

Papers in Urbanisation, Planning and Development

# The Micropolitics of Speculative Green Urbanism at Forest City, Iskandar Malaysia

Sin Yee Koh, Yimin Zhao and Hyun Bang Shin

Paper No. 21
Geography and Environment Discussion Paper Series

January 2021

# **Editorial Board**

# Professor Riccardo Crescenzi Professor Hyun Bang Shin Dr Charles Palmer

All views expressed in this paper are those of the author(s) and do not necessarily represent the views of the editors or LSE. The results presented in the paper are not peer-reviewed.

### **Published by**

Department of Geography and Environment London School of Economics and Political Science Houghton Street London WC2A 2AE

geog.comms@lse.ac.uk www.lse.ac.uk/Geography-and-Environment

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission in writing of the author(s) nor be issued to the public or circulated in any form other than that in which it is published. Requests for permission to reproduce any article or part of the Discussion Paper should be sent to the author(s) directly.

# The Micropolitics of Speculative Green Urbanism at Forest City, Iskandar Malaysia

Sin Yee Koh, School of Arts and Social Sciences, Monash University Malaysia, Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor, Malaysia. E-mail: <a href="koh.sinyee@monash.edu">koh.sinyee@monash.edu</a>

Yimin Zhao, Department of Urban Planning and Management, School of Public Administration and Policy, Renmin University of China, Beijing 100872, China. E-mail: <a href="mailto:zhao.y@ruc.edu.cn">zhao.y@ruc.edu.cn</a>

Hyun Bang Shin, Department of Geography and Environment, London School of Economics and Political Science, Houghton Street, London WC2A 2AE. E-mail: <a href="https://hib.shin@lse.ac.uk">h.b.shin@lse.ac.uk</a>

#### **Abstract**

There is an established urban studies literature on the discursive politics of green urbanism, especially with regards to eco-cities and (mega) greenfield developments. However, less attention has been paid to the micropolitics of cross-border transplantation of green urbanism ideas and practices, especially within Asia. This paper examines the case of Forest City, a mainland Chinese developer-led mega greenfield project in the Iskandar Malaysia special economic corridor, to be built on four reclaimed islands. Based on observations, in-depth interviews with local stakeholders and document analysis, we analyse the different ways in which green urbanism has been used by the local state and the developer as an apparatus for speculative city-making. On the one hand, the state seeks to position Iskandar Malaysia as greener than its global competitors through the development of a homegrown "low carbon society" green accreditation system. On the other hand, the (selectively) "green and smart" Forest City consolidates the developer's corporate brand image and marketing aesthetics at the cost of local residents' living environment. Attention to such entangled micropolitics of speculative green urbanism contextualises different stakeholders' rationales and practices and contributes to critical reflections on the entanglement of green urbanism and speculative urbanisation.

**Keywords**: green urbanism; speculative urbanization; property development; micropolitics; Iskandar Malaysia; Global China

#### **Funding**

This research is funded by the British Academy's Tackling the UK's International Challenges Programme (IC3\100155), the Universiti Brunei Darussalam University Research Grant (UBD/ORI/URC/RG(337)/U01), and the Monash University Malaysia School of Arts and Social Sciences Internal Grant (PC 208-19).

#### Acknowledgements

We thank all the interviewees who have kindly shared their views with us, and also our research assistants, Bor Tsong Teh, Sharifah Syed Abdul Rahiman Al-Aydeross, and Amira Abdul Rahim in Malaysia and Kang Li and Minyi Li in China, for their assistance. Earlier versions of this paper were presented at the RC21 Annual Conference 2019 in Delhi, India and 2020 LSE SEAC Southeast Asia Week. We thank the commentators and audience members for their helpful suggestions. The usual disclaimer applies.

#### 1 Introduction

China's Country Garden Group (hereafter "CGG"), one of the largest property developers in the world, has been transplanting its corporate vision of green urbanism from China to various new urban development projects overseas. One of the most notable projects is Forest City (Figure 1), a mega greenfield project to be built on four reclaimed islands totalling 14 square kilometres in the Johor Straits, Malaysia, for a target population of 700,000. The project is located in Iskandar Malaysia, a 4,749 square kilometre special economic zone in the *negeri* of Johor that was institutionalized as a joint federal and *negeri* government initiative in 2006. The project, with a Gross Development Value (GDV) of US\$100 billion, is developed by Country Garden PacificView Sdn Bhd (CGPV), a joint venture company between the Guangzhou-based CGG (66% share) and Esplanade Danga 88 Sdn Bhd (EDSB) (34% share) (Aw, 2014). EDSB is in turn partially owned by the Sultan of Johor<sup>2</sup> (64.4% majority share), Kumpulan Prasarana Rakyat Johor (KPRJ), a Johor state-owned company (20% share) and Daing Malek, the Sultan's aide and business partner (15.6% share) (ibid.).

While Forest City is to be constructed over a 20-to-30 year timeframe, its development on the ground has been proceeding at high speeds. In May 2017, only three years after commencing island reclamation, the keys to the first phase of high-rise residential units were issued to the residents (iProperty, 2017). In July 2019, another 9,000 new residential units were reportedly ready for occupation (Forest City Malaysia, 2019). By September 2019, the first island was 50% reclaimed, and all of its commercial and educational facilities were in operation (South China Morning Post, 2019).

Forest City is marketed as a "green and smart" city with a multi-layered mobility system where parking, street level activities (including a light-rail transit system), and residential communal areas are segregated from each other (CGPV, n.d.). It also boasts a "forest-like environment" with vertical greening. Smart technologies are integrated into the construction

<sup>&</sup>lt;sup>1</sup> Malaysia retains a federal system, consisting of 13 *negeri* (or state) and three *Wilayah Persekutuan* (federal territories). In this paper, we use the local expression "*negeri*" in order to distinguish it from the more general usage of the state as in nation state.

<sup>&</sup>lt;sup>2</sup> Nine of the negeri in Malaysia, including Johor, are headed by hereditary constitutional monarchs. The Sultan serves as the head of state and the head of the Islamic religion in his state. The Sultan has discretionary powers in appointing the *Menteri Besar* (i.e., Chief Minister), the head of government in his state.

processes, as well as post-construction urban and building management systems (e.g., smart meters for real-time energy monitoring, artificial intelligence security applications such as face and fingerprint recognition) (CGG, 2019). The high speed of construction described above has been to a large extent enabled by the establishment of the CGPV-led Industrialized Building System (IBS) Plant in 2017, the largest fully automated facility in Malaysia with an output capacity to produce building materials (including concrete) that are equivalent to 9,000 apartment units per annum (Chew, 2019).

Figure 1: Forest City, Iskandar Malaysia. Photograph taken by authors in August 2019.



Source: Photographed by the authors, 4 September 2019

At first glance, CGG's planning and design concepts for Forest City centres on green urbanism, which is largely in line with the Chinese State's "ecological civilization (*shengtai wenming* 生态文明)" agenda as well as the green and urban sustainability agenda of Iskandar Malaysia. However, the extensive land reclamation to secure a "tabula rasa" condition in Forest City questions the greening nature of the project itself, as well as the extent to which the project adheres to these two state-led ecological agendas. Using Forest City as a case study, this paper explores three interrelated research questions. First, how are particular variants of green urbanism transplanted within Asia? Second, to what extent is the materialization of green urbanism being shaped by local power relations and politics? Third, how do local residents perceive and make sense of such large-scale green urbanism projects? In interrogating these

questions, this paper aims to contribute to the green urbanism literature through the lens of speculative urbanization and its associated micropolitical dynamics.

Following this introduction, the next section discusses the theoretical underpinnings of this paper, specifically on the entanglements of green urbanism and speculative urbanization in the context of "ecological civilization." This is followed by an explanation of the case and research methods. The fourth section analyses the different ways in which green urbanism has been used by the local state and the developer as an apparatus for speculative city-making. The fifth section highlights the micropolitics of urban development at Iskandar Malaysia to contextualize local stakeholder groups' reactions to the Forest City mega-project. We conclude by highlighting the necessity and significance of attending to concrete/material politics that ground and shape speculative green urbanism.

### **2** From Ecological Civilization to Speculative Green Urbanism

The links between nature/ecology and the political economy have long been a central theme shared by Frankfurt School-inspired environmental critiques and the neo-Marxian approach to urban political ecology (Castree, 2008a; Gandy, 2015). While the socio-ecological interdependencies of urban space are foregrounded to criticize capital accumulation and to create "possibilities for constructing different socio-environmental futures" (Swyngedouw, 2010, p. 228), such analyses are mainly limited to Western democracies and pay less attention to the role of the state (see, for example, the debates on "neoliberalising nature" in Bakker, 2010; Castree, 2008a, 2008b) and its various partners in this regard.

In China, for example, the presence of a strong central state and state-owned enterprises in the urban development sector necessarily means that there are additional dynamics to the interdependencies between urban development and nature that may be different to that in Western democracies. Moreover, while the state promoted "ecological civilization" in China partly overlaps with the concept of "green urbanism" derived from the West, the term carries different discursive and material connotations to Chinese developers. For many of them, operating in a more "ecological" manner would translate not only to lower construction costs and time savings, but also to the enjoyment of state preferential policies (see Sun & Fu, 2017; Wang, 2019). Such concessions have in part contributed to the transplantation of "green" urbanism practices by major Chinese developers to other Asian cities as they expand internationally.

However, the transplantation of such practices may not be smooth nor automatic. The urban policy and political environments in each destination city may be different to those in Chinese cities. Moreover, ambitious local authorities in these cities may understand and deploy "green urbanism" in different ways to the Chinese developers. How do place-based micropolitics shape and influence the cross-border transplantation of green urbanism ideas and practices in a way that entangles with speculative urbanization in these cities? In this section, we lay out a framework to address this question by focusing on the interconnections between the discursive power of ecological civilization and the material politics of green urbanism.

#### 2.1 Ecological Civilization as Ideology

The term "ecological civilization," which first appeared in a former Soviet Union academic journal article in 1984, has been adopted by ecologists in China since the late 1980s (Xu, 2010). At that time, the term was used to emphasize the balance between economic and ecological development. This approach is illustrative of the then influential "ecological modernization" thesis in China (Chien et al., 2017; Mol, 2006; Pow & Neo, 2013), which was popular for its "win-win" prospect of balancing environmental concerns and economic growth – hence internalising conflicts rather than challenging or addressing social injustice (Harvey, 1996, p. 382).

<sup>&</sup>lt;sup>3</sup> The term was first added to the CPC's Constitution and development plan in 2012 (Parr & Henry, 2016).

Figure 2: "Forest City, building together," a billboard installed by Foshan municipality



Source: photo by the authors, August 2019

Recent discussions in China (urban) studies have attended to the nature and role of the "ecological civilization" discourse. Pow (2018), for example, in examining the discourse in the context of the Sino-Singapore Tianjin Eco-city project, finds that a form of aesthetic governmentality is at work, fusing "bourgeois forms of aesthetic environmentalism with worldclass urban aesthetics" (p. 864). Informed and regulated by this discourse, the foundation of urban planning has been remade in China, with the focus being shifted from previous technoscientific arenas to the emerging concern of eco-aesthetic normativity (ibid.). Nationally, this discourse has been translated into numerous governmental tools that are interlinked to such a normativity. For instance, the "National Forest City" (guojia senlin chengshi 国家森林城市) title, promoted by the National Bureau of Forestry and Grassland since the early 2000s, has been awarded to 138 cities in China by 2018, including Foshan City where CGG's headquarter is located (National Bureau of Forestry and Grassland, 2019; see Figure 2 for Foshan City). To compete for this title, each city is required to reshape their urban (green) space to meet certain criteria and standards (see National Bureau of Forestry, 2005). This demonstrates the reach and power of the eco-aesthetic normativity in China, embodied in the discourse of "ecological civilization."

Perhaps not coincidentally, CGG's large-scale development project at Iskandar Malaysia is also named "Forest City." It is hence critical to examine how and to what extent this eco-aesthetic normativity, developed in China, has travelled abroad under the expansive reach of "Global China," i.e., the outward expansion of Chinese investments in foreign real estate (Paik, 2019). To understand multiple and dynamic processes of urban political economy at work here, we need to examine the ways through which this normative discourse has been put to "use" by international developers (CGG in this case) and their local partners including the local state at Iskandar Malaysia, whose primary goal turns out to be maximizing economic gains. In order to do so, we situate the ideology-discourse of "ecological civilization" in the context of speculative urbanization, attending in particular to the articulations between this discourse and concrete and material politics on the ground, both of which are operationalized in the name of "green urbanism."

#### 2.2 The Entanglements of Green Urbanism and Speculative Urbanization

While China witnessed the emergence of the ideological discourse of ecological civilization in the 1980s, the concept of green urbanism had a longer history in the West. There have been two waves of the green urbanism movement since the mid-19th century: the first saw the shift from elite private gardens to urban green spaces as a public good; and the second, which emerged in the 1960s, saw the development of a new urban planning focus on the environment (Barton, 2020). It is the second wave that led to the establishment of the UN-Habitat and the subsequent development of the principle of environmental sustainability (i.e., the responsible usage and protection of environmental resources for future generations). This principle continues to inform current understanding of sustainable urban development (Rapoport, 2014; Whitehead, 2020).

<sup>&</sup>lt;sup>4</sup> Our use of "Global China" departs from a foreign policy perspective that focuses on China's growing influence on international order (see Vangeli, 2018). Similar to Lee's (2018) use that focuses on China's state-led investment in extractive and labour-intensive manufacturing industries in Africa, we use "Global China" in reference to the phenomenon of mainland Chinese developers expanding their urban development projects in international locations that are not confined to the global South. Such expansion often entails the developers' proactive mobilization of the buying power of individual/corporate investor buyers from mainland China. In this regard, our usage of "Global China" differs from Ley's (2017) usage of the term, for whom "Global China" encompasses investor buyers from *Greater China* (e.g., Hong Kong, Taiwan) investing in local property markets of Vancouver, Canada and whose presence became noticeable in the context of (post-)Cold War geopolitics of the 1980s and 1990s.

The critical geographies of green urbanism literature have examined the extent to which the proponents of green urbanism have delivered what was originally envisioned (McCann, 2017). There is also a growing urban studies literature on the discursive politics of green urbanism (i.e., how green urbanism is discursively maneuvered by city elites to promote urban development projects), especially with regards to eco-cities and (mega) greenfield developments (Caprotti et al., 2015; Crot, 2013; Curugullo, 2013; Death, 2014). According to these discussions, more often than not, the actually-existing green urbanism in these large-scale developments tend to be cursory rather than transformative.

Rapoport (2014, p. 138) notes that eco-city projects in Asia and the Middle East are often undertaken to address "larger aims and objectives which are as likely to be political or economic in nature as environmental." In his analysis of green urbanism in the Emirates, Ouis (2002, p. 338) suggests that the large-scale creation of man-made green spaces in the desert environment "is closely linked to the legitimization of power for the ruling sheikhs and the political system of paternalism." Moreover, the produced green urbanism landscapes become part of the region's modernization project. Green urbanism, both in concept and in material form, has hence been socially constructed and imbued with multiple political and economic connotations. As McCann (2017, p. 1818) suggests, the meaning of "green" in concepts like green urbanism and green development "is clearly up for grabs."

Evidently, the specific connotation of "green" in a certain context depends on who is speaking about what type of "green urbanism" to which audience, and for what purpose. In the context of speculative urbanization, the discursive usage of "green urbanism" becomes particularly apparent and problematic. In other words, we propose that it is the speculative nature of place-making and making of the urban, which exposes the instrumental nature of green urbanism discourses for advancing economic interests.

In this paper, we take as a starting point Bear's (2020) argument that speculation is "future-oriented affective, physical and intellectual labour that aims to accumulate capital for various ends" (p. 2), which accompanies "an act of labour that has become crucial to the generation of surplus value" (p. 6). With this in mind, we understand speculative urbanization as a process of urbanization that involves the production of the built environment and the reproduction of labour in such a way that aims for quick returns on high-risk investments as non-productive gains. In this regard, our discussion of speculative urbanization encompasses the definition by Marcinkoski (2018), who emphasized "the undertaking of land acquisition and/or infrastructure and building construction in the pursuit of uncommon financial gains

under the presumption of market demand despite the absence of a specific future tenant or consumer" (p. 52, original emphasis). Additionally, our attention to speed renders "fast urbanism" (see Shin, Zhao & Koh, 2020) as intrinsic to speculative urbanization. Green urbanism in this regard provides discursive legitimization of such future-oriented social action that comes with high risks, often pursued through fast-tracked urban production.

On top of this definition, we also take into consideration the role of the state from a strategic-relational perspective (Jessop, 2008), which for us is critical in fostering the mechanisms and practices of city-making for the purpose of "anchoring ...mobile finance capital into the built environment" (Halbert & Rouanet, 2014, p. 472; Shin and Zhao 2018) and in overcoming the limits of methodological statism (Doucette & Park, 2019). Instead of understanding state actions in isolation, we understand "the state as a social relation" (Jessop, 2018) and a site of contention among political forces that involve the mobilisation of state apparatuses and resources through the unequal use of state power. Such views of the state also call for the need of treating the state not as a homogeneous, unitary entity but as a site of multiscalar struggles among different factions of bureaucratic bodies and political interests.

As we shall later show, the Forest City's project of "moving the mountain and greening the sea" involves the artificial (re)creation of expansive urban greenscapes on reclaimed land. Using green urbanism discourses as justification, this "green" project has been ironically made possible through transnational transactions of plants, gravel, sand and other natural resources (Rizzo, 2019; Tateishi 2018). Furthermore, this project is situated within a complex landscape of changing local politics and political economy in Iskandar Malaysia, where not only very different versions of "green urbanism" are foregrounded, but also the diverse and divergent interests of various actors involved in local power relations and place-based micropolitics. It is hence necessary to further investigate the entanglement of green urbanism and speculative urbanization by taking into account these political dynamics, with adequate attention paid to the everyday practices and conducts where these different, and sometimes conflictual, groups of state and non-state actors interact with each other. Before doing so, we will introduce in the next section the empirical context and research methods.

### 3 Case within Case: Researching Forest City in Iskandar Malaysia

Iskandar Malaysia is one of the five economic corridors (i.e., special economic zone) in Malaysia. While the other two economic corridors in Peninsular Malaysia (i.e., West Malaysia)

span across two or more states,<sup>5</sup> Iskandar Malaysia is the only economic corridor in West Malaysia that is entirely contained within a single state, i.e., the negeri of Johor. Furthermore, it is the only economic corridor in Malaysia where the federal government shares equal directive power with the negeri government. This is of significance as land is under the jurisprudence of the negeri government (not the federal government) in Malaysia. This co-directive arrangement means that the federal government has significant, if not equal influence as the Johor negeri government on Iskandar Malaysia's urban economic development.

When the federal government announced the establishment of Iskandar Malaysia in 2006, it also established the Iskandar Regional Development Authority (IRDA), which is governed by the IRDA Act 2007, a Parliament act that enshrines the agency's statutory powers and functions in planning, promoting and facilitating Iskandar Malaysia's long-term economic and urban developments. IRDA's organizational structure reflects the equal interests of the federal and state governments in overseeing the development of Iskandar Malaysia. The agency's Chief Executive Officer reports to the Members of Authority (MoA), a board consisting of key federal and state government officers holding finance, economic planning and executive portfolios. The MoA, in turn, reports to IRDA's two Co-Chairmen, the Prime Minister of Malaysia and the Chief Minister of Johor. This governance model clearly signals the strategic and multiscalar state interests in Iskandar Malaysia.

Table 1. Large scale mixed-use development projects undertaken by mainland Chinese developers in Iskandar Malaysia

Developer	Project	Site area (ha)	Gross development value (RM, billion)	Number of residential units
Country Garden Group	Country Garden Danga Bay	22.26	10	9,539
	Forest City	1,386	100	160,000
Guangzhou R&F Properties	R&F Princess Cove	46.9	24.5	7,258ª
Greenland Group <sup>b</sup>	Greenland Danga Bay	5.5	2.2	2,205
	Greenland Tebrau	52	18.4	20,000

Notes:

<sup>&</sup>lt;sup>a</sup> Phases 1-5 (https://ehome.kpkt.gov.my/index.php/pages/view/172)

<sup>&</sup>lt;sup>5</sup> The Northern Corridor Economic Region covers the negeri of Kedah, Pulau Pinang, Perak and Perlis. The East Coast Economic Region covers the negeri of Kelantan, Terengganu, Pahang, and the district of Mersing in the negeri of Johor.

<sup>b</sup> A Chinese state-owned enterprise established and owned by the Shanghai Municipal Government. Sources: Choong (2013), Chow (2015), Cole (2015), Mahrotri and Choong (2016), Murugiah (2017), Ong (2017)

From 2006 to 2016, IRDA has secured cumulative committed investments of MYR 208 billion, of which 50% has been realized (IRDA, 2016a). Crucially, the largest proportion of the cumulative committed investment was in property development (53%), including residential (20%) and retail/mixed developments (27%) (IRDA, 2016b). Within the same period, China ranked first in terms of foreign investment into Iskandar Malaysia. It was noted that investments from China were "mainly in property development" (ibid.). Indeed, in addition to the Forest City project, there are a number of large-scale mixed-use development projects that are undertaken by mainland Chinese developers in Iskandar Malaysia (Table 1). As foreign developers cannot operate independently in Malaysia, these developers have formed joint venture companies with local public and/or private entities.

While Forest City is not the only large-scale mixed-use development undertaken by mainland Chinese developers in Iskandar Malaysia, it has been at the centre of national and international media attention for two reasons. First, the scale of the project is simply unprecedented in the region, and there are environmental concerns due to the large-scale land reclamation entailed. As Table 1 shows, the project's site area is significantly larger than other mainland Chinese developer-led projects in Iskandar Malaysia. Moreover, the project sits in an area with rich seagrass, mangrove and marine diversity that supports the livelihoods of local residents in the surrounding fishing villages. The environmental damage caused by the project's large-scale coastal reclamation would result in irreversible socio-cultural, economic and environmental impacts (Rahman, 2017a, 2017b).

Second, the media has noted that the involvement of the Sultan of Johor in this project might have assisted in some circumvention of existing planning and development guidelines, especially those that concern the environment (Aw, 2014). In fact, land reclamation for the project had commenced without an approved Detailed Environmental Impact Assessment (DEIA) (Susskind et al., 2018). After the DEIA was subsequently submitted and approved, the planned land reclamation was reduced from 20 to 14 square kilometres. Finally, the project was also caught in between long standing political and power struggles between key federal and local state elites (Rahman, 2017a, 17-19), a point which we will return to later.

This paper primarily draws upon a comparative research project on the international business expansion of two major mainland Chinese developers' activities in London and Iskandar Malaysia (2019-2021). It also draws upon a project on the sale of cross-border and transnational residential real estate in Iskandar Malaysia (2016-2018). Both projects utilize qualitative and ethnographic methods, including field observations, interviews, and document analysis. Interview respondents include CGPV employees, IRDA officers, local state urban planning officers, local urban development industry players, local urban studies experts and observers, and local youths. Respondents were asked questions specific to their roles and positions. These interview conversations gave us a glimpse into the diverse perspectives surrounding speculative urbanization and green urbanism at Iskandar Malaysia.

On top of this, we have benefited from the comparative research approach by triangulating data collected in Iskandar Malaysia with those from Shunde, China, where the headquarter of CGG is located. Such data includes field notes, interviews with employees and local residents, as well as public reports and internal company magazines. Combining views and observations both "at home" and "overseas" gave us greater insight into how CGG has consolidated, transplanted and speculated upon its corporate version of "green urbanism" at Forest City in Iskandar Malaysia.

#### 4 Two Versions of Green Urbanism

The articulation between green urbanism and speculative urbanization, as discussed earlier, makes it plain that the discursive power of the former is embodied in the process of translating ideas into actually-existing manifestations that is susceptible to the logic of the latter. At Iskandar Malaysia, we observed that green urbanism has been discursively used by the local state (IRDA) and the developer (CGG and its local subsidiary CGPV) as an apparatus for speculative city-making. While the green urbanism strategies deployed by either party appear to be unrelated at first glance, they are rooted in the overarching logic of speculative city-making of Iskandar Malaysia within which Forest City carves out its own monopoly space that feeds upon money capital from China.

#### 4.1 IRDA: Toward a "Low Carbon Society"

At the onset of Iskandar Malaysia's establishment, green urbanism – specifically, low carbon society and green technology – has been IRDA's key concern that is also in line with

the federal government's agenda. Starting in 2009, the federal government kickstarted a few initiatives to promote green technology and sustainable development, including the launch of the National Green Technology Policy and the country's voluntary commitment to reduce greenhouse gas emissions by up to 40% by 2020 at the Conference of Parties 15 (COP 15) (Tu, 2016). Following this, Iskandar Malaysia was selected as a pilot area in 2011 for the "Development of Low Carbon Society Scenarios for Asian Regions," a five-year joint research program between Japan and Malaysia (Ho et al., 2013, p. 5). Overseen by both IRDA and local and Japanese research institutes, this program resulted in the Low Carbon Society Blueprint for Iskandar Malaysia 2025 (LCSBP-IM2025), a key document that bridges Malaysia's global and national climate change responses and Iskandar Malaysia's regional and local development plans and policies (Ho et al., 2016, p. 127).

One of the 10 priority programs identified in the LCSBP-IM2025 is the Green Accord Initiative Award (GAIA), a certification scheme that promotes sustainability in the built environment. The scheme rides upon existing green urbanism certification tools such as the Green Accord Initiative Award, the Green Building Index (GBI), the Comprehensive Assessment System for Built Environment Efficiency (CASBEE), Green Mark,<sup>6</sup> and Green Star.<sup>7</sup> According to an IRDA officer (interview, 6 February 2020), the purpose of GAIA is to maintain a high level of *sustainable* green building standards in Iskandar Malaysia (emphasis added):

GAIA is meant to be like a PhD standard. If you get a GBI or CASBEE, or BREEAM, or LEED (Leadership in Energy and Environmental Design), that's just your first degree. ...Those who get [GAIA] will need to perform really well. ...if they don't maintain that accolade for three years, because we reassess them in the third year, ...we take away that award. Because we know the GBI, once you get it, you get it forever. But for us the important thing is that they maintain their green standards all the time. So, we are strict in a way with that but we didn't want to lower the standards. Because we know that *if you want to go green, it should be properly green.* ...here [in Iskandar Malaysia] we are not doing it superficially. ...we mean what we say and we do it properly.

Here, the emphasis on GAIA being a green building certification scheme of a much higher standard than the existing ones plays into Iskandar Malaysia's race to become green*er* 

<sup>&</sup>lt;sup>6</sup> Launched by Singapore's Building and Construction Authority in 2005.

<sup>&</sup>lt;sup>7</sup> Launched by Green Building Council of Australia in 2003.

than its (global) competitors. In a global speculative market already saturated with eco-city branding and zoning technologies (special economic zones) competing for foreign investment capital (Caprotti, 2014), a home-grown green building certification scheme that has been successfully pilot-tested helps in the branding and promotion of Iskandar Malaysia. Moreover, developers "do like the accolade of getting [GAIA] because it helps [to promote] their projects" to potential buyers who may be "climate conscious or... green conscious" (interview with IRDA officer, 6 February 2020). IRDA's insistence on maintaining high green building standards at Iskandar Malaysia is captured more explicitly in the officer's own words:

If your development comes in with a huge pollution potential, even though you are going to bring in billions of ringgit, we are going to turn you down because we have set out our green credentials and we want to keep it. We don't want to compromise that. ...We want to make sure that we try to make it as green as possible.

In this sense, IRDA's interpretation of green urbanism is centred on reducing carbon emissions at the regional and local scales and maintaining sustainable green building certification in the long-term. While this program is in line with IRDA's focus on the long-term regional economic, urban and sustainable development of Iskandar Malaysia, it is also closely linked to what Harvey (1989) coins as "urban entrepreneurialism." Specifically, it is green and low carbon that have been deployed as a local urban development strategy to embrace international competitions and to accommodate "the external coercive power" (ibid., 10) of such competitions (see also Shin, 2017). This marks the political economic context where CGG's strategic marketing of the Forest City as a "green and smart" future city is explicitly situated.

#### 4.2 Forest City: Marketing "Green and Smart"

While Forest City is not CGG's first international urban development project,<sup>8</sup> it is the largest in terms of scale and project duration. The Group has its origin in a town and village enterprise (TVE) in construction in Shunde City, Guangdong Province, managed by Mr Yang Guoqiang in the 1980s and early 1990s. Yang and his partners founded CGG in 1997 after successfully privatizing that contractor company. The Group soon made its reputation as a credible and

<sup>&</sup>lt;sup>8</sup> The Group's first international urban development project is Country Garden Danga Bay, also in Iskandar Malaysia.

efficient local developer, especially for projects in out-of-town, suburban locations. CGG's suburban developments are notable for the comprehensive provision of amenities and transport connectivity (Cohen, 2014, p. 101).

Since the 2010s, green urbanism has become a key marketing feature of CGG's township developments. According to two CGG middle management staff interviewed, this started when the Vice-Chairman (Yang's daughter) suggested a "livelier green building look" for the Group's headquarter building in Shunde that was completed in 2014 (interview, 18 September 2019). The result was a building with its facades covered in lush tropical vertical greenery, as if it was immersed in nature (Figure 3). This version of green urbanism reflected "the Founder's vision and imagination of urban futures;" and importantly, became CGG's "nuclear weapon" (i.e., unique selling point) in sales and marketing. In fact, it was the Founder's preference and instruction to have "green everywhere you can see" (manyan dou shi lüse 满眼都是绿色)in Forest City's marketing materials (ibid.). As Figure 4 shows, this vision of "green everywhere" has been transplanted to Forest City at Iskandar Malaysia.

Figure 3: Country Garden Group headquarter in Shunde, China



Source: photo by the authors, 19 August 2019

Figure 4: "Green everywhere" at Forest City, Iskandar Malaysia





Source: photo by the authors, 4 September 2019

In addition to vertical greenery, CGPV has spent considerable effort and investment in creating and maintaining Forest City's overall landscape. A marketing manager of a major local developer explained the local industry's shock regarding CGPV's marketing strategy and expenditure on landscaping (interview, 12 July 2016):

They did a very impressive entrance statement,<sup>9</sup> plus a lot of landscaping that helped to impress people. They brought in landscapes from the Middle East, and they had all these sculptures. [They] created an artificial beachfront. ...So, it becomes, you know, very impressive. ...They had the financial capability to spend on marketing. ...It was really an eye-opener for the developers in Malaysia, in the sense that Malaysian developers are very cautious about spending. We always spend like 2-3% max in terms of marketing costs from the GDV (Gross Development Value). Whereas [they] were spending like easily 10-15%.

Notably, the transplantation of the vertical green façade from CGG's headquarter building in Shunde to Forest City in Iskandar Malaysia was possible because of the similar tropical climate in the source and destination cities. This means that it was possible for CGPV to "[bring] in landscaping from China" (interview with local planning officer, 6 February 2020). Moreover, the visual manifestation of a "forest city" helps to reinforce the project's

<sup>&</sup>lt;sup>9</sup> The drive from the highway exit interchange to the Forest City show unit is about 6km. Forest City signages and landscaping appear on both sides of the motorway. It is unclear whether this is a private road maintained by CGPV or a public road that has been handed over to the Iskandar Malaysia City Council.

brand name and affiliation to CGG. This in turn facilitates the marketing of Forest City to CGG's existing customer base in China.

In addition to the "green everywhere" look, CGPV has also incorporated various smart building technologies into the post-construction urban management of Forest City. In 2019, its "Smart B.I.A." system received the IDC Smart City Asia/Pacific Awards under the Smart Building category (IDC, 2019). The system is an Internet of Things sensing platform and an artificial intelligence city application that enables remote and automatic online monitoring of energy consumption and building security. Here, the incorporation of smart building monitoring technologies appears to cohere with IRDA's version of green urbanism, though their impacts are yet to be validated. Nevertheless, mainland Chinese buyers may find building security features such as face and fingerprint recognition attractive as these are increasingly prevalent in newer housing developments in China.

This section has shown how the local state (IRDA) and the developer (CGG and its local subsidiary CGPV) deployed different green urbanism strategies to meet their respective discursive aims. On the one hand, IRDA has used the GAIA certification scheme, which is part of the broader LCSBP-IM2025, to position Iskandar Malaysia as a forerunner in green city competition to attract foreign investments. On the other hand, CGG has used the "green everywhere" look and selected smart building technologies to consolidate a strong and consistent brand image, which is particularly important as the company relies heavily on its existing customer base in China to facilitate sales. However, underlying these two seemingly different green urbanism strategies is the shared logic of speculative city-making: the success of Forest City's branding brings international attention (which can be translated into investment capital) to Iskandar Malaysia, and vice versa.

## 5 The Micropolitics of Speculative Green Urbanism

As a "green and smart" project incorporating smart building technologies and green urban infrastructures at the city scale (e.g., car-free groundscape, waste management system), Forest City would have been apt as a showcase befitting IRDA's green urbanism aims. However, despite the scale of the development and its longer-term green urbanism promises, this project was not originally catered for in Iskandar Malaysia's Comprehensive Development Plan (interviews with local planning officers and academics, August 2019 to February 2020). The unplanned nature of the project vis-a-vis the Iskandar Malaysia urban regional development

plan is problematic for two reasons. First, the introduction of a city-scale project with a targeted population of 700,000 has significant downstream and longer-term local and regional infrastructural impacts such as water supply, power supply, and sewerage treatment. Second, the very idea of the project, with its massive land reclamation, could not have fit into IRDA's broader green urbanism aims for Iskandar Malaysia.

What then, in the first place, made the Forest City project possible in Iskandar Malaysia? After the project received green light to proceed from the Johor state, what are the micropolitics that have shaped the translation of CGPV's ideas into actually-existing green urbanism in Forest City? How have the actually-existing green urbanism been perceived by local stakeholder groups? Here, we contextualize the materialization of Forest City to the place-based micropolitics of speculative urban development in the negeri of Johor. We then highlight the perspectives of local stakeholder groups who also play their own roles in perceiving, producing and contesting the actually-existing green, speculative urbanism at Forest City.

#### **5.1** Complex Local Power Nexuses

As mentioned earlier, land is under the jurisprudence of the negeri government in Malaysia. On top of this, amongst the negeri governments in Peninsular Malaysia, Johor retains relative autonomy vis-a-vis the federal government on economic development decisions (Hutchinson, 2020, p 13). Furthermore, as the hereditary ruler and major landowner in the negeri of Johor, the Sultan holds considerable *de facto* power in various matters of the state, including urban development (see Hutchinson & Nair, 2020). Since land is a key asset and instrument for speculative urbanization and capital accumulation, it has become the source of contestation and negotiation between these key stakeholders. Indeed, Ng's (2020) account of the politics of urban transformation in Johor highlights the presence of parallel governance structures of land development within Iskandar Malaysia, with the federal government consolidating its influence in one area (Iskandar Puteri where Forest City is located) and the Johor negeri government exerting its influence in another area (Johor Bahru city centre).

With regards to the urban economic development of Iskandar Malaysia that is supposed to be equally co-directed by the federal and Johor negeri governments, it has been noted that "the far-reaching involvement of the federal government in areas that are under the remit of the state government caused considerable tension" (Hutchinson, 2015, p. 98). In sum, land related power nexus in Iskandar Malaysia remain an important undercurrent that shapes speculative urbanization in ways that foreign developers such as CGG may not be fully aware

of prior to their entry into the local market. Hence, mainland Chinese developers accustomed to urban political economy in China may find that they are unable to directly transplant their knowledge, practices and networks to Iskandar Malaysia.

On top of the federal-negeri power relations, there are also additional layers of power nexus at the local scale. In the nearby fishing villages affected by the Forest City construction, "local level Napoleons" filter information, "siphon off" money compensations that were meant for the villagers, or subcontract business opportunities (e.g., fishing boat licenses) to their family members and cronies (interview with local observer, 5 September 2019). According to the local observer interviewed:

Sometimes the developers actually want to do something about the damage that they caused but there are these layers in between that stop it. And the average person who has no connections suffers.

This suggests that, even if the developer (CGPV in this case) was genuine in their compensation and social engagement initiatives, their efforts may not achieve the desired effects due to the presence of opaque and complex layers of local power nexus. It is within this complex landscape of power relations that local stakeholders differentially perceive actually-existing green urbanism at Forest City, which we now turn to.

#### 5.2 Local Stakeholders' Perspectives

While the local planning and city council officers personally disagreed with the project in terms of its scale of development and the potential impacts of its extensive land reclamation, they felt that this was a top-down directive that they could not contest as rank and file government officers. As a local officer lamented, "sometimes we don't agree but we are forced to agree... we are government servants, ... you know, we follow our rules, we only do our jobs" (interview on 6 February 2020). The only available option was mitigation and "damage control" to reduce the urban and environmental impacts of the project. An illustrative case involved the local planners' response to the constraints caused by the Forest City project on water supply.

A local planning officer interviewed explained that water supply by the local city council is usually planned ahead based on population projection (interview, 12 January 2020). However, as the Forest City project "suddenly injected a lot of population" into the area, the current and planned water supply is unable to cater for three of the islands. As a way to "reduce the damage [through] damage control," the local city council has imposed planning approval

conditions such as requiring CGPV to submit water supply proposals for 2025 onwards when the current water supply can no longer cater for the development's water supply. According to the officer, CGPV has constructed sea water desalination and grey water treatment facilities on the first island.

While resigned to adopt an attitude of "damage control [following] the aftermath," the officer nonetheless acknowledged that mainland Chinese developers have the technologies and technical skills to actualize their large-scale development projects within a much shorter time frame compared to local developers. The officer explained that there has been an iterative process of learning from and adjusting to each other as various phases of Forest City are constructed on site.

At first of course we had a lot of conflicts. We tried to manage, to understand: "Oh, actually their thinking is like this." We should also try to accept [their views and ways of doing things] and listen to them. So, if it's something [concerning our] laws, we cannot compromise the minimum [safeguards]. But beyond this, can we consider [their proposals]? And we see how to [be] flexible in interpretation and execution to make the environment better. It's not a very static kind of interpretation, "A is A." We try to see what is their justification behind their design and their wish list.

The quote above indicates that CGPV had to engage in repeated consultative discussions with the local authorities in the transplantation and translation of CGG's "green and smart" brand image at Forest City - something that perhaps was not initially anticipated on their part. A local observer remarked that "some parties within [CGPV] used [the Sultan's involvement] as a license to do whatever they want, ...which is why initially they didn't do the DEIA, because they thought they could get away with it" (interview, 5 September 2019). This again points to the complex local power politics that foreign developers may not intuitively understand, in order to effectively achieve their desired urban development outcomes. While the support from a powerful local elite may be sufficient for similar urban development projects elsewhere, in this case the battle ground involved other powerful stakeholders such as the federal and *negeri* governments, which have their own economic, political, and civic agendas.

In terms of the attractiveness of Forest City's "green and smart" city offering, the officer, quoted at the outset of this section (interviewed on 6 February 2020), commented that local residents preferred "landed housing with a garden" in suburban areas "which is more comfortable" rather than high rise apartments. We observed on multiple occasions that local families visit the artificial beach and public recreational water features outside the Forest City

sales gallery on weekends (Figure 5). However, these local residents are temporary visitors and not Forest City residents. Their access to these facilities is not guaranteed as the project is, after all, a private development. To a large extent, this "green and smart" city and its green urbanism features have been developed primarily for foreign investors and Forest City residents rather than for local residents. Indeed, based on his analysis of publicly available property sales statistics, Ong (2017) found that 98.54% of Forest City units (Phase 2-10) were sold to foreign buyers. Mainland Chinese buyers contributed to 70% of the 16,000 apartment units sold in 2016 (Tan & Yong, 2017). Moreover, priced at RM700,000 onward, these units are well above the affordability of local residents. This leads to a further question: who are the local beneficiaries of this actually-existing (not-)green urbanism?

Figure 5: Local families at Forest City public areas on a weekend



Source: photos by the authors, 30 November 2019

Local academics and urban experts generally expressed scepticism toward the Forest City project. They reasoned that there are abundant land resources in Johor for urban developments, and it was unnecessary to resort to large scale land reclamation. Furthermore, the impacts of land reclamation are "transboundary," in the sense that they cannot be confined locally (interview with urban planning academics, 16 August 2019). With regards to the discourse of green urbanism proclaimed by the Forest City project, an urban sustainability

<sup>&</sup>lt;sup>10</sup> The officer noted that after Country Garden's Danga Bay project was completed, the public no longer enjoyed access along the entire Lido beach waterfront.

<sup>&</sup>lt;sup>11</sup> The average house price in Johor in 2018Q2 was MYR 327,173 (source: open data, Valuation and Property Services Department, Ministry of Finance), while the mean monthly household disposable income was MYR 5,966 in 2016 and MYR 6,923 in 2019 (DOSM, 2020).

expert responded sceptically, going as far as branding it "greenwashing" (interview, 27 September 2019):

Forest City always has that claim to be sustainable - you know, low carbon, carbon neutral, green, and so on. I'm not sure. I mean, as academics we have to be very objective about this. But looking at it, to some degree I think it's a lot of greenwashing. ...In the very first place, if there is no need to reclaim an island - Johor has such an expanse of land area and all flat in the southern area - is there really a need to reclaim and especially in an area which is so sensitive with respect to the ecosystem and ecology? So, in the first place when that is done, I don't think it is sustainable. So whatever claims you put in there, to me it's useless.

Interestingly, this group of local academics and urban experts shared a similar ambivalent stance with the local planning and city council officers: "What has been done has been done. We cannot say anything. We have no say in what decisions they [i.e., the high-level decision makers who approved and supported the Forest City project] are making or what they have decided upon" (interview with urban planning academics, 16 August 2019). Similar views are also captured among the local residents. When asked about their first impressions about Forest City, a group of local youths in a focus group interview expressed a sense of alienation and of impending change to their existing culture and ways of living (group interview, 5 September 2019). One of them criticized that the "green everywhere" façade of Forest City was not natural or authentic, while another spoke about the loss of village culture and heritage as a result of the mega development. Below are some excerpts from this conversation (authors' translation from Malay):

Youth A: When I first entered Forest City, I felt weird entering the place. Like we are born as villagers in the village, and when we go to the city, we feel that it's not right. We feel that it is strange or unfamiliar, something that we cannot accept.

Youth B: I felt weird because they built so quickly. There's also the fear of collapse. The village environment became different. It feels like the city is coming nearer to the village, so we have to be prepared to accept this reality.

Youth C: I felt disgusted. Because the name is "Forest City," but I see that the development is not a forest (laughs). There is a lot of green, but they planted it. The plants are not original, they are fake.

Youth D: My first impression is, I felt a bad aura, something bad. When there is the Forest City, I think the village heritage has disappeared. Lost. So, it's like a threat to us.

Figure 6. An entrance to the workers' compound in the neighbouring village



Source: photo by the authors, 5 September 2019

The youths also spoke of water and electricity disruptions in their village as a result of the construction works at Forest City. They felt threatened by the increasing presence of foreign construction workers in their village (Figure 6). For, in the earlier stages of construction, some villagers became victims of road accidents involving construction vehicles as the construction was literally in their backyard (interview with local resident, 5 September 2019). Anecdotal evidence suggests that there are waste disposal and drainage issues in the temporary construction workers' quarters located near the villages (group interview with local youths, 5 September 2019). This suggests that the idea of a "green and smart" city is only manifested in the saleable areas which are visible to the public and potential buyers; it is not extended to other places such as their workers' quarters, which are by and large rendered invisible.

In the production of this "green and smart" Forest City, such invisible undersides of actually-existing green urbanism are unequally experienced by local stakeholder groups. While the discursive power of "green and smart" has been significant for the strategic marketing and branding of the project, it has also unevenly transformed the local way of life and endangered local and trans-local environmental dynamics. As was discussed earlier, green infrastructures and technologies require constant inflows of capital, which tends to produce speculative real estate projects for excessive financial gains appropriated mostly by non-resident investor

buyers and development coalitions. Such speculative green development targets potential individual investor buyers whose socio-economic profiles are distinctively different from those of local populations and who are more likely to leave their properties vacant if high-rent tenancy demand does not exist. The logic of speculative urbanization thus prevails and presides over green urbanism and this is in turn embodied in the selective actualization of "green" development plans. Such an environmentally speculative pattern has also been observed in some other projects recently pushed through China's Belt and Road Initiative (see Harlan, 2020).

#### 6 Conclusion

This paper has used Forest City as a case study to examine the micropolitics of cross-border transplantation and translation of green urbanism in Asia. As it shows, place-based micropolitics play a significant role in shaping the mobilization of discursive green urbanism for speculative city-making purposes. Once a top-down directive was made to proceed with the Forest City project at Iskandar Malaysia, all that the local rank and file government officials can do was to adopt mitigation strategies to assist in the materialization of the project (which is backed by powerful local elites) while at the same time ensuring the alignment of the project to existing local green urbanism guidelines to a certain extent. Nonetheless, while Forest City is an unplanned and unanticipated urban development project for Iskandar Malaysia, it is, after all, a major, and perhaps the biggest, source of foreign investment and urban capital that is in line with IRDA's broader economic development strategies that hinge upon speculative city-making.

With regards to the actually-existing green urbanism, the analysis finds that the "green and smart" features at Forest City have been primarily undertaken for marketing and branding purposes. Moreover, these technologies and the completed "green" environment are to be exclusively enjoyed by the residents within this private city. Importantly, the private "green and smart" city has been created upon encroachments onto existing local habitats, threatening local livelihoods.

This greenfield mega development, like many Chinese eco-cities that purport to embody green urbanism and ecological civilization, "blur[s] the lines between artificial and 'natural'" (Caprotti et al., 2013, p. 504). The project cannot be said to be "green," "sustainable" or "low carbon" because its creation lies on the unsustainable exploitation and deployment of

existing resources, locally as well as globally. Indeed, sand for land reclamation is transported from Teluk Ramunia (lit. "Ramunia Bay")<sup>12</sup> and grazed from local hills (Rahman, 2017a, p. 36); while plants are imported from China and the Middle East to create the manicured "green city." In other words, mountains have been moved to green the sea in the speculative making of Forest City. The creation and maintenance of Forest City rely on a vast supply chain, stretching across and beyond the local, that is not necessarily, if at all, environmentally friendly or low carbon.

In the making of such large-scale "green" projects, specific features of green urbanism and green technology have been consistently branded as their unique selling point in an increasingly competitive market for speculative capital investments and economic growth (Wu, 2012). It is in this context within which various (eco-)cities have competed globally to become the "greenest" (Rosol, Béal & Mössner, 2017). Ironically, these green infrastructures and technologies are materialised for the benefit of speculative investors, oftentimes to the detrimental exclusion of local populations who are left to bear the negative costs of such "green" pursuits. The logic of speculative urbanization thus prevails and presides over sustainable and equitable green urbanism. While the local states may accord financial commitments to such projects, especially at their onset, such commitments may be subject to geopolitical vicissitudes, shifting scalar politics as well as the changing interests of local politicians. These shifts, in turn, result in short- and long-term impacts, often negatively due to high risks embedded in such projects, on the social, economic, cultural and environmental sustainability that are initially promised and branded by those behind such projects (Goldman, 2011; Shin, 2014).

<sup>&</sup>lt;sup>12</sup> Southeast coastal area of Johor, about 140km from Forest City.

#### References

Aw, Nigel (2014, July 14). The case of Forest City and the Johor Sultan. *Malaysiakini*. Retrieved from <a href="https://www.malaysiakini.com/news/268649">https://www.malaysiakini.com/news/268649</a>

Bakker, Karen (2010). The limits of 'neoliberal natures': Debating green neoliberalism. *Progress in Human Geography*, 34(6), 715-735.

Barton, Jonathan R. (2020). Green urbanism. In Anthony M. Orum (Ed.), *The Wiley Blackwell Encyclopedia of Urban and Regional Studies* (1st ed.). Wiley.

Bear, Laura (2020). Speculation: A political economy of technologies of imagination. *Economy and Society*, 49(1), 1–15.

Caprotti, Federico (2014). *Eco-cities and the Transition to Low Carbon Economies*. Basingstoke, Hampshire: Palgrave Macmillan.

Caprotti, Federico, Springer, Cecilia, & Harmer, Nichola (2015). 'Eco' for whom? Envisioning eco-urbanism in the Sino-Singapore Tianjin Eco-city, China. *International Journal of Urban and Regional Research*, 39(3), 495–517.

Castree, Noel (2008a). Neoliberalising nature: The logics of deregulation and reregulation. *Environment and Planning A*, 40(1), 131-152.

Castree, Noel (2008b). Neoliberalising nature: Processes, effects, and evaluations. *Environment and Planning A*, 40(1), 153-173.

Chew, Rachel (2019, April 26). Forest City's fully automated IBS Plant certified largest in the country. *The Edge Markets*. Retrieved from <a href="https://www.theedgemarkets.com/article/forest-citys-fully-automated-ibs-plant-certified-largest-country">https://www.theedgemarkets.com/article/forest-citys-fully-automated-ibs-plant-certified-largest-country</a>

Chien, Shiuh-Shen, Hong, Dong-Li, & Lin, Po-Hsiung (2017). Ideological and volume politics behind cloud water resource governance. *Geoforum*, 85, 225-233.

Choong, En Han (2013, July 29). Country Garden to launch maiden Malaysia project with GDV of RM10 bil. *The Star*. Retrieved from <a href="https://www.thestar.com.my/business/business-news/2013/07/29/china-firm-to-launch-maiden-msia-project-country-garden-danga-bay-has-m10bil-gdv">https://www.thestar.com.my/business/business-news/2013/07/29/china-firm-to-launch-maiden-msia-project-country-garden-danga-bay-has-m10bil-gdv</a>

Chow, Cecilia (2015, August 24). Greenland Group invests US\$3.2 bil in Iskandar Malaysia. *The Edge Markets*. Retrieved from https://www.theedgemarkets.com/article/greenland-group-invests-us32-bil-iskandar-malaysia

Cohen, M. L. (2014). Country Garden Holdings Company Ltd. In Tina Grant (Ed.), *International directory of company histories* (Vol. 153, pp. 99-103). Farmington Hills, MI: Gale, Cengage Learning.

Cole, Michael (2015, January 24). Greenland's \$666m project to bring snow and opera to Malaysian seaside. *Mingtiandi*. Retrieved from https://www.mingtiandi.com/realestate/outbound-investment/greenlands-666m-project-to-bring-snow-and-opera-to-malaysian-seaside/

Country Garden Group (CGG) (2019, June 23). Forest City. *Construction 21*. Retrieved from <a href="https://www.construction21.org/city/h/forest-city.html">https://www.construction21.org/city/h/forest-city.html</a>

Country Garden PacificView (CGPV) (no date). Green & smart. *Forest City*. Retrieved from <a href="https://www.forestcitycgpv.com/about-forest-city/green-smart">https://www.forestcitycgpv.com/about-forest-city/green-smart</a>

Crot, Laurence (2013). Planning for sustainability in non-democratic polities: The case of Masdar City. *Urban Studies*, *50*(13), 2809–2825.

Cugurullo, Federico (2013). How to build a sandcastle: An analysis of the genesis and development of Masdar City. *Journal of Urban Technology*, 20(1), 23–37.

Death, Carl (2014). The green economy in South Africa: Global discourses and local politics. Politikon, 4I(1), 1–22.

Department of Statistics Malaysia (DOSM) (2020). Household income and basic amenities survey report by state and administrative district: Johor. Putrajaya: DOSM.

Doucette, Jamie, & Park, Bae-Gyoon (Eds.) (2019). Developmental Cities? Interrogating Urban Developmentalism in East Asia. Leiden; Boston: Brill.

Forest City Malaysia (2019, July 11). Forest City Malaysia completes new homes, introduces connected smart city experience. *PR Newswire*. Retrieved from <a href="https://www.prnewswire.com/news-releases/forest-city-malaysia-completes-new-homes-introduces-connected-smart-city-experience-300883306.html">https://www.prnewswire.com/news-releases/forest-city-malaysia-completes-new-homes-introduces-connected-smart-city-experience-300883306.html</a>

Gandy, Matthew (2015). From urban ecology to ecological urbanism: An ambiguous trajectory. *Area*, 47(2), 150-154.

Gare, Arran (2012). China and the struggle for ecological civilization. *Capitalism Nature Socialism*, 23(4), 10–26. doi: 10.1080/10455752.2012.722306

Goldman, Michael (2011). Speculative urbanism and the making of the next world city: Speculative urbanism in Bangalore. *International Journal of Urban and Regional Research*, 35(3), 555–581.

Halbert, Ludovic, & Rouanet, Hortense (2014). Filtering risk away: Global finance capital, transcalar territorial networks and the (un)making of city-regions: An analysis of business property development in Bangalore, India. *Regional Studies*, 48(3), 471–484.

Harlan, Tyler (2020). Green development or greenwashing? A political ecology perspective on China's green Belt and Road. *Eurasian Geography and Economics*, 1–25.

Harvey, David (1989). From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism. *Geografiska Annaler. Series B. Human Geography*, 71(1), 3-17.

Harvey, David (1996). Justice, nature and the geography of difference. London: Blackwell.

Ho, Chin Siong, Matsuoka, Yuzuru, & Teh, Bor Tsong (Eds.) (2013). Annual report 2012/13: The Project for Development of Low Carbon Society Scenarios for Asian Regions. Johor Bahru: UTM – Low Carbon Asia Research Center. Retrieved from <a href="https://www.nies.go.jp/unfccc\_cop/2014/4.8.pdf">https://www.nies.go.jp/unfccc\_cop/2014/4.8.pdf</a>

Ho, Chin Siong, Chau, Loon Wai, Teh, Bor Tsong, Matsuoka, Yuzuru, & Gomi, Kei (2016). 'Science to action' of the sustainable low carbon city-region. In Shuzo Nishioka (Ed.), *Enabling Asia to stabilise the climate* (pp. 119–150). Springer: Singapore.

Hutchinson, Francis E. (2015). Mirror images in different frames? Johor, the Riau Islands, and competition for investment from Singapore. Institute of Southeast Asian Studies.

Hutchinson, Francis E. (2020). Situating Johor. In Francis E. Hutchinson & Serina Rahman (Eds.), *Johor: Abode of development?* (pp. 5–25). ISEAS - Yusof Ishak Institute.

Hutchinson, Francis E., & Nair, Vandana Prakash (2020). The Johor Sultanate: Rise or reemergence? In Francis E. Hutchinson & Serina Rahman (Eds.), Johor: Abode of development? (pp. 335–356). ISEAS - Yusof Ishak Institute.

IDC (2019, July 10). IDC names Forest City Smart B.I.A, Johor as Best Smart Building Project at 5th Annual 2019 Smart City Asia/Pacific\* Awards. Retrieved from <a href="https://www.idc.com/getdoc.jsp?containerId=prAP45356919">https://www.idc.com/getdoc.jsp?containerId=prAP45356919</a>

iProperty (2017, May 1). Handover of Forest City Kylin Apartments. Retrieved from <a href="https://www.iproperty.com.my/news/handover-of-forest-city-kylin-apartments/">https://www.iproperty.com.my/news/handover-of-forest-city-kylin-apartments/</a>

Iskandar Malaysia (no date). Low carbon society. Retrieved from <a href="http://iskandarmalaysia.com.my/green/low.html">http://iskandarmalaysia.com.my/green/low.html</a>

Iskandar Regional Development Authority (IRDA) (2016a). *10 year progress report*. IRDA. Retrieved from http://iskandarmalaysia.com.my/downloads/IM10%20Progress%20Report V5.pdf

Iskandar Regional Development Authority (IRDA) (2016b). Introduction to Iskandar Malaysia [unpublished presentation slides].

Jessop, Bob (2008). State Power: A Strategic-Relational Approach. Cambridge: Polity Press.

Jessop, Bob (2018). The state as a social relation. In John L. Brooke, Julia C. Strauss & Greg Anderson (Eds.), *State Formations: Global Histories and Cultures of Statehood* (pp. 45-57), Cambridge: Cambridge University Press.

Lee, Ching Kwan (2018). The Specter of Global China: Politics, Labor, and Foreign Investment in Africa. Chicago and London: The University of Chicago Press.

Ley, David (2015). Global China and the making of Vancouver's residential property market. *International Journal of Housing Policy*, 17(1), 15-34.

McCann, Eugene (2017). Mobilities, politics, and the future: Critical geographies of green urbanism. *Environment and Planning A: Economy and Space*, 49(8), 1816–1823.

Mahrotri, Pooja Thakur, & Choong, En Han (2016, Nov 22). \$100 billion Chinese-made city near Singapore 'scares the hell out of everybody.' *Bloomberg*. Retrieved from https://www.bloomberg.com/news/features/2016-11-21/-100-billion-chinese-made-city-near-singapore-scares-the-hell-out-of-everybody

Marcinkoski, Christopher (2018). The city that never was: Engaging speculative urbanization through the logics of landscape. In Daniel Czechowski, Thomas Hauck, & Georg Hausladen (Eds.), *Revising Green Infrastructure: Concepts Between Nature and Design* (pp. 47–70). CRC Press.

Mol, Arthur P. J. (2006). Environment and modernity in transitional China: Frontiers of ecological modernization. *Development and Change*, 37(1), 29-56.

Murugiah, Surin (2017, May 13). China's liquidity squeeze casts shadow over Iskandar Malaysia. *The Edge Markets*. Retrieved from https://www.theedgemarkets.com/article/chinas-liquidity-squeeze-casts-shadow-over-iskandar-malaysia

National Bureau of Forestry (2005). "国家森林城市"评价指标 (试行) [Evaluation Criteria of "National Forest City" (Trial). 中国林业产业 [China Forestry Industry], 2005(9), 57.

National Bureau of Forestry and Grassland (2019). 全国森林城市发展规划 (2018—2035) [National Development Plan of Forest Cities (2018—2035)]. National Bureau of Forestry and Grassland.

Ng, Keng Khoon (2020). Johor Bahru's urban transformation: Authority and agency revisited. In Francis E. Hutchinson & Serina Rahman (Eds.), *Johor: Abode of development?* (pp. 407–423). ISEAS - Yusof Ishak Institute.

Ong, Kian Ming (2017, August 22). Chinese property projects in Southern Johor: Should we be concerned? *Penang Institute Issues*. Retrieved from https://penanginstitute.org/publications/issues/1003-chinese-property-projects-in-southern-johor-should-we-be-concerned

Ouis, Pernilla (2002). 'Greening the Emirates': The modern construction of nature in the United Arab Emirates. *Cultural Geographies*, 9(3), 334–347.

Paik, Wooyeal (2019). Chinese investment in foreign real estate and its interactions with the host state and society: The case of Jeju, South Korea. *Pacific Affairs*, 92(1), 49–70.

Parr, Ben, & Henry, Don (2016, August 24). China moves towards ecological civilization. Australian Institute of International Affairs. Retrieved from <a href="http://www.internationalaffairs.org.au/australianoutlook/china-moves-towards-ecological-civilisation/">http://www.internationalaffairs.org.au/australianoutlook/china-moves-towards-ecological-civilisation/</a>

Pow, Choon-Piew, & Neo, Harvey (2013). Seeing red over green: Contesting urban sustainabilities in China. *Urban Studies*, 50(11), 2256-2274.

Pow, Choon-Piew (2018). Building a harmonious society through greening: Ecological civilization and aesthetic governmentality in China. *Annals of the American Association of Geographers*, 108(3), 864-883.

Rahman, Serina (2017a). *Johor's Forest City faces critical challenges*. (Trends in Southeast Asia, TRS 3/17). Singapore: Yusof Ishak Institute.

Rahman, Serina (2017b). The socio-cultural impacts of Forest City. *ISEAS Perspectives*, 2017(2), 1-10.

Rapoport, Elizabeth (2014). Utopian visions and real estate dreams: The eco-city past, present and future. *Geography Compass*, 8(2), 137–149.

Rizzo, Agatino (2019). Predatory cities: Unravelling the consequences of resource-predatory projects in the global South. *Urban Geography*, 40(1), 1–15.

Rosol, Marit, Béal, Vincent, & Mössner, Samuel (2017). Greenest cities? The (post-)politics of new urban environmental regimes. *Environment and Planning A: Economy and Space*, 49(8), 1710–1718.

Shin, Hyun Bang (2014). Contesting speculative urbanisation and strategising discontents. *City*, 18(4–5), 509–516.

Shin, Hyun Bang (2017). Envisioned by the state: Entrepreneurial urbanism and the making of Songdo City, South Korea. In Ayona Datta & Abdul Shaban (Eds.), *Mega-urbanization in the Global South: Fast Cities and New Urban Utopias of the Postcolonial State* (pp. 83–100). Routledge.

Shin, Hyun Bang, & Zhao, Yimin. (2018). Urbanism as a state project: Lessons from Beijing's Green Belt. In Mark Jayne (Ed.), *Chinese Urbanism: Critical Perspectives* (pp. 46-62). London and New York: Routledge.

Shin, Hyun Bang, Zhao, Yimin, & Koh, Sin Yee (2019). Whither progressive urban futures? Critical reflections on the politics of temporality in Asia. *City*, 24(1-2): 244-254.

South China Morning Post (2019, September 9) Malaysia's Forest City to hand over more than 20,000 residential units this year as it unveils new golf course. Retrieved from <a href="https://www.scmp.com/business/article/3026354/malaysias-forest-city-handover-more-20000-residential-units-year-it">https://www.scmp.com/business/article/3026354/malaysias-forest-city-handover-more-20000-residential-units-year-it</a>

Sun, H., & Fu, C. (2017, September 29). 以生态文明建设引领房地产业发展 [Leading the development of real estate industry with ecological civilization construction]. 海南日报 [Hainan Daily]. Retrieved from <a href="https://www.hainan.gov.cn/hainan/zxjd/201709/c60930c071994003b8a612cb7246c451.shtml">https://www.hainan.gov.cn/hainan/zxjd/201709/c60930c071994003b8a612cb7246c451.shtml</a>

Susskind, L., Kuwabara, T., Williams, M., Mukahhal, A., Allen, N., Vale, M., ..., Sherman, D. (2018). Foreign developers and local impacts in Malaysia. *MIT case study initiative*. Retrieved from <a href="http://case-study.mit.edu/malaysia.php">http://case-study.mit.edu/malaysia.php</a>

Swyngedouw, Erik (2010). Apocalypse forever? Post-political populism and the specter of climate change. *Theory, Culture & Society*, 27(2-3), 213-232.

Tan, Siew Mung, & Yong, Yimie (2017, May 22). Cover Story: China's liquidity squeeze casts shadow over Iskandar Malaysia. Retrieved from https://www.theedgemarkets.com/article/cover-story-chinas-liquidity-squeeze-casts-shadow-over-iskandar-malaysia

Tateishi, Eigo (2018). Craving gains and claiming "green" by cutting greens? An exploratory analysis of greenfield housing developments in Iskandar Malaysia. *Journal of Urban Affairs*, 40(3), 370–393.

Tu, Fan (2016). Promoting urban sustainability through green technology in Malaysia. Malaysia Sustainable Cities Program Working Paper Series. Retrieved from https://scienceimpact.mit.edu/sites/default/files/documents/Tu.pdf

Vangeli, Anastas (2018). Global China and symbolic power: The case of 16+1 cooperation. *Journal of Contemporary China*, 27, 674-687.

Wang, Tianyu (2019, February 28). 助推房地产市场绿色转型 [Boosting the green transformation of the real estate market]. 中国金融 [China Finance]. Retrieved from <a href="https://www.sohu.com/a/298274693">https://www.sohu.com/a/298274693</a> 481887

Whitehead, Mark (2009). Sustainability, urban. In Audrey Kobayashi (Eds.), *International Encyclopedia of Human Geography* (2nd ed., pp. 169–176). Elsevier.

Wu, Fulong (2012). China's eco-cities. *Geoforum*, 43(2), 169–171.

Xu, Chun (2010). 生态文明在人类文明中的地位 [The position of ecological civilization in human culture]. 中国人民大学学报 [Journal of Renmin University of China], 24(2), 37–45.