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Institutional conditions for sustainable private sector-led urban development projects: A conceptual model



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Summary

Across the globe sustainable private sector-led urban development projects (SPUDPs) in the built environment rarely commence as real estate developers face several institutional barriers which limit their capacity to develop economic-viable, social-responsible, environmental-friendly urban places. Hence, SPUDPs are a promising development strategy for cities as the scale of such projects could be an effective means to integrate public planning policies and private development decisions with a broader social impact as opposed to solely developing sustainable buildings. However, it is largely unknown how SPUDPs can be effectuated as insight is lacking into institutional conditions that could incentivise real estate developers to make decisions for sustainable urban development practices. This paper explores the institutional conditions, in particular the policy instruments from local planning authorities, that nudge private decision-making to realise SPUDPs, by means of a literature review resulting in a conceptual model. The paper reveals that developers can be incentivised by pro-active local planning bodies using a combination of planning policy instruments which foster a sustainability-sensitive market decision-making environment.

Keywords: sustainable urban development projects, institutional conditions, real estate developers, local planning authorities, market decisions

1. Introduction

Sustainable development has generated wide attention among scholars in the academic domains of spatial planning (e.g. Dempsey *et al.*, 2012; Rydin, 2010; Pearson *et al.*, 2014) and real estate (e.g. Christensen, 2012; Reed & Sims, 2015; Wilkinson *et al.*, 2015). However, limited academic attention has been paid to sustainability at the intermediate operational level of urban development projects (UDPs). UDPs consist of redeveloping land into mixed-use inner-city areas in which public, private and civil interests materialise through a complex process of actor (inter)actions. Often UDPs are characterised by integrative development strategies which hold the potential of creating successful places as various objectives of different stakeholders are incorporated in the decision-making process. Sustainable urban development projects (SUDPs) aim to realise economic-viable, social-responsible and environment-friendly urban places. They hold great potential to meet some socio-environmental challenges faced in cities. Foremost, the cumulative development of various these projects could be an effective means to gradually implement a multitude of sustainable planning policies within cities, thereby closing the policy-implementation gap (Heurkens *et al.*, 2015). In addition, the focus on creating mixed-use urban places probably has

broader social impacts than focusing only on constructing sustainable buildings (Williams & Dair, 2007) as SUDPs require substantial local community involvement, and hold the ‘economy of scale’ potential for integrating eco-solutions (Rydin, 2010). However, Dixon (2007: 2380) argues “there has also been little detailed research to examine how the property development industry, as one of the key actors and stakeholders in [urban development], is responding to [sustainable development policy] concepts ‘on the ground’, through specific, local-area-based [urban development] initiatives.” In this regard, private sector-led urban development projects (PUDPs) (Heurkens, 2012; Heurkens & Hobma, 2014) have come forward as potential strategy to develop local sustainable initiatives. Such projects are considered as a form of public-private partnerships in which real estate developers play a leading role in designing, financing, developing and managing urban projects, and local planning authorities adopt a facilitating role to support such private initiatives (Heurkens *et al.*, 2015). PUDPs symbolize the changing public and private roles and relations in urban planning, with shifts towards forms of private planning (Andersson & Moroni, 2014; Hackworth, 2007). This situation requires local planning authorities to crucially influencing market decisions by deploying a variety of planning policy instruments (Adams & Tiesdell, 2010; 2013).

The promise of urban development projects as an appropriate scale for sustainable policy implementation and the shift towards more private sector involvement in city development, illustrate the importance of understanding how real estate developers can be incentivised by planning authorities to develop SPUDPs. Critics argue that it is highly questionable if private organisations with their traditional profit-maximisation decision-making rationales (e.g. Henderson, 2010) can deliver SPUDPs. Nonetheless, urban practices across the globe indicate that private organisations increasingly adopt social and environmental concerns in their development, investment and partnership decisions and strategies as evidence from recent studies indicate (e.g. Potters & Heurkens, 2015; Sturm *et al.*, 2014). This awareness is reflected in private sector policies based on principles such as corporate social responsibility (CSR) (Reed & Sims, 2015) and socially responsible property investment (SRPI) (Squires & Moate, 2012), and the presence of ‘market-driven’ environmental assessment methods like BREEAM, LEED, Green Star and other rating tools.

2. Methodology

Despite the ample opportunities for developing sustainable urban places, it remains largely unknown which institutional conditions support market decisions to develop sustainable private sector-led urban development projects (SPUDPs). This poses questions about how SPUDPs can be effectively delivered by setting the ‘right’ institutional conditions for market actors. Therefore, the main question this paper addresses is: *Which institutional conditions for delivering sustainable private sector-led urban development projects can be identified by linking planning policy instruments to market decisions?* The aim of the paper is 1) to identify potential institutional barriers and incentives for developers to make decisions about developing sustainable urban projects and 2) to construct a conceptual model which aligns planning policy instruments to market decisions. Therewith, the paper enables key stakeholders to effectively align sustainable urban policies with development decisions. In order to answer this question the paper contains a literature review on institutional barriers and incentives found in real estate and urban planning publications. Based on these findings a conceptual institutional model is constructed which relates planning policies to market decisions offering opportunities for academics and practitioners to set the ‘right’ institutional conditions for delivering sustainable urban development projects.

3. Results

The results presented hereinafter are based on a literature review. In section 3.1 we describe the importance of understanding institutions for our paper, followed by preliminary findings on barriers and incentives for sustainable urban development. Section 3.3 sets out how public planners can use policy instruments to influence market actors to make sustainable development decisions, ultimately resulting in a conceptual model for delivering SPUDPs in section 3.4.

3.1 Institutional conditions

It is relevant to understand the institutional context of urban and real estate development processes. Buitelaar *et al.* (2014: 249) claim that “institutions are commonly defined as the man-made structures that guide and give meaning to human interaction.” Institutions are not given social products that are actively created and changed through action. There is reciprocity between institutions and actors; institutions affect actors’ actions, and actors actively shape institutions. Also, institutions can be formal and informal in nature. Buitelaar *et al.* (2014: 249) define formal institutions as “government rules that are enforced by the legal system, such as laws, constitutions, ordinances and local land-use plans.” Informal institutions are less explicit rules of conventions, codes of behaviour, traditions and values. In essence, institutions are the ‘rules of the game’ which influence decision-making by actors to a large extent and are cultivated through actor interactions (Van Bueren & Ten Heuvelhof, 2005). Therefore “urban development is [also] the product of the interaction between actors and institutions” (Buitelaar *et al.*, 2014: 250). In this paper, institutional conditions then refer to formal and informal institutions – more specifically actor instruments and interactions – that influence policy-making and decision-making.

3.2 Barriers and incentives for sustainable urban development projects

Barriers and incentives for market actors to develop sustainably are applicable to various levels and aspects. Rydin (2010) argues that sustainable urban development is concerned with the scale of the building, development site, and urban area. This paper focuses on urban development sites, or what is often called urban places (Adams & Tiesdell, 2013), urban regeneration or development projects (UDPs) (Heurkens, 2012). It is important to understand that at this level governing a multitude of sustainability issues takes place through a constant interaction between public and private organisations. In that sense, UDPs can be regarded as effective means to implement (often public) planning policies (Heurkens *et al.*, 2015) and in particular those including principles of sustainable cities (Pearson *et al.*, 2014). Therefore, sustainable urban development projects (SUDPs) are an appropriate unit of analysis to understand public-private interaction and policy implementation. What do we mean with SUDPs? In our view these projects aim to realise economic-viable, social-responsible, environmental-friendly urban places within inner-cities. The biggest challenge here is to focus on brownfield redevelopment sites in order to recycle land within the existing built environment, instead of choosing for ‘unsustainable’ greenfield sites. Dair & Williams (2006) indicate that central to this choice lays the concept of urban compaction. “Proponents of the compact city argue that high-density, mixed-use living enhances sustainability because it reduces car use and pollution, leads to urban vitality and vibrancy, encourages social interaction, and provides support for local economy and facilities” (Dair & Williams, 2006: 1345). Dempsey *et al.* (2012) add that it involves well-connected urban lay-outs and easily accessible transport networks. In this respect, Raco & Henderson (2006: 499) state that “bringing brownfields back into use tends to be, a priori, presented a ‘good thing’ that will have broader economic, environmental and social benefits.” More specifically, Williams & Dair (2007: 139) introduce a conceptual model for sustainability

objectives to be met in brownfield developments (see Table 1). We follow this view when we adhere to SUDPs as objectives are policy-driven and less rigorous than concrete physical solutions.

Table 1: Sustainable categories and objectives of UDPs (based on: Williams & Dair, 2007: 139)

Sustainability category of UDPs	Sustainability objectives in UDPs
Economic sustainability objectives	Economic-viable UDPs
	To enable businesses to be efficient and competitive
	To support local economic diversity To provide employment opportunities
Social sustainability objectives	Social-responsible UDPs
	To adhere to ethical trading standards during the development process
	To provide adequate local services and facilities to serve the development
	To provide housing to meet needs
	To integrate the development within the locality To provide high quality, liveable developments To conserve local culture and heritage, if appropriate
Environmental sustainability objectives	Environment-friendly UDPs
	To minimise the use of resources
	To minimise pollution To protect biodiversity and the natural environment

There are explanations for why urban sustainability objectives are difficult to realise. Dair & Williams (2006) distinguish five reasons for variations in the achievement of SUDPs including: stakeholder knowledge of development proposals; timing of stakeholder involvement; absence of power to enforce sustainability; various attitudes of stakeholders towards sustainable technologies; and most fundamental, stakeholders' attitude towards and knowledge of the issue. However, Dair & Williams (2006) also conclude that 'champions' of sustainability were found amongst most stakeholders, including real estate developers. This indicates that sustainability attitudes of the private sector are not necessarily less-supportive than those from public bodies. Nonetheless, Dixon (2006: 237) argues that "despite the increasing focus on sustainability in government policy, the [UK] development industry seems ill at ease with precisely how sustainable development can be implemented in brownfield schemes." This led Dixon (2007: 2382) to claim that there is "clear evidence to suggest that many [UK developers are] simply paying 'lip service' to sustainability. Dixon (2006) highlights a need for better benchmarks to measure sustainable brownfield regeneration, in order to quantify its life cycle cost-benefit ratio. However, solutions are not easily found to alter this situation. Barriers to sustainability implementation of UDPs include infrastructure and governance issues, and can be broadly characterised as being perceptual, institutional and economic (Dixon, 2007). Williams & Dair (2007), in a study of identifying the barriers of sustainable building in England, conclude that the following barriers were commonly recorded: non-consideration of sustainability by stakeholders; non-requirement of sustainability by client; no power to enforce sustainability; replacement by another sustainability measure; restriction/non-allowance of sustainability by regulators; high costs of sustainability measure; non-compliant site conditions for sustainability; inadequate, untested, unreliable sustainable materials/products; and non-availability of sustainability measures. Such barriers can be labelled as lack of demand, lack of knowledge, lack of power, high perceived costs, ineffective regulation, location characteristics, and lack of expertise. Despite this, Rydin (2010) argues that SUDPs offer the necessary economies of scale to integrate various sustainability objectives such as carbon reduction, water efficiency, waste management, nature conservation, and climate change adaptation. This might manifest itself in the physical requirements aimed at the delivery of sustainable buildings, infrastructure, food, water and energy systems that strengthen social networks and create opportunities for a strong local economy (Wiseman *et al.*, 2014). Wiseman *et al.* (2014) further point out that there

are four key pathways to sustainable resilient cities including: imaginative integrated visions and plans; cross-sectoral partnerships; and effective policy instruments, which are important conditions for accelerating innovation. Complementary to this, according to Raco & Henderson (2006: 499), achieving wider benefits from SUDPs requires a “more comprehensive set of development projects and policy agendas”. To put it into other words, this is a pledge for a closer alignment of development and policies, or private and public interests. Hence, from a real estate market perspective these pathways only assort effect and become institutional incentives (and not barriers) once aligned with private developer decision-making rationales.

3.3 Planning policy instruments and market decisions

In this regard, Adams & Tiesdell (2013) developed a categorisation of planning policy instruments that effectively adhere to market decision-making based on the notion of ‘planners as market actors’. In order to develop successful urban places Adams & Tiesdell (2013) argue that planners should operate as actors within rather than outside markets. They can do this by deploying policy instruments that shape, regulate, stimulate, and build the capacity to influence market decisions. Shaping instruments include non-statutory plans and visions which guide market decisions. Regulatory tools include rules and laws which condition market decisions. Stimulus instruments consist of financial-fiscal incentives to lever market investment. And capacity building involves market-rooted networks and relevant skills which change market decisions and behaviours. Heurkens *et al.* (2015) further argue that such policy instruments should be tightly coupled with planning actions to enable implementation. Therefore, a certain degree of instrument flexibility is needed to respond to changing market needs and specific local circumstances. Hereinafter, we discuss some (sustainable) policy instruments and examples and how they might affect market decisions.

3.3.1 Shaping instruments

Municipal sustainable city visions, localised sustainable urban development plans, and sustainability assessment instruments, give direction for real estate developers to develop sustainable places. According to Berke & Conroy (2000) localised plans should embrace liveable built environment principles with for instance physical space requirements including the location, shape, density, mix, proportion and quality of urban development. In addition, Carter *et al.* (2015) argue that comprehensive sustainable design and programmes is a prerequisite for the implementation of plans, such as Rotterdam’s Climate Proof adaptation programme (City of Rotterdam, 2010). Also key performance indicators (KPIs) for sustainable urban development as promoted by Christensen (2012) could be beneficial. However, government-led plans seldom are effectively implemented by developers, as often planning systems in which they are embedded do not sufficiently incorporate market needs. Planners should be aware that shaping market decisions to develop sustainable places through formulating plans requires public-private interaction. For instance, despite the direction these instruments give to markets, we notice that private companies– like multinational Siemens with its Green City Index (Siemens, 2012) and developer/investor Grosvenor with its Resilient Cities Index (Grosvenor, 2013) – themselves initiate assessment tools for sustainable urban development investment opportunities. Other examples of market-driven voluntary assessment methods – some of which are focusing on urban areas like the BREEAM Communities and LEED-ND framework – also point out that the development industry is using such frameworks based on market reasons. If such frameworks are important to the industry, we would expect shaping planning policies to contain information about prioritised development sites that could possibly accommodate sustainable private urban development investments. This chal-

challenge can be met by obtaining information on sustainability decisions from market actors, currently insufficiently understood especially at the neighbourhood level (e.g. Sullivan *et al.*, 2014).

3.3.2 Regulating instruments

In addition to shaping instruments, regulating policies can often be effective tools to mitigate unwanted or unsustainable environmental-social consequences of development. Williams & Dair (2007) argue that private stakeholders involved in development and construction show a *lack of awareness* in building sustainable developments, and state that public bodies should be enforced to apply regulations which are more stringent to achieve sustainable urban developments. Regulation of markets is necessary as “conventional market mechanisms provide limited applications for designing sustainable communities, because markets often fail to produce economically optimal and socially desirable outcomes” (Hendrickson *et al.*, 2011: 161). As such, regulatory power is regarded as a planning policy tool which is mandatory for developers to comply with through development proposals and planning application procedures, in order to seek planning permission or building permits. Importantly, Adams & Tiesdell (2013) emphasise that such regulatory tools also serve as creating some sort of certainty for market actors as they reduce procedural and political risks. Hendricksen *et al.* (2011: 159) identify several regulatory instruments that might create more sustainable outcomes including: standards, certifications, controls, restrictions; permits and licenses. For instance changing building codes and zoning standards to support sustainable outcomes, linking planning applications and development approval processes to sustainable objectives, and creating non-financial incentives for sustainable behaviour, might prove effective in enabling SPUDPs. Also, at state level, there are possibilities to influence market decisions such as state law or mandates (Berke & Conroy, 2000). These have an effect on the development industry as a whole and structure local public-private decision-making. For instance, in the Netherlands the ‘Ladder for Sustainable Urbanisation’ (I&M, 2013) is a national government law propagating brownfield redevelopment that tests land-use plans from decentral governments. This implies that public land-use plans indirectly nudge private decision-making to focus development towards inner-cities. In addition, private law in the form of tenders and development agreements, offers opportunities for planning bodies to require developers to submit sustainable plans.

3.3.3 Stimulating instruments

Adams & Tiesdell (2013) illustrate that stimulating planning policy tools include: direct state actions, price-adjusting instruments; risk-reducing instruments, and capital-raising instruments. In this regard, Hendrickson *et al.* (2011) point out that these are mainly financial instruments that would convince developers to invest in SUDPs, which might include: charges and pricing; taxes and tax exemptions; loans, grants and funding; and direct incentives and subsidies. They portray that deploying such instruments would make sustainable urban development investments more accountable, beneficial, generate private equity, generate revenues, stimulate innovation and technology research, diversify investment options, reduce perverse incentives and subsidies, and discourage unsustainable behaviour. For instance, promoting socially responsible investment funds in combination with an additional development grant, might give the necessary financial threshold for real estate developers and investors to decide to invest in and deliver SUDPs (see Christensen, 2012). Specifically, Jollands (2014: 160) argues that “stimulating investment in sustainable and resilient urban energy systems should be straightforward, at least in theory.” However, the benefits of such systems are often ‘invisible’ and difficult to quantify. Moreover, several pervasive barriers for investment remain (Jollands, 2014: 161) in relation to such systems, like: lack of information about benefits; perceived risks and lack of certainty associated with returns

and benefits; low priority people give to energy cost reduction; energy prices not reflecting externalities; and principal-agent problems. Furthermore, most of these barriers relate to energy issues that are not necessarily the expertise and the primary concern of real estate developers, but more applicable to private energy service companies. To stimulate private investment in sustainable energy systems private-private partnerships between developers and energy service companies might be necessary to pull resources and expertise, and share risks and benefits. Moreover, public-private partnerships could function as capital-raising risk-reducing instruments for SPUDPs.

3.3.4 Capacity building instruments

All such instruments might prove to be less effective unless local planning authorities enable development actors to operate more effectively (Heurkens, *et al.*, 2015). Capacity building in this respect means developing the capacity to facilitate market decisions. Planners in this respect can influence such decisions by an active attitude through shaping market cultures, mind-sets and ideas; obtaining market-rich information; participating in market-rooted networks; and developing market-relevant skills. This means that for promoting sustainable development all levels of local government should be actively involved (Saha & Henderson, 2011). Moreover, it indicates that leadership from the private sector in delivering sustainable urban development should be complemented by active committed public leaders. In this regard, Pearson *et al.* (2014: 49) argue that “leadership can and should come from all sectors of our cities – mayors, private developers, [and] community.” With regard to climate change adaptation, Carter *et al.* (2015: 6) refers to this as adaptive capacity: “the ability of city governors, businesses and residents, and associated structures and systems to prepare for and moderate potential harm from climate change hazards and exploit any emerging opportunities.” In brief, this indicates that governing for sustainable urban development (Rydin, 2010) involves understanding other attitudes and learning from best practices (Bulkeley, 2006) and to construct governance arrangements which incorporate positive incentives for actors to cooperate (Van Bueren & Ten Heuvelhof, 2005). For instance participating in strategic triple helix networks, attending sustainability conferences, and stimulating public-private partnerships for development projects, are important interaction platforms for public planners to understand market logics and make informed policy decisions. Moreover, through such planning-market interactions, planners can restructure and redesign existing shaping, regulating, and stimulating tools to bring them in line with market decisions.

3.4 Conceptual institutional model for sustainable urban development projects

This preliminary literature review reveals that linking private sector decisions to public policy instruments is not an easy task, because there are multiple barriers and incentives operating at different institutional levels. However, here we present a first attempt to develop a conceptual model which can be used to bridge public policies with private decisions to deliver sustainable urban development projects. Table 2 shows the conceptual institutional model for SPUDPs. It illustrates how public planning policy instruments and particular policy tool sub-types and examples can affect market decisions to invest in and develop sustainable urban places. By doing so certain institutional incentives are created to overcome some institutional barriers for real estate development actors to realise SPUDPs. The first three columns derive from Heurkens *et al.* (2015) who applied a similar model to a study of private sector-led urban development projects in the UK. Column three has been modified with specific sustainability tool examples whenever possible and appropriate. The content of the last two columns resonate with the literature findings presented in this paper. The incentives and barriers for delivering SPUDPs identified within the literature review have been simplified and generalised in Table 2 in order to facilitate future testing and application.

Table 2: Conceptual institutional model for sustainable urban development projects

Policy instruments	Impact on market decisions	Sub-types and examples	Incentive created	Barrier overcome
Shaping	Shape decision environment of development actors by setting broad context for market actions and transactions	Development/investment plans <i>Development/investment priorities</i>	Brownfield development sites	Lack of policy certainty
		Regulatory plans <i>Statutory land-use plans, mandates</i>	Formal sustainable requirements	Lack of commitment
		Indicative plans <i>City sustainability visions, policies</i>	Synchronisation of policies	Lack of imagination/vision
Regulating	Constrain decision environment of development actors by regulating or controlling market actions and transactions	State/public regulation <i>Planning permissions, building permits</i>	Formal sustainable procedures	Lack of consistent rules
		Contractual regulation <i>Tenders, development agreements</i>	Certain development directions	Lack of power/influence
Stimulating	Expand decision environment of development actors by facilitating market actors and transactions	Direct state action <i>Brownfield land acquisitions</i>	Competitive advantages	Lack of market support
		Price-adjusting instruments <i>Taxes, charges, loans, grants, bonuses</i>	Improvement of cost-benefit ratios	Lack of financial benefits
		Risk-reducing instruments <i>Certifications, measurement tools</i>	Investment in certified buildings	Lack of demand/benchmarks
		Capital-raising instruments <i>PPPs, investment funds</i>	Leverage for sustainable investments	Lack of social-eco benefits
Capacity building	Enable development actors to operate more effectively within their decision environment and so facilitate the operation of other policy instruments	Market-shaping cultures <i>Sustainable behaviour subsidies</i>	Increased responsibility/awareness	Lack of responsibility
		Market-rich information <i>Sustainability best practice promotions</i>	Insight in proved practices	Lack of empirical prove
		Market-rooted networks <i>Business/community networks</i>	Increased participation/innovations	Lack of governance
		Market-relevant skills <i>Sustainability education/training</i>	Development of learning skills	Lack of expertise/knowledge

4. Discussion

What the model reveals is that more conscious linking of public planning policies to private development decisions can potentially generate a variety of incentives and overcome barriers. In theory, conceiving of public planning policy instruments as potential incentives for overcoming the barriers experienced within the real estate development industry's decision-making to realise sustainable urban development projects is quite relevant and new. Therefore, at this point the limitations of this paper are: 1) the possibility of missing out on relevant institutional conditions, and 2) the generalisability of empirical findings for other institutional contexts. It is extremely difficult to cover all institutional conditions for SPUDPs through literature review. Therefore, we aim to validate and complement these institutions with follow-up research. The model can be supplemented by more in-depth literature studies on real estate developer decision-making (to validate the completeness of the model's aspects), tested through quantitative surveys amongst practitioners (to validate the expected linkages of the model's aspects), and confronted with qualitative best practice SPUDP case studies (to draw lessons for effective public-private interaction in delivering such projects).

5. Conclusion

This paper introduced a conceptual model for delivering sustainable private sector-led urban development projects (SPUDPs) as first attempt to align public planning policies to market decision-making. By collecting data from literature focused on incentives and barriers experienced by real estate development actors, and taking market decisions for sustainable urban development as a departure point, this paper provided a contribution to existing body of knowledge on sustainable urban development. Furthermore, the model might assist planning policy-makers and officers to effectively design policies for and interact with market actors to achieve sustainable urban places. The findings reveal that various barriers for sustainable private decision-making need to be overcome, but that the development industry – once consciously, pro-actively and comprehensively steered by planners – might take a more active stand towards contributing to a more sustainable built environment. As the model is a result of a preliminary literature review, it remains conceptual. Findings and insights generated by envisaged future research could assist academics and practitioners to better conceive of the real estate industry's role in delivering sustainable urban places.

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