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# Contesting inclusive urbanism in a divided city: The limits to the neoliberalisation of Cape Town's energy system

Mark Swilling

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## Abstract

The struggles to define and implement an inclusive non-racial urbanism in South Africa after democratisation in 1994 occurred during the heyday of world-wide diffusion of unevenly developed neoliberalisation processes. This case study of the complexities of transforming Cape Town's energy sector analyses the consequences of these contradictory trajectories by tracking the dynamics of four urbanism typologies: inclusive, splintered, green and slum urbanism. It is argued that, while the imperatives of deracialisation reinforced inclusive trends, neoliberalisation processes reinforced splintered urbanism and its consequences, namely slum urbanism. These dynamics were then overdetermined by environmental changes that have introduced green urbanism as a new arena of contestation.

**Keywords:** Cape Town, governance, green urbanism, inclusion, neoliberalism

## Introduction

The transition to democracy in South Africa, marked by this country's first non-racial democratic election in 1994, set the scene for the complex task of restructuring South Africa's cities ([Parnell \*et al.\*, 2002](#)). Inevitably, this was supposed to entail the dismantling of racial and class-based inequalities that had been systematically spatialised into distinctive legally structured urban forms by the apartheid regime.

However, this task was to be tackled within a global context of ascendant and aggressive neoliberalisation of the global economy that effectively redefined development pathways and governmentalities in ways that often contradicted the policy intentions of a number of progressive political projects in the global South. Unsurprisingly, the implications of this conundrum for South Africa have given rise to a rich body of literature

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(Edigheji, 2010; Freund, 2010; Marais, 2011; Satgar, 2008; Southall, 2007a, 2007b; Swilling, 2008).

While this literature revolves primarily around questions of economic policy at national level, a related body of literature addressed specifically how the democratic drive towards geographical deracialisation and inclusion in South Africa's cities came up against the constraints of neoliberalisation of urban development pathways (Beall *et al.*, 2000; Bond, 2002; Jaglin, 2008; Lemanski, 2007; McDonald and Pape, 2002; McDonald and Smith, 2002; MirafTAB, 2004; Smith and Hanson, 2003; Smith, 2004). Some of this literature draws from historical materialist approaches to political economy that tend to emphasise the transformative impacts of the post-1970s world-wide dynamic of market-driven regulatory restructuring. These approaches tend to focus on the 'downward' economic disciplines that constrain what sub-national governments can do to reshape the future of their own local urban contexts. This, it is argued, is due to the twin impacts of 'deregulation' (aimed at weakening state capacity to promote more equitable development strategies) and the increased dependence of local development pathways on unstable increasingly globalised flows of financial capital that depend heavily on debt-financed urban property developments.

Cape Town is an interesting case because it demonstrates why it is important to grasp three sets of interrelated dynamics not hitherto integrated into the discussion about neoliberalisation and urbanism. Following Brenner *et al.* (2010), the first set refers to the profoundly contingent complexities of urban change that are determined as much by contested spatialised local dynamics as by the unevenly developed global logics of capital flows and marketised governmentalities. Specifically, this refers to the tensions between the

overriding imperative to promote inclusive urbanism in post-apartheid South African cities and the classic splintering modalities of cost recovery that emanate from the application of neoliberal regulatory modes of governance. The second set refers to the mounting evidence that the rising costs of unsustainable resource use could well render both inclusive and splintered urbanism unviable. This has generated a new arena of contestation best described as green urbanisms. The third set of dynamics relates to the failure of inclusion giving rise, in turn, to slum urbanism. Slum urbanism, however, is not just a problem that gets 'resolved'—and therefore obliterated—by the success of inclusive urbanism. It is a fully fledged mode of urbanism with its own logic that can either be ignored or harnessed for urban development (Pieterse, 2008).

The struggles to define and implement an inclusive non-racial urbanism in South Africa after democratisation in 1994 have revealed the limits of inclusive urbanism, the divisive impacts of the neoliberal alternatives and the consequences of unsustainable resource use. This argument will be elaborated via a case study of Cape Town's energy sector, including an analysis of how the City of Cape Town<sup>1</sup> resisted the privatisation of the electricity distribution system, why a by-law on solar water heating that could have catalysed 'green urbanism' failed and how the dynamics of 'slum urbanism' can be used to drive incremental upgrading of informal settlements.

This case study of Cape Town contributes to the overall discussion of this special issue in two ways. First, it relates to theme two by seeking to develop an analytical framework that addresses simultaneously the complex interactions between the race/class dynamics of urban infrastructure provision and the impact of unsustainable resource use on urban governance modes.

Secondly, it addresses theme three by revealing the benefits of case study work that connects three levels of analysis: socio-technical analysis of networked urban infrastructures, largely quantitative analysis of resource flows and analysis of the roles played by specific social and regulatory actors.

## Conceptual Framework

To avoid an overpromiscuous use of the notion of 'neoliberalisation', the conception of 'variegated neoliberalisation' as developed by Brenner *et al.* has been used to inform the development of the argument that follows. They argue that

In the most general sense, neoliberalization denotes a politically guided intensification of market rule and commodification. ... Crucially, however, across all contexts in which they have been mobilized, neoliberalization processes have facilitated marketization and commodification while simultaneously *intensifying* uneven development of regulatory forms across places, territories and scales. Therefore, an emphasis on the variegated character of neoliberalization processes stands in sharp contrast to their prevalent equation with a worldwide homogenization or convergence of regulatory systems (Brenner *et al.*, 2010, p. 184).

The notion of 'variegated neoliberalisation' makes it possible to avoid the "binary frame of inexorable convergence versus unpatterned heterogeneity" (Brenner *et al.*, 2010, p. 217). This creates the conceptual space for comprehending how urbanism is contested as articulated in partially or wholly competitive projects with each characterised by a particular core logic and modality. For this purpose, four frameworks are used as heuristic devices for comprehending how these competing logics and modalities are

locally constituted by networks of urban actors who opportunistically mix and match selectively (mis)understood perspectives to suit their strategically contingent urban projects: inclusive urbanism, splintered urbanism, slum urbanism and green urbanism (for a detailed elaboration, see Swilling, 2011).

Inclusive urbanism refers to the type of urban regime that was introduced mainly in OECD countries during the post-WWII period as part of the expansion of welfare states. The central organising principle was 'universal access' to state-managed networked infrastructures (water, sanitation, electricity, solid waste and transport). Keynesian economic policies managed to limit the negative impacts of speculative property bubbles and publicly financed infrastructures made it possible to include a remarkably wide spectrum of social classes into the mainstream urban life (Harvey, 2012, p. 43).

Following the pioneering work of Graham and Marvin (2001), inclusive urbanism was challenged by the rise of 'splintered urbanism' which was an expression in space of the neoliberal project that was first introduced into some leading OECD countries from the late 1970s onwards. 'Commodification' replaced 'universal access' as the primary organising principle of urban governance. Privatisation reduced the state's role as funder of urban infrastructures and the stabilising restrictions on the penetration of speculative finance in urban property markets were removed.

The flip side of splintered urbanism in the developing world (especially in those countries experiencing the second urbanisation wave) was what could be called slum urbanism (Pieterse, 2008). As argued by Asef Bayat (2000), the organising principle of slum urbanism is 'quiet encroachment'—the incremental (largely illegal/non-formal)

penetration of the interstices and niches of the city by the urban poor as they 'make the city' from below.

Finally, green urbanism is discussed as a response to the growing realisation that cities depend on increasingly unsustainable resource flows—especially energy and water (Beatley, 2000). 'Minimising environmental damage' is the organising principle of green urbanism which, in turn, has been formalised in the various codes of conduct of the Green Building movement that have emerged since the 1990s in many countries around the world. Although green urbanism is responding to unsustainable resource use, its implementation in elite enclaves like Masdar (in Abu Dhabi) tends to reinforce the neoliberal orientation of splintered urbanism—indeed, green urbanism is often little more than the greening of splintered urbanism (Birkeland, 2008). However, as discussed later in the case of Cape Town's bid to pass a by-law on solar water heating, 'green urbanism' has significant inclusive potential.

## Context

Like all post-apartheid cities, Cape Town has faced the twin challenge of overcoming the spatial divisions created during the colonial/apartheid era and addressing the endemic poverty that these divisions reproduced for over three centuries. This resulted in 10 years of almost continuous institutional and organisational change. By 1994 Cape Town was governed by 61 municipalities and managed by 17 separate racially based administrations. In 1995–96, the first democratic, local government elections took place in integrated municipal areas. Initially, the 61 former racially segregated municipalities were amalgamated into seven local government authorities, with a weak overarching metropolitan level of

governance. In 2000 the Municipal Structures Act was passed by the national legislature (*Government Gazette*, No. 19614, 1998) which provided for a new system of metropolitan government for South Africa. This led to the establishment of the so-called Cape Town Unicity, a single-tiered form of strong metropolitan government. This new structure made possible a single, integrated, metropolitan tax base in order to create the fiscal resources to address the inequitable access to services, characteristic of all apartheid cities. This process of municipal restructuring and its impact on service provision has been well documented (Jaglin, 2004, 2008; Khosa, 2000; McDonald and Smith, 2002; Parnell *et al.*, 2002; Parnell and Pieterse, 2007; Swilling, 2010; Watson, 2002).

Privatisation/corporatisation of state-owned enterprises, the formulation of public–private partnerships, greater emphasis on service delivery on a cost-recovery basis and the implementation of performance management systems were part of the process of institutional reform in South Africa (Southall, 2007), albeit only partially implemented in the Cape Town context (Smith, 2004; Smith and Hanson, 2003; Watson, 2002; Wilkinson, 2004). Despite arguments that this has resulted in neoliberal governance approaches and, by implication, splintered urbanism in Cape Town (MirafTAB, 2004; Smith, 2004; Smith and Hanson, 2003), the fact of the matter was that by 2010 all municipal services in Cape Town were still being delivered by the CCT's integrated municipal administration and, despite trends that could have 'splintered' Cape Town's post-apartheid urbanism, the vast majority of poor households did get connected to publicly managed and heavily subsidised networked infrastructures during the decade after 1994. Yet it is also true that a half-baked 'new public management' discourse was incorporated,

giving rise to an awkward hybrid: publicly managed service delivery with an inclusive bias, wrapped in the language—but not necessarily the practice—of commodification, markets and cost recovery (that often did not reflect the real complexities of actual service delivery).

As argued elsewhere, when analysing the implementation of the so-called new public management within the South African context it is essential to distinguish between the discourse of commodification and deregulation (to satisfy local and international policy elites) and the realities of actual fiscal expenditures driven by the exigencies of political stabilisation (Swilling, 2008). Within South Africa's cities, things get even more complex because of the intervening spatial factors. As already suggested, after 1994 smaller local governments were consolidated into a large strong metropolitan government in Cape Town. Elsewhere in the world, this process of consolidating large metropolitan governments has often been part of a neoliberal governance/new public management agenda. In South Africa, the driving force was not about rolling back the welfare state (which did not exist under apartheid), but rather it was an absolute necessity to overcome apartheid spatial divisions and to enfranchise the majority. This same logic translated into an inclusive urbanism agenda with respect to infrastructure services. Yet, this was done within a city where people already lived in separate geographical spaces (now determined by the property market and lending practices of the banks) which means that non-racial political integration and the idea of 'services for all' were not only superimposed on a class-divided city, but one could argue that the modalities of these processes (subsidies for people in certain areas and not others, political patronage via the local wards, etc.) reinforced these divisions. Furthermore, as demonstrated in the

discussion of the electricity system that follows, new public management practices such as cost recovery/no cross-subsidisation threatened the fiscal basis of inclusive urbanism. Ironically, without cross-subsidisation 'services for all' within a class-divided city would have been impossible. Subsidies were needed to mitigate the consequences of persistent class apartheid.

By 2005 there were nearly 850,000 households in Cape Town (Haskins, 2006) with a population of approximately 3.25 million people (Romanovsky, 2006). Population growth rates peaked at about 2.5 per cent per annum in 2000/01, but have declined to an average of 1.2 per cent since then. Approximately 14.5 per cent of households can be classified as upper income, 28 per cent as middle income, 46 per cent as poor and working class, and 11 per cent as shacks obviously inhabited by the urban poor.<sup>2</sup>

Like elsewhere in the world, the decline of Cape Town's manufacturing sector as cheap imports flooded the market undermined the backbone of inclusive urbanism—namely, the employed (usually unionised) working class with stable long-term jobs and nuclear families, and willing and able to pay city rates and taxes. This was the same group of people who were the most powerful and well-organised components of the struggle for democracy and from whose ranks many city councillors were drawn after 1994. Ironically, their vision for an inclusive urbanism for Cape Town was out of kilter with a local economy that adjusted rapidly to global economic trends (enabled by pro-globalisation national economic policies) which favoured high-skilled service sectors, the importation of cheap manufactured goods (mainly from China) and the proliferation of ultra-cheap, informal-sector services and the casualisation of labour (for similar trends in Johannesburg, see Beall *et al.*, 2000).



Despite the many political changeovers in Cape Town's municipal government since 1994, a constant theme of successive administrations has been the need to address the service backlogs in the poorer areas of the city. This has had major implications for capital and operating expenditures in the energy, waste, water and sanitation (EWWS) sectors, which together accounted for nearly half of the annual expenditure of the CCT up until 2007/08. R9.3 billion or 47 per cent of the CCT's 2007/08 budget was spent on capital and operations to extend and maintain the networked urban infrastructures that deliver Cape Town's EWWS services. This equated to 8 per cent of the GGP of the Cape Town metropolitan economy at that time (de Wit *et al.*, 2008). One key outcome has been that over 90 per cent of all households were connected to urban infrastructures by 2010, but this did not mean that they all had houses (which are financed and delivered by national and provincial government). Indeed, there were about 300,000 shacks in Cape Town, of which approximately 200,000 were serviced. Not only were the capital costs of this significant achievement subsidised, but monthly operating costs were also heavily subsidised to minimise cost recovery from these poor households.

Our previous published research has demonstrated that Cape Town's urban system is coming up against serious resource limits and scarcities that cannot be transcended if resources are managed in the old ways (Crane and Swilling, 2008; Swilling, 2006). This includes the resources conducted via vast networked infrastructures such as electricity, water, sanitation, solid waste, transport and affordable food supplies. However, there are also a range of eco-system services that are under threat, including biodiversity (the fragile fynbos biome), the region's rivers which are the most polluted in the country, rapidly

depleting fisheries, degraded agricultural soils and deteriorating air quality. There is now a consensus that Cape Town and the wider Western Cape region face severe climate-change-related threats which require a co-ordinated government response (Cartwright *et al.*, 2012; Western Cape Provincial Government, 2008). Although originally ignored by the post-1994 policy-makers, the constraints imposed on Cape Town's spatially segmented inclusive urbanism by the realities of environmental change were slowly making themselves felt from about 2007 onwards (City of Cape Town, 2008; Clark *et al.*, 2007; Western Cape Provincial Government, 2008).

### Cape Town's Elusive Inclusive Urbanism

The integration of a large number of smaller EWWS departments into vertically integrated metropolitan bureaucracies after 2000, with district-level satellite offices, was seen by strategists as a necessary precondition for the delivery of uniform services to all households. Like so-called large technological systems (LTS) in other contexts (Guy *et al.*, 2001; Summerton, 1994), Cape Town's EWWS systems were highly complex networked infrastructures managed by a specific set of vertically integrated institutions that were required to operate in accordance with (at times contradictory, but ever-changing) national, provincial and local government regulations (Jaglin, 2008). While the managers of these systems actively participated in the rationalisation of multiple administrations into a single centralised metropolitan government, they never succeeded in effectively marrying the political necessities of inclusive urbanism and the fiscal prescriptions of splintered urbanism. The dominant political actors who governed the city after 1994 were united around what was called the



'services for all' policy that committed in one way or another the CCT to the extension of services to the under/unserved areas of Cape Town on an equitable and uniform basis (City of Cape Town, 2003). Indeed, as in South Africa as a whole, so-called service delivery became synonymous with development (Freund, 2010).

Needless to say, notwithstanding the commitment to a vision of *inclusive urbanism* as expressed in city-wide planning frameworks for Cape Town, this is not to say that this was actually achieved in practice. Although the literature has clearly demonstrated the vast gap between vision and reality when it comes to integration of the city (due to the logic of the property market and rights, limits to planning capacity and powers, lack of political will, consequences of neoliberal public management approaches and the marginalising effects of housing subsidies) (see Haferburg and Obenbrugge, 2003; Jaglin, 2004, 2008; McDonald and Smith, 2002; Miraftab, 2004; Robins, 2006; Ross, 2005; Smit, 2006; Smith, 2004; Smith and Hanson, 2003; Swilling, 2006, 2010; Swilling and de Wit, 2010; Watson, 2002), what cannot be denied is that the EWWS administrations did extend services to nearly every household in Cape Town. However, the EWWS administrations achieved this by working within existing spatial relations to connect nearly everyone into the networked infrastructures of the city. The result was uniquely South African: *spatially segmented inclusive urbanism*. This more limited conception of inclusive urbanism within a spatially fragmented landscape is very different from the more idealised vision found in all policy documents of a post-apartheid city, which envisages a city that has managed somehow to overcome the stark geographical separation of (overwhelmingly poor) Black areas and (increasingly multiracial) middle-class and elite areas.

It is worth noting that richer suburbs slowly deracialised because South Africa followed the international trend of debt-financing consumption-led growth securitised against urban property markets (Mohamed, 2010). This classic process of neoliberalisation of urban consumption via debt-financed property development benefitted, in particular, the educated expanding Black middle class created by affirmative action programmes in the public and private sectors. The absence of a coherent spatial development framework for the metropolitan area made it possible for developers to secure aesthetically disconnected approvals for low-density security estates that catered for both the ultra-rich as well as the entry-level middle class in areas that were well served by high-quality social infrastructures (education, health), transport and EWWS infrastructures created before and after 1994. Cape Town's property prices tracked average prices of South African urban property which increased by 351 per cent between 1997 and 2006 (Rust 2007). The property prices in the Cape Town middle class suburb of Westlake, for example, tripled between 2000 and 2006 (Lemanski, 2011, p. 64). As property prices rose, this increased the credit available for the consumer habits of the expanding middle class. This also led to a rapid increase in the tax revenues of the CCT that were, in turn, used to cross-subsidise the progressive tariff policy. In other words, as long as boom times lasted, the costs of inclusive urbanism were cross-subsidised from the financial revenues generated by accelerated debt-financed urban sprawl driven largely by well organised growth partnerships between property developers, financial institutions and agile consulting firms. However, this virtuous cycle quickly reversed itself after the recession set in from 2007 bringing the construction boom and high returns on upper-income property developments to an end.

**Table 1.** Key elements of the progressive equity model in Cape Town

Water	First 6000 litres free
Sanitation	First 4800 litres free
Electricity	First 50 Kwh free
Solid waste	Free service on properties valued <R88,000 and heavily subsidised on properties of R88,000–160,000
Rates	Properties <R88,000 zero rates Properties <R199,000 20 per cent discount Households earning < R1740/month receive 100 per cent rebate and R20 subsidy on services account
Tariff increases	Since 2003/04, average increases at above inflation, but with much lower increases for poor households (and in some cases even decreases) compensated for by much higher increases for richer households

Source: Jaglin (2008).

Since 2000 tariff policy has benefited the poor significantly (see Table 1).<sup>3</sup> Water tariffs have included a progressive five-step structure which resulted in large consumers paying more per litre than small consumers (excluding the problem of extended or multiple families in poor areas) and a 7 per cent surtax levied on businesses to cross-subsidise the 6000 litres of free water which needed to be provided to all households in line with national government policy. As for sanitation, the first 4200 litres were provided free of charge. Solid waste was standardised via a 240-litre bin and the service was provided free of charge for properties valued at less than R88,000 and heavily subsidised for houses worth between R88,000 and R160,000. A progressive approach to electricity tariffs has been much more difficult because Eskom (South Africa's state-owned by 'corporatised' electricity utility) supplies approximately one-third of Cape Town's households directly. Nevertheless, all consumers on the Domestic 2 tariff, who consumed less than 450 kWh per month on average, got 50kWh free electricity per month. After Eskom refused to apply this to the areas they served, the city had to step in to pay Eskom to make available this benefit to the poorer households.

As far as rates are concerned, the 2007/08 budget provided for properties valued at less than R88,000 (about 85,000 property owners) to pay zero rates, get free refuse collection and a basket of free services. Properties valued at R199,000 received a R20 per month discount on their rates, and households that earned less than R1740 per month, listed on the City's Indigent Register, received a 100 per cent rates rebate and a R20 per month subsidy of their services account. Finally, since 2003/04, tariff increases have taken into account the affordability levels of poor households—the result being average increases at above inflation, but with much lower increases for poor households (and in some cases even decreases) compensated for by much higher increases for richer households.

### Cape Town's Energy System

Cape Town's electricity supply system comprises the following infrastructures

- The bulk of the electricity supply comes from coal-fired power stations to the north carried into Cape Town via a 400 kV line that can deliver a maximum of 2600 MW (with no serious plans in place by anyone to expand this).

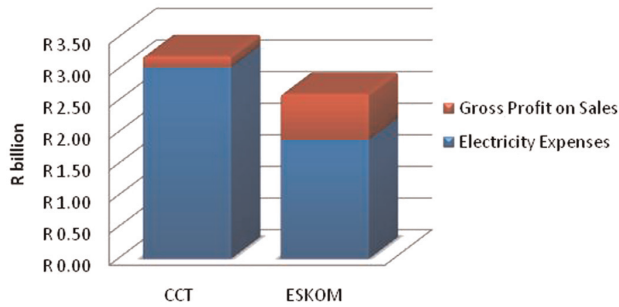
- The nuclear power plant at Koeberg (1800 MW) and the gas turbines at Acacia (171 MW) provide additional supply from units located within the Cape Town functional region. Two gas turbines at Roggebaai and Athlone (40 MW each) are used only during emergencies.
- Hydro power is generated from the surrounding region at the Palmiet (400 MW) and Steenbras (160 MW) pumped storage schemes. Surplus energy at night is used to pump water up a hill which then drives a turbine during the day when electricity is expensive.
- The Darling Wind Farm up the West Coast has been operational since 2008 and supplies electricity into the grid from four 1.3 MW turbines (5.2MW).
- By 2007 there were an estimated 10,000 solar water heaters (SWH) in Cape Town, representing 4.2 MW of renewable energy.

ESKOM<sup>4</sup> controls the coal-fired, nuclear and hydro-power electricity supplies. Approximately 72.5 per cent of Cape Town's electricity requirements are sold to the CCT who then on-sells to Cape Town's end-users via traditional or pre-paid meters. The remaining 27.5 per cent is supplied directly by Eskom, mainly via pre-paid meters. This means that there are two electricity supply administrations that service Cape Town, with little co-operation between the two.

Like many other South African cities, Cape Town's dual electricity supply system has its origins in the restructuring of ESKOM in the 1980s under the authority of the apartheid state. As part of its strategy to manage the crippling effects of rising debts exacerbated by sanctions and expanding military expenditures, the apartheid state mounted an aggressive privatisation strategy, which included the 'corporatisation' of ESKOM as the first step towards

privatisation. A classic neoliberal regulatory framework was established (agent-provider system) and ESKOM's culture was thoroughly transformed from an old-fashioned public utility to a market-oriented for-profit company (Gentle, 2009). This included an aggressive explicit strategy to take over the entire value chain, including removing electricity provision from local government. However, before this could be realised, the democratic transition began in 1990. Although ESKOM lobbied to make sure that the new democratic Constitution excluded electricity from local government's constitutional responsibility, this bid failed. However, this did not stop ESKOM from continuing with this strategy after 1994—a strategy that rapidly gained support from the newly elected democratic government. Indeed, by the late 1990s, the new democratic government was not only sympathetic to idea of removing electricity from local government control, it was also seriously considering privatising ESKOM entirely (for an account sympathetic to ESKOM, see Pickering, 2008). Unfortunately for Eskom, national government and the private-sector interests who wanted to buy ESKOM, local government's right to deliver electricity was entrenched by a sentence in the Constitution that powerful metropolitan governments were determined to protect, no matter which party was in power. It is this sentence that lay at the centre of Cape Town's battle to retain control of its electricity supply system.

The reason for ESKOM's determination to remove electricity provision from local government is that South African local governments have, since at least the 1960s, used profits from the sale of electricity to cross-subsidise other services—a practice that directly contradicts the neoliberal tenets of cost recovery. Indeed, after 1994, progress towards a more inclusive urbanism would have been unviable without these



**Figure 1.** Electricity cost and profit.

Source: Spencer (2010).

cross-subsidies. In Cape Town's case, for example, approximately R300 million was transferred from the Electricity Department to the rates account to cover general expenses in 2007/08. This level of cross-subsidisation has continued since then in Cape Town and in all other South African cities. For Eskom, using these surpluses for anything other than the 'electricity business' contradicted the technical efficiency and cost-recovery principles so valued by the neoliberal management culture that had established itself within Eskom.

To counteract the Constitutional protection of local government's control of electricity provision, Eskom has subverted local government control of electricity distribution by stealth. This was done by making the approval of additional supply for new extensions to South African cities conditional on direct supply by Eskom rather than via the municipality—which is why 40 per cent of Cape Town is supplied by Eskom. It is no coincidence that the areas supplied by Eskom are overwhelmingly newly developed areas in which many of the new upwardly mobile, largely Black, citizens live. Furthermore, as Figure 1 reveals, Eskom's sales volumes are lower than CCT's, but its profits are greater. The CCT also compensates Eskom for the free basic electricity supply, which means that Cape Town's ratepayers cross-subsidise Eskom's

profit margins. This confirms that, when service delivery agencies cease to be controlled by elected bodies, they are able to implement with impunity profit-generating cost-recovery systems that have splintering effects.

Eskom's long-term aim, however, was to establish regional electricity distributors (REDs) to remove electricity provision entirely from local government. On 17 April 2001, the South African Cabinet approved a document entitled *Blueprint of the EDI Restructuring Committee (EDIRC)*, more commonly known just as the *Blueprint*.<sup>5</sup> Inspired by crude neoliberal conceptions of governance (and ignoring the fact that the outcome would be splintered urbanism), the *Blueprint* laid out a plan to set up REDs that would take over from both local government and Eskom the rights to supply electricity to end-users. In September 2005, the Cabinet decided to establish a RED for each of the six metropolitan areas. The electricity assets of each metropolitan government, plus Eskom's distribution assets in these cities, would be transferred to the REDs, which would then be required to operate as 'businesses'. A giant national RED would then be established for the rest of the country (Pickering, 2008). Although vehemently denied by Eskom and national government, the negative financial implications of this decision for local government

were clear. Cape Town was the site of the battle to establish the first RED—the last round (which ended in December 2006) going undoubtedly to Cape Town, with major national implications.

Although the September 2005 decision was clearly a significant step towards removing electricity from local government, major local government players were won over when government agreed that REDs would be constituted as so-called municipal entities in terms of the Municipal Systems Act.<sup>6</sup> Although this meant full-scale ‘corporatisation’, at least it allowed local government to extract surpluses to cross-subsidise other services. At a meeting on 28 August 2006 between the Mayor of Cape Town, Mayoral Committee members,<sup>7</sup> RED1 (which had been constituted by then) and national government representatives, it was agreed that the CCT would support RED1 and the transfer of CCT and Eskom assets to RED1 on condition that RED1 remained a ‘municipal entity’ (that is, a company owned by CCT). This would have effectively created an integrated energy delivery system under CCT control. On 25 October 2006, Cabinet decided that the REDs would be constituted as ‘public entities’ in terms of the Public Finance Management Act and be accountable to the Minister of Minerals and Energy. The CCT interpreted this as a direct threat to the autonomy of local government and contradicted the 25 October 2006 agreement. It would also, of course, threaten the flow of surpluses from electricity sales, which were needed to cross-subsidise a cash-poor metropolitan government. The CCT immediately responded by announcing that all contractual agreements with RED1 would be terminated as from 31 December 2006 and that no asset transfers would take place. The CCT tabled this decision at a public hearing of the National Energy Regulator of South Africa (NERSA) on 7 December 2006, which was opposed by RED1 and national government.

NERSA ruled in favour of the CCT on 15 December 2006. RED1 (as ‘public entity’) was effectively dead and with it the biggest threat to an inclusive urbanism agenda Cape Town as a city had ever faced. This, however, was a battle won; the war was far from over—not least because Eskom remains determined to retain control of 40 per cent of Cape Town’s energy supply. This stubborn attachment to a politically unacceptable model will prevent the establishment of an integrated, sustainable resource management approach to Cape Town’s long-term energy needs. Ultimately, it is the urban poor who will suffer the consequences as energy prices rise at rates well above inflation.

## Green Urbanism and the Solar Water Heater Saga

Every year the *Mail and Guardian*, a renowned weekly newspaper, runs the Green Awards competition. The main message that the judging panel expressed in 2013 was that when it comes to green consciousness, South Africa has ‘hit the tipping point’. Judging by the proliferation of national policy frameworks committing South Africa to sustainable development and a greener economy, there seems to be some truth in this assertion (including the National Development Plan, Industrial Policy Action Plan, New Growth Path, National Strategy for Sustainable Development) even though in practice public investments are reinforcing dependence on coal-fired power and mining. It is, however, also generally recognised that Cape Town is the epicentre of this emerging green consciousness driven in part by an active research community interested in these issues based in the city’s four major Universities (see Cartwright *et al.*, 2012; Pieterse, 2010; Swilling, 2010). Motivated by many years of research that confirm that Cape Town faces severe natural resource constraints on future



**Table 2.** Energy efficiency and renewable energy potential

Wind	3000 MW
Ocean	1000 MW
Solar-PV	247 MW
Hydro	15 MW
Solar thermal	1400 MW
Pumped storage	1800 MW
Total	7452 MW

Source: Western Cape Provincial Government (2008)

development (Crane and Swilling, 2008), both the Western Cape Provincial Government and the City of Cape Town have adopted an extraordinary array of policies aimed at greening Cape Town. In parallel, the property development industry established the Cape-Town-based Green Building Council to create a self-regulated set of 'green building standards' based on the Australian Green Star system. A number of major property developers have taken these cues and formulated proposals for elite enclaves and green suburbs<sup>8</sup>, partly to secure approvals but also to access funding from banks with an explicit 'green building' agenda (for example, Nedbank).

As reflected in Table 2, there is more potential in renewable energy sources and energy efficiency than the current installed coal- and nuclear-based capacity (which is + 5000 MW) that services Cape Town now.<sup>9</sup> However, the existence of two major electricity suppliers in Cape Town (ESKOM and CCT), one of which has a vested interest in opposing a major transition to renewables, will more than likely make it impossible to develop a coherent actionable plan to implement such a vision for Cape Town. It was in this context that the idea of a by-law to make the installation of solar hot water heaters compulsory was regarded by key actors within the CCT as 'low hanging fruit' within a wider green urbanism agenda.

Based on both operational experience and the build-up of research about the benefits of solar hot water heating (SHW) (Kritzinger, 2011), by 2006 a policy consensus had evolved in Cape Town that the promotion of SHW systems made economic, social and environmental sense. New companies opened up (both manufacturers of South African products and importers of mainly Chinese systems), middle-class consumers started buying them and they began to be included in low-income state-funded housing developments. Their affordability for both low- and middle-income consumers, plus the financial benefits of bulk supply savings in an energy-constrained environment, resulted in a shared view across a broad alliance of interests that the widespread implementation of SHW systems could contribute to what could be called an inclusive green urbanism agenda. This prompted the CCT to propose a by-law that would effectively make it compulsory for all housing to be fitted with SHW systems. Despite wide agreement, in the end the by-law was not adopted and many small businesses that had been launched in anticipation that the by-law would be passed, were forced to close down.

The root cause of the failure to approve the by-law was the inability of the Environmental Resource and Management Department (ERDM) that motivated the by-law to reach agreement with the Planning and Building Development and Management Department (PBDMD) on the most appropriate way to implement the policy. The ERDM advocated a regulatory intervention via a by-law which, in turn, the PBDMD would have had to implement. The PBDMD strongly rejected the idea of a by-law preferring market incentives to legal compulsion. Although both departments reported to the Strategic Planning Directorate, their normative orientations, implementation pathways and learning cultures were fundamentally

different (Froestad *et al.*, 2012). The ERDM was staffed by relatively young professionals (backed by some politicians) motivated by a broad inclusive green urbanism agenda for the city that was articulated in terms of ambitious policy statements and a strong commitment to using new laws to change consumption behaviour. Few had any experience of implementation and the complexities of enforcement. The PBDMD was staffed by experienced officials who appreciated the high transaction costs of enforcement, took pride in their professional ethos and chose to be cautious about innovations. Reflecting the public choice orientation of the 'new public management' tropes that accompanied the world-wide diffusion of neoliberalisation, these officials argued that incentives are more effective because by giving consumers choices the risk and related costs of non-compliance are minimised. By defining in market terms who the 'willing to change' are, this approach effectively minimised the scale of change and marginalised a potentially transformative agenda to the periphery of the policy process.

Although the debate about a SHW by-law fell away at the end of 2011 as a result of the promulgation of regulations for energy efficient buildings by national government that made SHW compulsory for all new buildings, this conflict provides a useful example of how a potentially transformative approach can be marginalised by a neoliberal governance approach that is able to trivialise the necessity for change and minimise to almost nothing the room for strategic manoeuvre. This was by no means an isolated case.

## From Quiet Encroachment to Co-production

Of the approximately 800,000 households in Cape Town, approximately 200,000 live

in shacks with services (water, sanitation, roads and in some cases electricity) and 100,000 live in shacks located in unserviced areas. Although *in situ* incremental upgrading of informal settlements has been government policy since 2004, in practice it can take on average eight years to secure approval for the commencement of the upgrading process. The reason for this is that upgrading can only commence after tenure rights have been secured. The installation of the road, water, sanitation and electricity grids follows. This means that, for the average shackdweller, incremental upgrading means waiting for the grids to arrive. The message from the state is 'be patient' which, in turn, reinforces a passive entitlement culture. To counteract this, NGOs and social movements have focused on building proactive communities that initiate engagements with the state to accelerate the delivery process. This, however, is difficult to sustain if quality of life only improves when the grids arrive. So the question this raises is whether there is anything that communities can do now that can demonstrate the advantages of collective action now. In particular, how can they access the free basic water and electricity subsidies that all South African households are entitled to, given that the condition for eligibility for these subsidies is being grid-connected? In short, is there a genuine incremental approach to upgrading that is not entirely dependent on the state to activate but can benefit from the subsidy flows?

To answer this question, a coalition of NGOs, urban movements and researchers developed what has come to be referred to as the iShack approach (Keller, 2012; Taverner-Smith, 2012).<sup>10</sup> Starting off in an informal settlement of 2500 households called Enkanini in the University town of Stellenbosch on the periphery of the Cape Town metropolitan area, the aim was to



find simple affordable community-based interventions that could significantly improve quality of life through co-operative action. By insulating the inside of the shack with low-cost materials and using solar power for lighting, cellphone charger and a 12 volt TV (with the option to expand to a radio and fridge at an extra cost), significant tangible improvements were achieved, including a reduced fire hazard. To cover operation and maintenance costs, energy consumption is metered to facilitate a cellphone-type ‘pay-as-you-go’ payment system. This income covers the cost of a full-time so-called hub operator—there is one for every 250 households. As the animator of the system, the hub operator is not just operating a small social enterprise, s/he is also constantly renewing the social bonds of co-operative action. The basic social unit of the system is the cluster of four or five households who co-operate around learning, purchases, vigilance (to protect the units from theft) and then engagements with the state around the allocation of subsidies and accelerated upgrading (including land rights). As has emerged in Stellenbosch, tangible improvements in quality of life create the social basis for contesting the terms (social and temporal) of incremental upgrading.

Left to its own devices, slum urbanism is the emergent outcome of countless quiet encroachments that gradually transform the socio-spatial fabric of the city from below (Bayat, 2000). Quiet encroachments, however, can leave existing power relations largely uncontested, especially if they are mounted primarily by individual households. The iShack initiative provides an alternative mode of bottom-up urban inclusion through ‘co-produced’ solutions on terms that suit shackdwellers (Mitlin, 2008). This is the kind of active citizenship that can challenge prevailing power relations.

## Conclusion

The fact that South Africa experienced the formal establishment of a non-racial democracy during the neoliberal 1990s as opposed to the Keynesian 1960s as is the case of most African nations meant that it faced the simultaneous challenges of (racial) inclusion and (class-based) splintering, overdetermined by the impact of the ecological crisis. As demonstrated in this discussion of Cape Town’s energy system, these pressures were most acutely felt at city level. This unique set of conditions helped to illustrate how actually existing ‘variegated neoliberalisation’ manifested as neither “inexorable convergence” nor “unpatterned heterogeneity” (Brenner *et al.*, 2010, p. 217) at the urban level. Careful tracking of the dynamics of contested urbanisms in Cape Town has helped to reveal how contextually specific conditions shaped the evolution of diverse urban discourses. At the simplest level, urban inclusion was necessitated by the imperatives of the democratic transition. ‘Services for all’, including cross-subsidisation, became a broadly shared programme for achieving this. However, this inclusive agenda was threatened by the splintering consequences of the neoliberalisation of electricity governance as reflected in ESKOM’s strategies to remove electricity provision from municipal control. These divisive trends were reinforced by the splintering logic of debt-financed property booms characteristic of neoliberalisation processes elsewhere in the world. However, both these trends had contradictory outcomes: the CCT successfully resisted the ‘corporatisation’ of electricity supply under the control of national government, and ironically booming property markets helped to fund the cross-subsidisation of the ‘services for all’ programme until the boom ended in 2007. Contesting the new dynamics of green urbanism as reflected in the debate about solar hot water heating helped to

expose the limits of market-oriented public choice modes of governance when faced with systemic ecological threats to the natural resource base of the city. The case of the iShack initiative was used to demonstrate how ‘co-production’ could activate the dynamics of ‘quiet encroachment’ of slum urbanism to generate an alternative more collectivist bottom–up inclusive mode of urban governance than the more passive household-centred processes or the state-centred delivery modes.

Future research will be needed to test the usefulness of identifying the diverse articulations of urbanism by different urban actors and then applying these categories to an analysis of ‘variegated neoliberalisation’ within specific urban contexts. This may be empirically useful because it will build up a collection of comparative cases that could then be used to draw out some general trends. Some of the following research questions may be relevant: What are the competing conceptions of city-level governance? Are there examples of tensions between strategic approaches to systemic change (in response to environmental change or other macro economy dynamics) versus public choice approaches that define those ‘willing to change’ in market terms? Are there other examples in the global South where the financialisation of middle-class property markets translated into property booms that cross-subsidised service provision for the poor (at least for a while)? What happens when the property booms end? What are the different ways that ‘quiet encroachment’ has evolved into ‘co-production’? What are the different responses of the state?

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## Notes

1. City of Cape Town is the formal name of the municipality that governs Cape Town (henceforth referred to just as CCT). The CCT is a strong metropolitan government structure.
2. Calculated from Haskins (2006) and Swilling (2006).
3. The data referred to in the following paragraphs are drawn primarily from Jaglin (2008), but also from Swilling and de Wit (2010).
4. Eskom is the name of the large public utility that is responsible for managing the generation and distribution of all electricity in South Africa. It is now a company with the state as its shareholder. Its core business is coal-fired power generation and it defines its mission purely as the provision of electricity as a commodity to its ‘customers’.
5. EDI = electricity distribution industry.
6. Municipal entities are legally constituted as stand-alone companies but owned by local governments. They are required to operate in terms of the Municipal Finance Management Act.
7. The Mayoral Committee was at that stage controlled by the Democratic Alliance, the official opposition to the African National Congress-controlled national government.
8. For one example, see [www.wescapelife.co.za](http://www.wescapelife.co.za).
9. Since the publication of this report, further research has revealed the potential of concentrated solar power plants, which also have the advantage of storage capacity (see [Heun \*et al.\*, 2010](#)).
10. See also [www.ishackliving.co.za](http://www.ishackliving.co.za) and iShackproject on Facebook.

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