

URBAN REGENERATION: TURNING OBSOLESCENCE INTO VALUE FOR SOCIETY, NATURE, CLIMATE - AND INVESTORS

S Y S T E M I Q



*Grandes Serres Regeneration project
in Pantin, France – Ginkgo Advisor
Photo credit: Leclercq Associés, architect*

EXECUTIVE SUMMARY

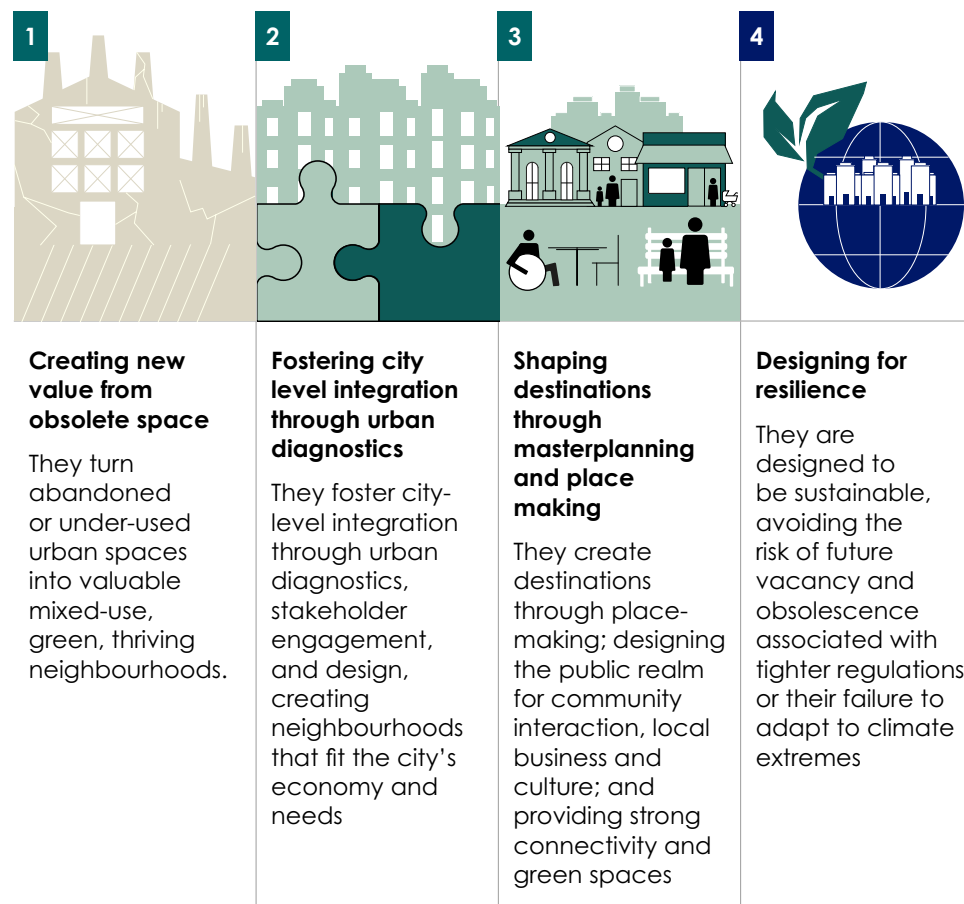
Across Europe's cities, demand for more and better urban housing is soaring. At the same time, Europe's cities need to update their economies, generate better jobs, lower emissions, reduce pollution, revive nature and increase resilience to future events shocks.

Urban regeneration – transforming under-used land and obsolete buildings into compact, vibrant places to live, work and do business – is a strategy that could relieve Europe's housing crisis and revitalise its cities for a resilient future at the same time.

Scaling urban regeneration across Europe will need significant private investment. The good news is that investing in well-designed urban regeneration is an effective way for investors to create significant economic, environmental and social value while earning reliable long-term returns.

Although every regeneration project is different, **they share four main characteristics** (figure ES1):

FIGURE ES1



Source: Systemiq analysis

Across Europe, continuing migration – from rural to city areas, and from the South and East to the North – is pushing up demand for more and better urban housing and for new types of flexible and sustainable workspaces and industrial spaces. Urban populations have grown by more than 9 million since 2010. But the EU's goal of “no net land take” by 2050, aimed at shrinking Europe's average consumption of virgin land of 450 square kilometres a year, is drastically reducing the area of new land available to cities to meet this demand. Their search for better uses of existing space favours more urban regenerationⁱ. Cities' plans to meet their economic, social, climate and environmental goals are leading many in the same direction.

Sites suitable for urban regeneration could meet mostⁱ, if not all, of Europe's projected demand for new buildings over the next 10-15 years while saving cities around 20% of projected infrastructure costs. Systemiq's analysis indicates that vast amounts of viable brownfields and empty structures are available. A fraction of this area - about 300 square kilometres of empty office and retail space and 1,000-1,500 square kilometres of brownfield land - could satisfy Europe's demand for additional land if it were redeveloped into value-creating spaces for living, production and trade over the next 10-15 years.

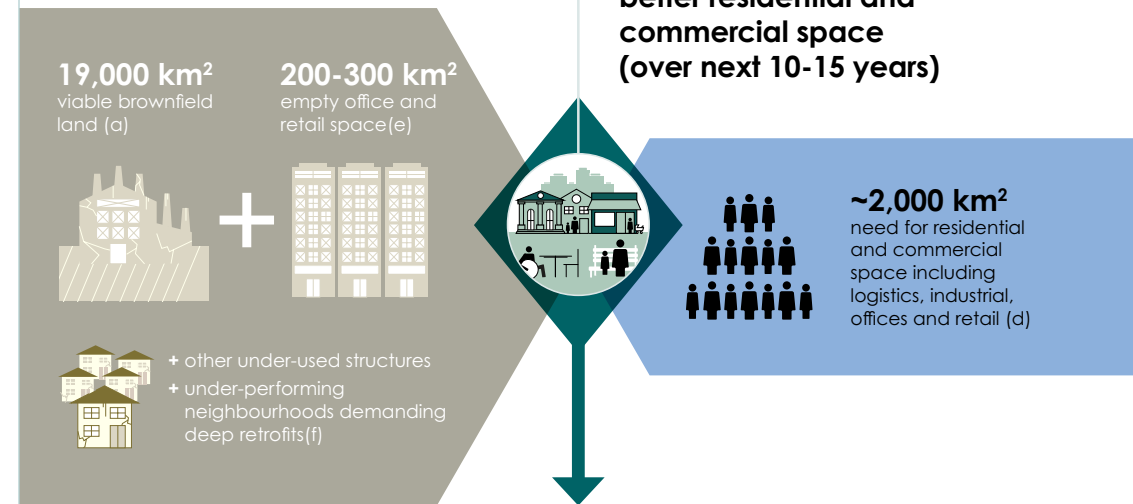
This could create demand for investment of EUR 4-6 trillion over the next 10-15 years, opening up significant possibilities for private investors. Europe has barely begun to seize this opportunity. So far, institutional investors have largely seen urban regeneration as a public- sector play. However, smaller and mid-size projects are well suited to private development, or private cooperation with municipal landowners.

ⁱ In total, there is much more than enough brownfield land to accommodate all Europe's development need. However, it remains to be modelled where the housing needs will emerge and the geographical distribution of housing need matches the locations of pre-used spaces.

FIGURE ES2

Large supply of under-used space in Europe...

Countries already implementing EU's 'no net-zero land take 2050' target are limiting greenfield availability



...leads to a great market potential for urban regeneration investing

~15,000 regeneration sites of different sizes(c)



EUR 100-400 million investment volume per project(b)



~ EUR 4 Tn investment potential

(a) JLL and Eurostat (b) Systemiq and EMF "Building Prosperity" 2024 (c) further analysis needed to quantify the potential (d) Systemiq estimate based on Europe's recent trends (e) if ca. 70% of expected building activity moved to pre-used land, some 1,000-1,500 square kilometres of existing structures and brownfield land could be regenerated with an average size of 7 to 10 hectares (f) Based on common project sizes in Europe

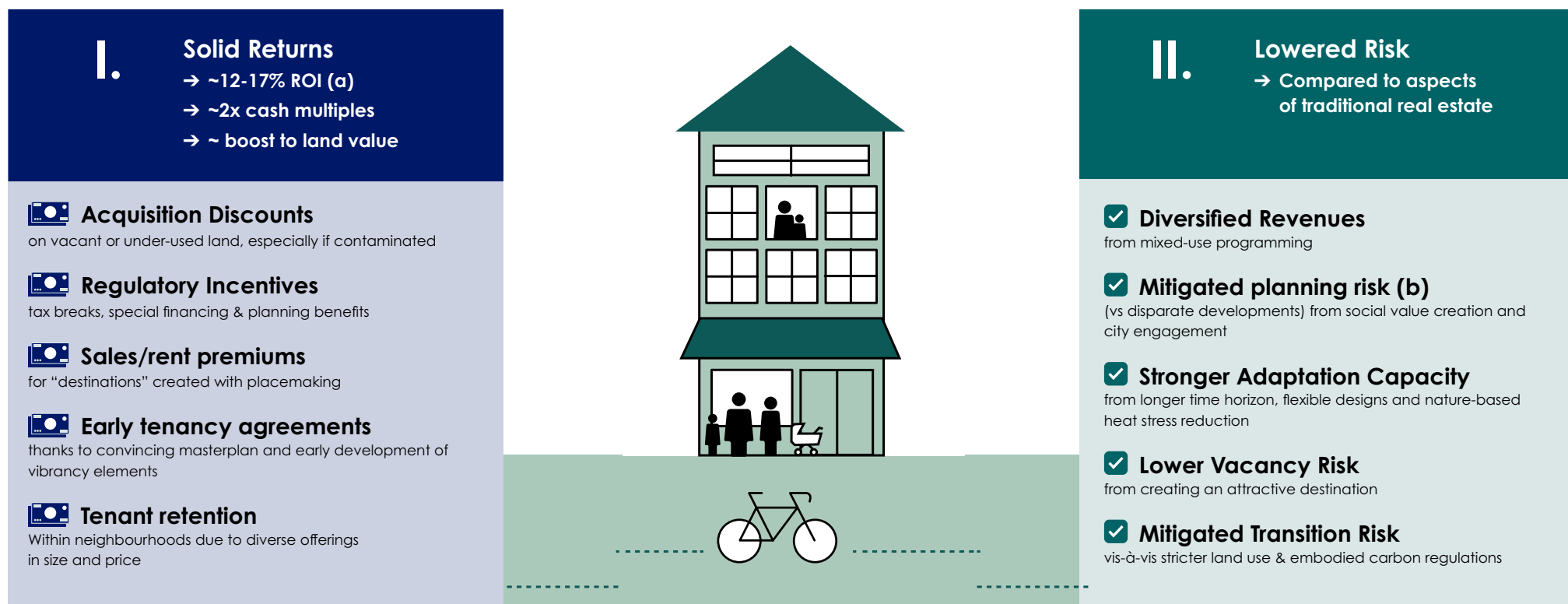
Mid-sized, neighbourhood-scale regeneration projects, each needing EUR 100Mn to 400Mn of investment, could meet a large share of Europe's new housing and workspace needs (Figure ES2).

Projects of this scale are the focus of a growing number of expert urban regeneration funds and developers (and also this paper). Demand for investment in urban regeneration is expected to grow particularly fast in countries that strictly limit the area of virgin land available for residential and industrial development, for example France, the Netherlands and Germany.

Well-designed urban regeneration projects offer investors with a 10-15-year³⁻⁶ time horizon a solid return at relatively low risk. They can

deliver returns in the mid-teens and cash multiples of around 2x, depending on their local context, objectives and design. One reason for their strong financial performance is the relatively low cost of the under-used urban spaces that projects regenerate. Financial returns on projects are also closely linked to the quality of their placemaking. Done well, this attracts residents and businesses, raising land values not only within the regenerated areas but up to 2km beyond². They have lower vacancy risk than fragmented real estate developments. And their decarbonising strengths mean they have significantly lower energy transition risks than conventional building projects. The societal, environmental and financial values of urban regeneration projects are systemically intertwined (Figure ES3).

FIGURE ES3



(a) Based on examples, dependent on the type and objective of projects (b) All new developments face considerable planning risk; however this is mitigated through smart stakeholder engagement

Urban regeneration offers everyone in Europe a huge social and environmental prize. If adopted at scale across the continent, it will create millions of high-quality homes and business spaces in well-connected urban locations, alleviating the housing crisis and boosting the long-term productivity of European citiesⁱ. Systemiq estimates a potential EUR 500-600 billion of new revenue and jobs associated with the regeneration value chain², and up to 400 billion increase in the value of existing urban assets.

Science shows that more compact living – making more efficient and balanced use of urban space - has a bigger positive impact on urban and national energy efficiency and natural resource depletion than any other strategy.³⁻⁶ For example, scaling urban regeneration could:

- save about 45% of Europe's yearly construction emissions by curbing urban sprawl;
- allow an area of nature almost twice the size of Luxembourg to regrow or be saved from destruction over the next decade;
- Prevent the emission of 13,000 tonnes of particulates, equivalent to the pollution generated by 12 million cars, from polluting Europe's air²; and
- curb the dispersal of contaminants from polluted industrial sites.

Investors with a long-term interest in urban economies, real estate and infrastructure need an urban regeneration investment strategy, and a clear plan for tapping into the opportunity. Mainstream capital providers still undervalue it significantly. Yet these investors seek assets that will fulfil their fiduciary duty to create financial value for beneficiaries and also respond to growing demands from their stakeholders for evidence of sustainable or even 'regenerative' credentials. Urban regeneration assets meet both criteria.

ⁱ Urban regeneration could increase the long-term productivity of some cities by up to 100%, according to Systemiq's & Aretian's modelling

Expert urban regeneration funds already offer suitable assets for LPs keen to invest immediately. However, high-quality projects are still difficult to find in big numbers. The pipeline of investment opportunities will fill faster if Limited Partners (LPs), funds, General Partners (GPs)/ developers and cities with a shared interest in expanding private investment in Europe's urban regeneration work together to demystify this market, accurately quantify the real returns on investment in placemaking, and enable new developers to learn from the frontrunners.

This paper offers a clear definition of investable urban regeneration projects (chapter 1) and unpacks their benefits for society and investors, with a focus on private investment (Chapters 2 and 3). It then synthesises the main challenges and risks of the market perceived by investors today and offers a path to overcome them (Chapter 4).



Nordhavn, Copenhagen
- Shutterstock

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Regeneration of a former industrial railway maintenance station in Florence, Italy – Ginkgo Advisor

1. WHAT IS INVESTABLE URBAN REGENERATION IN EUROPE?

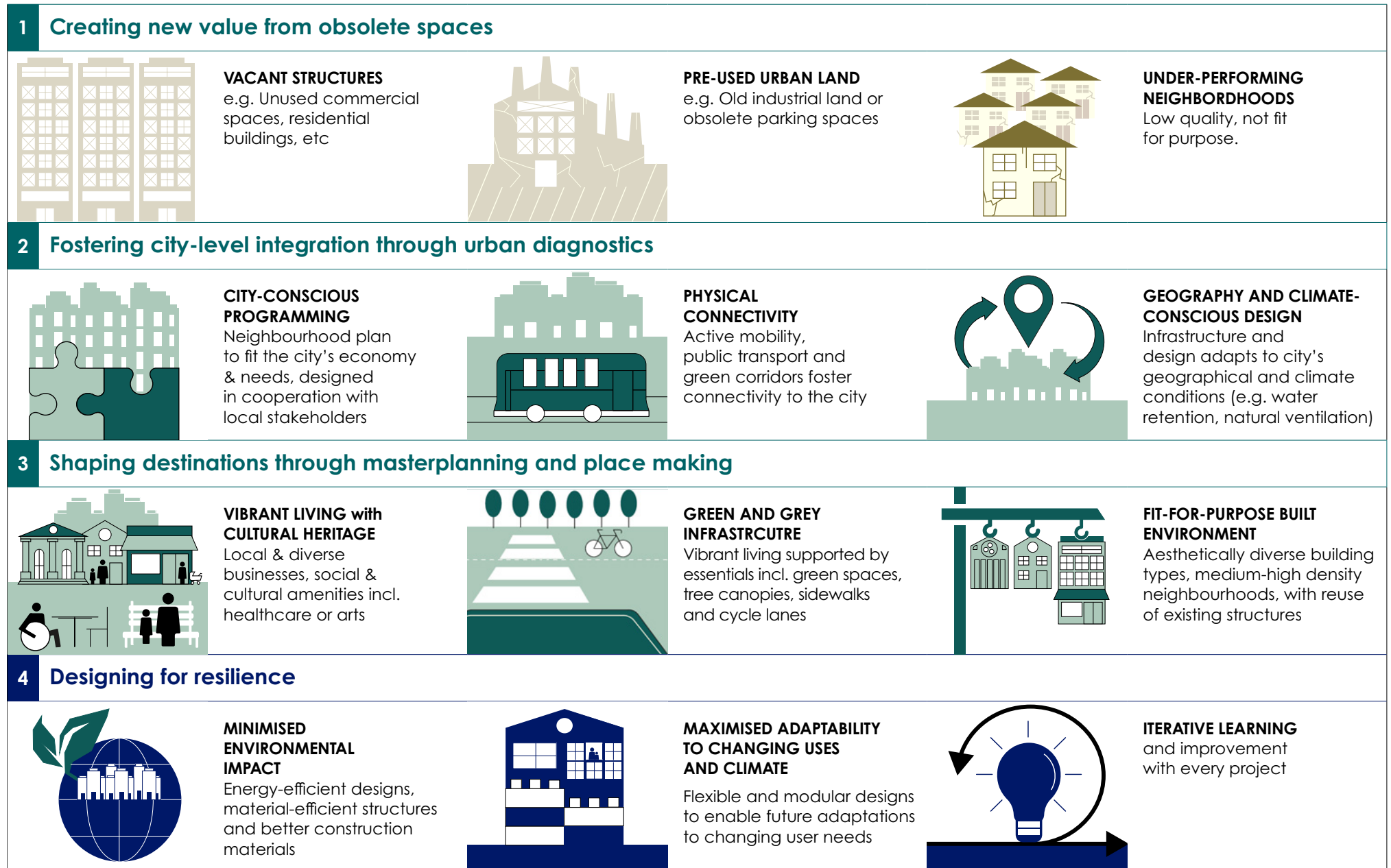
Europe has a vast amount of urban space that could be remodelled. Thousands of Europe's neighbourhoods are under-performing; hundreds of thousands of obsolete buildings stand unused; and millions of square metres of old industrial land, much of it in inner-city or well-connected locations, remain empty. Moreover, Europe urgently needs to refashion old building stock and infrastructure as migration into cities continues from rural hinterlands, from Southern and Eastern Europe to the North, and from countries further afield.

Urban regeneration – the transformation of under-used or under-performing spaces into vibrant places to live, work and do business – offers Europe an outstanding opportunity to renew its cities for the long term. With this strategy, cities can advance their social and economic performance, respond to the housing crisis, become more resilient to energy, material supply and price shocks, save millions of tonnes of hard-to-abate emissions and prevent large-scale destruction of nature. At the same time, urban regeneration projects offer limited partners (LPs) and general partners (GPs) a unique opportunity to create financial value alongside social and environmental value.

There is no single, consolidated definition of urban regeneration. In practice, each project can – and should – look very different, depending on its location and its unique history and context. However, the relevant urban planning literature and experts concur in defining the characteristics summarised in Figure 1.

So far, Europe has barely begun to seize its urban regeneration opportunity. About half of current residential new-builds still feature inefficient sizes and shapes and are consuming virgin, natural land. Given the ambitious commitments of European cities and the European Community to carbon neutrality (“cut carbon emissions by 55% by 2030”)⁹, land protection (“no net land take by 2050”)¹⁰, resilience, and economic competitiveness¹¹; urban regeneration should be top of their agendas, and a priority for investors as well.

FIGURE 1: WHAT IS INVESTABLE URBAN REGENERATION?



2. URBAN REGENERATION DELIVERS SOCIO-ECONOMIC AND ENVIRONMENTAL VALUE

Well-designed urban regeneration projects produce socio-economic gains and benefits for climate and nature, within individual projects and beyond their boundaries.

A. SOCIO-ECONOMIC BENEFITS

Urban regeneration projects create high-quality housing, workspaces and, where suitable, industrial spaces in well-connected, inner-city areas, making them crucial to solving Europe's housing crisis. They also help cities to attract new industries, making their wider economies more resilient.

Socio-economic benefits within projects: vibrant neighbourhoods for people and businesses

Because of their scale and intent, urban regeneration projects can better feature strong 'placemaking'. This umbrella term means designing the public realm for community interaction, local business and culture; providing green spaces; and providing strong connectivity including good public transport links. Strong placemaking is inherent to the lasting success of a regenerating area and essential to the economic case for investing or buying space in one (see section 3).

Urban regeneration projects with a strong placemaking emphasis deliver valuable socio-economic benefits on the level of the neighbourhood and for the wider city (Figure 2). Better quality of life is

achieved through quality housing, access to essential services, green spaces, and enhanced connectivity, which collectively foster better health, safety, and well-being. Economic activity and job creation are bolstered by a mix of smaller local and larger businesses, which receive higher footfall thanks to green spaces and an attractive public realm.

Wider socio-economic benefits: efficient, compact, attractive cities

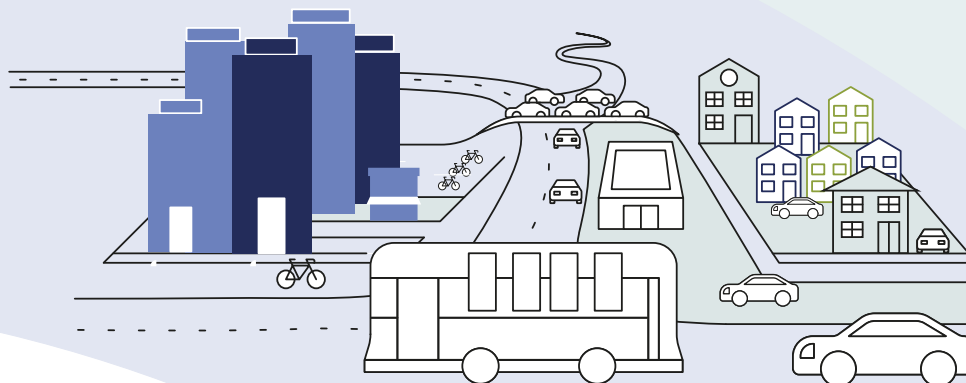
The crucial wider benefit of urban regeneration is that it can slow down or even reverse costly urban sprawl. The total costs of urban sprawl remain under-researched. But road maintenance alone, in the low-density, 'sprawling' neighbourhoods costs 20% more than in high-density neighbourhoods. In addition, urban economies lose millions of Euros each year due to congestion, which is harder to mitigate in space-inefficient cities. If their tendency to sprawl is left unchecked, Europe's cities will waste billions of scarce municipal budgets.

Urban regeneration projects, together with a city-wide plan for improving compactness have a significant positive effect on the wider city's economy, income and jobs - summarised in Figure 2.

FIGURE 2: URBAN REGENERATION DELIVERS HIGH SOCIO-ECONOMIC VALUE

CITY-LEVEL BENEFITS

of revitalised and densified urban areas



EUROPEAN POTENTIAL

if best practices are scaled across Europe



NEIGHBOURHOOD-LEVEL BENEFITS

Better quality housing

Improved access to services

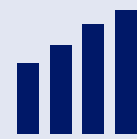
Local business and jobs



Increased connectivity

Enhanced health and wellbeing

Diverse commercial space; higher footfall



Higher-value and innovative economy
~20% more innovation activity in more compact urban areas (d)



Infrastructure cost savings
up to 20% savings compared to sprawling cities (e)



Value increase in wider urban assets
10-15% increase in value of land adjacent to regenerated sites (f)

EUR 500-600 Bn

Revenue and local jobs for sustainable remediation and the (re)construction value chain (a)

EUR 15 Bn

annual infrastructure savings (b)

EUR 400 Bn

increase in value of existing urban assets (c)

Sources: (a) Estimated assuming Europe met 90% of its regeneration targets. (b) Ca. if EUR 250-400 Mn annual savings per Flanders's model achieved at Europe level (as 60% of European urban regions share similar sprawling patterns). (c) Estimated assuming Europe met its new housing needs by regenerating ~12,000 derelict brownfield sites. (a-c) Base figures for calc from Ellen MacArthur Foundation, 2024 (d) Carlino et al, Urban density and the rate of invention, 2007 (e) Based on Vermeiren et al. Modelling urban sprawl and assessing its costs in the planning process: A case study in Flanders, Belgium 2022; Kurvinen and Saari. Urban Housing Density and Infrastructure Costs 2020; Aretian: Aretian Urban Analytics predictive modelling for Espluges, Catalonia, 2023. (f) Haninger, K., Ma, L. & Timmins, C., The Value of Brownfield Remediation, 2015.

New developments can lead to problems as well as benefits. For example, a sudden increase in population can overload local infrastructure, such as hospitals or schools. Neighbouring areas, while they may benefit from new services, may also experience more traffic, noise and competition. Regeneration projects should co-operate with city authorities at an early stage to minimise these possible effects.

BOX 1: WELL-DESIGNED URBAN REGENERATION VERSUS (HYPER-)GENTRIFICATION

Urban redevelopment projects are often criticised for 'gentrification' or driving out poorer residents to provide higher-priced housing to better-off residents. This strategy may produce positive returns in the short term. However, research indicates that urban regeneration projects designed to create socially diverse neighbourhoods can benefit both existing residents and asset owners.

Moody's 2021 study notes that housing prices in regenerated areas increased by 1.3% - 7% over 5 years²⁴ and also benefited existing residents economically by providing shorter commute times (most integrated communities experience a 13% decrease in commuting time), improved access to credit, less crime, more business activity and more employment opportunities.



Cool Drops Yard, Kings Cross regeneration, London
- Shutterstock

B. CLIMATE AND NATURE BENEFITS

Urban regeneration projects can decarbonise and 're-nature' neighbourhoods and make the wider city more resource-efficient and healthy.

Climate and nature benefits within projects: Greener, lower-carbon neighbourhoods

Well-designed urban regeneration projects aim to deliver efficient buildings and infrastructure, restore nature and minimise waste. Not every project succeeds, but the scale and integrated character of inner-city regeneration projects is more conducive to achieving sustainable outcomes than projects in fringe locations or smaller, fragmented projects.

The inclusion of adequate green space is more prevalent in integrated regeneration projects and enhances climate resilience and biodiversity. Regeneration projects also foster higher-density living and the reuse of materials from demolished structures, which in conjunction can lead to up to 50% savings in construction materials compared to sprawling developments. Additionally, these projects facilitate more efficient low-carbon heating solutions, with the potential to cut heating emissions by up to 70%. Air and land pollution is reduced by better connectivity reducing car dependency and the remediation of decontaminated soil (Figure 3). Success examples like the transformation of London's Olympic Park for 2012 games illustrate the potential (see Figure 4).

Wider climate and nature benefits for cities and Europe: Enabling resource-efficient, healthy cities

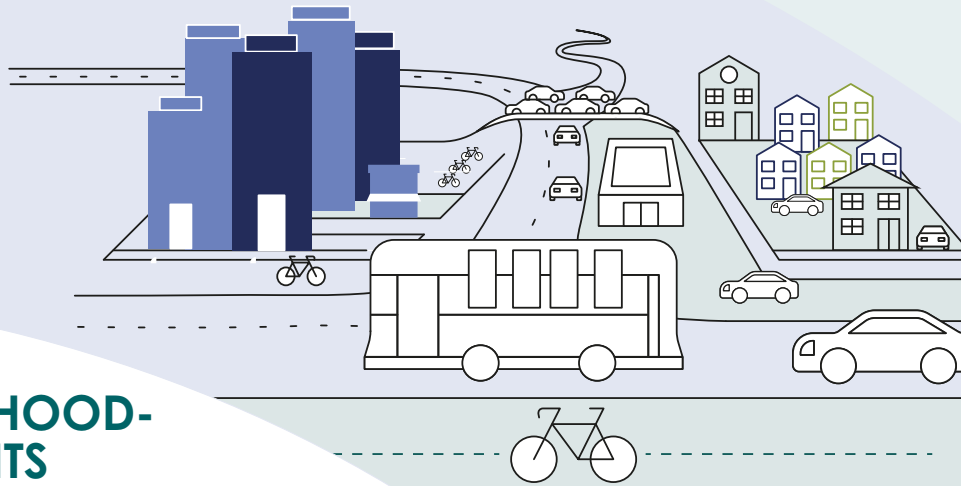
Improving space efficiency through strategic planning and supporting regeneration investments is the most effective strategy a city can adopt to improve its energy efficiency, its resilience and its material, carbon⁴ and nature footprints²⁷ (Figure 3).



FIGURE 3: URBAN REGENERATION DELIVERS LARGE ENVIRONMENTAL VALUE

CITY-LEVEL BENEFITS

of revitalised and densified urban areas



EUROPEAN POTENTIAL

if best practices are scaled across Europe over 10 years



NEIGHBOURHOOD-LEVEL BENEFITS

Waste reduction

Decontamination of land

Lower material use and embodied carbon



Low-carbon heating

More green spaces, biodiversity and resilience



Material efficiency

through **3-5x** lower road asphalt use per inhabitant in more compact urban areas (c)



Reduced car emissions

better viability for low-carbon transport and shorter distances leads to up to **50%** lower private vehicle use in compact urban areas (d)



20% higher energy grid efficiency

through fewer transmission losses (e)

Avoidance of land-sealing

Redeveloping inner-city sites avoids **2-4x** the land sealed compared to sprawled urban development (f)



45%

avoided hard-to-abate emissions over the next 5-10 years from road and building construction (a)

12 Mn

cars removed from European roads reducing (b)

13k tonnes





airborne particulate matter per year (b)

7,000 Km²

of virgin land saved with potential for **nature protection** (b)

Option 1 Sources: (a) Efficient and Balanced Space Use – Shaping Vibrant Neighbourhoods and Boosting Climate Progress in Europe, 2022. (b) Ellen MacArthur Foundation. Building Prosperity: Unlocking the Potential of a Nature-Positive, Circular Economy for Europe, 2024. (c) Dijkstra, Lewis, et al. ROAD TRANSPORT PERFORMANCE IN EUROPE, European Commission, 2019. (d) European Court of Auditors, 2020. Special Report: Urban Mobility. (e) Efficient and Balanced Space Use – Shaping Vibrant Neighbourhoods and Boosting Climate Progress in Europe, 2022 Or Johansson et al., Global Energy Assessment (GEA), 2012. (f) Industry expert interview.

FIGURE 4: EXAMPLES OF SOCIAL AND ENVIRONMENTAL VALUE DELIVERED THROUGH URBAN REGENERATION PROJECTS

			
<p>Grandes Serres, Pantin (a)</p>	<p>Elephant & Castle, London</p>	<p>Merwede, Utrecht (d)</p>	<p>Lower Lea Valley, London (e)</p>
<ul style="list-style-type: none"> → Local business and jobs → Higher-value sectors & commercial space → More green space 	<ul style="list-style-type: none"> → Quality housing → Increased connectivity 	<ul style="list-style-type: none"> → Quality housing → Increased connectivity → Low-carbon heating 	<ul style="list-style-type: none"> → Decontamination of Land → Waste Reduction
<p>75,000 m² of premium, high-demand office space</p>	<p>3,000 high-quality homes with access to community spaces (b)</p>	<p>6,000 Mixed-income homes with a shared and active mobility concept</p>	<p>~2 Mn Tons of contaminated soil chemically stabilised in a 110-ha brownfield</p>
<p>11,000 m² For local retail and cultural amenities at affordable rates</p>	<p>3,000 new cycle spaces and new hire bikes (c)</p>	<p>75% Lower energy demand from low-carbon underground heat and cold storage</p>	<p>98% demolished materials recycled and reused</p>
<p>Photo: Grandes Serres Pantin, Leclercq Associés for Ginkgo Advisor</p>	<p>Photo: ElephantPark.co.uk, Landlease; ElephantAndCastle.org</p>	<p>Photo: marckoehler.com/project/merwede-utrecht-district-of-the-future/</p>	<p>Photo: livebettermagazine.com</p>

Sources: (a) Alios Development, 2022. (b) Elephant and Castle Partnership, (n.d.) (c) Elephant Park, 2021 (d) New Utrecht city district Merwede, Valstar Simonis 2020. (e) LiveBetter Magazine, 2012

BOX 2: PURSUING URBAN REGENERATION BEYOND CAPITAL CITIES DRIVES ADDITIONAL VALUE

Urban regeneration projects will bring benefits to almost every city in Europe. There are still important untapped opportunities in large metropolitan and capital cities. Cities of this scale, with more than 1 million inhabitants, are home to just under half of Europe's population and are seeing the fastest population increases. Their infrastructure is already more resource-efficient than in smaller settlements, which means that enabling more people to live in them compactly is environmentally beneficial.

On the other hand, large cities already receive most real estate investment.²⁹ There is strong competition for land and so land prices are high, making developments smaller and more disjointed. Some cities may have already reached the point where 'diseconomies of scale' start to reduce their competitiveness.³⁰

For these reasons, investors will want to avoid betting exclusively on urban regeneration in capital cities. Fortunately, urban regeneration activities in Europe's larger secondary and medium-sized cities have a lot of overlooked potential. Their 'rate of sprawl' is much higher, partly because they lack the resources to produce a citywide spatial management masterplan. Their need for good urban regeneration is greater and its social value potentially higher. Secondary and tertiary cities can offer an excellent quality of life and regenerating their underused spaces can help to alleviate unsustainable housing pressures on larger centres. They are also vital for Europe's overall economic productivity and competitiveness, which depends on maintaining polycentrism. Furthermore, most of the brownfield land still available is in secondary and tertiary cities, where land is cheaper than in the capitals. Lastly, while projects in 'non-prime' locations are often classified as more volatile and riskier for investment, excellence in master planning and city interaction can mitigate these risks by paying lower prices for non-prime land.



Regeneration of a former papermill in Mont Saint-Gulbert, Belgium
- Ginkgo Advisor

3. URBAN REGENERATION OFFERS ATTRACTIVE, STABLE LONG-TERM RETURNS

European urban regeneration is an excellent investment opportunity for four main reasons:

1. A large potential market
2. An attractive risk-return profile, especially at a time of real estate market volatility and tightening regulation
3. The opportunity to gain distinctiveness and a competitive edge through technical and managerial excellence
4. The chance to brand 'beyond ESG' and drive the regenerative economy in Europe

These characteristics make investment in urban regeneration of particular interest to institutional investors with a 10-15-year horizon and a preference for stable returns, such as pension and insurance funds as well as Development Finance Institutions (DFIs). It is already attracting interest from long-term oriented leaders in private equity.

A. A LARGE MARKET POTENTIAL

Urban regeneration today is underinvestedⁱ. While the exact scale of financial flows into urban regeneration projects is not transparent, what is clear is that only a few LPs and funds have explicit integrated regeneration strategies. Mainstream investment in urban and real estate still goes largely into stand-alone building projects, often greenfield developments.

The potential for investment in urban regeneration is large and investment opportunities are expanding. In principle, all of Europe's new residential and logistics developments over the next 10-15 yearsⁱⁱ could be located in repurposed buildings and regenerated brownfield land as figure 5 illustrates.

In total, this translates into a potential demand for investment in urban regeneration of EUR ~4 trillion over the next 10-15 years. Part of this amount will be additional to the current expected demand for private investment in urban construction. That's because about half of residential house-building today is small-scale or individual. More urban regeneration will shift some of this activity into larger, integrated schemes seeking larger-scale funding from institutional investors.

In sum, seizing this opportunity would turn residential, logistics and infrastructure developments, currently the main causes of land sealing and urban sprawl²⁹, into drivers of more efficient and vibrant cities.

ⁱ Urban regeneration is not a defined asset class, and there is no commonly agreed definition of the concept, making it challenging to track how much investment is flowing into urban regeneration projects across Europe. Statistics showing how many new buildings are being placed on brownfield land vary across urban areas: in Berlin and London, for instance, we see 90%, whereas other areas e.g. UK-wide show ~50%. However, these figures do not tell us how many new buildings are being built or existing neighbourhoods are being redeveloped on an 'urban regeneration' basis.

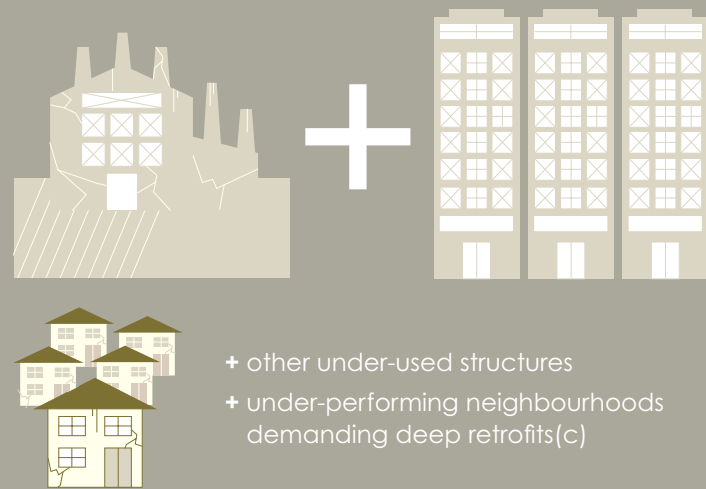
ⁱⁱ Well-designed, flexible logistics and other industrial spaces are vital for a sustainable economy. The success criteria for industrial buildings that add value to cities and underpin a sustainable industrial transition remain to be developed – a key area for further analysis.

FIGURE 5: THE POTENTIAL FOR INVESTMENT IN URBAN REGENERATION IS LARGE AND GROWING

Large supply of under-used space in Europe...

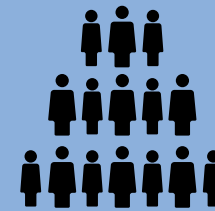
19,000 km²
viable brownfield land (a)

200-300 km²
empty office and retail space (b)



Countries already implementing EU's 'no net-zero land take 2050' target are limiting greenfield availability

...and large demand for better residential and commercial space (over next 10-15 years)



~2,000 km²
need for residential and commercial space including logistics, industrial, offices and retail (d)

...leads to a great market potential for urban regeneration investing

~15,000
regeneration sites
of different sizes (e)



EUR 100-400
million investment
volume per project (f)



~ EUR 4 Tn
investment
potential

(a) JLL and Eurostat (b) Systemiq and EMF "Building Prosperity" 2024 (c) further analysis needed to quantify the potential (d) Systemiq estimate based on Europe's recent trends (e) if ca. 70% of expected building activity moved to pre-used land, some 1,000-1,500 square kilometres of existing structures and brownfield land could be regenerated with an average size of 7 to 10 hectares (f) Based on common project sizes in Europe

While there is enough brownfield land available to accommodate all of Europe's expected demand for new residential and logistics developments, shifting all that demand to brownfield land would bring some challenges. For example, many viable brownfields are not in areas facing the steepest rises in population and housing demand. They may have fragmented or opaque ownership structures, making them difficult for private entities to purchase for redevelopment. And many brownfields are heavily contaminated (although this challenge is often overstated, as the right experts can remediate such sites at manageable cost).

Recognising these challenges, **public authorities are encouraging the expansion of urban regeneration using incentives and disincentives.**

Tightening land regulation is a powerful disincentive. The EU has set a goal of "no net land take" by 2050¹. This is shrinking the area of greenfield land available for development to one much smaller than current EU consumption of 450 square kilometres of virgin land a year.¹ Individual countries and cities are using tighter regulation to reach the goal. For example, to limit building on virgin land France has introduced "zero net artificialisation (ZAN)", which is likely to create a national shortage of 113,000 hectares of developable land.³¹ Germany has implemented a National Strategy for Sustainable Development to reduce expansion onto new land from 100 to 30 hectares per day and to encourage the more sustainable deployment of land already in use.

Regulation is also ramping up outside the EU. For example, in the UK about 90% of land is classified as undeveloped, including agricultural land, forests, open spaces, and bodies of water. While tightening regulation on land use is the strongest factor pushing the urban development sector towards compact, integrated urban regeneration schemes, new regulations on embodied carbon and rising material costs are pushing it in the same direction.

Cities and national governments are offering several incentives. Some cities are encouraging urban regeneration by offering expedited planning permissions, tax breaks and special financing schemes to developers and projects that emphasise placemaking. Porto in Portugal is one city taking this approach.²³ In the UK, the Land Remediation Relief scheme provides landowners with corporation tax relief of 100-150% on spending to clean up land they have acquired in a contaminated state.³³



Regeneration of a former thermoelectric power plant in Porto, Portugal
— Ginkgo Advisor 1

Rising demand for urban neighbourhood living and working is the strongest factor driving demand for urban regeneration projects. The Covid-19 pandemic was marked by a surge in demand for suburban living. But this proved a temporary interruption to growth in demand for high-density, inner-city living, which has carried on growing after the pandemic³⁴. Market experts forecast continued migration from suburban and rural areas into urban centres over the coming decades, spurred by the lifestyle preferences of millennials and later generations and their expectations of vibrancy, flexibility and community-oriented living^{35,36}.

Urban regeneration has long been seen as a public sector 'play'. But the need for faster regeneration and the emergence of private expert remediators and developers are opening opportunities for private sector players to enter the field and LPs to benefit from their returns.

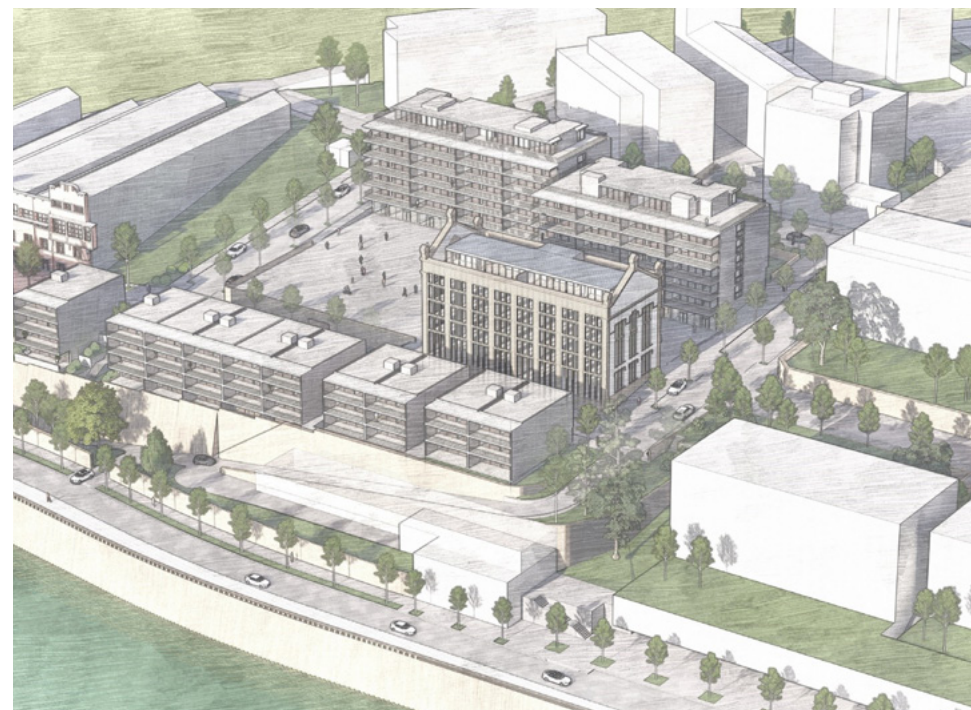
B. AN ATTRACTIVE RISK-RETURN PROFILE

Well-designed urban regeneration projects offer long-term value with stable returns, similar to infrastructure investments. Projects start with the identification of lands or structures that are under-used and can therefore be purchased at an appropriate discount. These spaces are then remediated, often re-zoned, re-designed and developed into attractive spaces to rent or buy, which generally enjoy high occupancy. Attractive, stable returns on investments in successful regeneration projects are generated by this combination of discounted land, high occupancy and diverse revenue streams (from residential, retail and office space). While many investors still see land contamination as a potentially high-cost risk, GPs with the right technical expertise can turn it into an opportunity to win a steep discount on contaminated land and keep the costs of remediating it at bay. See figure 6 for an overview of the risk-return profile of urban regeneration investing.

The scale of returns varies across locations and by type of project. Return on investment can reach the mid-teens and cash multiples

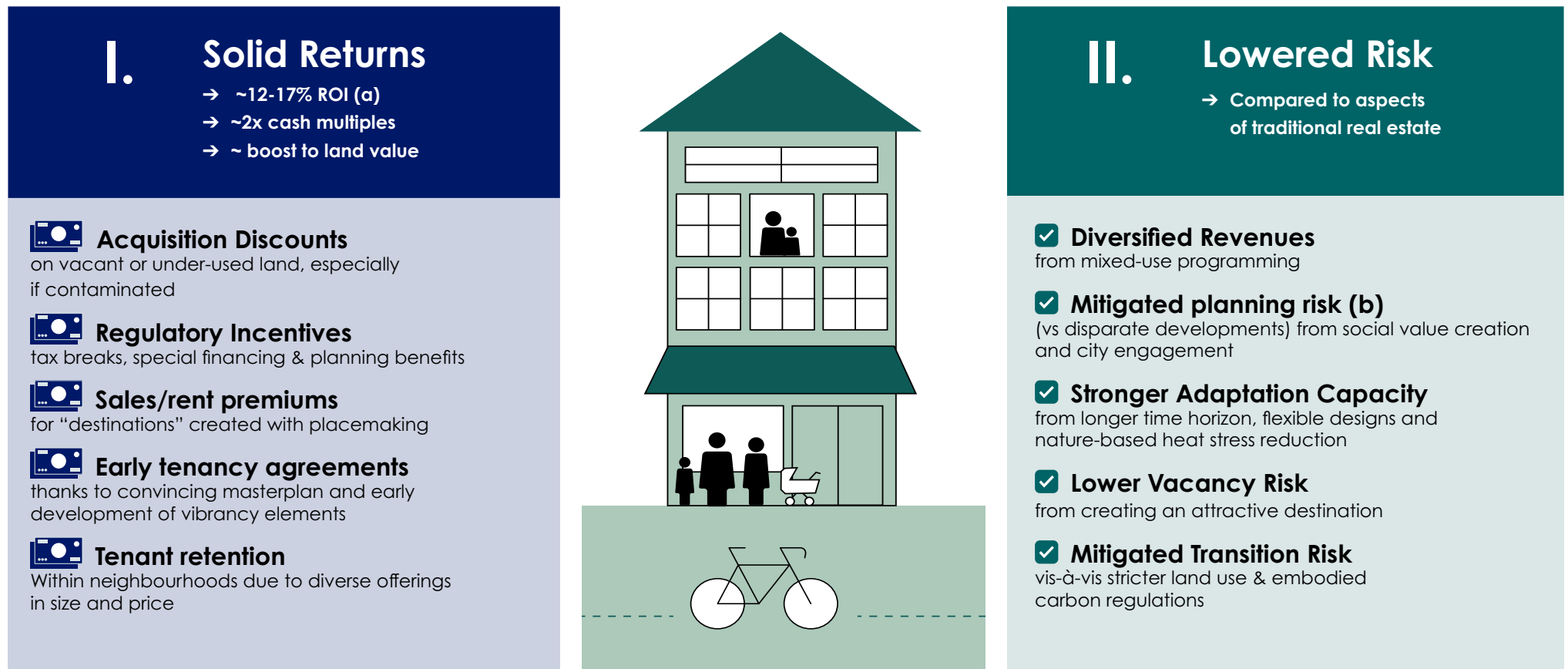
of about 2x for projects in high-potential locations with good land discounts, efficient remediation and high-value placemaking.

High average rates of occupancy and the reduced risk of vacancies in well-designed, well-managed urban regeneration projects are key to their stable high-return profile. Such projects are shown to be 50% more desirable than classic, siloed compounds, keeping vacancy rates low. For example, in the UK one study showed that their high-quality shared amenities and diversity in unit sizes helped regenerated sites to maintain 91% occupancy even during Covid-19, when rental occupancy rates in less attractive neighbourhoods plummeted.⁴¹ The Savills (2016) land value model of a theoretical urban extension site with 3,000 homes found that increasing the placemaking budget by 50% to provide better public amenities, schools, green spaces and other benefits would result in higher property prices and faster sales rates, boosting land value by 25%.³⁹



Rendering of the regenerated neighbourhood in Porto, Ginkgo Advisor.
Credit: architect Eduardo Souto de Moura

FIGURE 6: URBAN REGENERATION PROJECTS HAVE AN ATTRACTIVE RISK-RETURN PROFILE



Essential capabilities to realise return & risk benefits

- **Efficient remediation & refurbishment** of strategically selected pre-used sites and structures
- **Financial management** and knowledge of the real estate market

- **Excellent place-making**, urban design & analysis
- **(City) stakeholder management and communication** of (future) value and attractiveness of the neighbourhood

- **Unlocking economies of scale** for resource & energy efficiency
- **Excellent architecture** for adaptability of use

(a) Based on examples, dependent on the type and objective of projects (b) All new developments face considerable planning risk; however this is mitigated through smart stakeholder engagement

BOX 3: EXAMPLE OF STRATEGIC PLACEMAKING FOR STRONG LONG-TERM VALUE CREATION

The Grandes Serres project developed by Ginkgo in Pantin (France), will transform a former steel tube manufacturing site into a vibrant 4.1-hectare campus featuring high-quality offices, schools, accommodation, and activities such as shopping and crafts. The project includes the conservation, renovation, and extension of nearly 11,000 sqm of historic industrial halls. Space in the halls will be allocated (with affordable or rent-free occupancy options) to shared services and cultural amenities. These include the Jaroussky Music Academy, a food court, and event spaces. The project also benefits from excellent planning. Its masterplan features 1.4 hectares of green and public space and enhanced 'soft mobility' options, including a new footbridge over a canal, giving pedestrians access to the metro station, and an extended cycle lane.

The project's strong social value proposition has won support from local stakeholders, facilitated planning procedures, and has already attracted committed tenants in its early development stages, including a major French company that has signed a forward lease agreement. Even in its early stages, the project is already demonstrating how designing for long-term value and prioritizing diversity in use can generate greater net value for investors, the community, and the local economy.



C. DISTINCTIVENESS AND A COMPETITIVE EDGE THROUGH TECHNICAL EXCELLENCE

Developing an urban regeneration project that delivers long-term stable returns requires excellence in six areas:

- a) engineering skills to deal with land contamination (including expertise in environmental liability management), demolition, deconstruction and restructuring
- b) urban analysis, master planning, placemaking and urban design expertise
- c) architectural acumen to develop building types suitable for the place, with sustainable materials and operating systems
- d) collaborative skills to interact effectively with city councils and local stakeholders
- e) financial management, coupled with knowledge of the real estate market

Traditional real estate developments speculate on the future value of locations, rather than creating that value themselves. Most classic real estate investment funds will buy or build individual buildings separately in multiple locations, often multiple cities. While they may make a building more attractive, for example through renovation, most of its value will ultimately depend on where it is. Such a strategy can be successful. But it is highly vulnerable to market cycles and depends on other - mostly public - entities to maintain the attractiveness of the neighbourhood, as shown by the declining value of many office assets in less diverse locations versus those in mixed-use areas⁴².

Developers and funds specialising in urban regeneration gain a competitive advantage by exercising the skills needed to turn wasted space into sustainably attractive neighbourhoods identified above (Figure 6). For example, the Grandes Serres redevelopment in Pantin (see Box 3) was able to secure long-term leases for commercial tenants at the early stages of construction, thanks to its outstanding mixed-use neighbourhood plan and excellent track record in delivery.








In sum, LPs keen to benefit from the stable returns on investment in excellent urban regeneration, especially in times of financial market volatility, can gain a competitive edge by looking for specialist funds and developers who can demonstrate this distinctive skill-set.

D. BRANDING BEYOND ESG

Pension funds and other institutional investors have for some time been under pressure from their stakeholders to demonstrate better performance on sustainability.⁴⁴ As a result, a growing number of LPs look for funds that report on their sustainability performance under Article 8 or even Article 9 of the EU's Sustainable Finance Disclosure Regulation⁴⁵. Increasingly, institutional investors are going further by committing to voluntary targets and reporting frameworks, such as the Science-Based Target initiative (SBTi) and the Task Force on Climate-related Financial Disclosures (TCFD), or by developing their own sustainability frameworks and branding their portfolios as "net-zero-pathway aligned", "Paris aligned", "EU taxonomy aligned" and "SDG aligned". Urban regeneration projects, by definition, are more suitable to deliver carbon and nature performance than conventional real estate projects (see Section 2.b), making them particularly relevant to supporting such strategy (figure 7).

However, urban regeneration presents an opportunity to go even further than ESG branding for those institutional investors committed to a more ambitious 'regenerative' or 'system change' approach. Even the most rigorous ESG frameworks have tended to focus on metrics for reducing harm rather than producing sustainable value. In other words, they have aimed to reduce the negative impact of investments rather than maximise their positive effect. Meeting the requirements of such frameworks generally involves a simple check-box assessment of individual buildings, rather than an evaluation of the integrated social and environmental value of a project.

FIGURE 7: WELL-DESIGNED URBAN REGENERATION MEETS INVESTORS' MULTIPLE ESG AMBITIONS – AND BEYOND

Investor ESG goals	Urban Regeneration Strategy can more efficiently...	Facilitating alignment with...		
		Sustainable Development Goals ^a	EU taxonomy ^b	Other international standards
1. Carbon emission reduction and the Energy Transition	<p>...reduce carbon emissions, by</p> <ul style="list-style-type: none"> - (Re-)Developing energy efficient buildings - Reusing existing structures (reducing embodied carbon) - Increasing connectivity within neighbourhoods, thereby reducing car dependency - Onsite renewable energy generation and sharing 		Article 9.a: climate change mitigation	 <p>SFDR (Regulation on sustainability related disclosures in the financial services sector)(c)</p>  <p>(d)</p>
2. Biodiversity and nature preservation	<p>...preserve nature and foster biodiversity, by</p> <ul style="list-style-type: none"> - Reducing urban sprawl - Unsealing brownfield space - Creating quality green spaces 		Article 9.b: climate change adaptation	
3. Waste reduction and Circular Economy	<p>...reduce waste and increase material circularity, by</p> <ul style="list-style-type: none"> - Reusing demolition waste and excavated and remediated materials - Reusing whole buildings, structures and modules 		Article 9 d.: transition to a circular economy e.: pollution prevention and control	
4. Climate Adaptation and Resilience	<p>...facilitate climate adaptation capacity and resilience, by</p> <ul style="list-style-type: none"> - Integrating nature-based solutions for heat, flood and drought mitigation - Designing in adaptability in building use 		Article 9.b: climate change adaptation	
5. Social Challenges	<p>...address social challenges, by</p> <ul style="list-style-type: none"> - Creating high-quality housing, workspaces and industrial spaces - Improving health and safety through remediation of polluted land and renewal of derelict neighbourhoods - Improving diversity in services and housing types 			
6. Economic development	<p>...foster economic development, by</p> <ul style="list-style-type: none"> - Increasing opportunities for local businesses and supporting development of innovation industries - Creating jobs in the construction value chain - Increasing wider urban asset value 			

(a). United Nation (2017). Sustainable Development Goals. <https://sdgs.un.org/goals> (b): European Union. 2020. REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852> (c) European Commission. 2023. Sustainability-related disclosure in the financial services sector. https://finance.ec.europa.eu/sustainable-finance/disclosures/sustainability-related-disclosure-financial-services-sector_en (d) TCFD (2017). Recommendations of the Task Force on Climate-related Financial Disclosures. <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>

Urban regeneration, with its multiple benefits for societies, climate and nature described in Section 2, are a distinct opportunity for frontrunning institutional investors supporting investments in a more resilient economy. Specific actions that these investors can take are suggested in Section 4.

In sum, **now is the time for every investor with a long-term interest in urban economies, real estate or infrastructure to build an urban regeneration investment strategy.**

Urban regeneration is a growing opportunity for investors and has a large potential market. But it is still underinvested. Interested LPs can pursue this opportunity through the growing number of specialist regeneration funds and projects.

Frontrunning institutional investors can go even further and position themselves as drivers of urban regeneration in Europe, or of the regenerative economy more widely.

Vauban Regeneration, Freiburg – Alamy



BOX 4: IS URBAN REGENERATION DRIVING A “REGENERATIVE ECONOMY”?

Working with best-in-class developers and funders of urban regeneration projects is an effective strategy for institutional investors looking to make regenerative investments in cities.

Although there is no agreed definition of the ‘regenerative economy’, the white paper “Unleashing a Regenerative Revolution for the Built Environment” (Holcim & Systemiq 2024, upcoming). That makes the built environment regenerative (see Fig. 1).

By this definition, to count as actively regenerative, an urban regeneration project needs to be people-centric and rooted in place (for instance, developed or operated in co-ownership with the local community); deeply integrated with nature (for example, using renewable resources wherever possible); and designed to evolve and adapt to changing needs and contexts. Clearly, not every urban regeneration project today will meet these criteria. However, well-designed urban regeneration projects are better suited to achieve regenerative performance than siloed real estate investments because they are by definition place-based, forward-looking and designed to protect the climate and nature.



Figure: Defining characteristics of a regenerative business model.
Source: Holcim&Systemiq White Paper “Unleashing a Regenerative Revolution”

4. INVESTORS CAN GROW THE URBAN REGENERATION MARKET AND SCALE ITS POSITIVE IMPACT

There are encouraging signs that urban regeneration is beginning to take hold in Europe. Several innovative, complex urban regeneration schemes are now coming to fruition, building confidence in the approach; funds specialising in urban regeneration are expanding their activities while new specialists are emerging; traditional real estate funds are beginning to explore the potential of urban regeneration; institutional investors who understand that potential, are becoming more vocal and strategic about urban regeneration as a distinctive asset typeⁱ.

However, Europe needs the market for investment in regeneration to expand faster if its cities are to achieve their ambitions for people, nature and Europe's economy (see Section 2). And LPs need a larger, more mature market to gain easy access to a full pipeline of urban regeneration investment opportunities, with lower transaction costs.

What holds institutional investors back from putting serious money into urban regeneration today? They point to three related hurdles:

- the perceived complexity of investing in urban regeneration compared to conventional real estate. In particular, they cite the variability of investment risk, especially the planning and execution risks of long-term projects.
- the upfront cost of placemaking and uncertainty about its impact on financial returns.

- the absence, so far, of large-scale regeneration funds as high-performing and credible as today's smaller specialist funds that could absorb larger-ticket investments and offer a wider range of urban regeneration investment options to choose from.

Three kinds of action are needed to overcome these hurdles, all involving detailed inquiry alongside pilots to test potential solutions.

These inquiries need input from all the interested parties, especially LPs, GPs and cities, and some of those questions are difficult and controversial. Based on Systemiq's experience, small and time-bound collaborative taskforces of frontrunning institutional investors, fund managers and project developers would be well placed to take the lead on these inquiries. They need to be sufficiently targeted, nimble and action-oriented to get the work done well and efficiently.

ⁱ For example, Aviva has published a white paper in 2019 titled "Urban Regeneration - How a secure income strategy can help revive city centres" and Legal & General is testing a range of regeneration approaches e.g. [Bristol](#) regeneration development.

A. UNPACKING THE URBAN REGENERATION MARKET AND DEMYSTIFYING RISK

Today, many institutional investors categorise new developments, especially large-scale projects, as high-risk – and they tend to regard projects that buy urban land before obtaining re-zoning and planning permission from city authorities as particularly high risk. **But this perception of new development risk is generally based on outdated assessments of low-quality past developments.** It is too generic, and it obscures the attractive institutional investment opportunities now offered by some urban regeneration projects.

Different types of urban regeneration projects have widely differing risk profiles, depending on their size, the main actors involved (private and public), their geography, local planning policy and – crucially – the developer's strength in engineering, design and stakeholder management. At one end of the range, mid-sized projects in cities with solid urban governance, executed by experienced developers whose placemaking strategy is based on thorough local analysis, represent relatively low risk (see Section 3). At the other end, projects in areas with a short track record of private-public cooperation, integrated development and urban densification will be higher risk. However, such projects may also offer higher potential returns, as those areas are likely to have more suitable land available at lower prices (see for example Box 2).

The range of urban regeneration projects divides into a number of sub-categories according to their specific success factors, risk profiles and due diligence requirements. Different sub-categories will be suitable for different types of LP. But the current lack of transparency on these sub-categories of the market makes it difficult and costly for investors to identify investments suited to their particular remit.

Financial markets have previously opened up similarly complex markets to broader investment by structuring them into asset classes made up of clearly defined, standardised sub-classes, and then

tailoring financing structures to the specific risk profiles of each sub-class. Real estate investment funds are a relevant example. The European – let alone the global – real estate market, comprising residential, office, logistics, industrial, hospitality and other sub-types, is complex. Breaking down the market into standardised asset classes has enabled funds of different profiles to develop as investment products for mainstream institutional capital. Following this precedent, a taskforce could help to stimulate broader investment in urban regeneration as an asset class by:

- **Identifying the salient characteristics of its sub-classes.** This means:
 - Mapping the characteristics of different regeneration projects currently available for investment according to, for example, their size, private-public involvements, level of contamination, geographical features, etc., and grouping similar projects into potential sub-classes
 - Analysing the past performance and associated risks of projects in each sub-class
 - Analysing the success criteria for each sub-class (i.e. the most important risk mitigating factors associated with its projects)
- **Developing reliable due-diligence frameworks and financial vehicles, based on the analyses above.** This means:
 - Assessing which sub-class is suitable for which LPs. Some will already meet institutional investors' risk expectations, others will fit private equity investors better. Certain sub-categories, such as investments in specific political contexts, may need some kind of de-risking mechanism, for instance, blended finance, to bring in more risk-averse LPs.
 - Identifying financial vehicles to mitigate the risks and complexity of different sub-classes, for example, specialist funds that diversify across project types or geographies and optimise due diligence processes to ensure the selection and design of high-quality projects.

B. QUANTIFYING RETURNS ON INVESTMENT IN PLACEMAKING OVER TIME

An increasing number of investors also understand in principle that real estate enhanced by placemaking is likely to perform better financially over the long term.

This goes some way towards convincing LPs to back the placemaking elements of regeneration projects. However, **LPs tend to underestimate the mid-term financial returns on high-quality investments in placemaking** arising from, for example, the earlier pre-lease agreements, reduced vacancy rates and sales premiums commanded by homes and workspaces in well-made places. And many investors and developers have become increasingly cautious about any upfront cost that is not demonstrably linked to revenue, as construction costs generally (for labour, materials, borrowing, etc.) have soared.

Both factors are leading investors to allocate suboptimal levels of a project's capital and operational expenditure (capex and opex) to placemaking, inadvertently lowering its return on investment in the medium and long term. In addition, when regeneration takes place on public land, convincing the city of the overall value of an integrated, place-making project can significantly reduce land purchasing cost.

However, few GPs propose long-term asset-holding strategies that could facilitate the creation, management and maintenance of "third places" (local shops, cultural amenities, food market, etc.) that bring value to a neighbourhood while enhancing the financial performance of associated assets.



Regeneration of a former car parts factory in Villeurbanne, France – Ginkgo Advisor. Credit: Architect Dumélier Design

Investors and cities need better evaluation and assessment tools to give them confidence in placemaking strategies. To that end, a taskforce could:

- Quantify the positive effects of placemaking on the capacity of an urban regeneration project as a whole to generate social and financial returns. Building on existing methods for calculating social value, this work would enable evaluation of different project scenarios to find the levels of capex and opex in placemaking that will optimise overall returns from a scheme.
- Develop a method to quantify the wider urban economic benefits of a regeneration project with excellent placemaking (see Section 2). Ideally this method could model the wider outcomes of different design options upfront. New machine-learning applicationsⁱ can help.
- Analyse the benefits of different arrangements for the long-term ownership and management of placemaking assets (e.g. local retail and community spaces, green spaces), and identify best practices for different contexts.

ⁱ For example, Aretian Urban Analytics



C. SUPPORTING INNOVATIVE URBAN REGENERATION GPS TO EXTEND THEIR SCOPE AND SUSTAINABLE PERFORMANCE

Today's high-performing urban regeneration developers already offer great investment opportunities. But they are a small group of small-to-mid-sized companies. Existing and new urban regeneration GPs need financial, and sometimes technical, support from LPs to grow the pipeline of top-quality projects, especially in currently under-served but high-potential locations like smaller cities (see Box 2) and cities in Eastern and Southern Europe. Investing more in existing funds and projects is a first step. LPs could help to grow the market further by:

- Supporting experienced urban regeneration investment funds and developers in creating joint ventures and co-investments with local developers in new locations. This would not only expand the area under regeneration but also train new players. This strategy could be particularly interesting for LPs vested in a certain region (e.g. pension funds serving state employees), especially in under-served geographies.
- Supporting collaborative learning and knowledge-sharing. The environmental and social demands on urban regeneration developments are constantly evolving. So are relevant technological, data analysis, and design solutions. For developers to maintain a cutting edge, they need both friendly pressure and dedicated capital to keep testing new approaches. Collaborative research projects between LPs and GPs and developers - in bilateral cooperation or a group taskforce - can also help.

However, private Investors cannot build the market alone. Europe's cities urgently need support to learn how to attract and work with the best private developers. Indeed, every piece of urban land and the structures on it are subject to control and influence from the city authorities where it is located. Either the city will be the seller or lessor, or it will have crucial information about the plot and future zoning. And it will almost always have "planning authority" over conditions for development and any future uses. So smooth cooperation with city authorities is critical to the success of any private development project (see Box 5).

In conclusion, this paper states the case for investment in urban regeneration. Well-designed and well-executed urban regeneration projects deliver solid, long-term value for society and investors. Their attractions are still underestimated by LPs, but momentum is growing, and the market potential is large. Any institutional investor with a long-term interest in urban economies, real estate and infrastructure will benefit from an urban regeneration investment strategy.

This paper also serves as a call to action for LPs and GPs to actively grow the urban regeneration market. Strategic collaboration between them, in frontrunner taskforces with clear targets, can be an effective first step towards opening up Europe's extensive opportunities for investment in excellent urban regeneration.

BOX 5: AN ACTION AGENDA FOR PUBLIC INVESTMENT BANKS AND CITY COALITIONS

Cities can play an additional and crucial roles in enabling private urban regeneration projects. In some cities, opportunities for private regeneration are created through the city selling or leasing public plots, or through the city aggregating disparate plots by purchasing and trading them, or pre-negotiating their sale. Cities are also responsible for upgrading crucial connecting public transport infrastructure. Lastly, cities control the wider masterplan and zoning of the urban area in which a regeneration project is located. Cities with a credible ambition and plan for balanced densification²⁸, coherent zoning regulations that progressively limit urban sprawl, a dedicated team for interacting with investors, and reliable efficient planning procedures are much more conducive to successful urban regeneration projects than those without.

Cities that play all these roles – and play them well – succeed in reducing transaction costs and attracting private capital. Therefore, funds and developers working with such cities tend to be open to accommodating, even encouraging, their demands to create additional social value, for example, for affordable housing, additional infrastructure, more extensive regeneration of nature, or sharing increases in land value. In sum, when cities and private players work well together, the value for everyone involved, and for citizens at large, is multiplied. By the same token, cities that do not play their roles well find it almost impossible to attract private capital and developers.

To maximise the public value of regeneration projects across Europe, those cities urgently need support in building their capacity **to attract and work effectively with top-quality private investors.**

City networks such as EuroCities, C40 and ICLEI are likely to be well suited to delivering good capacity-building programmes and even project-development incubators. Ideally, these programmes will be based on a comprehensive analysis of city best practices, the current level of capacity across Europe and key gaps. However, as these organisations are mostly funded and shaped by their city members, they lack both the capital and the specialist financial knowledge to deliver such programmes today.

Public financial institutions, or private financial institutions with a strong commitment to the public good, should step in to back such programmes. The total returns on this investment - social, environmental, economic and financial - could be enormous. The subset of those **financial institutions with strong regional knowledge could be particularly important in helping existing urban regeneration players to find local venture partners.** Offering **de-risking capital** to any resulting new ventures could speed their completion.

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DISCLAIMER

This paper was commissioned by Ginkgo Advisor and Edmond de Rothschild Group. It aims to increase understanding of the benefits of urban regeneration investments. This includes, but is not exclusive to, Ginkgo's approach to brownfield redevelopment. The paper explicitly invites all purpose-driven developers and investors to utilise the insights, as well as cities, national governments and European institutions.

Systemiq developed the analysis and statements independently, based on extensive research including academic sources and practitioner interviews.

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