housing organisations. (1)

<u>SCHL</u>: Public authorities (*NM 1 Solving general housing needs*): Public authorities grant subsidies and other assistance upon certain conditions, such as maximum household income to rent ratio, size of apartments and even selection of tenants. By setting these conditions authorities hope to solve particular housing needs, such as housing low-income families. When the SCHL invests in its own stock and forgoes this housing assistance, it denies public authorities the use-right to solving a general housing need through the SCHL stock.

<u>Non-profit housing umbrella organisations</u>: Other members of any of the three umbrella organisations (*NM 1 Solving General Housing Needs*): All cooperatives must compete for the limited funds from the ASH. The extent to which cooperatives solve the housing needs of their members is related to the amount of loan assistance received.

Complementarity

<u>SCHL</u>: SCHL (*NM 1 Solving general housing needs*): By not accepting subsidies from public authorities by investing more in its own stock, the SCHL retains the management independence to address the housing needs of its members as it sees fit.

<u>SCHL members</u>: Tenants (*RS 1 Living space*): By purchasing shares in the cooperative, a member gains the use right to the living space of a apartment, either with immediate or future effect.

<u>SCHL members</u>: SCHL (*PF 1 Capital investment*): When members purchase shares, they give the SCHL capital with which it can invest in the housing stock. In return, members receive dividends.

<u>SCHL members</u>: SCHL (*NM 1 Solving general housing needs*): The purchase of shares by members allows the SCHL to have more capital with which to expand its housing stock and provide housing to members.

<u>Non-profit housing umbrella organisations</u>: Public authorities – Confederation (*NM 1 Solving general housing needs*): The working capital of the ASH is funded by loan credits by the Confederation. It is the organisation through which the Confederation invests capital in the SCHL and other public-interest housing stocks.

Effects

Environmental

<u>Non-profit housing umbrella organisations</u>: Conditions for granting loans include minimum environmental performance of the building. Furthermore, the design of apartments must have a high use value as described by the *Système d'évaluation des logements (SEL)*.

Social

<u>Banks</u>: Under-use of capital investment in affordable housing by banks in the early 1970s and the mid to late 1980s helped create a shortage of low- to mid-rent housing. (1)

<u>SCHL members</u>: As cooperative members, tenants can have a greater participation and involvement with the SCHL through decisions taken at the annual general meeting.

<u>Non-profit housing umbrella organisations</u>: Umbrella organisations help promote affordable housing as they are best suited to respond to the loan needs of their members.

Economic

<u>Banks</u>: **1960s and mid-1980s:** Over-use of capital investment in more profitable areas than affordable housing contributed to the overheated Swiss economy in the 1960s and mid-1980s. **(1)**

<u>SCHL</u>: SCHL (and other cooperatives) have a non-speculative purpose that better guarantees the long-term prospectives of their stock.

Internal heterogeneous

<u>Banks</u>: **1971**: Public authorities (*NM 1 Solving general housing needs*): The lack of capital investment in affordable housing obliged the Confederation to enact emergency measures to force banks to provide loans to non-profit housing organisations. (**1**)

<u>SCHL</u>: SCHL tenants (*RS 1 Living space*): The housing needs of members are better satisfied when the SCHL uses its own capital instead of that of public authorities.

<u>SCHL</u>: **1978 and 2000**: SCHL members (*PF 1 Capital investment*): To increase the amount of capital available for investment in its own stock, the administrative board of the SCHL increased the number of shares required to become a member and to rent a apartment, thus forcing members to increase their capital investment in the SCHL stock.

Non-profit housing umbrella organisations: Tenants (RS 1 Living space): Loan conditions ensure lower rents for tenants.

Regulations

Public policy

Confederation

• Loi fédérale encourageant le logement à loyer ou à prix modérés du 21 mars 2003 $(LOG)^{15}$ and Ordonnance encourageant le logement à loyer ou à prix modérés du 26 novembre 2003 $(OLOG)^{16}$

Art. 37 LOG: The Federal Housing Office (OFL) can make funds available to umbrella organisations;

Art. 47 LOG: OFL can delegate execution of the LOG to other institutions, including umbrella organisations.

Art. 43 OLOG: Describes mechanism by which umbrella organisations can use the working capital.

- Loi fédérale encourageant la construction et l'accession à la propriété de logements du 4 octobre 1974 (LCAP)¹⁷
- Loi fédérale sur les droits de timbre du 27 juin 1973 (LT)¹⁸

Art. 6: sets maximum dividend for cooperative shares to avoid issuing fee at 6%.

 Arrêté fédéral urgent du 6 octobre 1989 concernant un délai d'interdiction de revente des immeubles non agricoles et la publication des transferts de propriété immobilière¹⁹ and Arrêté fédéral du 6 octobre 1989 concernant la charge maximale en matière d'engagement des immeubles non agricoles²⁰

Controls speculation by prohibiting the resell of buildings within five years of purchase and setting the minimum means the purchaser must possess to acquire a building. Thus, public interest housing organisations and cooperatives are better able to purchase land that had been too expensive due to the uncontrolled speculation from 1985 to 1989.

• Arrêté fédéral instituant des mesures dans le domaine du crédit du 20 décembre 1972 ₂₁

Fight the overheated economy by limiting the loans that can be offered by banks. However, art. 3 al. 8 allows for financing of construction of affordable housing.

• Arrêté fédéral concernant la stabilisation du marché de la construction du 25 juin 1971²²

¹⁵ RS 842

¹⁶ RS 842.1

¹⁷ RS 843

¹⁸ RS 641.10

¹⁹ RO **1989** 1974

²⁰ RO **1989** 1978

²¹ RO **1972** 3121, FF **1972** II 1548

²² RO **1971** 961, FF **1971** I 1550

Limits construction demand by temporarily prohibiting demolition and the execution of construction projects that are not deemed urgent, thus freeing up construction labour and capital to the benefit of public-interest housing. Affordable housing projects are exempt from this regulation.

• Arrêté fédéral concernant la lutte contre le renchérissement par des mesures dans le domaine de la construction du 13 mars 1964²³

Requires permits for construction projects, but exempts subsidised housing construction and some non-subsidised construction; demolition of housing prohibited.

Civil law

• Art. 828-926 CO, Titre vingt-neuvième: De la société coopérative

Contracts

- Contracts between banks and SCHL for loans.
- Contracts between loan guarantors and banks.
- SCHL share purchase agreement
- Between the ASH and the SCHL: Décision sur l'octroi d'un prêt provenant du Fonds de Roulement.

Includes a clause on high use value of apartments constructed or renovated using loans coming from working capital of the ASH according to the *Système d'évaluation des logements (SEL)*.

• Between CCL and the SCHL: Ordre de souscription d'une part d'emprunt and Contrat relative à la participation à un emprunt CCL et au versement d'une quote-part.

Other regulations

• Statutes of the SCHL: revised statues in 1920, 1940, 1970 and 1995

1970: number of shares that must be purchased to rent an apartment can be as high as two per room (art. 51)

1995: number of shares that must be purchased to rent an apartment can be as high as three per room (art. 44). SCHL members can receive a higher dividend on shares (previously limited to 4%, now at 6%).

- Chartre des maîtres d'ouvrage d'utilité publique en Suisse
- Statuts de l'Association Suisse pour l'Habitat

Elements for evaluating extent and coherence

²³ RO **1964** 213

		1920 – 1970	1970 – present
Extent	Is the use right to PF 1 regulated?	Yes	Yes
Ext	Is PF 1 sufficiently regulated?	Yes	Yes
()	Is there a conflict involved in the use of PF 1?	No	Yes (1)
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	No
Coherence	Is it the result of contradictions between public policies?	-	Yes (1)
Ŭ	Is it the result of incoherence between regulations and policy?	-	No

(1) Conflict with *NM 1 Solving general housing needs* (public authorities and SCHL): Although federal housing policy encouraged the construction of affordable housing (at least in theory), fiscal policy allowed banks to severely under-use the capital investment potential of low- to mid- rent housing construction and instead invest in speculative and more immediately profitable areas. (*Contradiction between housing and fiscal policies*)

The Federal council attempted to solve this conflict by passing federal decrees in the early 1970s and again in 1989.

PF 2 Land investment

User actors

- 1. Public authorities
- 2. Private landowners

Excluded actors

Public authorities who do not have suitable land for housing construction

Landowners from whom the SCHL does not purchase land.

Affected actors

Owners of speculative housing.

Neighbours

Intended use

<u>Public authorities</u>: 1) to encourage housing construction by the SCHL and other publicinterest housing entities by granting surface rights or selling land, 2) additionally, to fight real estate speculation.

Private landowners: to make a profit from the sale of land to the SCHL.

Modality of use

<u>Public authorities</u>: Surface rights of public land are given to the SCHL either for free or are rented typically for a period of between 50 and 70 years. Previously, only subsidised housing could be granted surface rights, but non-speculative market housing is now also eligible.

Abusive use

Public authorities: Increasing prices beyond those agreed upon.

<u>Private landowners</u>: To under-use the land investment potential by not selling land to the SCHL as a matter of principle (i.e. not looking favourably on cooperatives).

Rivalry and Complementarity

Rivalry

<u>Public authorities</u>: Architects and Planners (*UF 1 Design of urban space*): The Ville de Lausanne has previously offered surface rights to the SCHL for land that is not well situated (in terms of noise, traffic and air-borne particulates), thus encouraging poor use of the service design of urban space (Grangette, 1987).

<u>Public authorities</u>: SCHL (*NM 1 Solving general housing needs*): Public authorities have granted surface rights and sold public land to the SCHL on the condition that certain of its own housing criteria are met, such as reserving a certain proportion of apartments for civil servants (e.g., Pully, 1986).

<u>Private landowners</u>: Architects and Planners (*UF 1 Design of urban space*): The design of buildings has been on occasion changed to increase the number of dwellings so that the SCHL can obtain higher rental revenue and therefore be able to pay for the land.

<u>Private landowners</u>: SCHL (*NM 1 Solving general housing needs*): Particularly during times of an overheated real estate market, exorbitant land prices have prevented the SCHL from undertaking new construction projects. (1)

Complementarity

<u>Public authorities</u>: Construction and renovation companies (*PF 3 Labour investment*): Surface rights accorded to the SCHL encourage housing construction.

<u>Private landowners</u>: Architects and tradespeople (*PF 3 Labour investment*): Landowners who are architects/tradespeople have sold land to the SCHL on condition that their services be used for the design and construction of the project (e.g. Languedoc 1956 and Boisy 1960-1963).

Effects

Social

Public authorities: Encouragement of social housing

Environmental

<u>Public authorities</u>: The new *SMéO* program of the City of Lausanne, which grants surface rights on a competitive basis to subsidised and market housing, is based on buildings attaining a minimum environmental performance in land-use, materials, water consumption and energy efficiency.

Economic

<u>Public authorities</u>: By granting surface rights instead of selling, public authorities remove land from the speculative real estate market and help keep housing reasonably priced.

Internal heterogeneous

<u>Private landowners</u>: **1956-1963**: SCHL (*PF 1 Capital investment*): The conditions for the sale of land for Languedoc and Boisy included clauses that the architect landowner be used for the project. The architect was over-worked and unable to meet deadlines, causing substantial delays in construction and cost overruns. (2)

<u>Private landowners</u>: SCHL (*NM 1 Solving general housing needs*): Some private landowners have not sold land to the SCHL (and other housing cooperatives) since they do not look favourably upon housing cooperatives, non-profit housing or subsidised housing. This has occasionally hindered the SCHL's ability to build. (3)

Regulations

Public policy

Confederation

• Arrêté fédéral urgent concernant un délai d'interdiction de revente des immeubles non agricoles et la publication des transferts de propriété immobilière du 6 octobre 1989²⁴

Allows public interest organisations and cooperatives to purchase land that had been too expensive due to the uncontrolled speculation from 1985 to 1989.

• Ordonnance sur la protection contre le bruit du 15 décembre 1986 (OPB)²⁵

Annexe 3-7: Describes limits in residential areas for noise from different sources.

• Loi fédérale sur la protection de l'environnement du 7 octobre 1983 (LPE)²⁶

Art. 22-24: Construction permits are granted only if noise limits are respected, and planning for new building zones (*zones à bâtir*) can only be planned in areas where noise emissions are within specific limits.

• Loi fédérale du 22 juin 1979 sur l'aménagement du territoire (loi sur l'aménagement du territoire, LAT)²⁷

Canton of Vaud

• Loi du 9 septembre 1975 sur le logement (LL)²⁸

Art. 16: authorises the State Council to create an institution whose objectives it is to acquire land for affordable housing. This was done in 1981 with the creation of the Société vaudoise pour la création de logements à loyers modérés (SVLM)

Ville de Lausanne

• Plan général d'affectation (PGA), règlement du 26 juin 2006

Civil law

• Art. 675 CC: Droit de superficie

Land and the structures upon it or below it may have different owners as long as it is recorded in the land registry as a servitude

Contracts

• Contract between the SCHL and the landowner for the sale of land.

Elements for evaluating extent and coherence

19	920 -	1970 -	
1	1970	present	

²⁴ RO **1989** 1974

- ²⁷ RS 700
- ²⁸ RSV 840.11

²⁵ RS 814.41

²⁶ RS 814.01

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

(1) Conflict with *NM 1 Solving general housing needs* (public authorities and SCHL): Private law concerning the selling and purchasing of land has always allowed landowners to ask for exorbitant land prices, particularly in times of high real estate speculation. High land prices have stopped public-interest housing organisations from building even though housing policy encourages them to do so. (*Incoherence between real estate regulations and housing policy*)

In 1991, the canton of Vaud created the SVLM, whose objectives are to find public land suitable for non-profit housing. Federal authorities have also enacted several temporary measures to try to lower speculation.

(2) Conflict with NM 1 Solving general housing needs (SCHL): Refer to PF 3 Labour investment (3). (Poorly defined right to labour investment and unclear property right of the SCHL)

(3) Conflict with *NM 1 Solving general housing needs* (SCHL): This conflict is due to preferences of landowners and not to coherence problems.

PF 3 Labour Investment

User actors

1. Construction and renovation companies, architects

Excluded actors

Up until 1970s: Companies that were not local and not cooperatives (with several exceptions)

Companies that do not honour collective agreements.

Affected actors

-

Intended use

To use the demand for labour generated by SCHL construction and renovation activities to generate profits.

Modality of use

Companies are awarded contracts by the SCHL.

Abusive use

Under-using the labour investment potential of the SCHL and other public-interest housing stocks due to more profitable opportunities in other sectors during times of housing shortages. (1)

Not meeting the deadlines stipulated in the contract.

Rivalry and Complementarity

Complementarity

Construction companies and architects (*PF 2 Land investment*): Some contracts for labour have been awarded as a condition of sale of land.

Public authorities (*NM 2 Solving non-housing needs*): The Confederation offered housing assistance to create and renovate housing and to jumpstart the economy, especially the construction sector.

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

Economic

The level of activity in the housing construction and renovation sector has a strong influence on the state of the economy.

Internal Heterogeneous

Tenants (*RS 1 Living space*): During the renovation of a building, tenants are moved temporarily from their apartments until such time as the work is completed in their apartment. This typically lasts six to eight weeks.

SCHL (*NM 1 Solving general housing needs*): Shortages of trades (i.e. insufficient use of the service 'labour investment') (**1**) and high construction costs (**2**) have delayed SCHL housing construction. (**1**) Furthermore, the SCHL has had the experience that some labour tied to the sale of land has been inadequate and has resulted in long delays in projects. (**3**)

Regulations

Public policy

Confederation

• Agreements between Switzerland and the European Community for the free passage of people.

Allows greater freedom for Europeans in the construction industry to work in Switzerland.

• Arrêté fédéral concernant la stabilisation du marché de la construction du 25 juin 1971²⁹

Limited construction demand by temporarily prohibiting demolition and the execution of construction projects that are not deemed urgent, thus freeing up construction labour and capital to the benefit of public-interest housing. Affordable housing projects are exempt from this regulation.

• Arrêté du Conseil Fédéral restreignant l'admission de main-d'oeuvre étrangère du 1 mars 1963³⁰

Until 1962, foreigners were admitted without restriction since the labour market required additional labourers.

• Loi fédérale sur le séjour et l'établissement des étrangers du 26 mars 1931³¹

Allowed foreigners entry to Switzerland to satisfy job market demand, but authorities had to account for the moral and economic impact such large numbers of foreigners would have on the country.

Civil law

• Art. 356-358 CO : Titre dixième : du contrat de travail, Chapitre III: De la convention collective de travail et du contrat-type de travail

Contracts

- Standard SIA contracts between client (SCHL) and general contractor
- Contract for the sale of land, which may include clauses on labour.

Other regulations

• SIA norms and regulations

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
ent	Is the use right to PF 3 regulated?	Yes	Yes
Extent	Is PF 3 sufficiently regulated?	Yes	Yes
Cohere nce	Is there a conflict involved in the use of PF 3?	Yes (1), (2), (3)	Yes (1), (2), (3)
Col	Is it the result of unclear or poorly defined property rights or use rights?	Yes (3)	Yes (3)

²⁹ RO **1971** 961, FF **1971** I 1550

³⁰ RO **1963** 185

³¹ RO **1931** I 437

Is it the result of contradictions between public policies?	Yes (1)	Yes (1)
Is it the result of incoherence between regulations and policy?	No	No

(1) Conflict with *NM 1 Solving general housing needs* (SCHL and public authorities): Particularly in the 1960s (although certainly not exclusively during this period) a severe labour shortage (i.e. an under-use of labour investment) in non-profit housing resulted in public-interest housing organisations halting housing construction projects. This was *partly* the result of contradictions in economic policy and housing policy. (*Contradiction between housing and economic policy*)

This was partly resolved in 1971 with the introduction of a federal decree to stabilise the construction market, which freed up all non-essential construction labour. Measures that allowed foreign labourers to work in construction and thus ease shortages have been introduced periodically beginning in 1931. The agreement between the Confederation and the European Community have also allowed greater freedom for other Europeans to work in Switzerland, including those in the construction industry.

(2) Conflict with *NM 1 Solving general housing needs* (SCHL): This conflict is due to the high cost of labour that has prevented public-interest housing organisations from being able to undertake housing construction and renovation projects.

(3) Conflict with *NM1 Solving a general housing need* (SCHL): Some contracts for sale of land have included clauses that the labour services of the previous landowner be used for the housing construction project (e.g. for architectural services or trades). These clauses oblige the SCHL, the new property rights owner, to use services that may be less than satisfactory (although this is not always necessarily the case). (*Poorly defined right to labour investment and unclear property right of the SCHL*)

There has been no real resolution to this conflict. The SCHL is free to not buy the land from landowners if the conditions of sale are considered too onerous. However, they may often not have a choice if land is difficult to acquire.

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

The US 1 Demand for energy is composed of heating demand and electricity demand. The buildings of the SCHL stock have different heating systems but are connected to a single electrical grid. The demand is satisfied by two major actors: the Services industriels Lausanne (SIL), which provides gas for heating, district heating (to Lausanne since 1934 but to the SCHL stock since 1974) and electricity; and private companies that supply heating oil. It should be noted that there are other smaller actors who also use this service.

User actors

- 1. Services industriels Lausanne (SIL)
- 2. Suppliers of heating oil

Excluded actors

Other companies that provide gas, electricity, and district heating (i.e. companies whose service areas do not include the buildings of the SCHL stock).

Providers of heating oil who are not suppliers in the Lausanne area.

Affected actors

Intended use

<u>SIL</u>: To control and satisfy the demand for energy of the SCHL and other housing stocks by managing and supplying gas, electricity and district heating services in a cost-effective manner.

<u>Suppliers of heating oil</u>: To carefully manage the supply of heating oil to satisfy the SCHL housing stock's demand for heating energy.

Modality of use

<u>SIL</u>: Energy is provided to the housing stock on a continuous basis.

Suppliers of heating oil: Periodic, on-demand sale of heating oil to stockowners.

Abusive use

-

Rivalry and Complementarity

Rivalry

<u>SIL</u>: SIL (US 1 Demand for energy): The SIL has two divisions that can come into conflict with each other - gas and district heating. Whereas the former wishes to maximize the sale of gas, the latter wishes to switch people to district heating (1).

<u>SIL</u>: Heating oil suppliers (*US 1 Demand for energy*): Demand for energy for heating is also used by providers of heating oil. Since the beginning of district heating in 1934 and gas provision in 1896, the SIL has made its services attractive cost-wise to the SCHL, thereby reducing the number of buildings of the SCHL that use heating oil.

<u>Suppliers of heating oil</u>: SIL (US 1 Demand for energy): Demand for energy for heating is also used by the SIL. Generally, the more heating oil used, the lower the price, providing even additional competition.

Complementarity

<u>SIL</u>: Tridel incinerator (US 3 Material Discharge) and Services d'assainissement (US 3 Material discharge, US 5 Water discharge): The Tridel incinerator, in service since 2005, burns household waste that is collected by the Service d'assainissement as well as dehydrated treated solids from the wastewater treatment plant at Vidy. The Vallon incinerator, in service between 1958 and 2005 also used household waste for incineration. The waste heat from the incineration process is used for district heating. The district heating network is an important sink for the waste heat of the incinerator.

Effects

Environmental

<u>SIL</u>: All energy consumption has an effect on the environment, whether it is CO2 emissions, pollution, modification of watercourses, consumption of non-renewable resources, etc.

<u>SIL</u>: Competitive prices encourage users to switch to the less polluting energy sources provided by the SIL.

<u>Suppliers of heating oil</u>: Heating oil is regarded as 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.

Economic

<u>SIL</u>: The many divisions of the SIL (electricity, district heating, gas) support energy diversification, thus reducing the economic risk associated with dependence on a single energy source.

Suppliers of heating oil: Fluctuations in oil prices can have heavy consequences on the economy.

Internal Heterogeneous

<u>SIL</u>: Tenants (*RS 2 Technical services and indoor environment*): In buildings with both gas and heating oil, if the price of heating oil drops, tenants must still pay a minimum rate for gas.

<u>SIL</u>: Tenants (*RS 2 Technical services and indoor environment*): Although the energy supplied by the SIL is not always the cheapest, tenants must at times pay more for being connected to the more environmental option.

<u>SIL</u>: Tenants (*RS 2 Technical services and indoor environment*): Tenants can be subjected to sudden price fluctuations, particularly of natural gas.

<u>Suppliers of heating oil</u>: Tenants (*RS 2 Technical services and indoor environment*): Tenants can be subjected to sudden price fluctuations, such as in 1967-1968 when the cost of heating oil increased by 30%.

Regulations

Public policy

Confederation

• Art. 89 Cst. Politique énergétique

Para. 4 states that measures concerning energy consumption of buildings remain the responsibility of the cantons.

- Loi fédérale sur l'énergie du 26 juin 1998 (LEn)³² and Ordonnance fédérale sur l'énergie du 7 décembre 1998 (OEne)³³
- Loi fédérale sur la réduction des émissions de CO2 du 8 octobre 1999 (Loi sur le CO2)³⁴:

Allows the Conseil fédéral to impose a tax on CO2. A tax on heating oil will come into effect on January 1, 2008.

Canton of Vaud

• Art. 56 Constitution du canton de Vaud du 14 avril 2003³⁵

Ressources naturelles et énergie : favours the development and use of renewable energy, and encourages the population to use energy efficiently.

• Art. 39 LVLEne: authorises the renovation or the transformation of buildings that include significant energy improvements; and RLVLEne

Greatly reduces the opportunities heating oil suppliers will have to sell heating oil to SCHL and other housing stocks since new buildings and buildings that are heavily renovated will not be allowed oil burners.

City of Lausanne

³⁴ RS 641.71

³² RS 730.0

³³ RS 730.01

³⁵ RSV 131.231

• Fonds communal pour l'utilisation rationnelle de l'électricité et la promotion des énergies renouvelables:

Provides financing for projects to use more rationally the use of electricity, promotes the production of electricity by renewable resources, creates public awareness campaigns related to energy conservation and efficiency.

• Règlement sur la fourniture d'énergie électrique du 18 avril 1977

Describes the provision of electricity distributed by the commune of Lausanne by its electricity service.

• *Règlement sur le raccordement et utilisation pour la fourniture de gaz du 28 janvier 1983*

Describes the provision of gas distributed by the commune of Lausanne by its gas service.

• Directives de la Société suisse de l'industrie du gaz et des eaux (SSIGE)

Contracts

• Between the SCHL and the heating oil provider

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to US 1 regulated?	Yes	Yes
Ext	Is US 1 sufficiently regulated?	Yes	Yes
0	Is there a conflict involved in the use of US 1?	No	Yes (1)
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	No
Coherence	Is it the result of contradictions between public policies?	-	No
	Is it the result of incoherence between regulations and policy?	-	Yes (1)

(1) Conflict with US 1 Demand for energy (between the district heating and gas divisions of the SIL): Public policy (particularly as described in the new cantonal law on energy LVEne) discourages energy production based on non-renewable resources, such as natural gas. However, the SIL continues to promote natural gas as an environmental option for satisfying heating demand. (Incoherence between the internal regulations of the SIL and cantonal energy policy)

US 2 Material Storage and Sink

The construction, maintenance and renovation of the SCHL housing stock demand large quantities of materials.

User actors

Suppliers of construction, renovation and maintenance materials

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 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

To under-use the material storage and sink capacity of the SCHL such that construction and renovation projects are delayed or halted, i.e. to not provide sufficient of appropriate materials.

Rivalry and Complementarity

Effects

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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.

Economic

When there are insufficient materials, the construction sector slows down, thus having an important consequence on the economy.

Internal Heterogeneous

1947 and occasionally thereafter: SCHL (*NM 1 Solving general housing needs*): At several points during the SCHL's history, a shortage of materials has resulted in a slowdown or halt of construction projects. A shortage of cement in 1947 effectively halted the construction of the Reposoir building.

Regulations

Contracts

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

Other regulations

• SIA norms and regulations

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to US 2 regulated?	Yes	Yes
Ext	Is US 2 sufficiently regulated?	Yes	Yes
1)	Is there a conflict involved in the use of US 2?	No	No
Coherence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Cohe	Is it the result of contradictions between public policies?	-	-
Ŭ	Is it the result of incoherence between regulations and policy?	-	-

US 3 Material Discharge

The SCHL housing stock produces *US 3 Material discharge*, which comes in the form of household waste, household recyclable materials and construction waste. Household wastes were previously collected by the Service routes et voirie of the Ville de Lausanne and currently are collected by the Services d'assainissement (established in 1970). The latter also oversees the activities of various private companies that collect different types of recyclables (PET, aluminium, glass, etc.). Tridel SA is a company created in 1997 by three waste management areas, namely GEDREL (greater Lausanne region), VALORSA (the Gros-de-Vaud and the western part of the canton from Morges to the Vallée de Joux) and STRID (the north of the canton) with the objective of treating the urban waste of their 150 commune members.

User actors

- 1. Services d'assainissement of the city of Lausanne and other collectors of waste and recyclables
- 2. Tridel SA

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

Intended use

<u>Services d'assainissement and others</u>: To ensure hygienic conditions in the city by carefully managing the waste collection, treatment and disposal systems that process waste and recyclables.

<u>Tridel SA</u>: To incinerate a sufficient quality and quantity of waste and use the reject heat from the incineration process for district heating.

Modality of use

Services d'assainissement and others: Collection occurs either per a defined schedule or on-demand.

Abusive use

-

Rivalry and Complementarity

Rivalry

<u>Tridel SA</u>: SIL (US 1 Demand for energy): During the summer, the district heating section can use only a portion of the energy produced by waste incineration at Tridel. whereas during the winter Tridel's supply of energy to district heating network is insufficient and must be complemented by other energy sources.

Complementarity

<u>Services d'assainissement and others</u>: Tenants (*NR 5 Collective outdoor space*): Tenants place their waste and recyclables in bins in specified locations outside the building, from which the Services d'assainissement pick it up.

<u>Services d'assainissement and others</u>: Services industriels Lausanne (US 1 Demand for energy) and Tridel Incinerator (US 3 Material discharge): The Tridel incinerator burns the waste that is collected and delivered to it by the Services d'assainissement. The waste heat from the incineration process is used for district heating by the SIL.

<u>Tridel SA</u>: SIL (US 1 Demand for energy) and Services d'assainissement (US 3 Waste discharge): The Tridel incinerates waste which is collected by the Services d'assainissement. The waste heat from the incineration process is used for district heating.

Effects

Environmental

<u>Services d'assainissement and others</u>: The collection and recycling of certain materials, such as aluminium and paper, mean that fewer natural resources are consumed. The rate of recycling, however, is still not as high as the Services d'assainissement's objectives (Kadri 2006).

<u>Tridel SA</u>: The reject heat from the incineration process is used for district heating, thereby decreasing the amount of fossil fuels required for domestic heating.

<u>Tridel SA</u>: The Tridel incinerator was designed to incinerate a certain quantity of waste. Since the current quantity of "local" household waste is insufficient for the design of the incinerator, Tridel must currently import and burn waste from Italy, thus producing emissions from transportation (Kadri 2006).

Regulations

Public policy

Confederation

- Art 30-32bbis LPE: Solid waste treatment and disposal is the responsibility of the cantons.
- Ordonnance du 10 décembre 1990 sur le traitement des déchets (OTD)³⁶
- Ordonnance du 16 décembre 1985 sur la protection de l'air (OPair)³⁷

Canton of Vaud

• Loi vaudoise du 5 septembre 2006 sur la gestion des déchets³⁸

Art 3b: waste must be value added whenever possible

Art 3c : incineratable waste must be incinerated if it cannot be value added

- Règlement d'application de la loi du 3 décembre 1993 sur la gestion des déchets (RLGD)³⁹
- LVLEne and RLVLEne

Ville de Lausanne

• Règlement sur la gestion des déchets du 25 avril 1996.

Describes the collection, the transportation and the treatment of waste.

Contracts

• The Services d'assainissement treats and recycles, in partner installations, urban waste produced by communes within the GEDREL SA area of waste management.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – 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?	-	-

³⁶ RS 814.600

³⁸ RSV 814.11

³⁷ RS 814.318.142.1

³⁹ RSV 814.11.1

US 4 Water Sink

User actors

Eauservice (of the city of Lausanne)

Excluded actors

All other potential water provision companies

Affected actors

Intended use

To rationally exploit the water supply for the region to provide potable water in sufficient quantity and quality to the housing stock.

Modality of use

Water is exploited, treated and distributed on a continuous basis.

Abusive use

-

Rivalry and Complementarity

Rivalry

Bottled water companies : Bottled water also satisfies the water sink of the housing stock in terms of drinking water. Eauservice and bottled water companies do not compete over water sources but rather the perception of the quality of their product by consumers.

Complementarity

Tenants (*RS 2 Indoor climate and technical services*): When a new tenant is connected to the water supply network, the circulation of water in the pipes increases, thereby reducing water stagnation and ensuring better water quality. Furthermore, there is a minimum volume at which the water treatment plant runs efficiently, meaning a minimum use of water by tenants is needed.

Effects

Environmental

Since water pumping from Lac Léman began in 1931, water resources for the Ville de Lausanne and other towns within the service area of eauservice are plentiful. There are no risks of water shortages, even in the hot summer months.

Bottled water creates large energy demands for treatment and bottling and produces large quantities of waste from used bottles. The domestic water supply from eauservice does not have the same magnitude of negative environmental consequences.

Regulations

Public policy

Confederation

 Loi fédérale du 24 janvier 1991 sur la protection des eaux (LEaux)⁴⁰ and Ordonnance du 28 octobre 1998 sur la protection des eaux (OEaux)⁴¹

Canton of Vaud

• Loi vaudoise de 30 novembre 1964 sur la distribution de l'eau (LDE)⁴²

City of Lausanne

• Prescriptions pour l'établissement, la réparation ou la transformation d'installation d'eau intérieures et extérieures (version du 11.05.04)

Art. 14.1 : Water treatment is the responsibility of the water distributor (eauservice) up to the water meter

• Règlement sur l'eau du 3 décembre 1965

Describes regulations concerning the distribution of water in the Lausanne and other communes that mandate Lausanne (through eauservice) to provide water.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – 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

Services d'assainissement

⁴⁰ RS 814.20

⁴¹ RS 814.201

⁴² RSV 721.31

Excluded actors

Only the Service d'assainissement is permitted to collect and treat wastewater.

Affected actors

-

Intended use

To accept wastewater of appropriate quality and quantity, treat it to required standards and discharge it back into water bodies.

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. During times of excessive rain the treatment plants are unable to treat the water as effectively as desired.

Rivalry and Complementarity

Complementarity

SIL (US 1 Demand for energy): The dehydrated treated solids from the wastewater treatment plant at Vidy are burned for fuel at the Tridel incinerator, the reject heat of which is absorbed by the district heating network.

Effects

Environmental

Although micro-pollutants in wastewater are yet to present themselves as a serious problem for the Services d'assainissement, their effect on the receiving water bodies and the larger environment remains largely unknown.

At times, part of the Lac Léman is too polluted for swimming due to wastewater contaminants that are discharged into it.

Regulations

Public policy

Confederation

• LEaux and OEaux.

The objective of the law is to protect water bodies from adverse effects. The canton supervises the establishment of the *plans généraux d'évauation des eaux (PGEE)*, which guarantees protection of water bodies in communes and an adequate evacuation of water from habitable zones.

Canton of Vaud

• Loi cantonale du 17 septembre 1974 sur la protection des eaux contre la pollution (LPEP)⁴³ and its Règlement d'application (RLPEP)⁴⁴

Ville de Lausanne

• *Règlement communale du 1 juin 1995 sur l'évacuation des eaux (REE)*

Describes regulations concerning the evacuation of wastewater and the infiltration, retention and evacuation of greywater.

• Plan à long terme des canalisation (PALT)

Approved in 1985, the PALT governs the current water evacuation system for Lausanne and region. It dictates the implementation of a dual stormwater/wastewater evacuation system except in the downtown, which has a single system.

• Règlement sur la taxe pour l'épuration des eaux usées du 16 mars 1962 and Annexe au règlement sur l'évacuation des eaux du 1 juin 1995

Describes pricing and billing of wastewater services.

Regulations

- Norme SIA 190 « canalisation », version 2000
- Norme suisse SN 592'000, évacuation des eaux bien-fonds privé, version 1990, avec compléments ultérieurs.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – 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	Yes
	Is it the result of unclear or poorly defined property rights or use rights?	-	Yes (1)
	Is it the result of contradictions between public policies?	-	No
	Is it the result of incoherence between regulations and policy?	_	No

(1) Conflict with RS 2 Indoor climate and technical services: See RS 2 Indoor climate and technical services (1)

⁴³ RSV 814.31

⁴⁴ RSV 814.31.1

UF. URBAN FUNCTION GOODS AND SERVICES

UF 1 Design of Urban Space

User actors

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

Excluded actors

Planners and architects who are not mandated by the SCHL or hired by public authorities.

Affected actors

Residents of a neighbourhood.

Intended use

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

Rivalry

<u>Public planning authorities:</u> SCHL (*PF 1 Capital investment*) and SCHL (*NM 1 Solving general housing needs*): To make a housing construction project pay for itself, the SCHL must build a minimum number of units to ensure an adequate income from rents. Thus, the SCHL has on several occasions fought (sometimes successfully, sometimes not) restrictions on density to ensure their project remains economical. (1)

Effects

Environmental

Density is not as high as it could otherwise be due to zoning restrictions (1) and opposition of construction projects from neighbours (2).

Social

Density is not as high as it would otherwise be because of opposition from neighbours (2).

Internal heterogeneous

Private landowners (*PF 2 Land investment*): Some owners of land adjacent to proposed SCHL projects that have been granted higher floor space ratio by public authorities have objected to the projects for reasons related to "unfairness".

Regulations

Public policy

Canton of Vaud

• Loi sur l'aménagement du territoire et les constructions (LATC)⁴⁵

Art. 109: describes requirement for public consultation of construction projects.

• LDTR

In areas that are undergoing a housing shortage, all housing demolitions, transformations and renovations must be authorised.

Ville de Lausanne (and similarly for other communes)

• Plan général d'affectation (PGA), règlement du 26 juin 2006 (Ville de Lausanne)

Includes density conditions for each type of zone.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – 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	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 (1), (2)
	Is it the result of incoherence between regulations and policy?	No	No

(1) Conflict with *NM 1 Solving general housing needs* (SCHL and public authorities) and *UF 1 Design of urban space* (between SCHL and public authorities): To pay for a construction project while keeping future rents low, new construction projects must have a minimum number of dwellings (i.e. a minimum housing density). Planning regulations have often imposed a maximum density that is below that of the SCHL's minimum required. Furthermore, laws that limit housing demolition and reconstruction (i.e. the LDTR) intended to maintain the number of housing units limit the SCHL's ability to rebuild at higher density with a greater number of dwellings. (*Contradiction within housing policy*)

⁴⁵ RSV 700.11

(2) Conflict with *NM 4 Social and cultural complexity* (neighbours): Neighbours are given the opportunity to object to construction projects during the period of public consultation, as described in the cantonal law on regional planning (LATC). Neighbours have used this opportunity to lodge objections on several occasions throughout the history of the SCHL. Concluded that it was due to the association of the name "SCHL" with low-cost housing, rather than the buildings themselves (Neuenschwander Feihl 1995, 96). Thus, an under-use of *NM 4 Social and cultural complexity* has had effects on how the SCHL and local public authorities can use the buildings of the SCHL stock for urban design.

UF 2 Demand for Traffic-Related Infrastructure

User actors

- 1. Public transit providers (Transport lausannois, regional transit, etc.)
- 2. 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

<u>Public transit providers</u>: To use the demand for public transportation to extend the transit network.

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

Modality of use

Abusive use

Public transit providers: To not use the demand for transit when it is sufficiently high.

Rivalry and Complementarity

Complementarity

<u>Public transit providers</u>: SCHL (*PF 2 Land investment*): The SCHL purchases land that is or is projected to be well serviced by public transportation.

Effects

Internal Heterogeneous

<u>Controllers of traffic and parking surfaces</u>: SCHL (*PF 1 Capital investment*): Street widening by the city of Lausanne provided space for on-street parking for SCHL tenants. Consequently, parking spaces of the stock (specifically the Boisy building) remained unrented causing a loss of revenue for the SCHL. (1)

<u>Controllers of traffic and parking surfaces</u>: Tenants (*NR 5 Collective outdoor space*): Street widening by the city of Lausanne used land of the SCHL. (1)

Regulations

Public policy

Canton of Vaud

• Loi du 11 décembre 1990 sur les transports publics (LTPu)⁴⁶; and Règlement sur la répartition entre communes des contributions accordées aux transports publics (RRTPu)⁴⁷

Other regulations

City of Lausanne (and similarly for other communes)

• Plan général d'affectation (PGA), règlement du 26 juin 2006 (Ville de Lausanne)

Art. 61-68: describes parking space requirements

Annexe 1: Détermination des besoins en places de stationnement

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to UF 2 regulated?	Yes	Yes
Ext	Is UF 2 sufficiently regulated?	Yes	Yes
0	Is there a conflict involved in the use of UF 2?	No	No
Coherence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Cohe	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

(1) Conflict with *PF 1 Capital investment* (SCHL): The explosion of the presence of cars in the 1950s caused great demand for parking spaces. The city both required new housing construction projects to provide parking spaces and expropriated land from housing projects for street widening to accommodate the greater volume of traffic and on-street parking. (*Contradiction between public policies*)

UF 3 Demand for Collective Institutional Services

User actors

⁴⁷ RSV 740.21.1

Persons or groups that provide collective institutional services.

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

-

Abusive use

None.

Rivalry and Complementarity

Complementarity

Schools, daycares, etc. (*NR 1 Non-residential space*): Institutional services that rent the non-residential space of the SCHL also benefit from the demand for their services that exists within the stock.

SCHL (*PF 1 Land investment*): Placement of buildings and buying of land depends on how well the area is or is projected to be serviced by institutions, most notably schools. These questions must first be settled.

Effects

Environmental

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

Social

Creation of a complete community.

Economic

Providing employment opportunities in the community.

Regulations

Public Policy

Ville de Lausanne

• Plan général d'affectation (PGA), règlement du 26 juin 2006 (Ville de Lausanne)

Defines the rights of landowners with respect to land use and defines different zones in which institutional services can exist.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to UF 3 regulated?	Yes	Yes
Ext	Is UF 3 sufficiently regulated?	Yes	Yes
	Is there a conflict involved in the use of UF 3?	No	No
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Coherence	Is it the result of contradictions between public policies?	-	-
Ŭ	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

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 institutional services generated by the tenants of housing stocks.

Modality of use

-

Abusive use

Rivalry and Complementarity

Complementarity

Stores and other businesses (*NR 1 Non-residential space*): Stores (such as the Coop) and other businesses that rent the non-residential space of the SCHL also benefit from the demand that exists within the stock.

SCHL (*PF 1 Land investment*): Placement of buildings and buying of land depends on how well the area is or is projected to be serviced by institutions, most notably schools. These questions must first be settled.

Effects

Environmental

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

Social

Creation of a complete community.

Economic

Providing employment opportunities in the community.

Regulations

Other regulations

Ville de Lausanne

• Plan général d'affectation (PGA), règlement du 26 juin 2006

Defines the rights of landowners with respect to land use and defines different zones in which businesses or organisations that provide goods and services can exist.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to UF 4 regulated?	Yes	Yes
Ext	Is UF 4 sufficiently regulated?	Yes	Yes
0	Is there a conflict involved in the use of UF 4?	No	No
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Coherence	Is it the result of contradictions between public policies?	-	-
Ŭ	Is it the result of incoherence between regulations and policy?	-	-

NM. NONMATERIAL

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 SCHL 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 or of cooperative members).

The first actor that uses this service is the actual holder of the property rights, the SCHL, whose objective it is to solve the housing needs of its members. The second actor group that uses this service is public authorities; the Confederation, the canton of Vaud and the communes in which the SCHL has buildings have historically sought to use the SCHL stock directly or indirectly to solve a variety of housing needs. Clearly, the urgency of these housing needs vary in time, space and scale. The Confederation is most responsive to needs at the Swiss level whereas the canton and communes are most responsive to needs at regional levels. Thus the different actors' desire to use the SCHL stock depends on their perception of the severity of the need at any given time.

User actors

- 1. SCHL
- 2. Public authorities

Excluded actors

All actors besides the SCHL, and

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

Affected actors

Intended use

SCHL: To satisfy the housing needs of the SCHL members

<u>Public authorities</u>: 1) to have some management control over the selection of specific tenants or categories of tenants to live in the SCHL housing stock, and 2) to increase the housing available to specific populations (e.g. low income households, mid-income households, families, seniors, single parent households, people with disabilities, etc.) by encouraging the construction and renovation of SCHL housing that fits the needs of these groups.

Modality of use

<u>SCHL</u>: To build, renovate and acquire housing suitable for members' needs.

<u>Public authorities</u>: By providing different forms of housing assistance to the SCHL. The type of assistance offered and the conditions of use have changed over time and according to whether the assistance comes from the Confederation, the canton of Vaud, or the commune. Modality of use is described in the various laws pertaining to housing assistance, a description of which is found in Appendix 1.

Abusive use

<u>Public authorities</u>: To under-use the potential of SCHL and other housing stocks to solve housing needs when housing problems exist. (3)

Rivalry and Complementarity⁴⁸

Rivalry

<u>SCHL</u>: Public authorities (*NM 1 Solving general housing needs*): To solve the general housing needs of its members, the SCHL requires full management independence. If the SCHL does not accept subsidies from public authorities, the latter are unable to directly use the SCHL housing stock directly to solve the housing needs they deem important. (2)

<u>Public authorities</u>: **1960s-today:** Tenants (*RS 1 Living space*): Tenants living in subsidised apartments that no longer met the criteria for such housing were allowed to pay a supplemental fee to be allowed to stay. By doing so, however, they denied public authorities the right to house people who did meet the subsidised housing eligibility criteria (1).

<u>Public authorities</u>: SCHL (*NM 1 Solving general housing needs*): To solve the general housing needs of its members, the SCHL requires full management independence. When the SCHL accepts subsidies from public authorities, they lose part of the ability to satisfy the housing needs of members. More specifically, households that require subsidised housing are generally not ideal cooperative members, in large part because they cannot afford to purchase the shares required to become members. (2)

Complementarity

<u>SCHL</u>: Tenants (*RS 1 Living space*): Tenant-members of the SCHL use the living space of the housing made available by the SCHL.

<u>SCHL</u>: Public authorities (*NM 1 Solving general housing needs*): Public authorities encourage housing construction and renovation that suit its housing objectives as well as those of the SCHL by providing assistance in the form of subsidies, loans, loan guarantees, etc.

⁴⁸ The use of each of the goods and services in this analysis is a direct consequence of the SCHL solving the housing needs of its members, therefore listing all rivalries and complementarities would be a considerable task. Aside from the few particularly important ones mentioned here, most rivalries and complementarities related to the SCHL's use of this service are described in other sections.

<u>Public authorities</u>: Banks (*PF 1 Capital investment*): Public authorities provide loan guarantees, and back-guarantees, thus making it safer for banks to provide mortgages.

<u>Public authorities</u>: ASH (*PF 1 Capital investment*): The Confederation provides capital to the ASH that can then be use as working capital that can be lent to the SCHL (and other public-interest housing members) at favourable interest rates, thus encouraging the construction of public-interest housing.

Effects

Environmental

<u>SCHL</u>: Especially since the oil crisis of the early 1970s (but also earlier), the SCHL has tried to build housing that is more energy efficient, that uses less-polluting heating energy, and that is built with more durable materials.

<u>Public authorities</u>: Some housing assistance, particularly that offered since the oil shock of 1973, has included conditions on the construction of buildings to improve environmental and energy performance.

<u>Public authorities</u>: The new SMéO programme of the Ville de Lausanne provides surface rights on communal land to non-speculative housing in return for meeting primarily environmental criteria (related to soil, materials, energy, and water) but also social and economic criteria.

Social

<u>SCHL</u>: As a cooperative, the SCHL encourages a cooperative spirit amongst its members so that they buy shares, the capital of which can be used for further the construction of housing to be used by other members.

<u>Public authorities</u>: Public assistance for the construction of public-interest housing has helped make available housing to segments of the population that otherwise might not be able to afford market housing.

Economic

<u>SCHL</u>: SCHL housing provides non-speculative options in the rental market.

<u>Public authorities</u>: Public assistance for the construction of public-interest housing has ensured that the real estate market is not always dominated by speculative housing.

Internal homogeneous

<u>Public authorities</u>: On a few occasions, the inaction of one public authority to address a housing need has prompted another authority to support housing construction and renovation. For instance, after the Confederation halted all housing assistance in 1950 following a national referendum on the matter, the canton of Vaud, which was experiencing a crisis of affordable housing, initiated a stronger housing assistance programme. (3)

Internal heterogeneous

Public authorities: SCHL (NM 1 Solving general housing needs): At several times throughout the SCHL's history, most notably since 1997, conditions linked to granting

subsidies for subsidised housing has resulted in the SCHL not accepting subsidies from public authorities. (2)

<u>Public authorities</u>: mid 1960s-1970: Tenants (*RS 1 Living space*): Some SCHL membertenants who no longer fulfilled the criteria set by the Confederation for subsidised housing were forced to leave their apartment. (1)

Regulations

Public policy

Refer to Appendix 1 for a list and description of housing policy in Switzerland

Civil law

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

Other regulations

• Statutes of the SCHL: created in 1920 and revised in 1940, 1970 and 1995.

Contracts

• Between the ASH and the SCHL: Décision sur l'octroi d'un prêt provenant du Fonds de Roulement.

Conditions for loans coming from working capital of the ASH include that new construction and renovation must have a high use value according to the *Système d'évaluation des logements (SEL)*.

• Between CCL and the SCHL: Ordre de souscription d'une part d'emprunt and Contrat relative à la participation à un emprunt CCL et au versement d'une quotepart

Describes shares purchased by the SCHL to be a member of the CCL as well as the conditions imposed by the CCL for issuing a loan to the SCHL.

• Accord between the canton of Vaud and the Ville de Lausanne, and the receiver of subsidies for housing construction

Accord describing the subsidies from the canton and the commune regarding a specific housing construction project, and includes obligations of the housing organisation that is the receiver of assistance.

• Decision regarding federal assistance (Office fédéral du logement)

Describes amount and conditions of subsidy granted.

- SCHL membership agreement: defines how many shares must be purchased for a household to gain the use-right to the living space (i.e. rent an apartment).
- Tenancy agreements between SCHL and tenants for various categories of apartments, including market housing, housing subsidised by the canton and commune, housing

constructed using federal assistance (LCAP of 1974), housing renovated using federal assistance, housing constructed with indirect federal aide (preferential loans).

		1920 – 1970	1970 – present
Extent	Is the use right to NM 1 regulated?	Yes	Yes
Ext	Is NM 1 sufficiently regulated?	Yes	Yes
	Is there a conflict involved in the use of NM 1?	Yes	Yes
Coherence	Is it the result of unclear or poorly defined property rights or use rights?	No	No
Cohe	Is it the result of contradictions between public policies?	Yes (3), (4)	No
Ŭ	Is it the result of incoherence between regulations and policy?	Yes (1), (2)	Yes (2)

Elements for evaluating extent and coherence

(1) Conflict with RS 1 Living space: See RS 1 Living Space (1). (Incoherence between SCHL regulations and federal housing policy)

(2) Conflict within *NM 1 Solving general housing needs* (between SCHL and public authorities): The acceptance of subsidies from public authorities (federal, cantonal and communal) comes with conditions attached. From the perspective of the SCHL, these conditions restrict the management independence of the SCHL and therefore prevent it from properly solving the housing needs of its members. (*Incoherence between SCHL regulations and housing policy*)

(3) Conflict within *NM 1 Solving general housing needs*: Contradictions within policies (e.g. federally before the introduction of LCAP in 1974), have often made housing assistance unattainable for the SCHL and other public-interest housing organisations. (*Incoherence between elements of housing public policy*)

(4) Conflict with NM 2 Solving non-housing needs: See NM 2 Solving non-housing needs (1). (Contradictions between economic and housing policy)

NM 2 Solving a Non-Housing Need

User actor

1. Public authorities

Excluded actors

Affected actors

The beneficiaries of the policy that uses housing stocks to solve non-housing needs (e.g. construction industry) and the target groups related to the need to be solved (e.g. banking sector).

Intended use

To use construction of SCHL and other housing stocks to control inflation and fight unemployment.

Modality of use

To use the encouragement of housing construction for a limited time to resolve problems of inflation and unemployment.

Abusive use

Rivalry and Complementarity

Rivalry

SCHL (*NM 1 Solving general housing needs*): Measures in the 1964 federal decree⁴⁹ to slow the economy were partly intended to help increase affordable housing construction. However, the measures to control inflation, such as placing a quota on the loans that could be issued by banks, were not conducive to encouraging housing since they also limited funds to public-interest housing organisations. (1)

Complementarity

Public authorities (*NM 1 Solving general housing needs*): Measures to jump-start the economy or calm inflation also helped create housing during several periods.

Effects

Economic

Assistance for housing construction and renovation has been used several times to jump start the economy and reduce unemployment, particularly in the construction sector.

Internal heterogeneous

SCHL (*NM 1 Solving general housing needs*): Measures that have allowed public authorities to use the SCHL stock to solve non-housing needs have also provided the SCHL with the means of building its stock.

Regulations

Public policy

Confederation

• Arrêté fédéral instituant des mesures dans le domaine du crédit du 20 décembre 1972⁵⁰

⁵⁰ RO **1972** 3121

⁴⁹ Arrêté fédéral du 13 mars 1964 concernant la lutte contre le renchérissement par des mesures dans le domaine de la construction (RO **1964** 213)

- Arrêté fédéral concernant la stabilisation du marché de la construction du 25 juin 1971⁵¹
- Arrêté fédéral concernant la lutte contre le renchérissement par des mesures dans le domaine de la construction du 13 mars 1964⁵²

Communal regulations

- Measures to fight local unemployment (1928)
- Decisions to require the use of local labour and materials for housing projects subsidised by the commune.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NM 2 regulated?	Yes	Yes
Ext	Is NM 2 sufficiently regulated?	Yes	Yes
1)	Is there a conflict involved in the use of NM 2?	Yes	No
rence	Is it the result of unclear or poorly defined property rights or use rights?	No	-
Coherence	Is it the result of contradictions between public policies?	Yes (1)	-
	Is it the result of incoherence between regulations and policy?	No	-

(1) Conflict with *NM 1 Solving general housing needs*: Measures to discourage inflation and cool the overheated economy that were also meant to help the housing situation actually impeded housing policy that encouraged the construction of affordable housing. *(Contradiction between economic policy and housing policy)*

NM 3 Shaping the Characteristic Landscape

User actors

- 1. Planners and architects hired by the SCHL or public authorities
- 2. Cantonal and local authorities and planners

Excluded actors

All other actors

Affected actors

⁵¹ RO **1971** 961

⁵² RO **1964** 213

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

Intended use

To add characteristic features to the landscape through the design and placement of the buildings of the SCHL stock.

Modality of use

-

Abusive use

Rivalry and Complementarity

Effects

-

_

_

Regulations

Public policy

Confederation

 Loi fédérale du 22 juin 1979 sur l'aménagement du territoire (loi sur l'aménagement du territoire, LAT)⁵³

Canton of Vaud

• LATC

Commune

• *Plan général d'affectation (PGA), règlement du 26 juin 2006* (Ville de Lausanne)

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NM 3 regulated?	Yes	Yes
Ext	Is NM 3 sufficiently regulated?	Yes	Yes
0	Is there a conflict involved in the use of NM 3?	No	No
Coherence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Cohe	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

⁵³ RS 700

NM 4 Social and Cultural Complexity

User actors

- 1. Neighbours objecting to SCHL projects
- 2. SCHL
- 3. Public authorities (especially at the communal level)

Excluded actors

Neighbours who are unable to lodge official objections to SCHL projects, and all actors without control of the SCHL housing stock.

Affected actors

All residents of the neighbourhood.

Intended use

<u>SCHL and Public authorities</u>: To use the stock to house people with a range of incomes and to blend subsidised housing with market housing to create diverse neighbourhoods.

Modality of use

Abusive use

<u>Neighbours</u>: To discourage social and cultural complexity by hindering SCHL housing projects.

Rivalry and Complementarity

Rivalry

<u>Neighbours</u>: SCHL (*NM 1 Solving general housing needs*): Under-use of social and cultural complexity by neighbours have halted SCHL housing construction projects. Objections to projects have been based on fear of the type of people cooperatives bring in (mostly in early period of SCHL history). (1)

<u>Public authorities:</u> SCHL (*NM 1 Solving general housing needs*): Since 2004, the city of Lausanne and the canton of Vaud has used a new communal regulation to encourage stockowners to accept 15% of at-risk households into subsidised housing. The SCHL does not accept having public authorities dictate the tenants to whom it rents.

Effects

Social

Neighbours: Reduction of social and cultural diversity (1)

<u>SCHL</u>: Greater socio-economic diversity in a building or in a neighbourhood.

Regulations

Public policy

Canton of Vaud

• Art. 109 LATC: describes requirement for public consultation of construction projects.

Ville de Lausanne

• Règlement communal du 8 septembre 2004 sur les conditions d'occupation des logements construits ou rénovés avec l'appui financier de la commune de Lausanne.

The regulation has two principle objectives: 1) to integrate at-risk households that do not have access to subsidised housing, and 2) to promote social mixity to prevent ghettoisation in subsidised housing.

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NM 4 regulated?	Yes	Yes
Ext	Is NM 4 sufficiently regulated?	Yes	Yes
1)	Is there a conflict involved in the use of NM 4?	Yes	No
Coherence	Is it the result of unclear or poorly defined property rights or use rights?	No	-
Cohe	Is it the result of contradictions between public policies?	No	-
Ĭ	Is it the result of incoherence between regulations and policy?	No	-

(1) There are no reasons related to coherence to explain the conflict between neighbours' fears to SCHL projects in the past and the SCHL desire to solve the housing needs of its members through new construction projects.

<u>NM 5 Conservation and Transmission of Social and Historical</u> <u>Values</u>

User actors

- 1. SCHL
- 2. Public authorities
- 3. Historians, architects, and others interested in history of the stock

Excluded actors

Affected actors

Neighbours, people interested in the social and historical values associated with the cooperative movement.

Intended use

<u>SCHL</u>: The cooperative housing movement was founded on social values, most notably but not exclusively the right to affordable, good quality housing for all. Many cooperatives are also active in other social domains and strongly transmit specific social values. The SCHL was founded in response to the housing shortage and inadequate living conditions prevalent at the time. The SCHL, however, has remained a cooperative that is dedicated to satisfying the housing needs of its members. The social values it transmits are thus those associated with satisfactory housing.

<u>Public authorities</u>: To preserve historical buildings

Modality of use

-

Abusive use

-

Rivalry and Complementarity

Rivalry

<u>Public authorities</u>: SCHL (*NM 1 Solving general housing needs*): Buildings that could be renovated to provide better housing to members cannot be since public authorities wish to preserve them.

Effects

Social

Preservation of social values related to housing and particularly cooperative housing.

Preservation of architecture from different eras.

Regulations

Public policy

Canton of Vaud

• Loi du 10 décembre 1969 sur la protection de la nature, des monuments et des sites (LPNMS)⁵⁴

Elements for evaluating extent and coherence

		1920 – 1970	1970 – present
Extent	Is the use right to NM 5 regulated?	Yes	Yes
Ext	Is NM 5 sufficiently regulated?	Yes	Yes
0	Is there a conflict involved in the use of NM 5?	No	No
rence	Is it the result of unclear or poorly defined property rights or use rights?	-	-
Coherence	Is it the result of contradictions between public policies?	-	-
	Is it the result of incoherence between regulations and policy?	-	-

O. OTHER GOODS AND SERVICES

Elected officials have an interest in having their housing policies perceived as successful to help them succeed politically. It is therefore possible that housing can become a tool for political gain, and not for 'good housing'. Many cooperatives in Switzerland have political liaisons with certain political parties. Although the SCHL's directors have been members of political parties (most notably the Socialist party), it claims to remain politically independent.

O 1 Political Gain

Not applicable.

O 2 Economic Gain

Not applicable.

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

4.1 INTRODUCTION

As described by the first hypothesis of this research, the SCHL management strategies 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.

Several important topics relating to the sustainability of the housing stock are the product of the coordinated use of several goods and services, namely construction and renovation cycles, subsidised housing, energy efficiency, housing density and availability of suitable land. These are discussed at length in the final section of this chapter.

4.2 CHANGES IN USE AND MANAGEMENT STRATEGIES

RS. Residential goods and services

 \rightarrow RS 1 Living space

 \rightarrow RS 2 Indoor climate and technical services

RS 1 Living Space

There have been four major changes in the way tenants have used RS 1 Living space:

1. A shift from working-class to middle-class tenants (1928, 1970-today)

Originally intended for working class labourers, the SCHL apartments soon were occupied by tenants with slightly higher incomes as early as 1928. The shift toward tenants with higher incomes has also become pronounced since the 1970s, when members started requesting apartments with certain comfort conditions consisting primarily of more space and more rooms per occupant but also including better appliances and aesthetics.

2. Under-use of living space (1935-1944)

Throughout the SCHL's existence, apartments have been in high demand with waiting lists often being long. The one exception occurred between 1935 and 1944 when demand for apartments throughout Switzerland and Lausanne dropped particularly low. It is the only period in the SCHL's history when tenants had control. The reasons for this occurrence were the saturation of the housing market, then over-abundance of housing leading up to World War II.

3. High turnover and low demand for SCHL subsidised apartments (1960s-today)

Even during periods of extreme housing shortage and high rents, since the 1960s the demand for subsidised housing at the SCHL has been lower and the turnover higher than that for SCHL market housing.

4. Under-occupancy of living space (1960s-today)

Beginning in the 1960s, some large SCHL apartments (3 or 4 rooms) were occupied by households that could have lived comfortably with fewer rooms.

Changes in use of the living space by tenants have been due to several factors, most importantly changes in management strategy of the SCHL, regulatory conditions governing the living space, and socio-economic factors such as demographics and the housing market.

The shift in tenant composition from working to middle class in 1928 (point 1) was essentially due to the SCHL's decision to shift the majority of subsidised housing to a sister cooperative, the *Fondation Pro-Habitat Lausanne* (FPHL), in response to difficulties of financing construction projects with (communal) subsidies. Construction without subsidies required higher rents to pay for the projects, therefore tenants who could afford the higher (but still very affordable) rents filled the SCHL apartments. Similarly, in 1970 the SCHL modified its statutes to allow it to increase the number of shares that members must purchase to become members and to rent an apartment, which further filtered out truly low-income tenants. Furthermore, since the SCHL is responsible toward its members, when standards of comfort and for amenities started rising at around this same period, the SCHL began including features that were more expensive, such as elevators, better appliances, and more spacious rooms. This general trend of incorporating such features required the SCHL to increase rents to within range of, but still below, market housing.

The subsidised housing of the SCHL began to pose problems for tenants at the beginning of the 1960s, leading to the high turnover and low demand for these apartments (point 3). Occupancy requirements set by the public authorities for subsidised housing (mainly limits on household income and number of people per room) became difficult for potential tenants to satisfy beginning in the 1960s. Tenants who found themselves no longer eligible but still living in subsidised apartments were initially required to pay an additional tax to retain the right to remain. Since the SCHL was obligated to respect the occupancy rules, it was occasionally forced to cancel the leases of some members living in such apartments although many of these members belonged to groups that were traditionally the founding backbone of the SCHL. Thus, rather than live in subsidised apartments and run the risk that the lease might one day be cancelled in the event of a pay raise or change in family number or composition, members preferred to rent non-subsidised apartments where they were at least secure in the knowledge they could stay.

The under-use of living space (point 2) between 1935 and 1944 and the under-occupancy of living space (point 4) that began in the 1960s were the result of circumstances largely external to the institutional regime and the SCHL management strategy. In the first case, a glut of housing that occurred when foreigners left Switzerland to return to their countries before and during World War II meant that tenants throughout Lausanne had their pick of apartments. Although the rent was less expensive than that in many other housing stocks, many SCHL apartments remained empty and consequently the SCHL was forced to make concessions to tenants including lowering rents, offering the first month free, and even allowing non-members to rent apartments. These concessions were revoked soon after the end of the war

when Lausanne began to experience a housing shortage; tenants who refused to become members of the cooperative had their leases cancelled.

Under-occupancy of apartments, on the other hand, resulted from a demographic shift and the consequences of this abusive use of the living space are felt most during times of housing shortage. Beginning in the 1960s, large apartments that were suited to families were being occupied by single people, mostly seniors, or couples. In most cases, these households had been larger at the time they were allocated their apartment, but had shrunk due to children moving out or death of a spouse. When smaller apartments in the SCHL stock became free, management would ask tenants in under-occupied apartments to move, but rarely did these tenants act on this suggestion.

RS 2 Indoor Climate and Technical Services

Few obvious changes have occurred in tenants' use of the *RS 2 Indoor climate and technical services* of the SCHL housing stock. Changes that have occurred are related to advancements in technology and the type of technical services the SCHL has made available to the tenants, and the actual use, better use or misuse of services:

1. Disposing of medications and chemical products (i.e., micro-pollutants) in toilets and drains (1990s-present)

The presence of micro-pollutants in receiving water bodies began to appear in the 1990s. This phenomenon is due in large part to people flushing medications down drains and toilets.

2. Use of less polluting and more energy efficient heating (1970s-today)

Tenants' use of heating has progressed to consume less energy and produce less pollution, particularly since the oil shock of the early 1970s.

The presence of micro-pollutants (point 1) due to increases in use of medications have forced wastewater treatment services to start finding and financing new treatment technologies. No change in SCHL management strategy has resulted from this change in use. Conversely, change 2 is a direct result of SCHL actions and strategies. The SCHL's strategy of energy diversification and of emphasising less polluting and more efficient heating systems since the early 1970s has determined the how tenants use this service.

Several issues present in Residential goods and services exist in other goods and services and are discussed at the end of this chapter, including:

• Subsidised housing

NR. Non-Residential Goods and Services

- \rightarrow NR 1 Non-residential space
- \rightarrow NR 2 Collective indoor space

- \rightarrow NR 3 Functional indoor space
- \rightarrow NR 4 Collective outdoor space

NR 1 Non-Residential Space

Although the SCHL housing stock does not have many buildings with *NR 1 Non-residential space*, it has always been open to the idea of such uses. Non-residential space has been used by stores and by schools. The SCHL does not rent these spaces to bars and restaurants, however, due to noise issues.

There have been no significant changes in the use of non-residential space or in the SCHL management strategy related to this good and service.

NR 2 Collective Indoor Space

There have been two major changes in the use of *NR 2 Collective Indoor Space*, which resulted in a change of management strategy by the SCHL.

1. Under- and miss-use of collective indoor space by tenants (1972 and ~2000)

Communal activity rooms were constructed in 1972 at Pierrefleur and again in around 2000. Tenants were supposed to look after these spaces; however, after approximately two years they fell into disuse.

2. Under-use then mandatory use of SCHL parking by tenants (1961)

Despite the availability in 1961 of on-site parking spaces in the buildings at Boisy for the exclusive use by tenants, many preferred instead to use free street parking. The following year, the SCHL made it mandatory for all tenants with a car to rent an SCHL parking space

The SCHL has on two occasions included collective activity rooms in its buildings with the objective of promoting social cohesion amongst tenants (1972 and ~2000). This policy was soon discontinued. Unfortunately, despite enthusiasm from tenants at the outset, these rooms were not maintained and gradually fell into disrepair. Consequently, the SCHL no longer includes activity rooms in its buildings (Meizoz February 2006).

The under-use of indoor parking by tenants also caused the SCHL to modify their management strategy. The cost of construction of the garages (an obligation imposed by the municipality) was not being repaid by rental revenues since tenants preferred to use free street parking. Thus the SCHL implemented rules in 1961 to oblige tenants with cars to rent spaces in the buildings (SCHL 1961, 11).

NR 3 Functional Space

There have been no significant changes in either the use of *NR 3 Functional space* by tenants or in the related SCHL management strategy.

NR 4 Collective Outdoor Space

There have been no significant changes in either the use of *NR 4 Collective outdoor space* by tenants or in the related SCHL management strategy.

PF. Production Factor

- \rightarrow PF 1 Capital investment
- \rightarrow PF 2 Land investment
- → PF 3 Labour investment

PF 1 Capital Investment

Capital investment in the SCHL stock is used by several different actors. Three main changes in use have been identified:

1. SCHL: Increasing auto-financing and decreasing reliance on subsidies for construction and renovation projects

As a general trend, the SCHL has invested more of its own capital into construction projects, relying less on subsidies.

2. SCHL members: Increase in number of shares purchased (1970-today)

Up until 1971, members purchased one cooperative share to become a member and a tenant of the SCHL. This increased to two per apartment plus two per room in 1971. In 1998, members were strongly encouraged to purchase shares not only "as a household" but also for each individual member of a household, and in 2000 the number of shares to rent an apartment became three plus three per room.

3. Banks: Under-use of capital investment (1960s until 1972, and mid to late 1980s)

Capital was not being made available for loans for the construction of non-profit housing.

The extent to which the SCHL has invested its own capital rather than use bank loans and subsidies from public authorities for construction and renovation projects has depended on a complex combination of related factors, including, but not limited to

- the state of the housing market (shortage or surplus);
- the availability of subsidies and the conditions set by public authorities for their use;
- the state of the economy, including interest rates, inflation, growth or stagnation;
- the availability and price of land;

- the availability of construction labour and construction costs; and
- the availability and cost of capital.

Nonetheless, as a general trend, we can observe that investment by the SCHL in its own projects became a greater priority through time, and became more evident any time difficulties with subsidies or other housing assistance were encountered (point 1). Clear periods of not accepting subsidies occurred between 1928 and 1935, 1957 and 1970 and since 1997. Finally, in 1997 the SCHL made the decision to no longer build subsidised housing – it would leave that task to its sister cooperative the *Fondation Pro-Habitat Lausanne* – and would finance projects through its own means and with assistance available for market housing.

Recognising that dependence on subsidies meant a loss of management independence, the SCHL has progressively developed strategies to give itself the flexibility to invest in its own projects.

Firstly, as far back as 1922, the SCHL campaigned to increase the number of shares purchased by members. At first, campaigns targeted civil servants and professional associations, and the SCHL even required that entrepreneurs awarded contracts for the construction of new projects be required to purchase shares worth five percent of their work. Later, campaigns targeted existing members who were encouraged to purchase shares for the sake of the "cooperative spirit" (often with disappointing results from the perspective of the SCHL administration). These drives have continued throughout the existence of the SCHL.

Secondly, in 1960 the SCHL established an equalisation fund whereby the rents in older buildings, which had not been increased in over two decades, were raised and this increase in rental revenue financed new construction projects that could still offer lower rents than those found in a highly speculative market. This system of rent equalisation was used repeatedly in subsequent years to finance projects.

Thirdly, the SCHL adopted new statutes in 1970 which gave it the power to accumulate much more capital by 1) setting incentives for members to purchase shares by eliminating the 4% maximum limit on dividends, 2) increasing the mandatory share purchase to two shares per room instead of two per apartment, and 3) encouraging purchase of shares by communes by dividing the assets amongst all of the communes that supported the SCHL and not just the commune of Lausanne in the event of the dissolution of SCHL (SCHL statutes 1970). The increase in shares was put into effect in 1976. The SCHL modified the statutes again in 1995 to allow for more obligatory shares per room in an apartment, and this was put into effect in 2000 (SCHL statutes 1995).

The increase in investment by tenants in the SCHL stock (point 2) through the purchase of cooperative shares and increased return on investment is a direct consequence of the SCHL's desire to expand and auto-finance construction projects – indeed, for the most part, members' and tenants' investment has been obligatory as was their increase in investment in 1976 and 2000. By raising the limit on the return on dividends, members were also encouraged to purchase additional, non-obligatory shares. The dividends received from the shares have varied over time in relation to interest and mortgage rates. Prior to 1970, these shares had a

maximum dividend of 4% as set by the SCHL; in 1970 this limit was removed and members could benefit from a maximum dividend of 6% as defined by the stamp tax⁵⁵.

The number of loans granted by banks skyrocketed during the period of the overheated Swiss economy of the 1960s. Nonetheless, capital was not being made available for loans for the construction of non-profit housing (point 3) since more profitable investments could be made elsewhere, such as in for-profit and luxury housing construction. This phenomenon was checked in 1972 with the introduction of an urgent federal ordinance to combat the overheated economy⁵⁶ and which made available capital for affordable housing. Again in the mid to late 1980s, the overheated economy made capital scarce for public-interest housing. The Confederation passed three federal decrees in 1989 with the partial objective of making this capital more available.⁵⁷

PF 2 Land Investment

Public authorities and private landowners alike have used the *PF 2 Land investment* of the SCHL housing stock. Public authorities have at various times sold land to the SCHL or have granted them long-term surface rights whereas private landowners have sold land on occasion in return for contracts for construction or architectural work.

The use of *PF 2 Land investment* has not changed significantly over time; it has been consistently characterised by an under-use by public and, more significantly, private actors. Thus, the acquisition of land has always been problematic for the SCHL (and other non-profit or affordable housing organisations). The reasons for under-use of this service, however, have been varied and include:

- a shortage of suitable land caused by the speculative purchase of land by actors in sectors other than non-profit or affordable housing;
- the SCHL not being prepared to pay the prices expected by landowners in a speculative market;
- a hesitation by landowners (at times including public landowners) to sell land or offer surface rights to a housing cooperative; and
- the SCHL not agreeing to the conditions imposed by public authorities for the sale of public land.

In addition to building on public land to which it has surface rights, the SCHL has also purchased land from private owners for the construction of its buildings, thus granting

⁵⁵ LT (RS 641.10)

⁵⁶ Arrêté fédéral du 20 décembre 1972 instituant des mesures dans le domaine du crédit (RO **1972** 3121)

⁵⁷ The federal assembly adopted the following urgent federal decrees on October 6, 1989: 1) Arrêté fédéral concernant un délai d'interdiction de revente des immeubles non agricoles et la publication des transferts de propriété immobilière (RO **1989** 1974), 2) Arrêté fédéral concernant une charge maximale en matière d'engagement des immeubles non agricoles (RO **1989** 1978), and 3) Arrêté fédéral concernant des dispositions en matière de placement pour les institutions de prévoyance professionnelle et pour les institutions d'assurance (RO **1989** 1981).

landowners the use right to land investment. Finding owners who want this use right, however, is not a simple task. Private landowners are sometimes unwilling to sell the SCHL land, at times for philosophical reasons (opposition to the concept of cooperatives). Other times, the cost of land is simply too much or is in the wrong location. Housing officials from the canton and Lausanne agree that finding land is the primary challenge for any housing company (Leimgruber 2006, Krebs 2006).

Since new projects cannot exist without land, the SCHL's management strategy regarding *PF* 2 *Land investment* has been one of seizing opportunities for purchase when they arise and coming up with ways of making land affordable, all while avoiding any onerous conditions. Strategies have included:

- where and when possible, increasing the number of floors or changing the design of the building to increase the number of dwellings built, to obtain higher rental revenues and therefore afford the land (e.g. Cour 1924; Couchirard 1933);
- purchasing land on the occasions it can afford to, even if no immediate housing construction plans exist (e.g. 1953; 1969-1971);
- not purchasing land (due to cost) and concentrating on renovations of existing buildings (e.g. 2002).

PF 3 Labour Investment

PF 3 Labour investment in the SCHL stock is used by several different actors, from the construction sector, to architects and planners, to building caretakers, however it is the use of this service by the construction sector that has had significant consequences on the SCHL management strategy and the SCHL stock.

Two major main changes have marked the use of Labour Investment by actors:

1. Cycles of use and under-use of labour investment in the SCHL stock (throughout SCHL history)

Labour shortages have repeatedly resulted in an under-use of labour investment in SCHL construction and renovation projects, and this at times when the need for more affordable housing was acute.

2. Shift from exclusive use of labour investment by trade cooperatives and local labour to include use by other cost-competitive companies (periodically, but especially since 1970)

Trade cooperatives and local labour were heavily favoured by the SCHL for construction and renovation projects. As the labour market tightened and costs became a greater priority, other companies were allowed to bid for and obtain work.

The SCHL's strategy regarding use of construction and renovation labour has varied in accordance with 1) whether the labour comes from a cooperative or not, 2) whether the labour is local or not, 3) labour availability, and 4) cost. Whereas the first two criteria were most important in the early history of the SCHL, the latter two gained greater influence over time.

An under-use of *PF 3 Labour investment* caused delays or cutbacks in several SCHL construction and renovation projects, for example:

- 1947: delays in the completion of Fontenay III
- late 1950s-1964: nearly all available construction labour was dedicated to work on the National Exhibition.
- 1966-1972: construction industry worked primarily on more profitable projects, leaving little labour left for non-profit housing such as the SCHL.

Conversely, the SCHL has also allowed the construction industry to use its labour investment potential. For instance, during the recession of the mid-1970s when the housing market was stagnating, the SCHL undertook an extensive renovation period, which gave some trades the opportunity to work.

During the earlier years of the SCHL, construction labour investment was used nearly exclusively by trade cooperatives and labour from the Lausanne region. Frequent problems with finding this type of construction labour, however, prompted occasional changes in the type of construction labour sought. One exception to hiring locally in the early years of the SCHL occurred in 1932 during a time of high unemployment in Lausanne. Due to high price of local joiners and woodworkers and the refusal of communal authorities to grant subsidies to aid in the hiring of these groups, the SCHL hired their less expensive Swiss-German counterparts. Similarly, in 1960 a Swiss-wide labour shortage meant that the SCHL applied for a special dispensation to be able to use foreign labour for their construction project at Boisy (Neuenschwander Feihl 1995: 115). Nonetheless, it was the general strategy of the SCHL to hire locally especially during periods of high unemployment, particularly when they were able to obtain subsidies from the unemployment office.

A definite shift in strategy, however, started to occur in the 1970s. In 1972 cooperatives were still awarded a large portion of the work at Romanel and Pierrefleur, but the president noted that this was not necessarily a positive action since non-cooperatives had stopped bothering to bid on projects and could therefore no longer be used for cost comparison (Neuenschwander Feihl 1995: 127). Thus, the potential list of labour has since expanded beyond trade cooperatives and local labour.

Today, cooperative suppliers are still often asked to submit bids. The SCHL does not award contracts exclusively to these cooperatives, but in the case where two bids are equal, the SCHL selects the cooperative. All bids for construction and renovation work are evaluated subject to the rules defined by the SIA. Normally, between 10 and 20 companies are used, usually but not always from within the greater Lausanne region. Therefore, the SCHL still has a preference for local and cooperative labour, but now more emphasis is placed on companies that are cost competitive (Meizoz November 2006). The agreement on free circulation between EU states and Switzerland has also allowed additional European workers to enter and work here legally.

Several issues present in Production Factor goods and services exist in other goods and services and are discussed at the end of this chapter, including:

- Subsidised housing
- Construction and renovation cycles

- Housing density
- Availability of suitable land

US. Utility Services

- \rightarrow US 1 Demand for energy
- \rightarrow US 2 Material sink
- \rightarrow US 3 Material discharge
- \rightarrow US 4 Water sink
- \rightarrow US 5 Water discharge

US 1 Demand for Energy

There has been one major shift in the way energy suppliers have used US 1 Demand for energy:

1. Provision of less polluting energy, particularly by the SIL (1973 and again in 2006)

Heating demand produced by the SCHL stock has been satisfied by oil suppliers, the Services industriels Lausanne (SIL) and other minor energy suppliers (e.g. for wood heating and solar domestic hot water heating). In particular since the 1970s, demand has shifted away from oil and toward the less polluting heating systems and energy sources provided by the SIL, such as natural gas and district heating.

The SCHL housing stock has always demanded energy but the quantity and the type required has changed over the years. Whereas quantity has been influenced by factors such as the increased number and use of appliances, better energy efficiency and energy management, and construction quality and insulation levels of buildings, the type of energy demanded has varied in accordance with

- fluctuating prices of heating oil, natural gas;
- technological advancements and available technologies;
- environmental concerns reinforced by regulations and policy; and
- a sense of environmental responsibility on the part of the SCHL.

The SCHL's concern for energy efficiency dates back to 1940 when the increasing costs of heating prompted it to undertake energy-conserving renovations in some of their buildings (SCHL Annual report 1940, 6) Prior to 1973, boilers for central heating in the SCHL stock burned oil, thus heating oil providers were the major users of heating energy demand. Following the oil shocks of the early 1970s, the SCHL began a policy of building insulation and energy diversification, with an emphasis on clean energies (SCHL Annual report 1978, 13). Concurrently, in 1974 the SIL started satisfying energy demand in SCHL buildings by

district heating. As the network expanded, the demand for energy of new buildings and buildings undergoing heavy renovations became increasingly satisfied by district heating and natural gas and less so by oil, even though the cost for the latter was at times much lower.

The SCHL's strategy of energy diversification was also made evident by the installation of individual electric heating in their new building at Chavannes-près-Renens in 1976. During renovations, however, the electric heating was replaced with centralised gas heating as a consequence of the SCHL's decision to no longer support energy derived from nuclear sources (Meizoz, February 2006). The SCHL created a reserve energy fund in 1978 with the express purpose of further promoting the strategy of energy diversification and was soon followed by the installation of solar collectors on the roof of their building at Fleurette (even though it was well accepted that the project would not pay for itself).

During the 1980s, district heating became an attractive option since the SIL ensured it remained cost competitive with oil. This has been particularly important since the SIL must remain cost-competitive with the suppliers of heating oil. Currently, the majority of SCHL buildings have been connected to the natural gas or the district heating network, although a few continue to use oil heating.

Environmental responsibility and cost have not been the sole determinants of the SCHL's energy management strategy and the SIL's use of *US 1 Demand for energy*. Regulations concerning technologies, construction standards, the environment and energy have also played large roles. The new cantonal law on energy⁵⁸ enacted in 2006 will have important consequences on supply and distribution of energy; for example, new buildings must use renewable energy for at least 30% of their domestic hot water heating.⁵⁹

Today, the SCHL continues to strive for energy efficiency and seeks energy from lower polluting sources as long as the costs remain reasonable. No buildings have yet been built to the *Minergie* standard.

US 2 Material Storage and Sink

There has been one major change in the way material providers have used US 2 Material storage and sink:

1. Under-use of material sink by cement producers (1945-1947)

Rationing of cement during World War II caused cement to be in short supply for SCHL construction that began at the end of the war.

At several points throughout the SCHL's history, certain material suppliers have under-used the material sink service of the SCHL; in other words, material shortages have resulted in delays in new housing construction. Most of these have not been significant. However, the under-use of the material sink service by cement suppliers caused delays in the construction of Fontenay II and III and also forced the SCHL to modify its building design (i.e. using

⁵⁸ LVLEne (RS 730.01)

⁵⁹ Art. 27 RLVLEne (RS 730.10.1)

wood for building joists). During the above shortage the Conseil fédéral intervened to ensure cement producers could supply construction projects that were already underway but that were in the process of shutting down due to the shortage.

Aside from the above, the SCHL's strategy regarding material sink and storage primarily concerns material selection. Beginning particularly in the 1970s, the SCHL has expressed a desire to use materials that may be more expensive in the short term, but that are more durable and longer lasting (Neuenschwander Feihl 1995, 119). These changes include marble for building entrances, durable building hardware, and tile and parquet instead of carpet.

US 3 Material Discharge

There has been one major change in the way waste collection and disposal services have used US 3 Material discharge:

1. Incineration of waste for production of district heating (1958-today)

The Services d'assainissement have used incineratable waste from housing stocks as an energy source for district heating since the Vallon incinerator was put into service in 1958.

Hygienic and environmental problems caused by the increase in production of household waste resulting from the population growth in the city of Lausanne prompted changes in how the Services d'assainissement (formerly the Services routes et voiries until 1970) used the material discharge of housing stocks. Household waste had been disposed of in dumps, but in 1954, the city conducted a study on possible mechanisms to solve the problem of recycling and elimination of waste in an economical and environmental manner (Völgyi 1995). Consequently, the Vallon incinerator was constructed in 1958 and the household waste that was brought there was used as an energy source for the district heating network. Vallon was decommissioned in 2005 and replaced by the new incinerator managed by Tridel SA.

There has been no significant change in SCHL management strategy related to US 3 Material discharge.

US 4 Water Sink

There have been no significant changes in the use of US 4 Water sink by the water services nor in the SCHL management strategy related to this good and service.

Until 1930, water came from groundwater and from other jurisdictions but demand persistently exceeded supply, particularly in dry years. In 1931, the municipal water services (eauservice) started pumping water from Lac Léman. Following the construction of treatment plants to accommodate the increased water volume, the current capacity of the system can easily satisfy demand.

US 5 Water Discharge

There have been three changes in the use of US 5 Water discharge by the Services d'assainissement.

1. Treating wastewater (STEP at Vidy) (since 1964)

Prior to 1964, wastewater was collected by the Services routes et voiries (predecessor of the Services d'assainissement) and disposed of untreated into Lac Léman. The construction of the wastewater treatment plant at Vidy in 1964 marked a major change in the way wastewater from the SCHL and other housing stocks were used.

2. Efforts to reduce peak wastewater loads

To reduce peak loads at the treatment plant during periods of heavy rainfall, the Services d'assainissement implemented two main measures: 1) separation of stormwater and wastewater collection infrastructure, and 2) promotion of infiltration and retention.

3. Treatment of micro-pollutants (near future)

Within the last decade, the composition of wastewater arriving at the treatment plants has included increasing levels of micro-pollutants. The Services d'assainissement is investigating new technologies to treat these new pollutants.

High levels of pollution in receiving water bodies causing potential public health problems pushed the Services routes et voiries to start treating wastewater in 1964. To ensure that wastewater is treated to appropriate standards, wastewater arriving at the treatment plant must meet certain quantity and quality criteria.

It is important to note that weather conditions play a critical role in the efficiency of wastewater treatment. On a rainy day, the amount of water received at the plant nearly doubles to 200 000 m^3 , driving down the efficiency of the plant and allowing insufficiently treated water to enter the lake. Connection rebates of up to 20% are offered to owners that practice water retention – that is, who retain water on-site during periods of heavy rainfall and release it during dryer weather. Water retention helps reduce the load on the network and treatment plants during high volume periods meaning less polluted water is discharged into the lake. Another solution is to encourage building owners to set up an infiltration system where stormwater is absorbed into the land. Unfortunately, the ground in Lausanne is generally not suitable for infiltration.

In parts of Lausanne (the Flon-Louve basin, which covers downtown and some northern sections of the city), stormwater and wastewater are collected in a single network. However, wherever possible in new construction, separate stormwater piping is provided. Owners of the buildings are obliged to pay for the double connection to both systems. Owners (not necessarily the SCHL) are in principal not opposed to the double system, but some are opposed to double payment (Kadri 2006).

The SCHL has not had any changes in management strategy relating to the use of this good and service.

Several issues present in US Utility services exist for other goods and services and are discussed at the end of this chapter, including:

• Energy efficiency

UF. Urban Function

- \rightarrow UF 1 Design of urban space
- \rightarrow UF 2 Demand for transit-related infrastructure
- \rightarrow UF 3 Demand for institutional services
- \rightarrow UF 4 Demand for goods and services

UF 1 Design of Urban Space

There has been one change in the way the SCHL stock is used for UF 1 Design of urban space:

1. Change in design of buildings (periodically, but less frequently recently)

Architects or planners hired by SCHL or by the city have had to change their building design, including style, number of dwellings, and building footprint, due to the actions of affected actors

Urban planners and architects use the buildings of housing stock as an element of urban design. However, other actors such as public authorities and even neighbours have managed to alter the way the SCHL stock is used to design urban space. Architects have had to modify their design of urban space due to:

- objections from neighbours for aesthetic or 'anti- low rent housing' reasons (e.g. Cour in 1925)
- the refusal of a project by the municipality (e.g. Montolivet in 1928)
- the high price of land, which necessitated compact housing styles (e.g. "high-rise"-style construction of Couchirard in 1931) or addition of more floors than originally planned (e.g. Ouchy II 1932)
- planning restrictions (e.g. reconstruction of Ouchy 1 in 1970).

The SCHL has had to often deal with these situations on a case-by-case basis. For instance, SCHL construction projects have been submitted under the name of the architect and not the SCHL to avoid objections by neighbours based on the SCHL name alone (Marc-Dufour in 1947), and purchasing land only when the neighbourhood plan (*plan du quartier*) is complete. Aside from such measures, the SCHL had no long-term strategy related to the use of this good and service.

UF 2 Demand for Traffic-Related Infrastructure

One change in the use of UF 2 Demand for transit-related infrastructure has occurred:

1. SCHL: Provision of on-site parking (1960-today)

The SCHL provided parking spaces that went unused until tenants were obliged to rent spaces.

The creation of on-site parking (e.g. garages) became a planning requirement of the city, thus the SCHL had no choice but to provide a minimum number of on-site parking spaces. At the same time, streets were being widened with public money and the SCHL was even obliged to cede some of its street-side land for this purpose. Not only did the SCHL have to build parking garages but it also had to compete with free street parking. Since tenants were not renting SCHL spaces but instead were using free street parking, the SCHL created a new regulation that required all tenants with cars to rent a space. It is worth noting that although on-site parking is more prized now than it was previously, parking spaces are the one property that the SCHL consistently is unable to rent all of (Virchaux 2006).

Aside from the above, the SCHL's management strategy concerning *UF 2 Demand for trafficrelated infrastructure* has related primarily to public transit and has remained constant. The SCHL builds in regions that are well serviced by public transportation, therefore transit providers are able to use the demand that is generated in part by SCHL tenants. The one notable exception occurred in 1975 at the building at Vennes, where tenants felt isolated since there was no public transit evenings and Sundays (SCHL Annual report 1974, 13). By 1978, however, the building was serviced by a complete bus schedule.

UF 3 Demand for Institutional Services

There have been no significant changes in the use *UF 3 Demand for institutional services* or in the SCHL management strategy related to this good and service. The SCHL policy has been to ensure the good location of its buildings with respect to institutional services.

UF 4 Demand for Goods and Services

There have been no significant changes in the use *UF 4 Demand for goods and services* or in the SCHL management strategy related to this good and service. The SCHL policy has been to ensure the good location of its buildings with respect to businesses, schools, stores, and other providers of goods and services.

Several issues present in Urban function goods and services exist for other goods and services and are discussed at the end of this chapter, including:

- Housing density
- Availability of suitable land

NM. Nonmaterial Goods and Services

- \rightarrow NM 1 Solving general housing needs
- → NM 2 Solving non-housing needs
- \rightarrow NM 3 Shaping the characteristic landscape
- → NM 4 Social and cultural diversity
- \rightarrow NM 5 Conservation and transmission of social and historical values

NM 1 Solving General Housing Needs

Since the foundation of the SCHL, three major changes have occurred in the use of the service *NM 1 Solving general housing needs*:

1. SCHL: Shift from solving the housing needs of the working class to satisfying the needs and demands of its members (beginning in 1928, becoming more pronounced starting in 1970s).

The SCHL shifted its priority from housing the working class to satisfying the demands of its members, who often have higher incomes.

2. Public authorities: Encouragement of housing construction, renovation and maintenance (periodic)

Frequent housing shortages in Switzerland have motivated public authorities to increase the size of housing stocks by encouraging housing construction. Even during periods when, statistically, sufficient housing existed, low- to mid-rent apartments were often grossly under-represented. Public authorities have enacted several measures to promote specifically the construction of affordable housing by public-interest organisations (such as housing cooperatives) as well as market-focused developers.

3. Public authorities: Decline in use of SCHL housing stock for subsidised housing (periodic, but more pronounced since 1997)

Public authorities have periodically provided the SCHL housing assistance for subsidised housing and have been able to set conditions for occupancy to ensure low-income households benefit from these apartments. Opportunities to grant subsidies have declined notably since 1997.

NM 1 Solving general housing needs has been used by public authorities (Confederation, canton of Vaud and communes) and the SCHL. Each actor has used different measures to use the SCHL stock to solve the housing needs it deems important using different measures. The main housing needs that have occurred with regularity over time are:

- a general housing shortage;
- a shortage of affordable housing;

- affordable housing not going to those who most need it;
- deteriorating housing stocks; and
- in the case of the SCHL, cooperative members not having their housing needs addressed.

Change 1 occurred as a result of SCHL management decisions, whereas changes 2 and 3 resulted from the implementation of measures enacted by public authorities. These include:

- measures that directly affect housing, such as low-interest loans, subsidies and loan guarantees to encourage housing construction and renovation, or imposing rent controls to keep rents low; and
- measures that indirectly affect housing, such as providing incentives to the construction sector and controlling speculation and an overheated economy.

These measures, however, did not always have the intended effect for many reasons. The following summarises how different actors attempted to use this service of the SCHL stock and the SCHL's management strategy vis-à-vis these measures. For detailed information on specific federal and cantonal laws, refer to Appendix 1.

Confederation

Three main periods define the Confederation's use (or non-use) of the SCHL's stock to solve housing needs. The first consisted of periodic encouragement on an as needed basis. The two subsequent periods are characterised by more coherent efforts to encourage housing construction and renovation, both in general and in affordable housing.

1918-1958: The Confederation did not have a single, consistent policy for encouraging housing construction and thus provided subsidies and loans on an as-needed basis. The two main periods where the Confederation provided subsidies, loans and loan guarantees were 1918 to 1924 and 1942 to 1950, which correspond to the two end-of-war/post-war periods. From 1925 to 1942 and from 1950 to 1958, the Confederation did not implement measures to encourage the construction or renovation of housing since there was no perceived need or a need existed (especially in the latter period) but was not addressed.

1958-1974: Following the period of no housing construction assistance and in view of the chronic shortage of social housing, in 1958 the Confederation introduced the first of more permanent measures to address the problem with a federal ordinance concerning the encouragement of construction of social housing.⁶⁰ This policy was largely deemed a failure since criteria often excluded cities where the shortage was greatest. It was superseded in 1965 by a federal law concerning encouragement of housing construction.⁶¹ This policy was also judged to be a failure.

1974-present: Responding to a dramatic housing shortage—especially of affordable housing—and to rising inflation and an overheated construction sector in the early 1970s, the Confederation introduced measures to encourage housing construction, access to housing

⁶⁰ Arrêté fédéral du 31 janvier 1958 concernant l'encouragement à la construction de logements à caractère social (RO **1958** 433)

⁶¹ Loi fédérale du 19 mars 1965 concernant l'encouragement à la construction de logements (RO **1966** 449)

ownership and construction and renovation of low-rent housing in a new federal law on construction assistance and access to housing ownership, known as LCAP.⁶² This assistance was available to all developers and the subsidy had to be repaid through a mechanism of progressively increasing rents. The LCAP was replaced in 2003 by a federal law on housing, known as LOG.⁶³

Emergency measures were often also required to address periodic and specific housing problems. In 1971, due to the severe housing shortage in Lausanne and the very high costs of construction, the Confederation introduced two ordinances to stabilise the housing market and encourage the construction of affordable housing^{64,65}. Similarly, during the end of the 1980s and the beginning of the 1990s, the Swiss economy overheated, resulting in a severe housing shortage, and rapidly increasing (and already high) land prices, construction costs and costs of capital. This prompted the introduction of an urgent federal ordinance against real estate speculation⁶⁶, which allowed non-profit housing organisations such as the SCHL to better afford land for housing construction purposes.

The effect these measures had on the SCHL management strategy is evident in the pattern of use of subsidies by the SCHL over the three periods. Aside from accepting federal subsidies for the first project in 1920, the SCHL avoided federal aid entirely in the first two periods. In addition to the disincentive to use subsidies caused by their conditions of use, the actual availability of subsidies was low. Thus, during these periods the Confederation was unable to use the SCHL stock to solve different housing crises.

The third phase, however, saw the introduction of the LCAP and later the LOG. At first, the LCAP was not well used, but in 1983 with the upswing in the economy, conditions for LCAP assistance became very attractive. The SCHL used this assistance in several of its construction as well as renovation projects. Similarly, the federal aid available under the LOG continues to be used by the SCHL.

Canton of Vaud

Since the housing situation at the federal level has not always been representative of that at the cantonal level, the canton of Vaud has taken measures to use the SCHL and other housing stocks to solve its housing needs. The three main periods are as follows:

1920-1953: Similarly to the Confederation, periodic assistance was given for housing by means of loans and subsidies. During this time, the canton did not really have an independent policy but one that was linked to complementing and implementing the federal one. The SCHL used these subsidies periodically, most notably after the end of World War II.

⁶² RS 843

⁶³ RS 842

⁶⁴ Arrêté fédéral du 25 juin 1971 concernant la stabilisation du marché de la construction (RO **1971** 961)

⁶⁵ Arrêté fédéral du 20 décembre 1972 instituant des mesures dans le domaine du crédit (RO **1972** 3121)

⁶⁶ Arrêté fédéral urgent du 6 octobre 1989 concernant un délai d'interdiction de revente des immeubles non agricoles et la publication des transferts de propriété immobilière (RO **1989** 1974) *and* Arrêté fédéral du 6 octobre 1989 concernant la charge maximale en matière d'engagement des immeubles non agricoles (RO **1989** 1978)

1953-1975: The canton of Vaud was still experiencing a housing shortage in 1950 when federal housing aid ended following a national referendum on the matter; in fact, the canton of Vaud had been one of the cantons to vote in favour of continuing housing construction assistance. Thus it launched its own housing policy in 1953 with a cantonal law that sought to encourage the construction of 12'000 housing units in the following ten years.⁶⁷ Under this law, loans were used by the SCHL for construction of two housing projects in 1958 but not after that, partly because loan credits had run out and partly because it did not want to be subjected to the conditions placed upon it by the canton for accepting these loans. As the housing shortage in the canton of Vaud continued, cantonal authorities encouraged housing construction through the introduction of a new law on housing.⁶⁸.

1975-present: The current cantonal law on housing was enacted in 1975 and introduced a two-pronged approach to housing assistance: assistance for the construction and renovation of housing and individual assistance.⁶⁹ The SCHL twice used subsidies under the new law, in 1993 and 1994.

The SCHL, therefore, did not often use cantonal subsidies, meaning the canton of Vaud was also very restricted in its ability to use the SCHL stock to solve the housing needs it considered important.

Communes (principally the municipality of Lausanne)

The city of Lausanne early on adopted housing policies to ensure its citizens were properly housed. Other communes did not focus on a housing policy *per se*, but would provide encouragement when needed. Three main phases of use exist.

Pre-1947: Previous to 1947, the Ville de Lausanne's housing policy was based on applying the measures enumerated in the Confederation's housing policy, which in turn worked in tandem with the cantons. During this period, the SCHL relied frequently on communal subsidies, although they often entered into heated discussions concerning the conditions for accepting subsidies and occasionally refused them.

1947-2004: In 1947, the commune passed a regulation that supplemented existing federal measures and independently encouraged the construction of social housing.⁷⁰ Measures included granting surface rights, providing loans, buying shares of housing cooperatives and providing additional subsidies. Housing built with this assistance is subject to restrictions lasting at least 20 years after which the commune can gain control of the housing. In addition, the commune continues to adapt its implementation of housing assistance in response to cantonal and federal laws. During this period, the SCHL often used different forms of assistance, particularly surface rights (especially from other communes) and joint loan guarantees. Conditions for subsidies became too onerous toward the end of the 1990s, at which point the SCHL stopped using any communal subsidies.

⁶⁷ Loi cantonale sur les mesures de coordination générale en matière de logement et d'encouragement à la construction de logements à loyers modestes du 8 décembre 1953

⁶⁸ Loi cantonale sur les mesures de coordination générale en matière de logements et d'encouragement à la construction de logements à loyers modérés du 22 novembre 1965

⁶⁹ LL (RSV 840.11)

⁷⁰ Règlement concernant la construction de logements du 11 mars 1947

2004 to present:

The new communal housing policy encourages the construction of affordable housing, provides individual subsidies, and includes a complete restructuring of conditions of occupation for subsidised housing.⁷¹ The Ville de Lausanne's objective is to control 15% of tenants in each subsidised building in order to better integrate the most at-risk households and avoid problems of "ghettoisation". In return, builders of subsidised housing are given financial guarantees ensuring rent and protection against potential damages in these households. Once again, the SCHL has not accepted any subsidies under this regulation.

Most recently, the commune also has decided to place emphasis on the encouragement of market housing to provide mid-income apartments. At the same time, it wishes new housing construction to abide by sustainability criteria. Thus, it created *SMéO* (*sol, matériaux, énergie, eau*). Surface rights to a certain number of parcels will be granted to private investors through architectural competitions in which sustainable development criteria must be followed. The successful project is subject to rent control.

Overall, communal assistance has been used throughout the SCHL's history, allowing different communes to use the SCHL stock to solve their respective housing needs. Nonetheless, the frequency and extent to which the SCHL has accepted subsidies has varied widely during this time, and has been completely dependent on conditions of acceptance.

By granting subsidies to the SCHL for subsidised housing construction, public authorities have been able to exert some degree of management control over the SCHL, most notably by screening potential tenants and placing conditions of occupancy (e.g. maximum household income, number of people per dwelling) on subsidised apartments. Opportunities to use subsidies as a means of controlling the use of subsidised apartments of the SCHL has disappeared whenever the SCHL has declined to apply for subsidies (change 3). Changes in the SCHL's strategy to accept or not accept subsidies have occurred on the following occasions:

1928: Subsidies from the city of Lausanne imposed conditions regarding maximum household revenue and size of household. The maximum household revenue set made it impossible for such families to be able to afford the cooperative shares. The SCHL, therefore, decides to forgo communal subsidies, but at the same time created the *Fondation du Logement ouvrier* (later named *Fondation Pro-Habitat Lausanne* – FPHL), which does not require cooperative shares to be bought and which continues to provide very low-rent housing.

1945: The overabundance of housing between 1936 and 1943 caused financial hardship for the SCHL. As a new housing shortage developed, the SCHL realised it could only pursue further new construction projects with the aid of subsidies from the commune, the canton, and eventually the Confederation.

1960: Occupancy conditions for existing subsidised apartments caused problems for the SCHL, who then decided to forgo subsidies in order to avoid following these restrictions.

⁷¹ Règlement du 8 septembre 2004 sur les conditions d'occupation des logements construits ou rénovés avec l'appui financier de la commune de Lausanne.

1983: Conditions for access to subsidised housing were relaxed. Furthermore, since no subsidised housing had been built in the five-year period between 1977 and 1982, there was a critical shortage of low-rent subsidised housing. Also, in 1981, the canton of Vaud created the Société vaudoise pour la création de logements à loyers modérés (SVLM). Its first priority was to find constructible cantonal and communal land that could be used by non-profit associations. All of these factors contributed to the SCHL deciding to again accept subsidies.

1997: Concerns about the high turnover rate of tenants in subsidised apartments, subsidy repayment conditions, and loss of management control of subsidised housing prompted the SCHL to again refuse subsidies. This policy continues today – the SCHL's strategy is to build affordable housing using its own financial capacity and leave subsidised housing to the FPHL.

NM 2 Solving Non-Housing Needs

NM 2 Solving non-housing needs refers to using housing stocks as a tool for resolving issues other than housing, for instance reviving a lagging construction industry or dealing with immigration issues. This service was used on numerous occasions since the founding of the SCHL.

1. Confederation: Controlling inflation

The Confederation has occasionally used legislation focusing on the housing market to control inflation, particularly during times of housing shortages.

2. Public authorities: Encouraging employment, particularly in the construction sector

The encouragement of housing construction and renovation by means of subsidies and other assistance has frequently been used not only as a means unto itself, but also as a way to encourage employment, particularly in the construction sector. The use of local labour for construction projects has also been legislated to combat high unemployment in Lausanne (1930s).

NM 3 Shaping the Characteristic Landscape

There have been no significant changes in either the use of *NM 3 Shaping the characteristic landscape* by the user actors or in the related SCHL management strategy.

NM 4 Social and Cultural Diversity

There have been no significant changes in either the use of *NM 4 Social and cultural diversity* by the user actors or in the related SCHL management strategy.

NM 5 Conservation and Transmission of Social and Historical Values

There have been no significant changes in either the use of NM 5 Conservation and transmission of social and historical values by the user actors or in the related SCHL management strategy.

Several issues related to NM Nonmaterial goods and services also exist for other goods and services and are discussed at the end of this chapter, including:

- Construction and renovation cycles
- Subsidised housing
- Housing density
- Availability of suitable land

O. Other

- \rightarrow O 1 Political gain
- → O 2 Economic gain

No changes, since these goods and services have not been used.

4.3 **DISCUSSION**

The relationship between the use (and the changes in use) of several goods and services can describe the evolution of several important phenomena related to housing and particularly to management decisions of the SCHL. Here, we discuss the interaction of goods and services and how they affect 1) the construction and renovation cycles of the SCHL, 2) subsidised housing, 3) energy efficiency, 4) housing density, and 5) the availability of suitable land for affordable housing construction.

4.3.1 Construction and renovation cycles

Since its foundation, the SCHL housing stock has undergone distinct periods of construction, renovation and even inactivity. The use of the following goods and services by the SCHL and by other user-actors all influence the management decisions of the SCHL with respect to these cycles:

- PF 1 Capital Investment
- PF 3 Labour Investment

- PF 2 Land Investment
- US 4 Material Storage and Sink
- NM 1 Solving General Housing Needs
- NM 2 Solving Non-Housing Needs

The construction, maintenance, renovation and demolition (or deconstruction) of a building require the careful coordination of four principal goods and services: *PF 1 Capital investment*, *PF 2 Land investment*, *PF 3 Labour investment*, and *US 4 Material storage and sink*. In other words, the stockowner must ensure that 1) there is sufficient capital to finance the work and that there will be a sufficient rate of return on the work (by establishing loans, seeking subsidies, and using own capital); 2) land is available for new building projects (in the case of construction); 3) sufficient and proper labour is available (by contracting general contractors or specific trades); and 4) sufficient and correct materials are used for the job. When any one of these goods or services cannot be appropriately used by the user-actors, decisions of the SCHL regarding construction and renovation can change.

The SCHL has sought to build housing whenever possible but turned to renovation work during the following years for the following reasons (Table 4.1):

Renovation periods	Reasons for not constructing
1934-1944	Housing surplus – no need for additional housing.
1949-1954	No construction subsidies available (under-use of NM 1 Solving
	general housing needs by public authorities)
1976-1980	Economic downturn
1994-2003	Severe downturn in housing market, plus renovations encouraged
	by public authorities (communal, and also Confederation from
	1998); land prices exorbitant (2002)

Table 4.1 –	Renovation	of SCHL	housing stock
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Furthermore, between 1960-1964 there was little construction or renovation activity due to the national exposition taking up nearly all available labour (i.e. under-use of *PF 3 Labour investment*) and skyrocketing land prices (speculative use of *PF 2 Land investment*).

Starting in the 1970s, however, the SCHL developed the financial means of ensuring a longterm renovation and modernisation plan for its stock. In general, it prefers infrequent heavy renovation projects rather than lighter renovation projects that are more frequent (as is done by some other cooperatives). Modernisation of buildings occurs 30 to 35 years after construction, allowing buildings to change to the standards that evolved over the preceding years, such as larger living spaces and modern appliances. The SCHL's objective is to maintain a building stock that is in good condition, long lasting, and thus financially healthier in the long run. In general, buildings are expected to be demolished 70-90 years after construction. Currently, the cantonal law on demolitions, transformations and renovations⁷² places limits on housing renovation activities. In order to maintain the number of apartments in a city experiencing a pronounced housing shortage, the City of Lausanne currently does not allow demolition and reconstruction of housing. Consequently, the SCHL is unable to undertake some reconstruction projects it would like to do, most notably the building on avenue du Cour in which reconstruction could result in an increase in density of 30% (without changes to neighbourhood plans). Thus, cantonal and communal authorities' policy to maximise use of *NM 1 Solving general housing needs* limits the SCHL's ability to demolish and reconstruct, thus any current strategy for these activities is on hold.

Furthermore, it will be seen that other factors beyond the use of goods and services (e.g., the state of economy, housing shortage/abundance) affected decisions of the SCHL management whether to build or renovate.

4.3.2 Subsidised housing

Subsidised housing allows households with limited financial means to afford a suitable apartment. The construction of subsidised housing has often, although certainly not always, fallen to public interest housing organisations. The SCHL's strategy regarding the acceptance of subsidies and the provision of such housing not only is the product of the complex interaction between many goods and services but also has a consequence on the use of goods and services by other user-actors. The goods and services implicated are:

• RS 1 Living Space

- PF 1 Capital Investment
- PF 2 Land Investment
- NM 1 Solving General Housing Needs
- NM 2 Solving Non-Housing Needs
- NM 4 Social and Cultural Diversity

Furthermore, as with construction and renovation cycles, a number of external factors play a large role in subsidised housing.

The Confederation, canton, and (where applicable) the commune each make available subsidies to housing organisations such as the SCHL so that they can build and renovate lowrent housing. In return for these subsidies, the receiving housing organisations must construct and build apartments that meet a certain standard of quality and must rent them to individuals and families that would normally not be able to afford them on the open market. To ensure that recipients for these apartments qualify for them, public authorities impose certain conditions of use and occupancy. Although these conditions have changed periodically with the introduction of new housing laws and ordinances, the net result is that the stockowner loses some management control of its housing stock. Onerous conditions of occupancy that have long created a high turnover in subsidised apartments and a restriction on management independence that has limited the SCHL's ability to best respond to the needs of its members have long been considered unacceptable to the SCHL. Consequently, periodically throughout the SCHL's history when the perceived interference by public authorities was considered too high (most recently since 1997), the SCHL has built less subsidised housing and concentrated instead on market housing. Today, approximately one quarter of the SCHL stock is subsidised.

⁷² LDTR (RSV 840.15)

Analytically speaking, when a stockowner decides to accept subsidies (which can also take the form of surface rights to public land – *PF 2 Land investment*), the public authority is simultaneously granted the use-right to a portion of the service *NM 1 Solving general housing needs* since it can now exercise some control over the rental conditions for specific tenants. Since the profile of tenants who live in non-subsidised apartments differs from that of tenants eligible for subsidised ones, the type of tenant who has the use-right to *RS 1 Living space* is determined in part by whether the SCHL or the public authority has primary control of the use-right to *NM 1 Solving general housing needs*. In the case of the SCHL, the cooperative prefers to retain the use right to *NM 1 Solving general housing needs* to address the housing preferences of its members rather than allow public authorities some use of its stock to increase the housing available for low-income households. Furthermore, the SCHL insists on retaining the right to control tenant selection as it allows it to create the diversity of tenants it wants and to avoid ghettoisation issues of having similar-income people in the same building (control of *NM 4 Social and cultural diversity*).

Part of the consequence of this management strategy is that the cooperative members that the SCHL houses have shifted progressively from labourers and low-income households to the middle class (i.e. a change in the characteristics of the actors who use *RS 1 Living space*). Furthermore, for the SCHL to maintain housing with rents below that of the market without relying on subsidies, the SCHL has had to develop strategies to gain greater financial means. One is to require a greater investment from member-tenants in terms of the number of shares to be purchased (changes in use of *PF 1 Capital investment* by tenants) so that the SCHL has more capital at its disposal. Another is to establish new ways of financing building construction, such as it did in 1961 with the creation of an equalisation fund.

Although the SCHL's tendency has been not to build subsidised housing whenever feasible, changes in conditions and sources of subsidies have at times made it attractive for the SCHL to apply for and accept subsidies. External factors that have prompted the SCHL to accept subsidies include climbing construction costs, labour shortages, speculation, especially high or low interest rates, and land availability.

Recently, there has been a shift on the part of the canton and the city of Lausanne regarding placing land at the disposal of housing owners. Whereas previously this land was meant solely for subsidised housing, it is now also being made available for market housing, on the condition that the housing remains non-speculative. A new programme to promote sustainable housing in Lausanne (SMéO - Sol, Matériaux, Energie, Eau)) grants surface rights for subsidised and non-subsidised housing based on the building design fulfilling specific environmental criteria related to land use, building materials, energy efficiency, and water consumption. The canton has very recently learned of this program and has expressed interest in implementing something similar (Leimgruber 2006). Since the new conditions for receiving surface rights would not restrict the SCHL's management independence and since the land can be used for market housing, it will be interesting to observe whether the SCHL's strategy regarding accepting this type of housing assistance changes.

4.3.3 Energy efficiency

The shift toward energy efficiency and less polluting sources of energy for heating and electricity have been the result of the interaction of two goods and services:

• RS 2 Indoor Climate and Technical Services • US 1 Demand for Energy

The need to change our energy producing and consuming habits is one of the most important aspects in sustainable development relating to housing and is having important effects on the use-rights of tenants to *RS 2 Indoor climate and technical services* relating to energy and the use-rights of energy providers to *US 1 Demand for energy*. With this in mind, there are three ways in which use of goods and services related to energy are changing: 1) reducing the demands that tenants put on their technical services (e.g. by turning down the heat at night); 2) controlling the technical services inside the building; and 3) satisfying energy consumption needs by using more renewable energy and energy sources that are less polluting.

Firstly, to reduce their energy consumption, tenants must curb their need or desire to exercise their use-right to technical services related to energy. How tenants exercise this use-right, however, is relatively uncontrolled and unregulated. Within the confines of his or her apartment, the tenant exercises full control over these services; tenants can leave the lights on all night or turn up the heat to full in the summer. Public awareness campaigns to reduce energy consumption are conducted by public authorities, but there is no obligation for them to do so, nor is there any obligation for tenants to pay them any heed. The primary disincentive for tenants to consume excessively is cost. Another indirect way of encouraging tenants to use less energy is by constructing or renovating buildings with higher energy efficiency. For instance if walls are well insulated, there is less need for heating energy.

Secondly, we can change the technical services available to tenants. Equipment that is more energy efficient will lead to greater energy savings. These changes will do little to affect the *indoor climate* that the tenants use (i.e. they can still enjoy the same level of indoor comfort). However the technologies they call upon when using the technical services will change.

Thirdly, it is possible to change the actor that has the use-right to US 1 Demand for energy or change the conditions of the use-right to this service. In other words, it is possible to regulate the type of energy that can be provided.

There are two competing factors that explain changes in the use of and demand for energy: cost and environmental concerns. The changing price of different energy sources has prompted end users such as the SCHL to switch to lower cost methods of heating. In the absence of regulations that limit the end-consumer's choice, actors that use the US 1 Demand for energy of housing stocks must strive for cost-effectiveness in whichever energy they provide and in service delivery. Increased environmental awareness by end-consumers and the housing stockowners means that there is increasingly a willingness to absorb a certain amount of extra cost in return for better environmental performance.

The SCHL's management strategy regarding energy has partly been driven by its own awareness of energy matters and the promotion of technologies made available by the SIL. Similarly, the SIL's provision of cleaner energy is in part due to awareness and changing demand from housing stockowners such as the SCHL. Thus, there is a delicate interaction between management strategy and the use of *US 1 Demand for energy*.

The new cantonal law on energy (LVLEne) in effect since May 2006, provides new regulatory conditions in which the interaction between SCHL management strategy, US 1 Demand for energy and RS 2 Indoor climate and technical services exists. The objective of the law is to promote a supply of energy that is sufficient, diversified, safe, economically sound and respectful of the environment by addressing energy planning, production, distribution and financial assistance for achieving these goals. Representatives from the cantonal and city housing offices as well as from the SIL believe that this new law will go a long way to create

housing that is more energy efficient and uses more renewable energy (Dewarrat 2006, Krebs 2006, Leimgruber 2006).

The *LVLEne* goes a long way to ensuring changes in the technical services to which tenants have use-rights. For instance at least 30% of energy for domestic hot water must come from renewable energy, and a maximum of 80% of heating energy can come from non-renewable sources. Furthermore, the new law now requires that buildings with at least five dwellings be equipped with individual heat meters. This will provide a disincentive for tenants to use heating excessively since now they will bear the full cost of their energy use, instead of having it spread across other apartments.

4.3.4 Housing density

The following goods and services are implicated in the SCHL's management strategy regarding housing density.

- PF 1 Capital Investment PF 2 Land Investment
- UF 1 Design of Urban Space
 NM 1 Solving General Housing Needs

Densification is a contentious issue, one for which the SCHL (amongst other housing owners) has often disagreed with public authorities. It is the objective of the SCHL to contribute to urban density (use of *UF 1 Design of urban space*) wherever possible, not only for the urban benefits that density can produce, but also to increase the apartments available to members on any given lot (use by the SCHL of *NM 1 Solving general housing needs*), and thus increase revenue per lot (use of *PF 1 Capital investment*). Beginning with the buildings at Ouchy in 1923, the SCHL regularly has wanted greater housing density than that prescribed in zoning and planning regulations. Thus, the SCHL has often entered into negotiations with communal authorities to change zoning and other planning elements so that it can build what it considers appropriate housing. For instance, as early as the 1930s the SCHL had heated discussions with the city to obtain authorisation to increase the number of floors in the building design to maximize the number of apartments (Neuenschwander Feihl 1995, 59).

In order to preserve rental housing in the canton (use by public authorities of *NM 1 Solving general housing needs*), the cantonal law LDTR states that in communes with a housing shortage, any demolition, transformation and renovation of housing must receive the authorisation of the Department of agriculture, industry and commerce. A decision whether to authorise work or not is based (at least partly) on a recommendation from the commune in question. In the case of Lausanne, heavy renovations of housing are permitted, but demolition and reconstruction is very restricted. Recognising that the city's objective is to maintain a minimum number of apartments during a time of housing shortage, the SCHL nonetheless disagrees with this logic since additional density (i.e. more apartments) can be achieved if demolition and reconstruction were to occur in some areas. For example, the SCHL's building at avenue du Cour could be rebuilt with 30 percent additional density without modifying the neighbourhood plan. Currently, the SCHL uses all legal avenues possible to increase density.

According to municipal authorities, granting additional density can cause a number of problems, including protests from owners of adjacent lots. If these owners note that an adjacent lot has been granted a greater density than they have, they are more likely to raise objections when the construction of the new building comes under public review (use by

neighbours of *UF 1 Design of urban space*). The municipal authorities must then play a delicate game of appeasing the neighbours while trying to encourage density.

4.3.5 Availability of suitable land

The following goods and services are implicated in the SCHL's management strategy regarding the availability of suitable land.

- PF 1 Capital Investment PF 2 Land Investment
- UF 1 Design of Urban Space NM 1 Solving General Housing Needs
- NM 4 Social and Cultural Diversity

The unavailability of suitable land is one of the biggest obstacles facing the housing market (Krebs 2006, Leimgruber 2006, Meizoz 2006, Virchaux 2006). Currently, financing of housing construction projects is not an obstacle but finding suitable land and good projects is.

There are three main reasons why finding suitable land for housing is problematic.

Firstly, in the case of non-profit housing, land that is subject to speculation is often simply too expensive (under-use of the SCHL stock's service *PF 1 Land investment*). Even in the early days of the SCHL, land sold by the commune to the cooperative was often deemed too expensive.

Secondly, although from a planning point of view it may be desirable to build in already urbanised areas (use of *UF 1 Design of urban space*), the land found there is often the least suitable for construction. Urban lots can be polluted, in noisy areas, or may be located close to dangerous goods throughways. Several laws at the federal and cantonal level set limits for these nuisances; housing can only be built on land that falls within acceptable limits. The federal law on noise⁷³ and the law on dangerous goods⁷⁴ can be particularly restrictive. Aside the legal prescriptions, however, the SCHL is particularly careful about locating its buildings in areas that are not subjected to nuisances such as noise and pollution from traffic. This was evident in 1986 when they were granted the surface rights along with two other cooperatives to build nine buildings (three each). When it became known that one of the SCHL buildings was to be located adjacent to a highway, they declined to build, and were left with only two buildings. However, one of the other companies did build demonstrating that not all public-interest organisations have the same criteria building location.

Thirdly, there have been instances when the SCHL has wanted to buy land but either the landowner did not want to sell to the SCHL or future neighbours have objected to construction of SCHL housing on a parcel. According to Bernard Meizoz, former director of the SCHL, some landowners object in principle to housing cooperatives and hesitate to sell to them. Similarly, in the second case neighbours have had ideological problems with housing cooperatives, often fearing that the affordable housing they promote will be a detriment to their neighbourhood (example of neighbours under-using *NM 4 Social and cultural diversity*). Apparent proof of this phenomenon occurred in 1947 when the SCHL decided to submit a

⁷³ OPB (RS 814.41)

⁷⁴ OMoD (RS 814.610)

construction project under the name of the architect and not their own name. No objections were registered, even though previous projects under the SCHL name had.

Thus, the lack of land – or rather the lack of opportunities to obtain suitable land – has prompted public authorities to grant surface-rights to non-speculative housing projects. Other initiatives, such as the SVLM in the canton of Vaud were created to assist public-interest housing organisations acquire land.

4.4 OVERALL MANAGEMENT PHILOSOPHY OF THE SCHL

The current management strategy of the SCHL can be characterised as being 'as long-term as reasonably possible'. From the SCHL's perspective, it is possible to make plans for 10 to 20 years ahead, but it becomes virtually impossible to plan longer term than that. There are certain decisions and actions management can make to ensure the best possible future situation, such as selecting good locations for buildings, but there will always exist unforeseeable circumstances. As an example, the housing located adjacent to the SCHL office are well serviced by the bus. Once the new M2 metro line is completed, however, the bus routes will change and this housing will no longer benefit from convenient public transit. Conversely, it is possible for circumstances to improve a situation. When the SCHL built the Couchirard building in 1932, it was located in the countryside outside of the city. As Lausanne expanded, the building became more and more centralised, and today it is in the central and popular 'Sous-gare' neighbourhood.

The SCHL does not perceive itself as being particularly restrained by the regime within which it exists. Its management strategy is based on satisfying the needs of its members and, as a non-speculative organisation with no interest in selling its stock, ensuring its longevity.

CHAPTER 5 – EVALUATION OF THE SCHL INSTITUTIONAL REGIME

5.1 INTRODUCTION

As seen in the detailed analysis of the SCHL housing stock's goods and services in Chapter 3, conflicts relating to the use of goods and services by different user-actors arose at different periods throughout the SCHL's history. Many of these conflicts were the result of problems in elements of extent and coherence of the institutional regime.

This chapter analyses the institutional regime of the SCHL over two broad periods that best show changes in management strategy and in the institutional regime. The first period is between the foundation of the SCHL in 1920 and 1970. The second is between 1970 and today. This second phase is characterised by 1) changes at the federal level in terms of housing policy, 2) changes in cantonal housing laws, 3) concern for energy issues provoked by the oil shock, 4) changes in SCHL management strategy that emphasised financial (and thus management) independence, and 5) new SCHL statutes.

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 (1921-1970 and 1970-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.

A few caveats are worth noting:

- 1. The two periods of analysis selected do not represent the only times in which the institutional regime changed. Changes in regulations and policies happened at many different points throughout the history of the SCHL and some of these changes may be lost in an analysis of two broad periods. Nonetheless, as mentioned above, 1970 was selected since it represents a time when several changes worth noting occurred. In actual fact, it may be more precise to select the period between 1960 and 1970 as a period of transition. Thus, an incoherence that occurred in the 1960s may be indicated under the second period, especially if the effects of the conflict were mostly experienced after 1970.
- 2. Coherence problems that appear in table 5.2 (1970-today) may appear to be more significant that they in fact are. Information regarding goods and services are more complete and easier to obtain for this second period, thus conflicts are easier to identify. In some cases, coherence problems may also have existed in the first period but they are harder to pinpoint.
- 3. The severity of a coherence problem may not necessarily be great, but may nonetheless be worth recording. Thus, even though an element of incoherence may exist for a good or service in both periods, it may be that there have been improvements or deteriorations in coherence that are not detectable in this kind of gross analysis.

5.2 EVOLUTION OF EXTENT AND COHERENCE

Table 5.1 – Elements for evaluating extent and coherence: 1921 – 1970

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	No	Yes	
RS2 Technical services	Yes	Yes	No	-	-	-	
NR Non-residential		•			•		
NR1 Non-residential space	Yes	Yes	No	-	-	-	
NR2 Collective indoor space	Yes	Yes	Yes	No	Yes	No	
NR3 Functional indoor space	Yes	Yes	No	-	-	-	
NR 4 Collective outdoor space	Yes	Yes	No	-	-	-	
PF Production factor		1	11		1	1	
PF1 Capital investment	Yes	Yes	No	-	-	-	
PF2 Land investment	Yes	Yes	Yes (x3)	Yes (x1)	No	Yes (x1)	
PF 3 Labour investment	Yes	Yes	Yes (x3)	Yes (x1)	Yes (x1)	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			11				
NM 1 Solving housing need	Yes	Yes	Yes (x4)	No	Yes (x2)	Yes (x2)	
NM 2 Solving non- housing need	Yes	Yes	Yes	No	Yes	No	
NM 2 Shaping characteristic landscape	Yes	Yes	No	-	-	-	
NM 4 Social and cultural complexity	Yes	Yes	Yes	No	No	No	
NM 5 Conservation and transmission of values	Yes	Yes	No	-	-	-	
O Other			11		1	1	
O 1 Political gain	-	-	-	-	-	-	
O 2 Economic gain	-	-	-	-	-	-	
	I		11	1			

RS ResidentialRS1 Living spaceYRS2 Technical servicesYNR Non-residentialY	Reg? (es (es (es	Sufficient? Yes Yes	Conflict? Yes Yes	Poorly defined use- rights?	Contradictions between public policies?	Incoherence btwn. property rights, contracts and policies?
RS1 Living spaceYRS2 Technical servicesYNR Non-residentialYNR1 Non-residentialY	les			37		
RS2 Technical services Y NR Non-residential NR1 Non-residential Y	les			X 7		
NR Non-residentialNR1 Non-residentialY		Yes	Ves	Yes	No	No
NR1 Non-residential Y	les		105	Yes	No	No
	les		u.			
		Yes	No	-	-	-
	les	Yes	Yes	Yes	No	No
	les	Yes	No	-	-	-
*	les	Yes	No	-	-	-
PF Production factor			u	1		.1
PF1 Capital investment Y	les	Yes	Yes	No	Yes	No
÷	les	Yes	Yes	Yes (x1)	No	Yes (x1)
PF 3 Labour investment Y	les	Yes	Yes	Yes (x1)	Yes (x1)	No
US Utility services			Ш	()		.1
	les	Yes	Yes	No	No	Yes
	les	Yes	No	-	-	-
	les	Yes	No	-	-	-
	les	Yes	No	-	-	-
US 5 Water discharge Y	les	Yes	Yes	Yes	No	No
UF Urban function			Ш			.1
UF 1 Design urban Y space Y	les	Yes	Yes	No	Yes	No
	les	Yes	No	-	-	-
	les	Yes	No	-	-	-
UD 4 Demand goods Y and services	les	Yes	No	-	-	-
NM Nonmaterial				-	-	-
NM 1 Solving housing Y need	les	Yes	Yes	No	No	Yes
	les	Yes	No	-	-	-
	les	Yes	No	-	-	-
	les	Yes	No	-	-	-
÷	les	Yes	No	-	-	-
O Other					-	•
O 1 Political gain -		-	-	-	-	-
O 2 Economic gain -		-	-	-	-	-

 Table 5.2 – Elements for evaluating extent and coherence:
 1970 – present

Good or service	Extent			Coherence			
	1920-	1970s-	Change	1920-	1970s-	Change	
	1970s	today		1970s	today		
RS Residential						-	
RS1 Living space	High	High	+	Low	Low	-	
RS2 Technical services	High	High	+	High	Low		
NR Non-residential							
NR1 Non-residential space	High	High	+	High	High	+	
NR2 Collective indoor space	High	High	+	Low	Low	-	
NR3 Functional indoor space	High	High	+	High	High	+	
NR 4 Collective outdoor space	High	High	+	High	High	+	
PF Production factor				1			
PF1 Capital investment	High	High	+	High	Low		
PF2 Land investment	High	High	+	Low	Low	-	
PF 3 Labour investment	High	High	+	Low	Low	_	
US Utility services	Ingn	Ingn	I	LOW	LOW	_	
US 1 Energy demand	High	High	I	High	Low		
US 2 Material sink	<u> </u>	Ű	+	High			
US 3 Material discharge	High	High	+	High	High	+	
US 4 Water sink	High	High	+	High	High	+	
	High	High	+	High	High	+	
US 5 Water discharge UF Urban function	High	High	+	High	Low		
		·		1	1	r	
UF 1 Design of urban space	High	High	+	Low	Low	-	
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				11		•	
NM 1 Solving housing need	High	High	+	Low	Low	_	
NM 2 Solving non- housing need	High	High	+	Low	High	_	
NM 2 Shaping characteristic landscape	High	High	+	High	High	+	
NM 4 Social and cultural complexity	High	High	+	High	High	+	
NM 5 Conservation and transmission of values	High	High	+	High	High	+	
UF Urban function							
O 1 Political gain					[
•	•••	•••	•••				
O 2 Economic gain	•••						
	+ Remains high Increases						
- Remains lov	N		► De	creases			

Table 5.3 – Evolution of extent and coherence

5.2.1 Overall evaluation

The institutional regime of the SCHL housing stock can be considered integrated and has generally remained so throughout the history of the SCHL.

Regime extent

The extent of the regime is very high since there are no use-rights to goods and services of the housing stock that are unregulated. This is likely a 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.) Second, the SCHL has remained the sole stockowner over the course of the stock's history thereby ensuring that regulations regarding use-rights to goods and services have not been "lost" as a result of stockowner turnover.

Regime coherence

The coherence of the regime has remained high, although the use of some goods and services produce conflicts that are the result of unclear use-rights, contradictions between policies or incoherencies between property rights, contracts and policies.

There are three ways in which elements for assessing coherence have evolved:

- 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.

Coherence remains low

There are five goods and services for which coherence has remained low over the two periods.

RS 1 Living space

The analysis of *RS 1 Living space* indicates that poorly defined use-rights in both periods contribute to a poorer coherence of the regime. During the first period, several tenants of the SCHL were obliged to leave their subsidised apartments since they no longer fulfilled the occupancy conditions described in federal laws, such as having maximum household income. Although wages in Switzerland were increasing, the Confederation would not adjust the income conditions to reflect this reality. Thus, even though these cooperative members were

often considered ideal tenants, the SCHL was obliged to cancel their leases, leaving them ineligible for subsidised housing yet with incomes insufficient to cover rents on the open market, which were as much as three times the subsidised rate.

This incoherence between the regulations of the SCHL concerning tenant eligibility and housing policy regarding subsidised housing improved throughout the 1970s for two reasons. Firstly, the Confederation finally increased the maximum household revenue allowed for tenants living in subsidised housing, thereby allowing more tenants to stay in their apartments. Secondly, occupancy conditions for new subsidised housing changed in 1974 with the introduction of the new federal law on housing, LCAP. Simultaneously, the SCHL avoided using federal assistance for subsidised housing to avoid imposing occupancy conditions on any of its tenants. Thus, in the second period of analysis, there was a marked improvement in coherence in this aspect of *RS 1 Living space*.

Starting in the early 1960s and continuing well into the second period of analysis, however, a second conflict arose regarding the use of *RS 1 Living space* – that of under-use of apartments by tenants. As households began to shrink for demographic and social reasons, many large SCHL apartments that had previously held large households were now being occupied by households of one or two people. The SCHL had no legal means to oblige tenants in under-used apartments to move to more suitably sized ones. Since most of these tenants refused to move, members of the SCHL on the waiting list for an apartment remained deprived of one. Although this conflict was the result of a demographic shift, the unclear use-right to *RS 1 Living space* meant the SCHL was unable to solve it.

Despite the important elements of incoherence in each of the two periods, it is worth noting that the tenants of the SCHL *overall* have very good use of the living space. Rents are below that of market housing and the quality of apartments is generally very good. That coherence has remained "low" over the two periods is more indicative of areas for improvement rather than problems that threaten the use of the *RS 1 Living space* or the housing stock as a whole.

NR 2 Collective indoor space

Similarly to *RS 1 Living space*, the conflicts in the use of *NR 2 Collective indoor space* in the first period and the second period of analysis are the result of two unrelated events. The first conflict manifested itself in the latter part of the first period. As the number of cars in Lausanne climbed throughout the 1950s, local regulations stipulated that new construction had to include on-site parking; consequently, the SCHL built indoor parking garages the spaces of which were to be rented by tenants. Many tenants, however, preferred to use the free street parking near their buildings, parking made possible by obligatory street-widening that consumed SCHL land and was done at the SCHL's expense. The tenants' under-use of indoor parking spaces reduced the rental revenue to the SCHL, thereby having a negative effect on the SCHL's use of *PF 1 Capital investment*. This problem was circumvented when the SCHL regulated that all tenants with a car must park in the SCHL garages; it did not, however, resolve the overall problem of the policy contradiction of street-widening and obligatory parking spaces for new construction.

The conflict of the second period was entirely different. The SCHL had built communal rooms for the use of SCHL tenants, once in the 1970s and again in the 1990s. In both cases, the rooms were well received by the tenants. Unfortunately, there were no regulations obliging the tenants to maintain the rooms (poorly defined use-rights) and they deteriorated

after a period of a couple of years. The SCHL resolved this problem by simply no longer building common rooms in any of their new buildings.

As with *RS 1 Living space*, the use of *NR 2 Collective indoor space* is generally good despite the problems indicated above. The problems with coherence indicate areas that could be improved rather than fundamental conflicts that threaten the sustainability of this good.

PF 2 Land investment and PF 3 Labour investment

The use of both *PF 2 Land investment* and *PF 3 Labour investment* have been problematic over both periods of the analysis.

Throughout the SCHL's history, the cost of land has consistently been a major obstacle to new construction projects, particularly during times of high speculation. Thus, despite periodic attempts by public authorities to resolve the conflict surrounding land, the incoherence between real estate law and housing policy has allowed landowners to demand land prices that public-interest housing organisations - supported in principle by public authorities - simply cannot afford. This under-use of PF 2 Land investment is exacerbated by certain private landowners who do not wish to sell land to the SCHL and other cooperatives for a variety of reasons, including not having a favourable opinion of housing cooperatives and subsidised housing, and frustration with the additional density that public-interest organisations are occasionally granted. Thus, in both periods, the over-use of land investment in for-profit housing has resulted in the under-use of the SCHL's PF 2 Land investment service. Finally, the scarcity of suitable land is likely the biggest obstacle to the construction of affordable housing (Krebs 2006, Leimgruber 2006, Virchaux 2006). Particularly in the second period, the creation of laws governing noise⁷⁵, pollution⁷⁶, and the transport of dangerous goods⁷⁷, for example, continues to place restrictions on the use of land, particularly in urban centres.

The cost and the scarcity of labour have also been constant threats and hindrance to new housing construction projects. Whether it is a severe labour shortage, such as in the early 1960s, or skyrocketing labour prices, a constant under-use of the SCHL service *PF 3 Labour investment* has forced the SCHL to review its criteria for hiring labour and has heavily affected its construction and renovations cycles. Although urgent federal decrees have occasionally been passed to free up labour and reduce costs for public-interest housing, there exists contradictions between housing policy and economic policy that, at least partially, are responsible for the conflict surrounding *PF 3 Labour investment*.

Finally, another type of conflict involves the combined uses of *PF 2 Land investment* and *PF 3 Labour investment*. Landowners have sold land to the SCHL on the condition that it uses specific labour services for the construction project, such as a particular architect or trade. Thus, although the SCHL is the new property rights owner, they are not entirely free to conclude contracts with whichever construction actors it desires. Instead, the landowner has the contracting power to determine the use-right of *PF 3 Labour investment*. This arrangement is not necessarily a bad one, but on occasion the SCHL has been obliged to use services that were less than satisfactory.

⁷⁵ OPB (RS 814.41)

⁷⁶ OPair (RS 814.318.142.1)

⁷⁷ OMoD (RS 814.610)

Conflict arising from the use of *PF 2 Land investment* and *PF 3 Labour investment* perhaps have the greatest effects on the SCHL's ability to use *NM 1 Solving general housing needs* since they directly impede construction projects.

UF 1 Design of urban space

The use of the SCHL's buildings to design urban space has been a source of conflict since the foundation of the SCHL. Zoning regulations can include simple design elements such as the density of housing and maximum number of floors of buildings. The SCHL has often sought special dispensations to these regulations to increase the number of units they can produce on a given parcel of land and consequently, increase revenue to keep rents low. Negotiations with public authorities on this point have resulted in changed designs. Thus, planning policy, which can restrict the number of housing units, can contradict housing policy, the objective of which is to encourage more affordable housing.

Further conflict occasionally occurs between the use of *UF 1 Design of urban space* and *NM 4 Social and cultural complexity*. Neighbours of future housing construction projects may lodge objections during the public consultation process and the SCHL has on several occasions had the experience of neighbours objecting presumably due to prejudices associated with cooperative and affordable housing. Neighbours' under-use of *NM 4 Social and cultural complexity*, therefore, has affected the way in which the SCHL and local public authorities can use the buildings of the SCHL stock for urban design purposes.

Coherence has decreased

The analysis shows that four goods and services have experienced a decrease in coherence from the first to the second period.

RS 2 Indoor climate and technical services and US 5 Water discharge

The apparent decrease in coherence since 1970 of *RS 2 Indoor climate and technical services* and *US 5 Water discharge* is not very significant; rather, it indicates shortcomings in the current regime and where modifications could help resolve conflicts.

Throughout the 1990s and the 2000s, the number of prescriptions filled has increased considerably, meaning more unused medications are being flushed by tenants down drains and toilets (Kadri 2006). These medications end up in water bodies, such as the Lac Léman, that also provide drinking water, wildlife habitat and other functions that are harmed by the presence of micro-pollutants. Currently, there is no way of controlling or regulating how tenants use the flushing technical services of their apartments; the institutional regime, therefore, will have to change so that the Services d'assainissement, users of the good *US 5 Water discharge*, is obliged to treat the "new" wastewater to acceptable health and environmental standards. In actual fact, the Services d'assainissement is already pursuing new technologies to deal with this problem; in this case, the required changes in regime, i.e. changes in policy addressing water pollution, will likely follow suit.

The period between 1920 and 1970 likely also witnessed conflicts in the use of technical services and water discharge (as well as other utility services). No doubt there were periods when the regime had to catch up to the progression of technology and environmental, health and comfort standards, and vice versa. However, this most recent example of the treatment of micro-pollutants was the one most explicitly mentioned and clearly shows the evolution of the relationship between regimes, technology, and changing behaviour.

PF 1 Capital investment

The conflict concerning *PF 1 Capital investment* is one that did not have a direct impact on the SCHL but that affected affordable housing in general. Although federal housing policy encouraged the construction of affordable housing (at least in theory), fiscal policy allowed banks to severely under-use the *PF 1 Capital investment* potential of low- to mid- rent housing construction and instead invest in speculative and more immediately profitable sectors. Thus the contradiction between housing and fiscal policies meant that many public-interest housing organisations could not find the capital to invest in new housing or renovations, thereby negatively affecting their use of *NM 1 Solving general housing needs* as well as that of public authorities. This conflict, though also present in the 1960s, has been particularly pronounced since the 1970s, especially during the overheated economy of the mid-1980s.

US 1 Energy demand

Similarly to *RS 2 Indoor climate and technical services* and *US 5 Water discharge*, the conflict in the second period regarding *US 1 Energy demand* is not necessarily indicative of a decline in coherence in the regime. The conflict arises due to two branches of the Services industriels (SIL) that provide heating: district heating and gas. Public policy (particularly as described in the new cantonal law on energy LVLEne) discourages energy production based on non-renewable resources, even ones considered cleaner like natural gas. However, the SIL continues to promote natural gas as an environmental option for satisfying heating demand. It is worth noting, however, that as the regime has changed to include stricter environmental performance relating to energy, the SIL has jointly taken measures to use energy demand in a way that minimises environmental impact. Thus, this conflict arises as a by-product of efforts to make the housing stock more sustainable. Conversely, during the first period, heating oil – a much more polluting heating energy source – was commonly used and since there were no policies or other regulations limiting its use, conflict was avoided.

Coherence has increased

There are two goods and services that have experienced an improvement in their level of conflict.

NM 1 Solving general housing needs and NM 2 Solving non-housing needs

Along with the RS 1 Living space, NM 1 Solving general housing needs is the good and service most associated with the use of the housing stock for housing purposes. Since the use of this good and service is closely intertwined with that of many others, it is not surprising that numerous conflicts are somehow related to NM 1 Solving general housing needs. The number of conflicts, however, appears to have decreased from the first period to the second, thereby indicating an improvement in coherence.

During the first period, the use of *NM 1 Solving general housing needs* experienced four main conflicts, only one of which has continued into the second period.

Firstly, the incoherence between housing policy and SCHL rental regulations (refer to the conflict of *RS 1 Living space* in "coherence remains low", above) meant that the SCHL was unable to use its stock in a way that it deemed best solved the housing needs of its members as it was forced to evict tenants who no longer qualified for subsidised housing. Secondly, the federal housing laws of 1958 and 1965 that were formulated to help public authorities and public-interest housing organisations provide affordable housing contained numerous

contradictions that resulted in federal assistance being unused, causing a severe under-use of *NM 1 Solving general housing needs* by both actors. Thirdly, measures to cool the economy in 1964 (which included the use of *NM 2 Solving non-housing needs*) had a further unintended negative effect on affordable housing construction, again reducing the ability of actors to use *NM 1 Solving general housing needs*. Each of the above conflicts was more or less resolved, or at the very least improved, with changes in public policy (e.g. loosening of occupancy conditions, the introduction of a new federal housing laws in 1974 and again in 2003).

The conflict that has remained constant during both periods is that regarding the acceptance of subsidies. At various times during its history, the SCHL has chosen not to accept subsidies from public authorities when the conditions of acceptance have meant that the SCHL would lose management independence. Thus, whenever the SCHL has rejected subsidies, the use of *NM 1 Solving general housing needs* by public authorities has been threatened, and whenever they have accepted subsidies, the SCHL's use of this service has been compromised.

5.2.2 Characterisation of the regime

The conflicts of *PF 2 Land investment* and *PF 3 Labour investment* along with the public authorities use of *NM 1 Solving a general housing need* are the three elements that most affect the SCHL's management strategy and ability to provide housing for its members. Nonetheless, as will be explained in Chapter 6, the SCHL has had an adaptive management strategy that has allowed it to more or less successfully deal with these challenges and continue to have a successful housing stock.

Notwithstanding the conflicts due to incoherencies in the regulation of the use of a few of the goods and services, the regime of the SCHL can be characterised as being integrated. Although some of the conflicts are indeed important and require concerted efforts by all actors to resolve, none produce effects that threaten the long-term viability of the housing stock or of the use of its many goods and services.

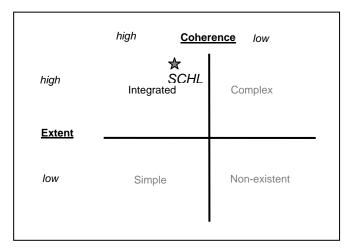


Figure 5.1 – Characterisation of the SCHL institutional regime

CHAPTER 6 – CONCLUSIONS

6.1 INTRODUCTION

The institutional regime of the SCHL 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 SCHL's management strategy 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 broad time periods, 1920 to the 1970s and the 1970s 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 SCHL 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 SCHL – KEY FINDINGS

Although table 5.3 indicates areas where coherence may be weak, in actual fact the regime (and changes in the regime) have not had any appreciable negative effect on the SCHL housing stock or on the use of goods and services by other user actors. This section addresses other features of the institutional regimes analytical framework as applied to housing stocks in general and the SCHL case study in specific:

- Conflicts caused by the external factors
- The need for institutional regimes to address future conflicts
- How the SCHL management strategy helps avoid some conflicts
- Conflicts and the multiple-stock actor
- Uniqueness of the SCHL management strategy within its institutional regime

Causes of conflict – Institutional regime versus external factors

As discussed earlier, a coherent regime is one in which: 1) use rights (derived from property rights through contracts) are clearly defined, 2) there are no contradictions between public policies of a regime 3) there are no contradictions between public policies and contracts or property-rights. The presence of a conflict (and not just a rivalry, which is a common and expected occurrence) in the use of one or several goods and services has been used as an indicator of incoherencies or contradictions in the regime. As the analysis shows, however, a conflict between user-actors regarding the use of goods and services does not definitely indicate the presence of an element of incoherence, it only gives us a clue that an incoherence might exist.

In some SCHL cases, conflict has indeed been a clear indicator of incoherence. For instance, the use of subsidised housing (i.e. *RS 1 Living space*) by members of the SCHL was severely compromised during the many years in which tenant incomes were increasing but the conditions of occupancy set by the authorities remained fixed. The SCHL was obliged to evict these tenants who had otherwise been good cooperative members and who would subsequently find it very difficult to find non-subsidised yet affordable housing in the rental

market. The incoherence between the conditions described in housing policy at the time and the regulations of the SCHL obviously created conflict.

Other conflicts, however, may be 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 SCHL as well as the use of goods and services by other user actors. For example, the conflict that arose when tenants started to under-occupy apartments was a result of a demographic and social shift that resulted in smaller households. Increasing awareness of the environmental effects of non-renewable energy, spurred by the oil shock of 1973, caused a major shift in the way the SCHL approaches energy diversification in its stock, the Services industriels Lausanne promotes and provides cleaner energy alternatives for heating, and regulatory bodies at all levels of government change laws to discourage non-renewable energy use in new housing. Finally, the conflict that is developing regarding the treatment of micro-pollutants in wastewater from housing stocks is the result of a recent explosion in the (over-) prescription of medications.

Analysis of the SCHL institutional regime also demonstrates that a clear relationship between the existence of a housing need and an actor's attempt to use the SCHL stock to solve this need does not always exist. This is particularly evident in the failure of a number of housing policies whose intention it was to increase affordable housing but did not. Sometimes the mechanism did not work or had perverse effects, as was the case with the federal housing laws of 1958 and 1965. At other times, a definite need existed and insufficient or no action was taken, sometimes because other problems or needs rightly or wrongly took precedence over that of affordable housing, such as during the years when construction labour was diverted to more profitable sectors. In such cases, the SCHL housing stock as well as other housing stocks are left under-, over-, or mis-used.

Institutional regimes to address future conflict

Clearly, conflicts arising from problems in the institutional regime and conflicts arising from external factors are not mutually exclusive. A regime that is not adaptable to future circumstances, particularly those that are foreseeable, likely will be less capable of addressing conflicts arising from external factors. Similarly, although the regime might not be responsible for the presence of a conflict, it can certainly be used to mitigate the external factors that are. This last point has been made evident a number of times over the course of the SCHL's history when economic conditions or the housing market in Switzerland (i.e. external factors) caused crises in affordable housing and legislative bodies have used new laws to try to temper these effects.

Interviews with user-actors provide insight into where the regime may develop lower coherence or lower extent in the future. As technologies change in response to environmental awareness, this becomes critical if sustainable use of housing stocks' goods and services is to be maintained. One example cited is that of the desired use of rainwater for toilet flushing, an action considered more environmentally friendly and one that implies a change in the use of *RS 2 Indoor climate and technical services* by tenants and *US 5 Water discharge* by the Services d'assainissement, the wastewater treatment facility. Currently, the Services d'assainissement bills clients according to the amount of potable water they consume as measured by the water utility, eauservice. If tenants replace potable water with rainwater for flushing and gardening purposes, their consumption of water from eauservice—and thus their

bills for water treatment—will decrease accordingly; however, the volume of wastewater sent by each household to the wastewater treatment network will remain the same. Consequently, the Services d'assainissement will have less revenue to treat the same amount of wastewater (Kadri 2006).

The above example clearly demonstrates that before incorporating elements in the design and planning of collective housing meant to improve the sustainability of the built environment, organisations must ensure that these aspects will not have a destabilising effect on the regime. Institutional and legislative organisations must understand how these changes will affect other actors' uses of their goods and services.

SCHL management strategies to resolve conflict

The integrated character of the regime is due in large part to the adaptability of the SCHL management strategy. When coherence issues have arisen, the SCHL has changed management strategy to avoid the incoherent element as much as possible. Thus, in the case of policies and regulations surrounding housing subsidies described in Chapter 4, the SCHL has been able to continue using the service *NM 1 Solving general housing needs* by self-financing construction projects, the capital of which comes from member shares. As the management strategy adapts, some coherence problems simply disappear since they are no longer applicable.

The SCHL's adaptable management strategy has allowed it and the user-actors that use the goods and services of its stock to successfully avoid some conflicts that other stockowners and user-actors have experienced. For instance, when rent control was abandoned in 1966, rents increased in Lausanne by 40% over the following four years – a national record. Thus a conflict quickly developed between the use of *RS 1 Living space* by tenants in the city of Lausanne and *PF 1 Capital investment* by investors who sought to maximise profits. Rents in the SCHL housing stock, however, increased very little thanks largely to the SCHL's strategy of keeping rents as low as reasonably possible. Thus, SCHL member-tenants avoid the conflict experienced by so many other renters in the Lausanne area.

Conflicts of multiple-stock actors

Multiple-stock actors are those that use the goods and services not only of a single stock, such as that of the SCHL, but of many stocks simultaneously. Typical multiple-stock actors include utility services (who use the US Utility goods and services), investors (who use PF Production factor goods and services), and public authorities (who use NM Nonmaterial goods and services, particularly NM 1 Solving general housing needs). Consequently, although the use of SCHL goods and services or the changing management strategy of the SCHL does not by itself have a great effect on multiple-stock actors, the cumulative effects of the many stocks from which these actors use goods and services do. During interviews of multiple-stock actors, conflicts would emerge that were not necessarily a product of the SCHL stock but of other housing stocks. Two examples follow:

• Collection of recyclables: The owners of buildings with five or more apartments must provide collective bins for tenants to dispose of recyclable materials but not all stockowners do so. The reason most cited is that there is insufficient outdoor space in which to locate these bins (conflict in use of *NR 4 Collective outdoor space*). Household recycling objectives (as set by the Services d'assainissement of Lausanne) have not yet been met – the objective is a 60% recycling level; the current level is 36% – and lack of

bins may be a contributing factor (Kadri 2006). An analysis of one of these stocks would indicate a low extent as indicated by the ability of stockowners to flout regulations and not provide recycling bins. The SCHL, however, does not fall into this category of stockowner since it provides bins for all of its buildings, thus the extent in this particular case study analysis remains high.

• Poor maintenance of technical equipment: Eauservice is responsible for the water infrastructure up to the entrance of buildings; equipment inside buildings is the responsibility of the stockowner. When a tenant suspects water quality has fallen below acceptable levels and lodges a complaint with eauservice, the latter has the right to test the water quality. If a problem exists within the building walls, all it can do is recommend that the tenant contact the owner to have the problem fixed (Truffer 2006). Since there are no legal means for the water services to put pressure on the stockowners to maintain the equipment in their buildings, extent is low regarding the regulations surrounding *RS 2 Indoor climate and technical services* and *US 4 Water demand*. However, since the SCHL does maintain its water equipment, it is not part of the problem and extent in this case remains high.

The conflicts above indicate where the regime could and does allow certain stockowners to manage their stock in a way that causes conflict, even if the SCHL management chooses not to.

Although multiple-stock actors are for the most part indifferent to the management strategies of just the SCHL, when a good or service offered by many stocks becomes scarce, the management strategies of a single stockowner such as the SCHL can have a large impact on these same stock actors. One example of this is the SCHL's efforts to use local labour and materials. During the housing crisis of the mid-1970s when the housing construction industry was at a near standstill, the SCHL made efforts to give work to local construction companies.

Implications of the institutional regime and SCHL management strategy

Not all housing cooperatives that belong to same institutional regime as that of the SCHL have the same management strategy; the regime allows a degree of flexibility that allows cooperative owners and managers to have strategies and make decisions that make each cooperative unique. Analysis of goods and services and interviews with SCHL management and other user-actors have shown that the SCHL does not always act in a way typical of other housing cooperatives. This is best exemplified by the SCHL's approach to subsidised housing. Whereas most cooperatives choose to build subsidised housing, the SCHL has emphasised its management independence and obligation to its members by not accepting subsidies when either of these SCHL priorities are put at risk.

This atypical behaviour is interesting in terms of how other cooperatives could manage their housing if they so desired. Since the SCHL is one of the only cooperatives (if not the only one) not to currently accept cantonal or communal subsidies, public authorities (a multi-stock actor) still have many cooperatives from which they can use the service *NM 1 Solving general housing needs*. But since there is nothing in the regime obliging cooperatives to accept subsidies, there is always the possibility, though unlikely, that other cooperatives will follow suit and not build subsidised housing. As seen in the federal housing laws of 1958 and 1965, the existence of a regime that provides subsidies does not mean stockowners will actually use them. For the moment, however, the fact that the SCHL does not build subsidised housing

does not have a significant effect on public authorities simply because public authorities have access to *NM 1 Solving general housing needs* from a multitude of other housing stocks.

6.3 ANALYSIS OF HYPOTHESES

Although a single case study is insufficient to draw conclusions regarding the hypotheses presented in the introductory chapter, the analysis of the SCHL and its regime over time allows us to make some preliminary conjectures.

Hypothesis 1 – Variance of strategies and use over time

The management strategy of the SCHL and the behaviour of actors with use-rights to the goods and services of the SCHL 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. In the case of the SCHL housing stock, it is this final reason that is the principle cause for changes in management strategy and user-actor behaviour.

The definition of rights to the *RS Residential goods and services* has remained consistent since the foundation of the SCHL. The SCHL has remained a cooperative and, with very few exceptions, tenants are composed nearly exclusively of SCHL members. Slight variations have occurred in terms of members' and tenants' financial obligations to the SCHL (i.e. the purchase of shares), but by and large their rights have remained the same. Similarly, basic property rights that also include the rights of owners to conclude contracts with other user-actors have not changed. The SCHL has remained the sole owner of its housing stock and its legal form has not varied. Public policies that regulate the rights to goods and services, however, have changed.

Changes in strategy have occurred, however, as a result of changes in public policies, particularly those related to housing assistance and subsidies. As we have seen, the SCHL has modified its strategy relating to the acceptance or not of subsidies in response to the conditions set out in the granting of subsidies with the result that tenants of SCHL buildings have progressively shifted from labourers to the middle class. Another effect of housing policy has been the increased investment of capital by the SCHL (and its members) in its construction projects, thereby requiring tenants to purchase additional shares.

Aside from the SCHL and its tenants, the actions of other actors have been influenced by public policy. For instance, the new cantonal energy policy will have profound effects on actors who use housing stocks' demand for energy and planning policy, which includes zoning regulations, have changed the way in which architects, planners and the SCHL have been able to use the buildings of the stock to design urban space.

To conclude, our analysis indicates that 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.

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

Unsustainable use of the housing stock resulting from stockowner 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 SCHL's regime has a high extent (i.e. is not simple) and has few unregulated rivalries (i.e. is not complex). As the analysis shows, the regime of the SCHL housing stock is fairly well-integrated with few uses of goods and services that are over-used, under-used or misused and that could be considered unsustainable. This is confirmed by the observation of no significant deterioration of the stock. The regime makes it possible for the housing-related goods and services to be treated as primary to the other goods and services since it gives the SCHL management the flexibility to make autonomous decisions that emphasise the goods and services necessary for residential purposes: buildings are regularly renovated to ensure good living space, the housing needs of member-tenants are a top priority, and rents are kept below the market average. Thus, for the most part, the SCHL, a cooperative for which all tenants are members and have voting rights, has a veto-type position in terms of prioritising residential goods and services.

Hypothesis 3 – Importance of other goods and services

The ability of the SCHL to prioritise the goods and services necessary for living purposes does not, however, preclude other user-actors from using the stock's non-residential ones. 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

Since its foundation in 1921, the SCHL has remained a housing cooperative whose tenants are composed of SCHL members. Although individual tenants and management staff have obviously changed over the years, the owner, the legal form and basic composition of this organisation have remained the same, thus ensuring a continuity of the principal actors. Since this low turnover rate has helped ensure that the memory of the stock is maintained, the use rights to the goods and services have remained documented.

6.4 THE INSTITUTIONAL REGIME AS A MEANS OF ANALYSING THE HOUSING STOCK

The SCHL housing stock creates use-rights for many actor communities beyond just tenants and the SCHL management. Without the goods and services provided by the SCHL housing stock (and others), these actors could not conduct their activities. Banks, utility services, local businesses, and public authorities amongst many others calculate their activity on the basis that these use-rights exist. By understanding which actors have use-rights to which goods and services, and how these use-rights are formalised in public policy, property rights and contracts, we can better understand 1) how the behaviour of these actors affect the sustainability of the stock, and 2) how various actors depend on housing to fulfil their own objectives, and thus affect the sustainability of the built environment in a broader sense. A stabilised framework of public policies, property rights and contracts ensures the use-rights to goods and services remain continuous, stable, and foreseeable, thus allowing these actors the sustainable functioning of their activities.

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. Thus, any analysis of housing and sustainability that does not include non-residential actors risks neglecting the important relationship between housing and other systems of the built environment.

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CITED LEGISLATION

Federal

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Articles 35^{sexies}, 36^{septies} aCst. (1972)

- Art. 89 Cst. Politique énergétique
- Article 108 Cst. Encouragement de la construction de logements et de l'accession à la propriété

Article 109 Cst. Bail à loyer

Civil code and Code of obligations

Art. 675 CC: Droit de superficie

- Art. 253-274 CO: Titre huitième: Du bail à loyer
- Art. 356-358 CO: Titre dixième: du contrat de travail, Chapitre III: De la convention collective de travail et du contrat-type de travail

Art. 828-926 CO : Titire vingt-neuvième : De la société coopérative

Laws in effect

Ordonnance sur le bail à loyer et le bail à ferme d'habitation et de locaux commerciaux du 9 mai 1990 (OBLF) **RS 221.213.11**

Loi fédérale sur les droits de timbre du 27 juin 1973 (LT) RS 641.10

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Loi fédérale sur la protection de l'environnement du 7 octobre 1983 (LPE) RS 814.01

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Ordonnance sur la protection contre le bruit du 15 décembre 1986 (OPB) RS 814.41

Ordonnance sur le traitement des déchets du 10 décembre 1990 (OTD) RS 814.600

Ordonnance sur les mouvements de déchets du 22 juin 2005 (OMoD) RS 814.610

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- Ordonnance du 26 novembre 2003 encourageant le logement à loyer ou à prix modérés (OLOG) **RS 842.1**
- Loi fédérale encourageant la construction et l'accession à la propriété de logements du 4 octobre 1974 (LCAP) **RS 843**

Repealed

Loi fédérale sur le séjour et l'établissement des étrangers du 26 mars 1931 (RO 1931 I 437)

- Arrêté fédéral du 8 octobre 1947 concernant les mesures destinées à encourager la construction de maisons d'habitation (RO **1948** 7)
- Ordonnance du 28 décembre 1956 concernant le contrôle des loyers et la limitation du droit de résiliation (RO **1956** 1731)
- Arrêté fédéral du 31 janvier 1958 concernant l'encouragement à la construction de logements à caractère social (RO **1958** 433)
- Ordonnance du 11 avril 1961 concernant les loyers et les limitations du droit de résiliation (RO **1961** 307)
- Arrêté du Conseil Fédéral du 1 mars 1963 restreignant l'admission de main-d'oeuvre étrangère (RO **1963** 185)
- Arrêté fédéral du 13 mars 1964 concernant la lutte contre le renchérissement par des mesures dans le domaine de la construction (RO **1964** 213)

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- Arrêté fédéral du 25 juin 1971 concernant la stabilisation du marché de la construction (RO **1971** 961)
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- Arrêté fédéral du 20 décembre 1972 instituant des mesures dans le domaine du crédit (RO **1972** 3121)
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- Arrêté fédéral du 6 octobre 1989 concernant la charge maximale en matière d'engagement des immeubles non agricoles (RO **1989** 1978)
- Arrêté fédéral concernant des dispositions en matière de placement pour les institutions de prévoyance professionnelle et pour les institutions d'assurance (RO **1989** 1981)

CANTON OF VAUD LEGISLATION

In effet

- Art. 56 Constitution du canton de Vaud du 14 avril 2003 (Ressouces naturelles et énergie) RSV 131.231
- Art. 67 Constitution du canton de Vaud du 14 avril 2003
- Loi du 12 mai 1982 fixant la procédure dans les contestations relatives aux baux à loyer immobiliers et aux baux à ferme non agricoles (LPCBL) **RSV 221.311**
- Arrêté du 8 octobre 2001 déclarant de force obligatoire générale le contrat-cadre de baux à loyer comprenant les dispositions paritaires romandes et les règles et usages locatifs du Canton de Vaud (AFCBD) **RSV 221.317.1**
- Loi du 10 décembre 1969 sur la protection de la nature, des monuments et des sites (LPNMS) RSV 450.11
- Loi sur l'aménagement du territoire et les constructions (LATC) RSV 700.11
- Loi vaudoise de 30 novembre 1964 sur la distribution de l'eau (LDE) RSV 721.31
- Loi cantonale sur l'énergie du 16 mai 2006 (LVLEne) RSV 730.01
- Règlement d'application de la loi sur l'énergie du 4 octobre 2006 (RLVLEne) RSV 730.01.1
- Loi du 11 décembre 1990 sur les transports publics (LTPu) RSV 740.21
- Règlement sur la répartition entre communes des contributions accordées aux transports publics (RRTPu) **RSV 740.21.1**
- Loi vaudoise du 5 septembre 2006 sur la gestion des déchets (LGD) RSV 814.11

Règlement d'application de la loi du 3 décembre 1993 sur la gestion des déchets (RLGD)

RSV 814.11.1

- Loi cantonale du 17 septembre 1974 sur la protection des eaux contre la pollution (LPEP) RSV 814.31
- Loi du 9 septembre 1975 sur le logement (LL) RSV 840.11
- Règlement du 24 juillet 1991 sur les conditions d'occupation des logements construits ou rénovés avec l'appui financier des pouvoirs publics (RCOL) **RSV 840.11.1**
- Règlement du 17 janvier 2007 sur les conditions d'occupation des logements à loyers modérés (RCOLLM) **RSV 840.11.2.5**
- Règlement du 5 septembre 2007 sur l'aide individuelle au logement (RAIL) RSV 840.11.3
- Loi cantonale concernant la démolition, la transformation et la rénovation de maisons d'habitation, ainsi que l'utilisation de logements à d'autres fins que l'habitation du 4 mars 1985 (LDTR) **RSV 840.15**
- Arrêté du 8 octobre 2001 déclarant de force obligatoire générale le contrat-cadre de baux à loyer comprenant les dispositions paritaires romandes et les règles et usages locatifs du Canton de Vaud (AFCBD) **RSV 221.317.1**

Repealed

Loi cantonale du 8 décembre 1953 sur les mesures de coordination générale en matière de logement et d'encouragement à la construction de logements à loyers modestes

Loi sur le logement du 22 novembre 1965 sur les mesures de coordination générale en matière de logement et d'encouragement à la construction de logements à loyers modérés

REGULATIONS LAUSANNE

Règlement concernant la construction de logements du 11 mars 1947

Plan général d'affectation (PGA), règlement du 26 juin 2006

Règlement concernant le plan d'extension (RPE), du 3 novembre 1942 (superseded in 2006 by the PGA, above).

Règlement du 8 septembre 2004 sur les conditions d'occupation des logements construits ou rénovés avec l'appui financier de la commune de Lausanne.

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

Arrêté fédéral du 31 janvier 1958 concernant l'encouragement à la construction de logements à caractère social

• 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 apartment, based primarily on criteria such as ratio of household revenue to rent, size of apartment, 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

Loi fédérale du 19 mars 1965 encourageant la construction de logements

- 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 (*aide à équipement*) (introduced in the execution ordinance of 1970). Construction had to be simple and adapted to the needs of families and the rents of these apartments 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

Loi fédérale du 4 octobre 1974 encourageant la construction et l'accession à la propriété de logements (LCAP)

• The base assistance (*aide à la pierre*) 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 (Office fédéral du logement, OFL) so that the advance and interest accrued can be repaid. Rents can be lowered further as a function of individual assistance (*aide à la personne*). 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 LCAP assistance must meet quality criteria defined in the *système d'évaluation du logement* (housing evaluation system), or SEL.
- LCAP, 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 apartments continued—as planned—to increase. Many owners who built LCAP 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 LCAP since 2002, but the Confederation must continue to provide the base assistance already promised until 2015 and the additional assistance until 2025.

2003 - present

Loi fédérale du 21 mars 2003 encourageant le logement à loyer ou à prix modérés (Loi sur le Logement, LOG)

- The objective of the LOG 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 CCL, 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 (*programme d'allègement budgétaire 2003*) 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 (OFL 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 Ordonnance du 28 décembre 1956 concernant le contrôle des loyers et la limitation du droit de résiliation⁷⁸ forbids rent increases past those existing on December 31, 1956; similarly, the Ordonnance du 11 avril 1961 concernant les loyers et les limitations du droit de résiliation⁷⁹ 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

Arrêté fédéral du 30 juin 1972 instituant des mesures contre des abus dans le secteur locatif (AMSL)

- Originally, the AMSL 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 AMSL 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 AMSL, originally limited to a five-year period, was extended three times. Finally, most of the provisions of the AMSL are transferred to the revised Title Eight of the Code of Obligations on rental and farm leases (*bail à loyer et bail à ferme*).

1990 – present

Code of obligations CO art. 253 to 274 (Titre huitième : Du bail à loyer)

- Title eight of the Code of Obligations ("*droit du bail*") 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 (*répercussion des coûts*). 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 apartment in the same region or neighbourhood.

Ordonnance du 9 mai 1990 sur le bail à loyer et le bail à ferme d'habitations et de locaux commerciaux (OBLF) RS 221.213.11

• The ordinance consists of complementary measures for the execution of Title 8 of the Code of Obligations – *Droit du bail*.

⁷⁸ RO **1956** 1731

⁷⁹ RO **1961** 307

- Article 2 states that only certain articles of Title 8 of the Code of Obligations and of the present ordinance are applicable to apartments 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.
- 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 (OFL 2008).

Others related

The following consists of decrees that have been passed that have had an effect on housing in Switzerland. The list is not exhaustive but includes the major decrees referenced in this working paper.

1963

Arrêté du Conseil Fédéral restreignant l'admission de main-d'oeuvre étrangère du 1 mars 1963 (RO 1963 185)

1964

Arrêté fédéral concernant la lutte contre le renchérissement par des mesures dans le domaine de la construction du 13 mars 1964 (RO 1964 213)

1971

Arrêté fédéral concernant la stabilisation du marché de la construction du 25 juin 1971 (RO 1971 961)

1972

Arrêté fédéral concernant la stabilisation du marché de la construction du 20 décembre 1972 (RO 1972 3102)

Arrêté fédéral instituant des mesures dans le domaine du crédit du 20 décembre 1972 (RO 1972 3121)

1989

Arrêté fédéral urgent concernant un délai d'interdiction de revente des immeubles non agricoles et la publication des transferts de propriété immobilière du 6 octobre 1989 (RO 1989 1974)

Arrêté fédéral concernant la charge maximale en matière d'engagement des immeubles non agricoles du 6 octobre 1989 (RO 1989 1978)

CANTON OF VAUD

Housing assistance

1953 - 1965

Loi du 8 décembre 1953 sur le logement

- The Confederation halted all housing assistance after a national referendum on the matter in 1950. Still suffering from a housing shortage, the canton of Vaud decides to take on a more active role in the encouragement of housing construction.
- The housing law of 1953 sought to encourage the construction of 12'000 housing units in the following ten years. Under this law, the canton would 1) act as guarantor of reduced interest loans, 2) provide capital advances to communes that then redistribute it and also guarantee these loans, 3) provide loans directly to non-profit housing and construction organisations who are willing to follow restrictions imposed by the canton, and 4) coordinate and encourage communes to modify their construction and planning regulations to lower the costs of construction.

1965 – 1975

Loi sur le logement du 22 novembre 1965 sur les mesures de coordination générale en matière de logement et d'encouragement à la construction de logements à loyers modérés

• Nearly all housing assistance consists of loan guarantees, resulting in a reduction in rents. Furthermore, the canton can cover the interest on loans. The rents on housing having received assistance are controlled for twenty yeas. These measures make the Vaud housing law amongst the most effective in Switzerland (Kohler and Frei 1972).

1978 - present

Loi du 9 septembre 1975 sur le logement (LL), complemented by : Règlement du 24 juillet 1991 sur les conditions d'occupation des logements construits ou rénovés avec l'appui financier des pouvoir publics (RCOL); and Règlement du 17 janvier 2007 sur les conditions d'occupation des logements à loyers modérés (RCOLLM); and Règlement du 5 septembre 2007 sur l'aide individuelle au logement (RAIL)

- The current cantonal law on housing introduced a two-pronged approach to housing assistance: assistance for the construction and renovation of housing and individual assistance. Measures focused particularly on social housing.
- Assistance for the construction and renovation of housing consists of 1) providing loan guarantees by the canton; 2) offering low interest rates for land and infrastructure as well as acquisition and construction of affordable housing; 3) providing state guarantee to other guarantors; 4) facilitate loans to communes or builders; 5) subsidise infrastructure costs related to the construction of affordable housing; and 6) subsidising intercommunal studies related to the creation of collective housing zones. Control by public authorities over the management and rents of buildings benefiting from this assistance is unlimited in time, unless otherwise agreed upon, and buildings receiving assistance are subject to control over costs of construction, construction quality and plans, progress of work,

eligible tenants, number of rooms per apartment, rent, limits of revenue of tenants, amongst many others. Tasks such as control over occupation of apartments and the monitoring of the management of buildings having received this assistance can be delegated to the housing offices of communes (generally communes with a population over 10 000, of which Lausanne is the one of interest in this case study).

• If a household is still unable to afford suitable housing, the State can provide it an additional individual subsidy. Apartments with such households are subject to rent control. The amount provided depends on the cost of rent and the household income.

Tenant protection

1982 - present

Loi du 12 mai 1982 fixant la procédure dans les contestations relatives aux baux à loyer immobiliers et aux baux à ferme non agricoles (LPCBL)

• Applies to matters of obligatory conciliation relating to leases.

1985 - present

Loi du 4 mars 1985 concernant la démolition, la transformation et la rénovation de maisions d'habitation ainsi que l'utilisation de logements à autres fins que l'habitation (LDTR)

• In communes with a housing shortage, demolition, transformation and renovation of residential buildings must be authorised by the canton. Tenants are consulted and their interests and concerns can be heard through tenant associations. The canton is authorised to determine rents after transformation.

2001 - present

Arrêté du 8 octobre 2001 déclarant de force obligatoire générale le contrat-cadre de baux à loyer comprenant les dispositions paritaires romandes et les règles et usages locatifs du Canton de Vaud (AFCBD)

• This decree enforces the implementation of a standard tenancy lease including specific provisions for Suisse romande and rental rules for the Canton of Vaud (*Dispositions paritaires romandes et règles et usages locatifs du Canton de Vaud – RULV*). These are generally not applicable to the SCHL as cooperatives have their own specific goals and statutes (art. 1 para. b)

APPENDIX 2 – LIST AND DESCRIPTION OF MAIN ACTORS

Confederation

Swiss Federal Housing Office (Bundesamt für Wohnungswesen (BWO), Office fédéral du logement (OFL)) (http://www.bwo.admin.ch)

The Swiss Federal Housing Office is the center responsible for all matters relating to housing policy at the level of the Confederation. It is part of the Federal Department of the Economy. The BWO/OFL works in conjunction with the following partner organisations:

Association suisse pour l'habitat (ASH) (to which the SCHL belongs)

Association suisse des coopératives d'habitation radicales (ACR)

Association suisse pour l'encouargement à la construction et à la propriété (ASCP)

The ASH, ACR and ASCP are umbrella organisations recognised by the Confederation as representing the public interest housing owners. Housing cooperatives, such as the SCHL must belong to one of these organisations to be eligible for federal aide.

These three organisations also jointly administer the Coopérative de cautionnement hypothécaire (CCH, http://www.hbg-cch.ch) and the Centrale d'émission pour la construction de logements (CCL http://www.egw-ccl.ch/). Each organisation also manages working capital (*fonds de roulement*) generated from loans from the Confederation. The working capital allows the ASH, the ACR and the ASCP to provide loans to public interest housing owners at preferential rates. These loans are used as complements to other financing mechanisms and for transitory financing.

The ASH, ACR and ASCP are the three members of **Wohnbund-Fédérhabitation** (<u>http://www.wohnbund.ch</u>), the umbrella organisation representing public interest housing organisations.

Canton of Vaud

Service d'économie, du logement et de tourisme (SELT) (http://www.vd.ch/fr/organisation/services/economie-logement-et-tourisme/)

The SELT is part of the Department of Economy of the canton of Vaud. Its housing activities center on the promotion of housing construction by the private sector, making available lowand mid-rent housing, preservation of the current housing stock and tenant protection.

City of Lausanne (http://www.lausanne.ch)

Service du logement et des gérances (SLG)

The SLG is responsible for the promotion of the construction of housing that conforms to sustainable development criteria (through the *SMéO* programme). It also controls the management of subsidised housing, allocates communal housing assistance and reviews any requests regarding rental housing in the city. The SLG is a service of the Department of Culture, Housing and Heritage.

Direction des travaux (The Department of Works)

The Direction des travaux includes the following services related to housing:

Service d'assainissement

The Services d'assainissement is responsible for the collection and disposal of household and construction wastes (carried out either by the service or a third party partner), and the collection, treatment and disposal of wastewater.

eauservice

eauservice provides potable water to Lausanne and various neighbouring communes.

Direction des services industriels

The services industriels includes the following services related to housing :

Service gaz et chauffage à distance (Gas and district heating service)

The district heating division distributes heat generated by waste incineration at the Centre de traitement par recyclage et incinération des déchets (Tridel), the wastewater treatment plant, and heat from the wood burning boiler at la Tuilière. District heating is available only to the city of Lausanne.

The gas division distributes gas to many neighbouring communes. The industriel services are one of the principle stockholders of their gas provider GAZNAT S.A.

Service électricité (Electricity service)

The electricity service provides electricity for several communes through their communal and intercommunal industrial services.

APPENDIX 3 – GLOSSARY

ACR	Association suisse des coopératives d'habitation radicales			
AFCBD	Arrêté déclarant de force obligatoire générale le contrat-cadre de baux à loyer comprenant les dispositions paritaires romandes et les règles et usages locatifs du Canton de Vaud			
AMSL	Arrêté fédéral instituant des mesures contre des abus dans le secteur locatif			
ASCP	Association suisse pour l'encouargement à la construction et à la propriété			
ASH	Association suisse pour l'habitat			
ASLOCA	Association suisse des locataires			
BWO	Bundesamt für Wohnungswesen			
ССН	(see HBG) Coopérative de cautionnement hypothécaire			
CCL	(see EGW) Centrale d'émission pour la construction de logements			
CC	Civil Code			
CO	Code of Obligations			
EGW	(see CCL) Emissionszentral für gemeinnützige Wohnbauträger			
HBG	(see CCH) Hypothekar-Bürgschaftsgenossenschaft			
LCAP	Loi fédérale encourageant la construction et l'accession à la propriété de logements			
LDTR	Loi concernant la démolition, la transformation et la rénovation de maisons d'habitation, ainsi que l'utilisation de logements à d'autres fins que l'habitation			
LVLEne	Loi cantonale sur l'énergie			
LL	Loi sur le logement			
LOG	Loi fédérale encourageant le logement à loyer ou à prix modérés (Loi sur le logement)			
OFL	(see BWO) Office fédéral du logement			
RULV	Dispositions paritaires romandes et règles et usages locatifs du Canton de Vaud			
SCHL	Société coopérative d'habitation Lausanne			
SEL	Système d'évaluation des logements			
SELT	Service d'économie, du logement et de tourisme (état de Vaud)			

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- **SIA** Swiss Society of Engineers and Architects (Schweizerischer ingenieur- und architektenverein, Société suisse des ingénieurs et des architectes)
- SMéO Sol-matériaux-énergie-eau
- **SVLM** Société Vaudois pour la création de logements à loyers modérés

L'IDHEAP EN BREF

Avec l'Institut de hautes études en administration publique, la Suisse dispose d'une haute école pour l'enseignement et la recherche dans le domaine de l'administration des affaires publiques.

Créée en 1981, l'IDHEAP est une fondation autonome associée à l'Université et à l'Ecole polytechnique fédérale de Lausanne.

L'IDHEAP a pour vocation la formation postgrade des étudiants qui désirent se consacrer à la fonction publique ou parapublique, le perfectionnement professionnel des fonctionnaires des administrations au sens large. Il a également une mission de recherche et d'expertise dans tous les domaines du secteur public.

Institut universitaire, l'IDHEAP propose une palette de formations adaptée à l'enseignement et au perfectionnement des connaissances des spécialistes de la fonction publique. Il dispense notamment le Master of Public Administration (MPA) et organise des séminaires pour spécialistes et cadres (SSC). L'Institut assure une formation doctorale et décerne le titre de docteur en science administrative de l'Université de Lausanne. Centre de formation au service des collectivités publiques, l'IDHEAP est ouvert aux entreprises, permettant à leurs collaborateurs de s'initier aux modes de fonctionnement propres au secteur public.

Comme tout institut universitaire, l'IDHEAP poursuit également une mission de recherche.

Son objectif est de fournir les instruments d'analyse et de gestion nécessaires à la réflexion des responsables du secteur public.

Concentration unique en Suisse de spécialistes de l'analyse des politiques et du management publics, l'IDHEAP intervient à la demande des entreprises et collectivités communales, cantonales, fédérales, voire étrangères, pour résoudre des problématiques spécifiques. Les mandats de conseil contribuent à nourrir l'interactivité permanente entre théorie et pratique qui caractérise les formations dispensées par l'IDHEAP.