



## 3 Land

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### 3.1 Introduction

Land is the most expensive single cost in the production of housing and the key determinant of house price and rent inflation in many high demand locations (Ball et al., 2022), with land price rises found to explain 80% of the post-war housing boom in a range of advanced economies (Knoll et al., 2017). The use of policy to support the supply of land for affordable housing is therefore an important part of many European housing systems, working alongside financial subsidies, regulatory and tax instruments, and personal supports, as covered elsewhere in this work package, to provide affordable housing.

The purpose of this chapter is to identify and critically discuss land policies used to support the supply of affordable housing. The chapter is produced to inform stakeholders of the range of land policies for affordable housing, as well as to identify specific policies and cases where these policies are applied, for further investigation. The basis for the chapter is the policy and academic literature on land policies used within Europe and the UK, as the countries covered in the EqualHouse project, though where commonalities are salient, we draw on sources from outside of those countries. Land policy is not a neutral or secondary component of housing systems; it is a foundational determinant of affordability, inclusion, and equity. Strategic interventions—whether through planning, taxation, or land acquisition—can decisively shift housing outcomes in favour of



public interest goals. However, their success hinges on legal frameworks, institutional capacity, and political commitment to distributive justice.

Land policy determines not just the *quantity* but also the *location, typology,* and *tenure* of housing. When public authorities actively intervene in land markets—through mechanisms such as land banking, inclusionary zoning, or value capture—they can ensure a pipeline of land is available for affordable and social housing. Alternatively, where land is taken out of the land market, as in the case of indigenous land and housing, affordability can be addressed alongside exclusionary and discriminatory barriers. Where indigenous groups use land in ways that do not align with dominant interests, issues of subordination arise, with land tenure one possible means of redress (Johnson, Porter and Jackson, 2017).

According to the OECD (2021), housing affordability is more sustainable in countries where public authorities retain a strong role in land allocation, as in Austria or the Netherlands, compared to those where land supply is driven solely by private market actors. In contrast, when land is commodified and speculative pressures dominate, affordability and inclusivity deteriorate. Urban land prices in many European cities have outpaced wage growth: for instance, between 2010 and 2020, urban land values rose by over 60% in Germany and more than 80% in the Netherlands, undermining affordability even amid increased housing output (ECB, 2022).

High and rising land costs are among the most significant drivers of unaffordable housing. A study by Whitehead & Monk (2019) for the OECD shows that in cities like London and Paris, land constitutes over 70% of total residential development costs. These costs are passed on to households through higher rents and purchase prices unless explicitly mitigated through policy.

Land value capture (LVC) mechanisms—such as development levies, planning gain contributions (e.g., the UK's Section 106), and betterment taxes—can redirect windfall gains from landowners to fund affordable housing and infrastructure. In France's ZAC system, public authorities capture land value uplift to fund up to 50% social housing within new developments (OECD, 2020).



Urban planning frameworks have a significant bearing on spatial equity and social inclusion. When zoning and land-use regulations are structured to favour high-income, low-density development or exclude multi-unit and rental housing, they reinforce socio-spatial segregation.

Inclusionary zoning, where a proportion of new private development is set aside for affordable housing, is a direct land-use strategy for inclusion. For example:

- In Vienna, two-thirds of residential floor space on rezoned land must be delivered as subsidised housing when public land or finance is involved (Förster & Amann, 2022).
- In Barcelona, since 2018, 30% of floor area in new developments over 600 m<sup>2</sup> must be allocated to protected housing (Ajuntament de Barcelona, 2018).

Yet, inclusionary mechanisms are only effective when matched with municipal land ownership, institutional capacity, and political will (Lawson & Ruonavaara, 2020).

Land governance has profound implications for equity. Since land ownership is unequally distributed—often more so than income—policies that shift value from private windfalls to collective benefit contribute to redistribution. John Muellbauer (2024) argues for a green land-value tax (LVT) to address both wealth inequality and housing unaffordability. He notes that land-based taxation is not only progressive (given skewed landownership) but also efficiency-enhancing, as it discourages under-utilisation and speculation.

### 3.2 Land Policy

Land policy is a field of public policy concerned with the use, management and development of land, encompassing ‘strategic and operational public interventions in both how land may be used (allocation) and by whom (distribution)’ (Hartmann et al., 2025a, p.243). Land policy addresses manifold problems associated with the allocation and distribution of land (Needham et al., 2018; Hartmann and Spit, 2018). There is a substantial degree of crossover



between land policy and land-use planning, with land-use plans sometimes regarded as one sort of land policy instrument (Meijer and Jonkman, 2020), though the two can be regarded as distinct policy fields. Where land-use planning is the public task of determining to what ends a given plot of land may be put and is achieved through the regulatory regime of the planning system, land policy is concerned with land matters beyond the use of land to encompass land development and land management by means of a variety of instruments, both regulatory and actively interventionist (Gerber et al., 2018; Hartmann et al., 2025b).

Land policy and land-use planning are both outcome-oriented and therefore entail the choice of a strategy and the use of policy instruments to achieve it. In heavily urbanised countries such as those within the European context, land policy influences the provision of housing, employment and infrastructure on the scarce resource of land (Gerber et al., 2018; Shahab et al., 2021), increasingly against a backdrop of concerns around limiting land take (Lacoere and Leinfelder, 2023) and housing unaffordability (Debrunner and Hartmann, 2020). The strategic purpose of land policy may therefore express distributional concerns over land, as in the case of land policy for affordable housing provision. The realisation of that strategic purpose through its focus on the operational is a core facet of land policy and a point of distinction between land policy and land-use planning, the latter of which is concerned with strategic spatial planning and plan-making in addition to the implementation of plans (Van der Krabben and Halleux, 2011).

This operational orientation, in service of a strategic purpose that aims to raise the provision of affordable housing, points to the use of policy tools and instruments, as 'techniques of governance' (Howlett, 2005, p.31), that intervene at the intersection of public policy and private property rights (Gerber et al., 2011). The relationship between land and affordable housing is based not only on the role of land, as a scarce resource that is an input in the production of affordable housing, but also on the notion of land as common resource rather than private asset. To that end, policy to support affordable housing provision is justified in impinging upon private property rights. This is not an uncontroversial principle



however, meaning that there is often a reluctance on the part of public authorities to intervene in property rights by use of land policy (Spit, 2025).

This chapter introduces and analyses five such land policy instruments, considering their role in promoting more equal access to adequate housing. The chapter is structured as follows. First, Land Value Capture (LVC) is introduced as an overarching policy outcome that all land policy instruments for affordable housing are aiming to achieve in one way or another. Subsequently, the following market replacement strategies are introduced: public land banking, public land leasing and community land trusts (CLTs). Then follows an analysis of Inclusionary zoning as a market shaping strategy, followed by land pooling and readjustment as a market enabling strategy. Penultimately, there follows an analysis of operational context, linkages and transferability, followed by the conclusion. For each of the land policy instruments, the first section provides a definition of the policy instrument, followed by a description of the use and implementation of the instrument, an analysis of its strengths and weaknesses regarding the provision of social and affordable housing, and finally, by policy snapshots of examples that may form the basis for the case study research later in this study.

### 3.3 Land Policy and Land Value Capture

In this section we establish the meaning of the term ‘land value capture’, set out the arguments for channelling land value towards the supply of affordable housing, and select and describe five land policy instruments used to support the provision of housing that is affordable and inclusive. The distinctive use of land policy, as opposed to the alternative means covered in chapters 2, 4 and 5 (covering finance, tax and regulatory tools, and personal supports) to address the issue of housing unaffordability, is to make use of land as a resource. Land policies therefore use public land resources and regulate for the use of private resources in the supply of land for affordable housing, with the aim in both cases usually being to capture increases in land value for reallocation towards affordable housing. Land value capture is an overarching logic that underpins the use of land policy to address housing unaffordability concerns.



Land value capture (heretofore LVC) is a generic term that describes the public taking of a share of value increase accruing to land. It is a concept rather than a policy (Scottish Land Commission, 2018, p. 2) and is used as an overarching term to describe the operation of a range of policies and legal tools that recover value uplift accruing to land following public and social actions, from broad economic change to specific infrastructure investments and land-use designations. A broad definition offered by the OECD and Lincoln Institute of Land Policy (2022, p. 14) states that LVC refers to ‘policies that allow public authorities to recover increases in land values which result from government actions, including the development of land, infrastructure and service deployment, and the alteration of land use regulations’. This ‘recovered land value’ can then be used ‘to fund urban infrastructure and public services’ (*ibid.*).

Arguments supporting the use of regulation to make use of land or land value in the provision of affordable housing follow from an efficiency rationale and a moral case. For the efficiency rationale, land markets are subject to market failure because land generates value over and above what would be required to ensure its supply due to the scarce or irreplicable nature of the resource (Neutze, 1987). Taxation of surplus land value is held to be optimal because land would continue to be supplied below the level at which economic rent is paid, rendering land tax non-distortionary (Evans, 2004; Obeng-Odoom, 2016). For the moral case, increases in land value are windfall gains following from general economic growth, public investment in infrastructure and the award of development rights (Catney and Henneberry, 2019). Land value capture therefore enables public spending on affordable housing to be self-funding, requiring no additional subsidy providing that sufficient land value is available to support it (Alterman, 2009).

Itself a somewhat contested and even contradictory phrase (Crook et al., 2016), explanations of LVC frequently make use of multiple related terms and concepts. A comprehensive set of definitions of the key terminology for LVC is given by Alterman (2012, p.763) and is summarised below.

- **Betterment:** the increase in land value caused by a land-use plan



designation or award of development rights, for example where agricultural land is rezoned for residential development. The opposite outcome, in which planning reduces land value, is sometimes called ‘worsement’ or ‘worsenment’.

- **Unearned increment:** an increase in land value that can be attributed to any public or social action, including planning decisions, public investments, or general economic growth and associated urbanisation.
- **Plus value:** synonymous with the unearned increment and widely used in Spanish-speaking countries as *plusvalía*.
- **Windfall gain:** an unanticipated and ‘unearned’ increase in the value of an asset, used more widely than in the LVC context. Its opposite, an unexpected and undeserved drop in value, is the less frequently used ‘wipeout’.
- **Givings:** synonymous with windfall gains and the opposite of ‘takings’.
- **Value capture:** where the increase in value, which may be described using the terms above, is ‘captured’ by the state, usually by means of taxes, levies, or transactions.

LVC is implemented by governments through ‘development-based methods which obtain contributions from the owners of property who would benefit from infrastructure provision’ (Lawson et al., 2021, p.114). Typically, LVC involves a mix of development and taxation strategies (Lawson et al., 2021 p.114). The OECD (2022) identify the sequential stages of LVC:

- Value creation: this involves the government or local authorities taking some action on (or close to) land – which results in an increased value to that land (i.e. an investment in the area, transport or otherwise, or the award of development rights, which impact on land value).
- Value recovery: the value is ‘recovered by the public’.
- Value distribution: This is when the recovered land is reinvested in public betterment.

Public means of capturing land value can be usefully divided into macro, direct, and indirect instruments (Alterman, 2012, p. 762-766). Macro instruments are those pertaining at the level of the total land market as policy and legal tools that apply across all land administered by a particular jurisdiction. These are generally not instruments whose primary or founding goal was to capture land value increase, but which nevertheless do this through their operation. The most



extreme macro LVC instrument is the nationalisation of all land, as was the case in postwar European communist systems of government and in communist China until 1988 (Chen and Wu, 2022), where single ownership means that all land value uplift is automatically the property of the state. A more measured form of this can be found where all, or almost all, land is owned publicly and traded on long leases, as in Singapore, Hong Kong (Chi-Man Hui et al., 2004) and mainland China (Chen and Wu, 2022). Land banking is aimed at controlling the rate and location of housing supply, meeting housing and planning goals by direct public investment while capturing land value along the way by raising the value of land between acquisition and sale (Van der Krabben and Jacobs, 2013). Land readjustment can also be regarded as a macro LVC instrument, being primarily intended to facilitate development through the amalgamation and rearrangement of property rights but also functioning in some instances to capture land value (Hong and Needham, 2007).

Direct LVC instruments are taxes or fees paid by landowners and developers based on increases in land value, sometimes associated with government intervention and at other times with general economic growth. These may be in the form of recurrent land taxes (Wyatt, 2019), which are not considered a part of land policy in this chapter, or infrastructure levies charged on value increase attributable to public investments (OECD, 2022). Direct LVC instruments for affordable housing are rarely applied, with the Spanish case exceptional in the European context (though infrastructure levies related to transport are more common) and are not selected for further investigation in this chapter.

Indirect LVC instruments are those that capture land value through their operation but whose stated or overt purpose is to achieve some other goal. Usually, this goal is associated with minimising external costs resulting from development by asking developers to pay towards infrastructure provision or landscaping. Less often, and arguably at odds with this rationale, indirect instruments may capture value towards affordable housing provision. Inclusionary zoning does this through instruments such as impact fees in the USA, special purpose zoning in France and developer contributions in the UK



(OECD, 2022). Community Land Trusts are here selected for further investigation as a form of indirect LVC instrument whose primary purpose is to provide land for affordable housing and which may capture value in instances where commercial facilities are leased out as part of their operation.

### 3.4 Strategies and mechanisms using land for housing that is affordable and inclusive in Europe

In this section we present our five selected land policies for affordable housing and classify these according to the nature of their engagement with the housing market into three categories: market replacement policies; market shaping policies; and market enabling policies. Following this we discuss each land policy in turn, establishing their nature, rationale, application and using case examples to detail how they have been used in practice.

Land policy strategies are understood as ways of using selected land policies to achieve a policy goal (Shahab et al., 2021, p. 1113). The most basic, and frequently cited, land policy strategies are those of active and passive land policies, which denote the degree of engagement taken by the local planning authority in the supply of land for development (Hartmann and Spit, 2015). In practice, land policy strategies are both more wide-ranging and more nuanced than this, with different degrees of cooperation and proscriptive power used by local authorities (Shahab et al., 2021), as well as alternative weightings of public and private interests (Gerber et al., 2018).

We will here go on to describe the characteristics, operation and application of five land policies for affordable housing provision: public land development; public land leasing; community land trusts; inclusionary zoning and regulatory planning; and land readjustment. These are in turn grouped within three categories of engagement with land and housing markets, set out as follows.

- **Market Replacement:** enabling the emergence of alternative, non-market sources of affordable housing.
- **Market Shaping:** engaging in the social construction of land and property markets to set the context for market actions and transactions (Adams and Tiesdell, 2012).



- **Market Enabling:** supporting the market to overcome barriers to its own operation by resolving market failures and regulating the supply of necessary resources.

Table 3.1 places the land policies we examine into the above categories of engagement with land and housing markets.

**Table 3.1: Land policies for affordable housing mapped against categories of market engagement. (Source: Authors' own)**

|                                      | Categories of Market Engagement |                     |                   |
|--------------------------------------|---------------------------------|---------------------|-------------------|
|                                      | Market Replacement              | Market Shaping      | Market Enabling   |
| Land Policies for Affordable Housing | Public land development         | Inclusionary zoning | Land readjustment |
|                                      | Public land leasing             |                     |                   |
|                                      | Community land trusts           |                     |                   |

### 3.5 Market replacement strategies

These are policy approaches that offer an alternative to the market as the provider of housing. They seek not to replace the housing market in the aggregate but at a particular site or, as has historically been the case with certain New Towns where all housing is supplied publicly, scale. While market replacement strategies circumvent the market in some respects, they may engage with it in others, as for example where municipalities buy and sell land on the market but, by dint of their public nature, do so to pursue the non-market goal of raising the supply of affordable housing.

#### 3.5.1 Public land banking

Land banking is a tool whereby governments purchase and secure land ‘in advance of need in order to pursue strategic development goals, such as to provide infrastructure or lower cost land for affordable housing’ (Lawson & Ruonavaara, 2020, p. 9). The primary benefit of land banking is that it enables governments to recover costs of land development and servicing, while also



supporting the capture of land value increases following a change of use. This was the standard mechanism by which land was supplied to housing associations in the Netherlands prior to the changes in the 2008 *Spatial Planning Act* that allowed land to be zoned for that purpose (Van der Krabben et al., 2011).

Land banking involves public acquisition, servicing and rezoning for land use before plots are sold for housing development by the private sector (Van der Krabben and Jacobs, 2013). This typically ensures that land can be bought for public ownership on the open market so that ‘the land [can be used] for specific projects or to build up reserves’ (Hengstermann and Hartmann, 2018, p. 31), though in some instances land may be expropriated, as in the case of the UK’s postwar New Towns. Terms related to, though not necessarily precisely synonymous with, land banking is in wide use. ‘Public land development’ indicates that a public sector body is not only acquiring but developing land (as opposed to property), conveying that the purpose of this exercise is to raise the value of the land between acquisition and sale (Van der Krabben and Jacobs, 2013). ‘Active land policy’ signifies a strategy of land banking, development and sale used as more than a one-off exercise and is contrasted with passive land development, where the role of the planning authority is to regulate development by the award of planning permission/ building rights but not to engage in development itself (Hartmann and Spit, 201, p. 729).

Value capture through land banking follows where land values increase more than development costs between the point of public land acquisition and sale of land. Following the moral and efficiency arguments of land value capture, the increase in the value of the land prior to disposal to developers is caused by the award of planning permission / building rights and the implementation of public works. Land value may also increase, however, due to rise in land values either general or specific to the local area, following broader population and economic change. Land banking can therefore be an effective tool for providing affordable housing where a portion of plots are sold at a discount to affordable housing providers alongside the sale of plots to developers on the open market, with the



latter effectively being used to subsidise the former (Van der Krabben and Jacobs, 2013; see also Spit, 2018).

### 3.5.2 The use and implementation of public land banking

The way that land banking is implemented varies from place to place. It is typically implemented by local governments, as in the Finnish and Dutch cases, but it can be the responsibility of land agencies appointed by the government, as with the UK New Towns Corporations (Lawson et al., 2021). For governments to purchase land at below market value, laws enabling this need to be in place (Lawson et al., 2021, p. 104). In some countries, policies exist which allow 'public land banking organisations' to be 'legally empowered to expropriate land (i.e. require its sale) or to negotiate its purchase at prices based on the current use value, in order to enable delivery of affordable housing,' through expropriation or compulsory purchase (Lawson et al., 2021, p. 104). Elsewhere, pre-emption allows municipalities or public agencies to guarantee themselves right of refusal should a piece of land come on sale (Melot, 2018; Schuite and Sluysmans, 2024)

### 3.5.3 Strengths and weaknesses of public land banking

There are a number of strengths for public land banking. Lawson and Ruonavaara (2020) cite that public land banking can be 'used as a means to promote interests of the wider community and prevent undesirable uses, kick start development and reduce land hoarding and speculation by private owners' (p.23; see also Spit, 2018, p. 272). Moreover, they argue that public land banking can increase cost efficiency by making land less expensive and thereby facilitate the production of 'better quality or more affordable housing'; it can increase social equity by achieving strategic planning aims, such as the provision of affordable housing close to employment opportunities; and it can promote fiscal equity by ensuring the wider community benefits from increased land values (*ibid.*, p. 24). Furthermore, they argue that public land banking can allow derelict land to be redeveloped; that it can ensure that 'rapid development can be planned for and adequately serviced'; that it can reduce the vulnerability of land and housing



markets to ‘crises and vulnerability,’ thereby stabilising these markets; that it can improve ‘development outcomes through competitive tendering’; that it can ‘promote non-profit forms of development, which would not otherwise occur’; that it can ‘reactivate development of repossessed or tax delinquent property;’ and that it can ‘fulfil planning objectives via active land acquisition policy’ (*ibid.*). Furthermore, the National Housing Conference (no date: no page) adds that land banks can ‘eliminate outstanding taxes and other public liens’; that they can ‘hold properties until such time as they can be used strategically’; that they can work across traditional boundaries; and that they can ‘simplify and expedite the disposition of foreclosed properties to new ownership.’

On the other hand, there are several weaknesses to public land banking. Lawson and Ruonavaara (2020, p. 24) note that land may not be released by land bankers according to the public interest; that ‘poorly designed or executed policies for compulsory sale can unfairly override established private property rights’; that public land banking can be ‘inefficient,’ ‘top down’ and bureaucratic; that public sector planners may not have the ‘expertise to predict land requirements adequately’; that local authorities may lack the resources to lead their own developments; that private developers often out bid public land bankers, with a lack of influence over the market from the public sector; and that public land bankers may not always act in the public interest, and instead act ‘monopolistically.’ In addition, the National Housing Conference (no date: no page) argue that the establishment of land banks may be limited by political considerations; and that public land banks require state-enabling legislation as state-chartered bodies.



### Policy snapshot 3.1: The Wohnfonds Wien land bank, Vienna, Austria

The Vienna Land Procurement and Urban Renewal Fund (Wiener Bodenbereitstellungs- und Stadterneuerungsfonds in German, known as Wohnfonds Wien) was established in 1984 by the city government as a 'not-for-profit, financially independent corporation, governed by a trust chaired by the city council and regulated under the Fund Act' (Lawson et al., 2021, p. 105). Wohnfonds Wien is 'a long-term land bank for new construction,' as well as a 'coordinator of urban renewal (preservation) projects' (Global Policy Leadership Academy, no date) and facilitates urban expansion and renewal (Wohnfonds Wien, no date). In partnership with 'the Vienna planning department and competitively selected master developers, Wohnfond Wien oversees the master planning of dense large-scale developments integrated with transit and amenities' (Global Policy Leadership Academy, no date).

Wohnfonds Wien has been cited as a 'powerful public-interest player in the land market of Vienna,' enabling 'the ongoing production and management of affordable housing for many of the city's residents' (Lawson et al., 2021, p. 105). It coordinates key actors that include property developers and homeowners alongside municipal bodies and funding agencies while its board brings together a range of interest groups alongside the City of Vienna (Global Policy Leadership Academy, no date).

The agency, acting as a land bank, assembles sites for provision of social housing, implementation of infrastructure, and to prevent speculative investment in land. A cooperative relationship with Vienna's urban planning department ensures that the Wohnfonds acquires and develops land in coordination with the strategic metropolitan plan of Vienna, which itself has a strong focus on housing (Lawson et al., 2021). While it lacks special powers to buy land at prices below the level of the market, the Wohnfonds is a significant presence in the city's land market and operates with relatively few competitors. Moreover, its acquisitions of unzoned land frequently benefit from the strategic approach to housing delivery that it shares with city of Vienna (Peaverini, 2023).

Sources: Lawson et al. (2021); Wohnfonds Wien (no date); Global Policy Leadership Academy (no date); Peaverini (2023).



### Policy snapshot 3.2. Île-de-France Public Property Establishment (French: **Établissement Public Foncier – EPF**)

The Île-de-France Public Property Establishment is the public land banker for Île-de-France. This land bank ‘contributes to the housing supply and supports economic development by actively buying undeveloped greenfield land or brownfield sites, preparing these for further development and reselling them for housing development purposes’ (Lawson et al., 2021, p. 107). The focus is very much on ‘meeting housing needs’ and ‘improving neglected housing acquired from slum landlords’ (ibid.). Preparatory work can involve ‘demolition of existing buildings, asbestos removal, and decontamination of land,’ with the costs ‘recovered in the resale process and according to the regional and sectoral needs’ (ibid.). They currently have 18,000 sites, with 50% of these being for social housing (ibid.). A detailed and up-to-date map of EPF’s activities is available on its website (Établissement Public Foncier Île-de-France, 2026).

The EPF Île-de-France is distinguished by the extent of its locational focus on brownfield and infill development and its functional emphasis on the supply of social housing. This is a more targeted use of the policy instrument within a wider context in which public land development has been typically used to develop large greenfield sites for private and social housebuilding.

Source: Lawson et al. (2021)



### Policy Snapshot 3.3. Dutch Active Land Policy

Land banking has been used in the Netherlands since WWII as a comprehensive, top-down approach to the provision of land for housing (Van der Krabben and Jacobs, 2013). Municipalities provide serviced land for housing in the same way that public infrastructure for transport or utilities might be provided, assembling sites through purchase on the market before implementation of roads and utilities, division into plots, then selling these to private residential developers.

The advantages of the approach are the control given to municipalities over the location and characteristics of new development, the financial gain from selling serviced sites zoned for development, and the win-win outcome wherein developers were satisfied with undertaking low risk development at good locations without the need to have land rezoned (Van der Krabben et al., 2011). The approach remains common but is no longer the default means of residential development (Van Oosten et al., 2018), following, especially, an increase in land and house prices through the 1990s that drove developers to seek profit from land value uplift (Spit, 2018), and heavy losses on land banks among municipalities following the GFC (Van der Krabben and Needham, 2008).

The Dutch approach to public land development is more comprehensive than most, having shaped housing supply the half century following WWII, with the dominance of the instrument embodied in its use within the so-called active land policy. Public land development continues to be an important part of planning and land development across much of the Netherlands.

Sources: Spit (2018); Van der Krabben et al., (2011); Van der Krabben and Jacobs, (2013); Van Oosten et al., (2018).

#### 3.5.4 Public land leasing

Public land leasing separates out property rights over land into ownership and use, leasing out publicly owned land to private firms and households for their use and development (Hengstermann and Hartmann, 2018, p. 31). The public owner retains the right to long-term benefits from the land, including the right to control its use via ownership in addition to land-use planning, the right to receive a payment or income from the land, and the right to gain from land value uplift. The private lessee has the right to use and develop the land according to the terms of the lease agreement. The idea was inspired by Henry George (1920, 1<sup>st</sup> ed. 1879) with 'the idea [being] that leasing would allow for a fair harvesting of land values to the benefit of all' (Korthals Altes, 2018, p. 97). Land leasing can be used for a variety of development types and can be a key policy instrument for



the funding and delivery of social and affordable housing, effectively offering subsidies in the form of revenue foregone.

### 3.5.6 The use and implementation of public land leasing

Governments (as lessor) and developers/third parties (as lessees) have different rationales for using public land leasing. Public land leasing allows governments to make use of publicly owned sites where developable land is scarce by issuing land to developers on leasehold agreements (Guelton and Le Rouzic, 2018, p.248); to influence/steer the use of public land (Lawson & Ruonavaara, 2020, p. 32); to provide long-term financial benefits to the government as the value of the land increases over time (*ibid.*); and to increase the availability of affordable housing provision (Tasan-Kok et al., 2013).

A plot of land is provided to the lessee at the start of the lease, with the rent typically based on the current market value of the land; 'the lessee is responsible for developing the building and all other improvements' (Korthals Altes, 2018, p. 99). The lessor will 'retain ownership of the freehold of the land while making the land available to be used by others subject to conditions, including payment for the land' (NESC, 2018, p. 26). The lessee will build and manage the development of an entire site/project, and this can be for affordable housing provision. When the lease period expires, the land and buildings are returned to government ownership and developed into a new site, allowing for land value capture.

### 3.5.7. Strengths and weaknesses of public land leasing

Lawson et al. (2021, p. 109) identify a number of strengths and weaknesses of public land leasing. On the plus side, they argue that public land leasing allows the government to retain ownership of the land, thus providing 'a long-term source of revenue from lease payments'; that 'open market land prices and rents are often priced to reflect the advantages gained by existing or anticipated public investment, such as road and public transport infrastructure'; that the benefits of investment can reach the community, rather than landowners, thus helping 'to repay public investment and fund further investment in public services'; that



governments can use land assets as a hedge against inflation as they tend to increase in value; 'changes in permitted use can generate substantial uplift in value which can then be captured for public investment'; governments can 'use conditions attached to land leases' to achieve public policy objectives through influencing 'the use and development of land'; developments can be made more feasible by paying leasing fees, rather than the cost of the site, allowing for 'lower rents or sale prices' for affordable housing; and that land leasing can be helpful in contexts of high inflation by reducing land price inflation. Public land leasing can thus be used 'to capture increases in land value, enable affordable housing provision and ensure the optimum use and allocation of land' (Lawson et al., 2021). Project costs can also be reduced, improving the feasibility of developments and also reducing rents for tenants (Lawson & Ruonavaara, 2020, p. 32; see also Guelton & Le Rouzic, 2018; NESCE, 2018).

For developers/ third parties, the benefits are: public land leasing reduces the upfront costs of projects for developers where lease payments are periodic and no one-off fee is paid, which can then reduce costs for housing provision; it provides developers with access to land in desirable areas at a reduced cost; it reduces financial risk for developers in the long run (i.e. if the project is not financially successful, they do not have the added burden of owning the land); and developers/ third parties may benefit from the increase in land value over time (Lawson & Ruonavaara, 2020, p. 32).

In terms of the disadvantages, Lawson et al. (2021, p. 109) identify a number of challenges. Lease fees may be inaccurate or outdated; lessees may oppose changes to fees, meaning that insufficient revenues are generated; investment in new developments and upgrading may be limited if banks do not accept land leases as collateral; and finally, the continuity of land-leasing arrangements in some countries may not be guaranteed as the residential property owners 'have a legal right to buy the site on which the dwelling is built.' Thus, NESCE (2018, p.12) highlight that for the leaseholder, when the lease expires and is re-valued at current market values, this may result in a large increase in the rent payable.



### Policy snapshot 3.4. Helsinki, Finland

In Helsinki, the government owns 70% of land in the city and therefore plays a key role in the promotion and provision of affordable housing (Affordable Housing Activation, no date). In 2016, the City of Helsinki implemented a long-term policy called Home Town Helsinki, with the aim being to achieve ‘a well-balanced mix of housing to meet the different needs and life situations’ (ibid.).

The policy aimed to add 6,000 housing units per annum, both through new-build and changing the use of existing buildings, with the aim being to increase this to 7,000 units per annum by 2019 (Hel.fi, 2016). Within this policy, another central objective is that government subsidised rental housing will represent 25% of all housing produced, with the aim, annually, for 1,100 new ordinary rental units, 300 additional student housing units and a further 100 units specifically for young people (ibid.). Annually, 1,800 housing units (just under a third) will be designated as ‘Hitas housing (price and quality regulated owner-occupied housing units), partial ownership housing and right-of-occupancy housing’ (ibid.). A further 2,700 housing units (45% of the total) are allocated as ‘unregulated rental and owner-occupied housing production’ (ibid.). Finally, approximately 1,500 housing units are created annually as part of the City’s own housing production, with half of these being government-subsidised rental housing units (ARA) (ibid.).

These plans are backed by a General Plan to ensure the housing is produced, with the aim being to create ‘a compact city with several centres that are interlinked through rail traffic’ (ibid.). The high level of public land ownership, combined with conditional land leases means that these aims for social and affordable housing are achievable (Affordable Housing Activation, no date).

Source: Lawson et al. (2021); Hel.fi (2016); Affordable Housing Activation (no date)

### Policy snapshot 3.5. Foncière Chênelet (Housing Solutions for the Most Vulnerable People), France

In France, the nonprofit organisation Foncière Chênelet has provided housing solutions for those who are most vulnerable in society since 2009. They have a partnership with local authorities in different regions across France. This partnership involves long leases of public land (99 years for a long lease, and 40 years for public housing operators). The contract stipulates that social housing must be developed on this land as part of the lease. The funding comes from the Casisse des depots (French savings bank), as well as public and private finances. This partnership/ leasehold system has resulted in up to 162 houses being built since its establishment in 2009, with 450 people being housed. The focus is on ‘vulnerable people such as families or elderly people with very low income, disabled people in six French regions.’ Foncière Chênelet has also expanded its work recently to work with Belgian stakeholders on a Housing First project ‘to provide homeless people with quality and ecological housing and psycho-social support.’

Source: Jones & Fritz (2023)





### Policy snapshot 3.6. The Netherlands

In the Netherlands, public land leasing is applied by the government who ‘acquires the land to be developed, makes the plan for the area and buildable plots are delivered to housing associations, developing companies or private individuals’ (Ploeger & Bounjouh, 2017, p. 78). In Amsterdam specifically, the government has used land leasing to retain ownership of public land since 1896, while also making land available for development for social/affordable housing. The government owns up to 80 percent of the land, and leases land to housing associations at lower rates to develop housing (ibid.). Since 2016, however, the Dutch cities have moved away from using land leases due to the increasing costs/ rents on renewing these leases (NESC, 2018). According to the OECD (2017), if the Dutch government had more regular revaluations of the leases, then the increases in rent would not be as much of a concern.

Sources: Ploeger & Bounjouh (2017); OECD (2017); NESC (2018)

#### 3.5.8 Community Land Trusts

Community Land Trusts (CLTs) are ‘non-profit, community-based organisations whose mission is to provide long-term affordable housing by owning land and leasing it to those who live in the houses built on that land’ (Lawson & Ruonavaara, 2018, p. 8; see also Lawson et al., 2021). In their model of operation, CLTs bear strong similarities with public sector land leasing, with the crucial difference being that they are owned and managed by non-state community bodies. Indeed, Bourassa (2006, p. 335) describes CLTs as a third sector means to delivering affordability that shares some attributes with public leasehold systems. Sustainable Housing for Inclusive and Cohesive Cities (SHICC) (2020) notes that CLTs ‘develop and manage affordable homes for low- and medium-income households, as well as other assets that help foster thriving local communities.’ The functional characteristic of CLTs is that they hold land title within a trust to preserve their purpose of housing provision for specified groups in perpetuity. CLTs are typically seen to ‘complement existing affordable social and cooperative housing providers’ rather than being a solution on their own (SHICC, no date). UN-HABITAT (2012, p.14-15) identify ten key characteristics of CLTs:

- They are formed as nonprofit, tax-exempt corporations.
- CLTs normally own land while leasing plots to households and housing



associations or other non-profit bodies.

- Land is leased on long-term contracts, granting security of tenure to residents while maintaining the purpose and integrity of the CLT.
- As non-profit organisations, CLTs can offer housing that is affordable in perpetuity.
- While residents may vary over a long time, the CLT remains in place as the responsible body able to maintain responsible stewardship of the land.
- CLTs exist for their community and residents of CLT housing built have the right to become voting members of the CLT.
- Governance and decision-making are the domain of residents and local community rather than outside actors.
- A tripartite governance model, wherein control over the CLT is divided three ways between residents, local community, and local funders or other public bodies, is common.
- An expansionist strategy is common to many CLTs, with an aim of acquiring additional sites to support further housing provision.
- Some CLTs operate under a strict separation of land and building ownership while others engage in more flexible arrangements including development partnerships and non-housing use provision.

### 3.5.9 The use and implementation of Community Land Trusts

CLTs have the potential to be a useful mechanism to ‘provide low cost or free land for social housing developments’ (Lawson et al., 2021, p.58). For example, CLTs can be used as ‘capital for housing provision,’ helping with supply (Lawson et al., 2018, cited in Lawson et al., 2021, p. 58). They can also help to ‘provide long-term affordable housing by owning land and leasing it to those who live in houses built on that land’ (Lawson et al., 2021, p. 111). The aim is ‘to provide perpetually affordable home ownership to low- and moderate-income households by giving home purchasers only a limited equity interest in their homes’ (Bourassa, 2006, p. 333), thereby reaching their overarching goal of maintaining affordability for future, as well as current, residents (Ingram and Hong, 2007).



### 3.5.10 Strengths and weaknesses of Community Land Trusts

The benefits of CLTs include that the structure should involve ‘a shared democratic governance’ structure (Lawson et al., 2021, p.112). To achieve this, Bourassa (2006, p.355) argues that a typical CLT board should include: one-third leaseholders or occupants, one-third community members who are not leaseholders, and one-third public representatives such as government officials or non-profit employees (Grounded Solutions, 2018). Bourassa (2006, p. 338) argues that this structure means that only a third of the board has financial incentives to dissolve the CLT and sell property at market rates, while the remainder are focused on preserving affordability for the long-term. Moreover, CLTs can provide a pathway to limited-equity homeownership, enabling households who might otherwise struggle to buy a home (*ibid.*). Further, they are underpinned by the commitment to being ‘an anti-speculative model of land management’ (Lawson et al., 2021, p. 112). Other benefits include that CLTs can empower communities, including the marginalised, and that the planning process and lease model promote inclusion and stability (Lawson et al., 2021, p.12).

In terms of challenges, the SHICC (2020, p. 11) report highlights that CLTs are generally formed on relatively small scales, with their wider institutional impact being limited. They cite additional challenges such as funding challenges for CLTs, regulatory barriers, limited public awareness, lack of policy integration and resource constraints (*ibid.*). A key issue for CLTs is in the acquisition of land. As with any other housing provider, CLTs must acquire sites to be developed within a model that matches their purpose and may in principle need to compete with other uses and buyers for those sites. As is the case with housing associations, CLTs may struggle to compete with providers of market housing, with this challenge often being greater in urban areas where competition for land is more intense (Moore, 2014). Unlike most housing associations, however, CLTs are often bound to places or even particular sites whose ownership is transferred at discounted or nil values (Moore et al., n.d.).



### Policy snapshot 3.7: Community Land Trust, Brussels, Belgium

The Community Land Trust Brussels (CLTB) was established in December 2012. The organisation was developed in the context of a severe housing affordability crisis in Brussels. There was a lack of social housing, representing only 7% of total stock and 'existing schemes for home ownership no longer cover[ed] low-income groups.'

CLTB fosters the development of affordable housing which is built or renovated on land owned by the CLT. It is funded largely by Brussels Capital Region, with a total annual budget of €2,500,000. The prices paid for a CLT home are reflective of the prospective owner's income rather than the market rate for the home, thus improving housing affordability. The homes are sold at 20-50% below the market equivalent, with the home being 'subsidised according to the household's ability to pay.'

The home purchase involves a ground lease where the CLTB lease the land to the buyer for 50 years, with the option to renew after this. If the owner wants to sell the property before this, they can do so and receive 25% of the increase in value on what they paid for it, while CLTB receives 6% of 3,000 Euros (whichever is highest). Subsequently, 'the next household purchases the home at this sale price,' which keeps the 'property affordable by neutralising the remaining 69% of the increase in value for the dwelling' (Lawson et al., 2021, p. 220).

Source: World Habitat (2021); CLTB (no date); de Santos (no date); Housing 2030 (no date)



### Policy snapshot 3.8: Brasted Close, Sydenham, Lewisham, London CLT, United Kingdom (2013-2021)

A community campaign, led by Lewisham Citizens (the local group of the charity Citizens UK), was established in 2014 in response to a lack of affordable housing in Lewisham, south-east London. The campaign decided to focus on the development of community-led, affordable homes delivered through a CLT to ensure that homes remained affordable for key groups within the community. The group worked with London CLT to find an appropriate site. This was London's first CLT.

The process involved extensive community consultation, with the aim of creating community-led affordable housing. The process was led by local people, who made 'all key decisions on land, money, design, planning and management. Inclusion, responding to local needs, building capacity, listening and community ownership were all central to the community-led design process.'

The plans were led by Lewisham Citizens who started the design process with a community picnic in July 2016, 'followed by open meetings over the following months to engage more and more residents through leafleting and inviting neighbours.' The project was led by Archio Architects and Roof (the construction company) who were chosen by the community in September 2016.

London Community Land Trust and Lewisham Council worked in partnership to develop the Brasted Close development. Lewisham Council transferred a site to the London CLT (for a fee) in 2016, and after submitting a proposal for the building of affordable homes in June 2018, the construction began in 2021. This was supported by a funding agreement between the Greater London Authority and London CLT established in October 2020. Funding was also provided by the Community Led Housing Hub, Big Issue Invest, investors in London CLT's community share offer, and mortgage providers Nationwide Building Society and Ecology Building Society. By 2023, the first residents had moved in.

Source: London Borough of Lewisham (2023); London CLT (2022); Community-led Housing (no date); Wainwright (2023)

## 3.6 Market shaping strategies

Adopting the conception within institutional economics of markets as socially constructed rule sets that frame transactions, market shaping strategies aim to set the context for land and property exchange in such a way that favours the achievement of public goals such as housing affordability. Market shaping strategies look to incentivise and constrain market actors' decision-making in such a way that aligns market and social outcomes.





### 3.6.1 Inclusionary zoning

Inclusionary zoning is a land-use planning policy that requires a proportion of housing within a given site to be supplied outside of the market. It is a means of providing affordable housing without direct state subsidy, being a regulatory instrument that constrains the actions and transactions of developers and landowners. In addition to supporting the supply of affordable housing, inclusionary zoning can achieve the secondary public goal of promoting socioeconomic diversity within neighbourhoods by mixing market and non-market housing (Schwartz et al., 2012; Granath Hansson et al., 2024).

Lawson et al., 2021, p. 102) describe ‘inclusionary zones’ as ‘land-use instruments that tap the economic gains from rising real estate values to create affordable housing for lower-income families’ (see also, Mallach, 1984, in Buitelaar & De Gam, 2011). By requiring that developers deliver affordable housing as a condition of their building rights, land value is channelled directly into the provision of affordable housing, with no subsidy necessary. The effectiveness of the tool is therefore contingent upon the availability of land value to be tapped and limits its operation to those sites and areas in which land values are sufficiently high as to continue to attract investment while imposing additional costs on developers. This has led to the criticism that inclusionary zoning has shifted the responsibility for the provision of affordable housing from the public to the private sector, as public authorities have made up for a reduction in resources by exercising their regulatory powers (Calavita & Mallach, 2010).

### 3.6.2 The use and implementation of inclusionary zoning

While the instrument is fundamentally a constraining one, in that it permits development only on the condition that affordable homes are supplied as part of it, this must be considered in the broader context of land-use planning as enabling. Where a planning decision permits development, landowners and developers are able to realise returns otherwise unavailable, while the same result follows where public investments are made. This is, of course, the moral case for



land value capture instruments, with inclusionary zoning being a prime example of these.

The operation of inclusionary zoning is by a stipulation that a stated proportion of housing in a given development must be affordable. Variations between planning systems may allow this in exchange for increased density on the site as a whole, in the form of a 'density bonus' (Ryan and Enderle, 2012), or may accept cash payment in lieu of land or housing (Calavita and Mallach, 2010). While the term inclusionary zoning implies that the tool can operate only within a zonal land-use plan, the UK practice of developer contributions makes use of no zonal instrument, instead using plan-wide rules or case-by-case negotiations (Crook et al., 2016), while negotiated private contracts are typically used in preference to zoning in the Netherlands (Tennekes, 2018).

The prominence of negotiation in determining quotas for affordable housing provision is instructive, being indicative of two aspects key to the operation of the tool. First, site value varies markedly according not only to broader area-based land values but also to the particularities of orientation, aspect, and access. Moreover, the value of a site may not be clear at the point at which the land-use plan, which itself may be several years old, is written. Second, each party may believe that it stands to gain more from a negotiated process than a rule-based process. Municipalities may, in balancing demands made on developers for infrastructure, open space and affordable housing, wish to reserve the right to defer finality until the point at which a site is to be developed. Developers, on the other hand, might make their own arguments as to the proportion of affordable housing that could reasonably be required. Indeed, the ability of residential developers in the UK to successfully argue down such requirements has been well-documented (Lord et al., 2022).

### 3.6.3 Strengths and weaknesses of inclusionary zoning

Lawson et al. (2021, p.122) identify several strengths of inclusionary zoning: this policy instrument can identify and secure 'well-located sites' for social housing; it can make development cheaper for the government and therefore more viable; it



can reduce the ‘risks of socio-spatial segregation’ by enabling tenure and income mix; and it can increase the supply of affordable housing by being ‘widely applied to all (or most) new residential developments.’

Weaknesses associated with this approach most prominently relate to its reliance on land value and private action (McAllister, 2019). This renders it useable only where land value can be extracted for affordable housing as to leave sufficient profit for landowners and developers to remain incentivised to develop, and makes it difficult to use in weaker land markets. Further, its reliance on private development means that inclusionary zoning is inevitably pro-cyclical, delivering affordable housing only when the market for private housing is growing. Where the determination of the quantity of affordable housing to be delivered is negotiated, there is inevitably a reliance upon the negotiating powers of local authorities and a potential for developer contributions to be argued down where the negotiating skills of developers outmatch those of local authorities (Wyatt, 2017).



### Policy snapshot 3.9: Inclusionary Zoning, France

The Solidarity and Urban Renewal Act (SRU) law was established in 2000 in France, introducing 'a national mandate for affordable housing availability.' The law aimed 'to reduce the segregation of low-income people in outlying suburban housing developments or banlieues.' The Law as introduced 'required that most urban municipalities ensure at least 20% of their overall housing stock was social housing by 2020.' This was increased to 25% by 2025 in 2013 for the 'communities in which more than half of the French population lives.'

This policy has been instrumental in distributing affordable housing across cities and reducing socio-economic segregation, leading to a 'rebalanc[ing of] the location of affordable housing to provide low- and moderate-income renters more living options.' Research suggests that the '[c]ommunities with the lowest social housing levels in 1999 increased their affordable housing stock the most by 2017... On the other hand, the cities with the most social housing in 1999 actually reduced their social housing share.' From 1999-2017, 'the number of exclusionary municipalities in the Paris region – those with relatively low levels of social housing – declined, from 86 cities with less than 7% social housing to just 45, while cities with high levels of social housing also became less common.'

The SRU law is exceptional in applying not only to new development but to all housing within each municipality. This forces municipalities to use land-use plans to zone land specifically for affordable housing as part of a wider approach to meeting the requirements of the SRU law., in which zoning is combined with complementary measures such as subsidies and public land development.

Sources: Freemark (2021a); Freemark (2021b)



### Policy snapshot 3.10: Inclusionary Zoning, Barcelona, Spain

Barcelona has introduced an 'inclusionary housing approach' in response to its housing crisis. Since 2000, in Catalonia, the region in which Barcelona is situated, rents have increased at a rate three times more quickly than household incomes. To address this crisis, it has been calculated that Barcelona has a 90,000-unit deficit in the number/ percentage of affordable housing units in the rental sector, when compared to the rest of the European housing stock (15% affordable). In 2018, rental public housing in Barcelona was only approximately 1.5% of the overall housing stock. In contrast, 7% of the city's tenants use a combination of '[n]on-market housing (public coop, non-profit and limited profit)' and rent subsidies, a reduction from 12% in 2015. Policy has supported home ownership, and this has made it difficult for many people to access housing.

In response to these challenges, the government has used land and development policy to provide affordable housing. In 2018, Barcelona introduced a mandatory zoning requirement where 30% of new developments or major renovations must include affordable housing. Although there are some exceptions, this is typically applied to all multifamily projects with a buildable surface of greater than 600sqm. Preliminary results for the period 2018-2021 suggest that although 'the number of building licenses is similar to that of previous years,' there has been a notable increase in the percentage of affordable housing units built.

The approach taken in Barcelona is interesting in a broader Spanish context, where the traditional approach to zoning has not taken affordable housing into account and provision of affordable housing has been in the form of subsidised units for sale. Barcelona has, in response to major challenges of affordability, adopted a drastically different strategy combining inclusionary zoning with affordable housing for rent.

Source: Institut Municipal de l'Habitatge i Rehabilitació de Barcelona (2023)



### Policy snapshot 3.11: Inclusionary Zoning, Vienna, Austria

The 'Subsidised Housing' zoning category was introduced in November 2018 by the City of Vienna through an amendment to the City of Vienna's Building Code. This allows the City Council to rezone greenfield or brownfield land to 'subsidised housing.' Under this policy, two thirds of the usable floorspace of the land that is classified as 'Subsidised Housing' must be taken up by subsidised dwellings. This limits rents and ensures that affordable homes are continually constructed across the city, also helping to achieve aims for social mix. This zoning category is most often used when reclassifying industrial or commercial areas as building land, and occasionally when 'aiming to increase density in residential or mixed-purpose development zones as well as in connection with high-rise projects.' It is applied to sites that will accommodate over 5000 square metres of space for housing. The policy also includes a 'sales ban', meaning that the City of Vienna has to approve any sale of subsidised flats, and this lasts for the whole period of the subsidy granted.

The addition of the 'Subsidised Housing' category to Vienna's Building Code adds a regulatory tool to the city's existing approaches to providing affordable housing. The use of this zoning category is notable for its association with densification, demonstrating that Vienna is combining its desire to densify with its longstanding responsibilities in affordable housing provision.

Sources: City of Vienna (no date); Kössl, and Jobst (2015); Kössl, and Jobst (2025)

## 3.7 Market enabling strategies

Instruments that are market supportive, facilitating the working of the market by reducing hindrances to its operation, can be regarded as market enabling. Where the market is regarded as the appropriate and best means to deliver public goals, policy instruments may address barriers such as market failures to ensure that private and social benefit are produced.

### 3.7.1 Land readjustment

Land readjustment involves the consolidation of multiple parcels of land into an alternative configuration that is more advantageous to development. This may involve the combination of separate plots into a larger overall site, as in generic site assembly, or the reconfiguration of the overall sum of plots into a new layout. Gozalvo Zamorano and Muñoz Gielen (2017, p.275) suggest that, in the land policy and planning literature, land readjustment is 'often presented as a



third way among the active and passive approaches to cope with the problem of scattered property ownership and land speculation.'

The overall aim of the exercise is to overcome two hurdles to the development or redevelopment of land. First, land readjustment supports land development and land use change that is stymied by the existing spatial distribution of plots across a defined area, as for example where demand for a large single development exists at a location occupied by multiple smaller plots. Second, the spatial distribution of plots is the physical manifestation of the spatial distribution of property rights, the fractured nature of which can inhibit development due to often substantial barriers to land assembly.

The mechanism by which land readjustment typically takes place involves property rights of individual plot owners being temporarily transferred to a public body that reassembles the plot distribution on the site according to a pre-determined plan (UN-Habitat, 2012). Following the implementation of the plan, property rights are returned to the original landowners. Through the implementation process the areal size of plots is adjusted, with land often subtracted from some plots to allocate land for infrastructure / or open space. The value of plots, however, is increased by the development, and the post-land readjustment landholding returned to each original landowner is quantified according to the proportional value of the original overall site accruing to each plot.

Land readjustment is thereby able to overcome problems of coordination wherein multiple parties are unable to act in unison even where all stand to benefit, due to their being unable to align their common interests (Hong and Needham, 2007). Such interests may present most obviously in the form of so-called ransom strips, in which landowners are able to increase their selling price based on the value of their land being determined by its necessity for a desired site configuration rather than more generic interpretations of location and scarcity. A further example involves development in which new public space is created on a site assembled from smaller plots. In the absence of a coordinatory mechanism this would entail the subtraction of value from those plots on which



the public space is created while those on which new development is sited gain in value, thereby disincentivizing some landowners from participating. By returning plots in a different configuration and according to value rather than area, land readjustment is more persuasive of landowners. In this sense the instrument can be characterised as a means to lower risk by raising the level of mutual trust between landowners, with the public sector acting as trusted arbiter (Lord and O'Brien, 2017).

### 3.7.2 The use and implementation of land readjustment

Land readjustment is implemented through the rezoning of multiple pieces of land to prepare them for future development (Lawson et al., 2021, p. 112). The process involves an agreement between various collaborators to balance issues of suitable land, as land may be close to adjoining roads or infrastructure and will be developed first, while the remaining land is further away and may be the last to be developed, yet the development relies on all parcels of land (Lawson and Ruonavaara, 2020). Lawson and Ruonavaara (2020, p. 37) suggest that land pooling and readjustment 'is useful when public finances and land ownership are constrained,' as it uses public powers to direct the use of private assets.

The practical applications of land pooling and readjustment are set out in the key examples of Germany and Spain detailed below.

### 3.7.3 Strengths and weaknesses of land readjustment

Scholars (for example, Lawson et al., 2021; Lozano-Gracia et al., 2013; Turk, 2008; Housing Europe, no date) have identified the benefits of land pooling and readjustment for different groups. For landowners, it can create an increase in land value by involving the development of a land use plan which improves the public infrastructure in the area, which can in turn, lead to increases in land prices (value) and access to better infrastructure. Furthermore, there is no displacement of landowners as they do not need to leave the land. Moreover, it can be 'more equitable than other land assembly methods, because the benefits and costs of land are borne by the affected property owners' (Lozano-Grazia et al., 2013, p.9).



Finally, landowners can experience 'the considerable increase in value after the LR process despite a reduction in size, the conversion of lands into serviced urban plots in regular forms and size, the ease of marketability and the continuation of ownership after LR' (Turk, 2008, p. 234).

For the government, the same authors have noted a number of additional benefits. These include the fact that there are no upfront/compensation costs; that there can be less conflict; that the increase in land value can increase the tax base; that there is less time and overall cost involved than in land acquisition; that it can improve the quality and quantity of affordable housing, as well as increasing the development of infrastructure; and that a large amount of capital outlay is not required to secure the land. Further, Turk (2008, p.229) argues that the benefits for public agencies include:

'planned urban development, the production of serviced urban plots, the meeting of requirements for service areas and infrastructure to be used by the public, the efficient supply of land service and subdivisions, ease in the solution of ownership problems, the ability to provide low-cost land for sheltering, and the readjustment of landownership and plot borders.'

For developers, they note that redevelopment costs can be decreased due to the fact that it 'does not require substantial upfront capital for buying out existing landowners' (Lozano-Grazia et al., 2013, p.9).

These authors also note a number of general benefits of land pooling and readjustment. There is less displacement of existing populations; it can 'act as an institutional arrangement through which wider community participation in land development and public-private-community partnerships can be fostered' (Lozano-Grazia et al., 2013, p.9); it can increase the transparency of the process by enabling active participation and partnership development to achieve a common aim; and finally that it is a collaborative tool, meaning that the increase in value is shared amongst key stakeholders.

For the community, Turk (2008, p.232-234) argue the following benefits can be realised:



‘good standard subdivision layout, the production of plots with service in regular forms and sizes, the supply of service areas such as roads, parks and so on that are required for public use, and the achievement of price stability as a result of meeting the demand.’

The challenges, as described by Lozano-Gracia et al. (2013, cited in Lawson et al., 2021,p.114) are as follows: that there can be ‘conflict with existing residential property owners,’ lessening consensus; there is a need for ‘a strong legislative framework’ which can require ‘a lengthy political process’; the process can ‘take time to implement’ and then further time to ‘recover [the] investment made’; the ‘valuation and reallocation of land parcels is complex’ as they vary in quality and size, which can lead to ‘major social upheaval, including compulsory acquisition, leading to the loss of traditional tenure arrangements, demolition of residential forms and income sources’ (Lawson and Ruonavaara, 2020, p.37); and there can be controversy over ‘the process of determining land values and land contributions.’



### Policy snapshot 3.12: Land readjustment, Germany

The system of land readjustment in Germany is very well established (since 1902) and is applied under federal law statute on land use planning. Under this law, municipal governments can use land readjustment to implement a binding land use plan (Bebauungsplan) (Lawson and Ruonavaara, 2020, p. 38). Through the process, 'municipalities can also capture part of the land for public purposes such as parks, footpaths and childcare centres – and in this way they can also promote more affordable and inclusive housing' (Lawson et al., 2021, p.112).

While land readjustment can be made mandatory through the German system, the emphasis is on consensus building where possible: 'Persuasion and negotiation should first be used to resolve the disagreement, with coercion employed only as the last resort when the involved parties have failed to compromise after exhausting all conflict-resolution mechanisms' (ibid., p. 113; see also Davy, 2007).

Land readjustment is typically supported by 'public subsidy and access to additional sources of funding from the private sector,' as the process does not often cover the total cost of the necessary public works 'to make land suitable for development on its own' (Hong and Needham, 2007, cited ibid, p.113).

Davy (2007, p.42) argues that the policy is generally seen as successful in Germany, with the view that 'mandatory land consolidation has been refined to an art form. Most landowners whose properties have been included in land readjustment are happy with the process (the fact that all costs are paid by the local government adds to the joy).' Seele (1982, p. 194-295, cited Davy, 2007, p.42) thus argues that 'by combining mandatory and voluntary elements, land readjustment has become an effective, efficient, and fair way to prepare land for development.'

Germany's passive land policy, in which municipalities do not actively supply land for housebuilding, is supported by the widespread use of mandatory land readjustment, which provides a basis for land assembly. In the absence of more interventionist tools, land readjustment is an effective regulatory approach.

Sources: Davy (2007); Satsangi et al. (2020); Davy & Lawson (2022)



### Policy snapshot 3.13: Land readjustment, Spain

Land Readjustment (LR) is used in Spain as a form of land value capture, part of which is used for the provision of social and affordable housing. LR was first introduced in 1956, but did not become commonplace and effective until the 1980s. Since the 1980s, land readjustment has been in widespread use across Spain, with each region adopting its own variant during the 1990s (Muñoz Gielen, 2010, p. 111–118 cited Muñoz Gielen & Mualam, 2019, p.2).

In Spain, the land use and LR plan are prepared by a public body (either the municipality directly, through a municipal land development company, or a regional or national public body). However, in some regions, landowners can be publicly appointed as the implementing agency. In the Valencian model (adopted by some other regions too), ‘municipalities can appoint in a public tender procedure not only the landowners, but also any other party (not necessarily owning land, although most of the times it is a property developer who owns part of the land in the development area), as the implementing agency’ (ibid.). The plans are approved by the municipality, while the preparatory tasks for the supply of infrastructure and infrastructure construction are conducted by the same agencies listed above for the preparation of the land-use plan and LR strategy.

An innovative aspect of land readjustment as it has long been used in Valencia and is now used in other regions, is that a non-public actor can propose a land readjustment plan. This gives scope for third parties to bring their ideas for redevelopment of sites to the table and in practice allows developers to use land readjustment as a tool of persuasion in surmounting the often substantial hurdle of land assembly.

Sources: Muñoz-Gielen (2014); Muñoz-Gielen and Mualam (2019); Zamorano and Muñoz-Gielen (2017)

The next section analyses the operational context, linkages and transferability of these land and planning policy instruments.

### 3.8 Operational Context, Linkages and Transferability

A substantial body of work comparing planning systems across Europe has applied classifications to distinguish between legal systems (Davies et al., 1989; Newman and Thornley, 1996), planning cultures (Sanyal, 2005) and institutional technologies (Berisha et al., 2021). These classes of planning system can be used to map the use of planning tools across Europe with, for example, the ‘discretionary’ plans of the UK and Irish systems distinguished from the ‘zonal’ plans used elsewhere. In searching for patterns in the incidence of land policy



instruments for affordable housing provision, typologies of planning system are – perhaps surprisingly – not useful, however. Europe-wide comparative surveys of land policy are by contrast of more recent origin (Gerber et al., 2018; Hartmann et al., 2025b) and reveal a similar lack of pattern.

While planning systems are shaped by legal systems and cultures of governance and practice, land policy instruments appear to be devised and applied in a more pragmatic way. Indeed, the plurality of land policy strategies used not only across countries but across municipalities within countries, and the independence of these from their institutional context, is an important recent finding (Shahab et al., 2021). In some instances, they may be developed through practice before being formalised, as in the case of inclusionary zoning in England (Cullingworth et al., 2015). In others, a common practice that was a response to a particular set of conditions is never formalised but simply grows in use, as with public land development in the Netherlands (Needham, 2014).

A third mode by which land policy tools have been brought into use is by policy transfer, where a policy is brought into play within a given country context based on a reading of its performance elsewhere and its perceived fit in achieving a land policy strategy. This is dubbed ‘instrumental activism’ by Shahab et al. (2021), who depict it as an overly determinative and perhaps simplistic attempt to address issues around land and housing. The introduction of land readjustment to the Netherlands is one such example in which a policy that has worked successfully elsewhere has failed to achieve desired results when transferred to a different context (Van der Krabben and Leferink, 2018).

### 3.9 Conclusions

Land policies are one of several means of promoting affordable housing supply, alongside the financial supports, tax and regulatory instruments, and personal allowances also covered here. The association between land and affordable housing is based on the necessity of land as an input to the production of affordable housing and is funded by a mix of public land effectively used as subsidy and private land allocated for affordable housing. The use of public policy



instruments to channel private land for use in affordable housing provision is morally justified by a logic of land value uplift being the result of public investment, award of development rights, and broader economic growth raising the value of privately owned land (Alterman, 2012).

A diversity of approaches are taken within land policy to address affordable housing supply, with the level of public intervention across these ranging from what have, in a broader residential development context, been classified as active and passive land policy (Hartmann and Spit, 2015). Active land policy entails the public sector actively intervening in the market rather than acting only in a regulatory capacity, by assembling sites and determining what uses and infrastructure are developed on them (Van der Krabben and Jacobs, 2013). This is typically done to address housing supply, with provision of affordable housing a core component, and is covered in this chapter by the descriptor of public land banking and public land leasing. Where the public sector directly supplies land to Community Land Trusts it could be argued that this practice is also representative of an active land policy. Passive land policy, by contrast, involves the public sector supplying landowners and developers with the right to develop housing but leaving the actual development to the market (Hartmann and Spit, 2015). Passive land policy is here represented by the policy instruments land readjustment, as well as and inclusionary zoning. Usually, some combination of active and passive land policy is used to provide affordable housing, requiring a mix of policy instruments. This is necessary to address provision in different markets, as some locations offer sufficiently high land values for affordable housing to be funded from land value capture while others require subsidy (Lord et al., 2019). But it is also a function of the heterogenous nature of land and the particularities of local housing need and demand, perhaps most visible where Community Land Trusts make available affordable housing to a defined community only (Bourassa, 2006).

An important concluding point is that it is often not the lack of available policy tools that inhibit the provision of affordable housing but a reluctance to put them to use on the part of policymakers. As Dembski (2025, p. 236) notes in a more



general sense on the application of land policies, there are instances in which ‘the explanatory power of an instrumental rationality is limited.’ This is evidenced where public authorities grapple with conflicting aims such as where public land banking and development must both capture land value and deliver affordable housing. Where the former is prioritised, the latter may be squeezed out by a preference for market housing (Granath Hansson et al., 2025).



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